**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY ALLAHABAD**

# Annual Report
# For the year
# 2014-15

## Gandhi Ji's Talisman to the Country Men

"Whenever you are in a doubt or when the self becomes too much with you, apply the following test:

Recall the face of poorest and the weakest man you may have seen and ask yourself if the step you contemplate is going to be a any use to him. Will he gain anything by it? Will restore him to a control over his own life and destiny? In other words, will it lead to swaraj for the hungry and spiritually starving millions?

Then you will find your doubts and your self melting away".

- M K Gandhi

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| **Patron** | **: PROF. SOMENATH BISWAS**<br>**Director** |
| **Advisory Board** | **: Prof. G.C. Nandi**<br>**Prof. U.S. Tiwary**<br>**Prof. Sudeep Sanyal**<br>**Prof. O. P. Vyas**<br>**Dr. Vijay Chaurasiya** |
| **Editor** | **: Dr Asheesh Kumaar** |
| **Joint Editor** | **: Dr. Pavan Kumar Saini** |

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## 1.1 THE CHANCELLOR'S PROFILE

**Prof. Goverdhan Mehta**
**National Research Professor**

Hon'ble Professor Goverdhan Mehta is a leading researcher in the area of Chemical Sciences and presently he is a National Research Professor and Lilly-Jubilant Chair Professor at the University of Hyderabad. He obtained his PhD from Pune University and carried out postdoctoral research at Michigan and Ohio State University. He started his professional career at IIT Kanpur, then moved to University of Hyderabad where he became the Vice Chancellor during the period 1994-1998. Subsequently, he served as the Director of IISc, Bangalore for seven years (1998-2005). He remained attached with the Department of Organic Chemistry at IISc as CSIR Bhatnagar Fellow (2005-2010).

Hon. Prof. Mehta has made wide ranging research contributions in organic chemistry that encompass synthesis of biologically active and architecturally challenging natural products, creation of new and aesthetically pleasing molecular entities and incisive probing of stereo electronic effects. His forays into synthesis have been marked by brevity, conceptual novelty and originality and his flair for devising simple solutions to complex and challenging problems of contemporary interest in organic synthesis have drawn attention internationally. In addition, he has made significant contribution to science education, science policy and planning and management of higher education in India.

Hon. Prof. Mehta is a Fellow of the Royal Society (FRS) and a Foreign Member of the Russian Academy of Sciences. He is also a Fellow of all the three Science Academies in India and Third World Academy of Sciences and was the President of INSA. He is a recipient of Padma Shri from the President of India and has been conferred with "Chevalier de la Legion d"Honneur" by the President of France. He had been offered several Visiting and Guest Appointments in leading Universities, has received over 30 medals/awards and numerous Honorary Doctorate degrees.

## 1.3 THE DIRECTOR'S REPORT 2014-15

### The IIITs Act 2015

A watershed event for our Institute is the enactment the Indian Institutes of Information Technology Act in January 2015. The act makes ours an Institute of national importance, and as a conseque nce we now possess the autonomy and a governance structure suited to attract the best students and faculty, and to create an environment for their nurture and growth. We are aware of the great trust the nation has placed in us and all of us are determined to be worthy of the trust.

### The Academics

At the end of the academic session of 2014-15, 264 B.Tech(IT) and 86 B.Tech(ECE) students, 112 M.Tech(IT) and 32 MTech(EE) students, 71 MBA(IT) students, 45 MSCLIS students, and 11 Ph.D students completed the requirements for the award of degrees.

In order to improve the quality of our post-graduate programs, a number of dual-degree courses have been introduced from the academic session of 2014-15. These are: 5 year dual-degrees in BTech (ECE) and MTech (EE), in BTech (ECE) and MTech(Biomedical Engg.), in BTech (ECE) and MBA(IT), in BTech(IT) and MBA(IT), BTech(IT) and MTech(IT) with various specializations, namely, Bio-informatics, Cyber Law and Information Security, Human Computer Interaction, Intelligent Systems, Robotics, Software Engineering, and Wireless Communication Engineering. We have also introduced an integrated program in MBA - PhD.

Our Institute is known for its excellence in information technology. With a view to do even better in future, an External Review of the Department of Information Technology was carried out. The Review Committee comprised Professor Gautam Barua, Mentor Director, IIIT Guwahati, Professor Rajat Moona, Director General, C-DAC, and Professor Harish Karnick, Computer Science and Engineering, IIT Kanpur. Recommendations of the Committee are being factored into the restructuring of the UG and PG curricula and in strategizing faculty recruitment in the Department.

Our Institute's activity in the domain of bio-informatics and biomedical engineering has immense potential in view of our excellence in IT and in

microelectronics. The Institute carried out an External Review of these activities by a Committee comprising Professor Alok Bhattacharya, Jawaharlal Nehru University, Professor Prasun Kumar Roy, National Brain Research Centre, and Professor GS Bhuvaneswar, Engineering Design, IIT Madras. An important recommendation of the External Committee was to have a dual-degree BTech(ECE) and MTech Biomedical Engineering program in place of the 5 Year Integrated MTech in the Biomedical Engineering program, and we have implemented the recommendation.

The Institute has critically examined all the academic processes and with the enthusiastic and valuable participation of the faculty has codified the processes, resulting in the Undergraduate and the Postgraduate Manuals. For effective monitoring of undergraduate academic activities, each Department now has a Departmental Undergraduate Committee (DUGC) which also has students' participation, and similarly for postgraduate activities, each Department has a Departmental Postgraduate Committee (DPGC), again with students' participation. At the Institute level, there is now a Senate Undergraduate Committee (SUGC) and a Senate Postgraduate Committee (SPGC), both with students' participation. The SUGC has made recommendations to the Senate on various issues like list of prerequisites as prepared by DUGCs, academically deficient students, schedules of conducting various examinations, more effective UG project evaluation mechanism, initiatives for motivating students for doing better projects, analysis of the last semester result, etc. All our academic programs are now purely credit based, thereby doing away with the 'year back' provision. For effective monitoring of both MTech and PhD theses work, the Senate has introduced research credits.

We have been fortunate in being able to attract better and better students every year, especially for our undergraduate programs. For example, the opening and closing JEE ranks for open seats for our BTech (IT) program were 2978 and 8751 respectively in 2014.

Our Institute has been given the responsibility of mentoring the Indian Institute of Information Technology, Lucknow (IIITL), a new Institute which is being set up in the PPP mode. The first batch of 50 students in BTech (IT) of IIITL has been placed in our campus for the first year. We carried out the admission process on behalf of IIITL, designed their portal, and we are helping IIITL in planning their academic

activities, both at the UG and PG levels, for the next five years. We are happy to report that admission was given for all 50 seats, of which finally 47 students joined. This figure, as well as the opening and closing JEE ranks of students selected for IIITL, are significantly better than those of all other newly created IIITs.

The Examination and Admissions Cell of the Institute has taken a number of new initiatives which include a single window facility to students, development of a portal for facilitating online services like results declaration, submission of applications, etc., reducing the duration of mid-semester examinations, redesign of grade-cards, transcripts, and degrees incorporating several security features, and an official twitter account.

We have been fortunate in having recently three overseas academicians participating in our teaching program: Dr. Steven Pearce (Simon Fraser University, Canada). Dr. Artus Krohn-Grimberghe (University of Paderborn, Germany), and Professor Antonio Puliafito (Univ. of Messina, Itlay).

**Faculty Recruitment**

Faculty shortage is a major challenge faced by our Institute. The challenge is more acute in the two Departments, IT and ECE, which have undergraduate programs with large enrolment. We are doing our best to attract and retain faculty at the entry level without any compromise on quality. We have continued the good practice of having rolling advertisements, and pro-active faculty search. The Institute believes that good, young faculty once inducted in the system should be given the best that we can in terms of pay, facilities, and in terms of a supportive and friendly environment; they then in turn will be instrumental in attracting other good, young faculty. Also, the entire faculty should be involved in the recruitment process. I am happy to report that our efforts have been bearing fruit: since January 2014 our faculty strength has been augmented by ten.

**Research and Development**

In spite of a relatively heavy teaching load, it is a matter of great satisfaction that our faculty members have been active in research. During the period since the last convocation in April 2014, our faculty along with their students have published over 150 research papers in reputed conferences and journals, and two book

chapters. A number of sponsored projects have been granted to our faculty. A notable one sanctioned in 2014 is entitled `Development and Application of Atomic Layer Deposition for High Efficiency c-Si Photovoltaic Solar Cells' (to Professor BR Singh and Dr. Manish Goswami) with a total funding of Rs. 2.16 crores from the Solar Energy Research Initiative, DST. The objective of the project is to develop the Atomic Layer Deposition (ALD) process for the Alumina ($Al_2O_3$) passivation layer with a view to achieve improved conversion efficiency of about 1% in c-Si Solar cells, the technology of which remains today the corner stone of the photo voltaic (PV) technology. The project is being carried out in close collaboration with Indosolar, Noida and IIEST, Shibpur. The Institute had started preliminary work on design and innovation; we have been in contact with Professor Lina Nilsson, Innovation Director of the Blum Center for Developing Economies, Berkeley.

The IT Department is in the process of developing three new research and teaching laboratories: one on Computer Vision and Biometrics, another on Cryptography and Information Security, and the third on Data Analytics. The Robotics and Artificial Intelligence Laboratory of the IT Department, already a state-of-the-art facility, has recently acquired a humanoid robotics framework--NAO to facilitate research work in the area of Humanoid Robots, and is engaged in developing technology related to the social and community services especially related to elderly persons. IIIT Allahabad is now included as an academic Partner in the European Consortium for Software Engineering under the category 'EMSE Members outside of Europe' from 2014 for three years.

The Department of ECE is developing a high-end Photonic Systems laboratory , as well as research laboratories in the field of RF and in Wireless Communication Technologies. The Department of Applied Sciences has procured Matlab R2014B as well as the Schrodinger software with appropriate toolboxes for work on vision, optimization, fuzzy systems, etc., and on drug design. The Department of Management Studies has developed a laboratory for Business Analytics, and has introduced as a pedagogical intervention, a ‘War Room’ (a scenario based study scheme) to investigate into Strategic Management.

**Awards and Honors**

It gives me great pleasure in reporting that during the last one year, two of our recent faculty recruits have won awards for excellence in their PhD work. Dr. R. Kala (IT Department) was awarded First Prize in Best PhD Dissertation award by the IEEE Intelligent Transportation Systems Society at the 2014 IEEE Intelligent Transportation Systems Conference at Qingdao, China. The thesis, extended into a book length form, is to be published by Elsevier in 2016. Dr. Rekha Verma (ECE Department) has won the TechnoInventor Award 2014 from India Electronics and Semiconductor Association (IESA) for outstanding research contribution in her PhD thesis. Our students community has commendable coding skills, this has been once more demonstrated through an IIIT Allahabad students' team**,** securing the first position at the ACM ICPC Asia Amritapuri Site Online Round.

**Administrative initiatives**

The Institute has undertaken a number of administrative initiatives under the guidance of its Board of Management. As faculty recruitment is of great priority, it has instituted the position of the Dean of Faculty Affairs (DOFA). To help planning of its infrastructural, financial and other resources and for alumni relations, the position of the Dean of Infrastructure (DIRP) has been created. DOFA has been instrumental in carrying out the faculty recruitment process in the Departments of IT and ECE. DIRP has helped the Departments in planning their infrastructural development and deployment, and in the ongoing processes of staff recruitment. For effective coordination of students' activities, the Institute also now has an Associate Dean of Students. The Institute now has Chancellor's nominees and a Board approved list of experts for each Department to meet the statutory requirement for faculty selection committee constitution. The Institute's finance, accounts, and audit had badly needed proper supervision. Towards this we now have a Deputy Registrar (Finance and Accounts) on deputation, and an experienced Audit Officer on an ad-hoc basis. We now have defined a roster for the purpose of reservation for our staff positions; the roster is needed for staff recruitment. We have ensured, by constituting an appropriate performance appraisal committee, that confirmation for the staff happens transparently and without delay. Towards streamlining the purchase process, a Purchase Manual has been prepared. Hostel related activities, like the tendering process for hostel messes, maintenance of discipline, etc., are now being processed with the help of a newly constituted Council of Wardens, which has students' participation, thereby

ensuring students' participation in their own governance. Students Gymkhana has now an active role to play in students' matters, its representatives are now invitees to the Senate, and they participate in decision making on disciplinary cases for students. The Institute has facilitated formation of the Staff Forum and the Faculty Forum.

**Students Activities**

Our students organize every year in the month of February a Sports Meet, named Asmita, in which they also invite Institute faculty and staff to participate. The meet consists of both track and field events. Aparoksha is the annual Technical Festival organized by our students, held in the month of March. The festival comprises many technical and analytical competitive events. The annual cultural festival of our students, named Effervescence, is held every year in the month of October. Besides these major events, the Students Gymkhana, through its various councils, carries out regular sports, cultural and literary activities.

A voluntary organization run by students, Prayas, has been involved in providing educational help to poor children of a nearby village. Students also organize blood donation camps regularly. The Swachh Bharat Abhiyan campaign of our campus is essentially students driven.

**Infrastructure and Facilities**

Most of the major construction work in the Allahabad campus is either complete or near completion. A five-storied apartment complex for faculty is completed and is now in use, also complete are thirty two staff quarters. A five-storied Boys Hostel with a capacity of 754 is expected to be completed soon. This hostel is partially funded by the Ministry of Social Justice. Work is near completion for the extension of the Administrative building. Also, work is in progress to make the entire Allahabad campus persons-with-disabilities friendly.

Several initiatives have been taken recently for our Library. We have started subscribing to IEEE Explore, thus now, along with the Indest set offered to our Institute, we have electronic access to all journals and conference proceedings of importance in the disciplines of computer science, electrical engineering, and information technology. The Library now has extended the working hours for all the seven days, namely, from 9 AM to 10 PM; library timings are further

extended during the examination period. The Library has introduced a book donation scheme, and has been organizing book fairs regularly. Through the Library Committee it is carrying out participative budget planning. The purchase procedure has been made transparent by allowing rolling advertisement for vendors registration.

We have added a new STM 4 (650 Mbps) Internet Leased line - bringing our total bandwidth to 1.6Gbps in the Allahabad campus. Additional wireless connectivity has been provided in the newly constructed residential buildings. We are in the process of completely connecting the new Boys Hostel which is expected to have approximately 1000 connected nodes. This will be completed in the current financial year. KV-IIITA has recently been provided with network connectivity. We have initiated the process of ensuring that equitable bandwidth is available to the entire campus, while ensuring that objectionable content is eschewed. Also we have instituted a Network Usage Policy.

**Campus Placement**

Industry values our students greatly as witnessed by the ever-increasing campus placements. Most of the students registered for campus placements, already 309 students have been placed in the best of the national and multinational companies.

**Outreach Activities**

During December 08-12, 2014, the Institute organized a Science Conclave in which one Nobel Laureate, one Turing Awardee, 26 eminent scientists from India and overseas interacted with 288 college and university participants, and 499 school students. The Conclave witnessed a lively panel discussion on innovation. In 2014 as well as in 2015 summers, the Department of Applied Sciences organized a Workshop. on Advance Material and Instrumentation in Biomedical Engineering. We have a very active IEEE Students' Branch, which was ranked first amongst all such Students' Branches in Uttar Pradesh, Uttarakhand and Nepal. In recognition of our activities in the area of robotics, the International professional society IEEE has opened a Robotics and Automation Society Chapter at IIIT-A with the jurisdiction of UP, Uttaranchal and Nepal. The Chapter has already organized a number of talks and students' competitions. During June 7-13, 2014 SERB

sponsored First Summer School was held in the Institute which attracted young researchers from all over the country.

**Concluding Remarks**

Since its establishment in 1999, our Institute has travelled a long way, by now establishing itself as a premier Institution of Information Technology and allied areas. This has been possible because of the sincere and sustained hard work and utmost dedication of the faculty, the staff, and the successive groups of students. It is our resolve to sustain and nurture this indomitable spirit in the years to come.

## 1.4 The Charter & Mission

**CHARTER**

- To train and educate certificate, diploma, undergraduate and postgraduate levels, engineers of outstanding ability who may become leaders in the IT industry and profession.
- To carry out advanced research and development in leading edge technology areas in Computer Hardware and Software which can be useful over comparatively on a long-term basis.
- To develop and promote national and international linkages by way of adjunct faculty, partnership in research, student exchange, academic credit transfer and joint degrees.
- To work for the creation and development of resource databases, associated software and courseware for all-important applications so as to ensure future availability of newer software technologies in English, Hindi and other Indian languages.

**MISSION**

- The mission of Indian Institute of Information Technology, Allahabad (IIIT-A) is to be a unique and world class nucleating “Apex Centre of Excellence” in the area of Information Technology and Allied Sciences for enhancing India's technological strength in Information Technology and for becoming a pace-setting institution for other similar institutes to be established in future.

- IIIT-A shall seek to derive its strength from its linkage with sound Indian traditions of past centuries and set out to create knowledge-based resources in regional languages of India.

## 1.5 The Governance

**GOVERNING BODIES OF THE INSTITUTE**

The Governing Bodies of the Institute comprise the following:

- The IIIT-A Society
- The Board of Management
- The Academic Council
- The Finance Committee
- The Building & Works Committee

These Governing Bodies derive their powers and functions from the MoA and Rules approved and promulgated vide UGC (Institutions Deemed-to-be Universities) Regulations, 2010.

In short, the functions of these Governing Bodies are given below:

**The IIIT-A Society**

a) To arrange for Instruction and training in such branches of learning as it may deem fit.
b) To arrange for research and for the advancement of and dissemination of knowledge.
c) To undertake extra-mural studies, extension programs and field outreach activities to contribute to the development of society.
d) To do all such other acts and things as may be necessary or desirable to further the objects of the Institute.

Constitution of IIIT-A Society as approved by the Government is given in **Annexure - 01.**

**IIIT Act 2014**

With effect from 5th Januray, 2015, IIITs Act 2014 has been come into force. The provisions of the said Act are being implemented. A copy of the IIITs Act, 2014 is attached as Annexure…

**The Board of Management (B.O.M.)**

The Board is the principal authority responsible for academic, financial and administrative matters and has the ultimate responsibility for long term policy formulation, planning and development for growth and governance of the Institute. The Board has the power to constitute other subordinate and subsidiary groups/committees, as may be required, to discharge its functions.

With effect from November 26, 2011, the Institute adopted the UGC (Institutions Deemed-to-be Universities) Regulations 2010 as adopted by the IIIT-A Society. The registration of Revised MoA and Rules of the IIIT-A Society under the Registration of Societies Act, 1860 was

done on 26.11.2011. Henceforth, the Board of Management replaced the erstwhile Board of Governors of the Institute. A List of Members during the period is given as **Annexure - 02.**

**The Academic Council (A.C.)**

As detailed above, w.e.f. 26.11.2011 consequent upon the adoption of UGC (Institutions Deemed-to-be Universities) Regulations 2010, the Academic Council replaced the erstwhile Senate of the Institute.

The Academic Council is the principal academic body of the Institute and is responsible for the maintenance of standards of education, teaching, evaluation, research & consultancy, training, inter-departmental co-ordination, examinations and tests within the Institute and shall exercise such other powers and perform such other duties and functions as may be prescribed or conferred upon it by the Rules and Bye-laws. It has the responsibility to lay down policy guidelines and the directions for academic growth and development of the Institute. Other powers and functions are given in detail in the MoA & Rules.

A List of Members of Academic Council during the period is given as **Annexure - 03.**

**The Finance Committee (F.C.)**

The Finance Committee of the Institute has the responsibility to look after resource mobilization, control of expenditure, etc. It should also stimulate resource generation from sources other than Government funding such as sponsored projects, research and consultancy and promote Industry Institute Interaction. A List of Members of Finance Committee during the period is given as **Annexure - 04.**

**The Building & Works Committee (B.W.C.)**

(1) It is responsible under the direction of the Board for construction of all major capital works after securing from the Board the necessary administrative approval and financial sanction.

(2) It is responsible under the direction of the Board for construction of all major capital works after securing from the Board the necessary administrative approval and financial sanction.

(3) It shall have the power to give the necessary administrative approval and financial sanction for all minor works and works pertaining to maintenance and repairs, within the budget placed at the disposal of the Institute for the purpose.

(4) It shall cause to be prepared estimates of cost of building and other capital work, minor works, repair, maintenance and the like.

(5) The Committee shall perform such other functions in the matter of construction of building and development of land for the institute as the Board may entrust to it from time to time.

A List of Members of Building & Works Committee during the period is given as **Annexure – 05.**

# 2. The Administration

**( As in March 2015 )**

## 2.1 Academic Departments

1. **Information Technology**
2. **Electronics and Communication Engineering**
3. **Applied Science**
4. **Management Stdies**

These Division plan their academic activities jointly and severally under the guidance and direction of Dean(Academic) under administrative & academic control of the Academic Council and Board of Management through the Institutional Head ,i.e. the Director of the Institute .Their growth plans and developmental activities are governed by the above authorities to ensure that the academic activities are planned and scheduled ,keeping in view and incorporating the latest developments in their various fields of academics.

## 2.2 Deans/HoDs

Prof. G.C. Nandi, Dean (Academic)
Prof. O.P. Vyas, Dean (R&D)
Prof. U. S. Tiwary, Dean (IRP)
Prof. Sudip Sanyal, Dean (Faculty Affairs)
Dr. Vijay Chaurasiya, Associat e Dean (Student Affairs)
Dr. Shekhar Verma, HoD (IT)
Dr. Neetesh Purohit, HoD (Electronics)
Dr. Tapobrata Lahiri, HoD (Applied Science)
Dr. Madhvendra Mishra, HoD (Management)

## 2.3 Council of Wardens

Dr. Pritish Varadwaj, Chairman Council of Warden, (Warden Boys Hostel - IV)
Dr. K. P. Singh, (Warden Boys Hostel -I)
Dr. Akhilesh Tiwari, (Warden Boys Hostel -II)
Dr. Amit Prabhakar, (Warden Boys Hostel -III)
Dr. Ranjana Vyas, (Warden Girls Hostel -I)

Dr. Nidhi Mishra, (Warden Girls Hostel -II)
Dr. Sangeeta Singh, (Warden Girls Hostel -III)

### 2.4 Proctorial Board

Dr. Rajat Singh, Chief Proctor Assistant Proctor
Mr. Satish Kumar Singh, Assistant Proctor
Dr. Satyavani Guttula, Asstt. Proctor

### 2.5 Special Functionaries

Prof. BR.Singh, Chief Vigilance Officer (CVO)
Prof. Sudeep Sanyal, Grievance Officer
Dr. Shirshu Verma, Professor In-Charge, Placement (B.Tech, M.Tech & MBA)
Dr. Pavan Chakraborty, Faculty In-charge (Ph.D. Cell)
Dr. Neetesh Purohit , Faculty In-charge (Library)
Dr. Manish Goswami, Faculty In-Charge (Exam Cell)
Dr. Abhishek Vaish, Faculty In-Charge, Placement (MS)
Dr. Manish Kumar, Faculty In-charge (Maintenance)
Dr. K. P. Singh (International Relations)
Dr. Sanjai Singh, Faculty In-Charge (RGIIT Amethi)
Dr. Asheesh Kumaar, Public Information Officer & In-charge, Legal Cell

### 2.6 Officers

Dr. Asheesh Kumaar, Deputy Registrar (Admin.)
Dr. Seema Shah, Deputy Registrar (E)
Mr. H.D. Tewari, Advisor (Finance)
Mr. S.C. Khare, Accounts Officer
Dr. K.K. Tiwari, Assistant Registrar (F)
Mr. R. Banerjee, Assistant Registrar (Exam)
Mr. L.N. Sharma, Security Officer
Mr. Mithilesh Mishra, System Analyst
Mr. Pankaj Mishra, Public Relation Officer / Hindi Officer

# 3. The Academics

## 3.1 Academic Programmes

| Campus | Program | Splsn. | Batch | Intake Position | No. of Students | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | General | | SC | | ST | | OBC | | Total |
| | | | | | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls | |
| IIIT-A | Ph.D | | 2014 | NA | 15 | 9 | 1 | 2 | 0 | 0 | 5 | 3 | 35 |
| IIIT-A | Ph.D | | 2013 | NA | 6 | 4 | 2 | 1 | 0 | 0 | 2 | 1 | 16 |
| IIIT-A | Ph.D | | 2012 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| IIIT-A | Ph.D | | 2011 | NA | 28 | 7 | 3 | 1 | 0 | 0 | 2 | 1 | 42 |
| IIIT-A | MSCLIS | | 2013 | 76 | 25 | 13 | 13 | 01 | 0 | 0 | 18 | 03 | 73 |
| IIIT-A | MBA-Ph.D | | 2014 | 5 | 01 | 02 | 0 | 0 | 0 | 0 | 01 | 0 | 04 |
| IIIT-A | MBA | | 2014 | 36 | 05 | 08 | 01 | 01 | 0 | 0 | 03 | 0 | 18 |
| IIIT-A | MBA | | 2013 | 76 | 15 | 16 | 03 | 02 | 0 | 0 | 06 | 05 | 47 |
| IIIT-A | M.Tech.-Ph.D. | SE (IT) | 2014 | 6 | 01 | 00 | 01 | 00 | 00 | 00 | 00 | 01 | 03 |
| IIIT-A | M.Tech.-Ph.D. | WCE (IT) | 2014 | 5 | 02 | 00 | 01 | 00 | 00 | 00 | 00 | 00 | 03 |
| IIIT-A | M.Tech.-Ph.D. | IS (IT) | 2014 | 4 | 00 | 01 | 01 | 00 | 00 | 00 | 00 | 00 | 02 |
| IIIT-A | M.Tech.-Ph.D. | RO (IT) | 2014 | 4 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 01 |
| IIIT-A | M.Tech.-Ph.D. | HCI (IT) | 2014 | 4 | 01 | 00 | 00 | 00 | 00 | 00 | 01 | 00 | 02 |
| IIIT-A | M.Tech.-Ph.D. | CLIS (IT) | 2014 | 6 | 07 | 00 | 02 | 00 | 00 | 00 | 04 | 00 | 13 |
| IIIT-A | M.Tech.-Ph.D. | BI (IT) | 2014 | 3 | 01 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 |
| IIIT-A | M.Tech.-Ph.D. | MI (EE) | 2014 | 4 | 00 | 00 | 01 | 00 | 00 | 00 | 00 | 00 | 01 |
| IIIT-A | M.Tech. | SE (IT) | 2014 | 17 | 04 | 03 | 02 | 00 | 00 | 00 | 04 | 00 | 13 |
| IIIT-A | M.Tech. | WCE (IT) | 2014 | 15+1 | 03 | 02 | 02 | 00 | 01 | 00 | 01 | 00 | 09 |
| IIIT-A | M.Tech. | IS (IT) | 2014 | 10 | 02 | 02 | 00 | 01 | 00 | 01 | 01 | 01 | 08 |
| IIIT-A | M.Tech. | RO (IT) | 2014 | 10 | 02 | 00 | 01 | 00 | 01 | 00 | 03 | 00 | 07 |
| IIIT-A | M.Tech. | HCI (IT) | 2014 | 12 | 03 | 00 | 02 | 00 | 00 | 00 | 01 | 00 | 06 |
| IIIT-A | M.Tech. | CLIS (IT) | 2014 | 17 | 07 | 00 | 02 | 00 | 00 | 00 | 04 | 00 | 13 |
| IIIT-A | M.Tech. | BI (IT) | 2014 | 10 | 00 | 00 | 00 | 00 | 01 | 00 | 01 | 01 | 03 |
| IIIT-A | M.Tech. | MI (EE) | 2014 | 12 | 02 | 01 | 01 | 00 | 00 | 01 | 02 | 00 | 07 |
| IIIT-A | M.Tech. | SE (IT) | 2013 | 28 | 10 | 06 | 03 | 01 | 01 | 00 | 06 | 02 | 29 |
| IIIT-A | M.Tech. | WCC (IT) | 2013 | 20 | 04 | 06 | 04 | 01 | 00 | 00 | 04 | 00 | 19 |
| IIIT-A | M.Tech. | IS (IT) | 2013 | 16 | 04 | 05 | 02 | 01 | 00 | 00 | 01 | 03 | 16 |
| IIIT-A | M.Tech. | RO (IT) | 2013 | 18 | 04 | 04 | 03 | 00 | 00 | 00 | 04 | 00 | 15 |
| IIIT-A | M.Tech. | HCI (IT) | 2013 | 18 | 04 | 03 | 03 | 01 | 00 | 00 | 03 | 00 | 14 |
| IIIT-A | M.Tech. | BI (IT) | 2013 | 15 | 04 | 04 | 02 | 01 | 00 | 00 | 02 | 00 | 13 |
| IIIT-A | M.Tech. | MI (ECE) | 2013 | 18 | 08 | 02 | 02 | 00 | 00 | 00 | 04 | 00 | 16 |
| IIIT-A | M.Tech. | CE (ECE) | 2013 | 15 | 05 | 04 | 01 | 02 | 00 | 00 | 02 | 01 | 15 |
| IIIT-A | Dual D. M.Tech. (RM) | IT | 2014 | 7+1 | 02 | 01 | 01 | 0 | 01 | 0 | 02 | 0 | 07 |
| IIIT-A | Dual D. M.Tech. (RM) | IT | 2013 | 15 | 07 | 01 | 02 | 0 | 01 | 0 | 04 | 0 | 15 |
| IIIT-A | Dual D. M.Tech. (SM) | IT | 2014 | 7+1 | 03 | 0 | 01 | 0 | 00 | 01 | 01 | 01 | 07 |
| IIIT-A | Dual D. M.Tech. (SM) | IT | 2013 | 15 | 04 | 04 | 01 | 01 | 01 | 0 | 02 | 02 | 15 |
| IIIT-A | Dual D. M.Tech. (WCE) | IT | 2014 | 7+1 | 01 | 01 | 01 | 0 | 01 | 0 | 02 | 0 | 06 |
| IIIT-A | Dual D. M.Tech.(IS) | IT | 2014 | 7+1 | 03 | 0 | 01 | 0 | 01 | 0 | 02 | 0 | 07 |

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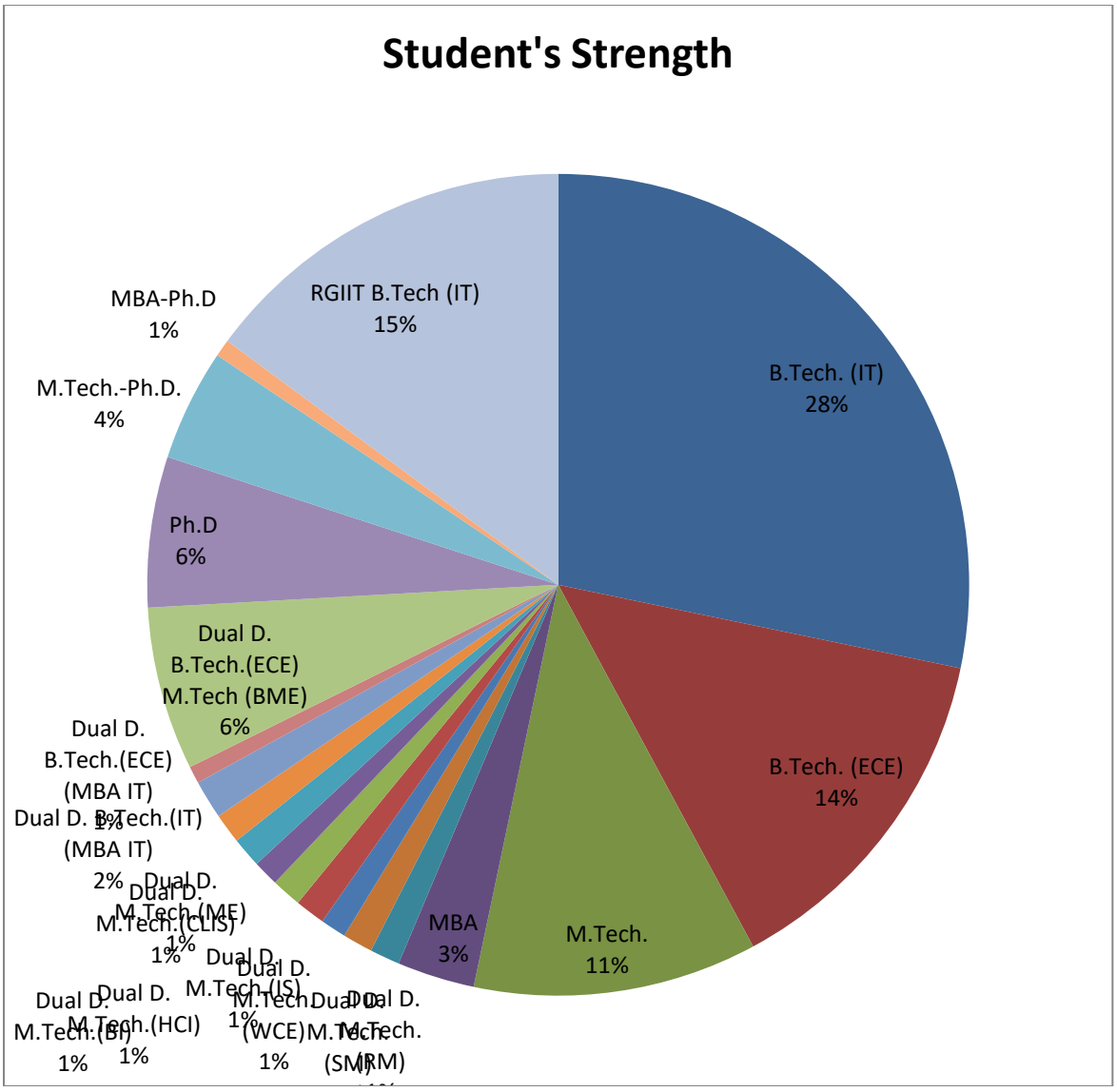
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **IIIT-A** | **Dual D. M.Tech.(HCI)** | IT | **2014** | **7+1** | 04 | 0 | 01 | 0 | 0 | 0 | 02 | 0 | 07 |
| **IIIT-A** | **Dual D. M.Tech.(BI)** | IT | **2014** | **7+1** | 02 | 01 | 01 | 0 | 0 | 0 | 01 | 01 | 06 |
| **IIIT-A** | **Dual D. M.Tech.(ME)** | ECE | **2014** | **7+1** | 03 | 01 | 01 | 0 | 0 | 0 | 02 | 0 | 07 |
| **IIIT-A** | **Dual D. M.Tech.(CLIS)** | IT | **2014** | **7+1** | 04 | 0 | 01 | 0 | 0 | 0 | 02 | 0 | 07 |
| **IIIT-A** | **Dual D. B.Tech.(IT) (MBA IT)** | IT | **2014** | **9+1** | 04 | 01 | 01 | 0 | 01 | 0 | 02 | 0 | 09 |
| **IIIT-A** | **Dual D. B.Tech.(ECE) (MBA IT)** | ECE | **2014** | **4+1** | 01 | 01 | 01 | 0 | 0 | 0 | 01 | 0 | 04 |
| **IIIT-A** | **Dual D. B.Tech.(ECE) M.Tech (BME)** | ECE | **2014** | **45** | 16 | 02 | 05 | 01 | 02 | 01 | 10 | 01 | 38 |
| **IIIT-A** | **M.Tech. (BME) including Stemcell** | ECE | **2013** | **62** | 15 | 15 | 08 | 04 | 02 | 0 | 09 | 08 | 61 |
| **IIIT-A** | **M.Tech. (BME)** | ECE | **2012** | **45** | 08 | 09 | 03 | 05 | 02 | 01 | 05 | 05 | 38 |
| **IIIT-A** | **B.Tech. (IT)** | IT | **2014** | **140+26** | 85 | 13 | 14 | 06 | 10 | 01 | 33 | 05 | 167 |
| **IIIT-A** | **B.Tech. (IT)** | IT | **2013** | **185+28** | 85 | 20 | 23 | 6 | 14 | 2 | 43 | 7 | 200 |
| **IIIT-A** | **B.Tech. (IT)** | IT | **2012** | **185+28** | 86 | 18 | 23 | 3 | 14 | 1 | 46 | 3 | 194 |
| **IIIT-A** | **B.Tech. (IT)** | IT | **2011** | **185+28** | 78 | 15 | 25 | 6 | 10 | 3 | 45 | 7 | 189 |
| **IIIT-A** | **B.Tech. (ECE)** | ECE | **2014** | **81+13** | 33 | 11 | 10 | 02 | 05 | 01 | 20 | 00 | 82 |
| **IIIT-A** | **B.Tech. (ECE)** | ECE | **2013** | **92+14** | 37 | 08 | 11 | 03 | 07 | 00 | 18 | 06 | 90 |
| **IIIT-A** | **B.Tech. (ECE)** | ECE | **2012** | **92+14** | 42 | 07 | 12 | 02 | 07 | 00 | 23 | 01 | 94 |
| **IIIT-A** | **B.Tech. (ECE)** | ECE | **2011** | **92+14** | 40 | 06 | 12 | 01 | 05 | 01 | 18 | 03 | 86 |
| **RGIIT Amethi** | **B.Tech. (IT)** | IT | **2014** | **92+14** | 32 | 11 | 12 | 02 | 05 | 01 | 23 | 02 | 88 |
| **RGIIT Amethi** | **B.Tech. (IT)** | IT | **2013** | **92+14** | 27 | 13 | 12 | 00 | 03 | 01 | 18 | 06 | 80 |
| **RGIIT Amethi** | **B.Tech. (IT)** | IT | **2012** | **92+14** | 37 | 08 | 12 | 03 | 05 | 01 | 19 | 07 | 92 |
| **RGIIT Amethi** | **B.Tech. (IT)** | IT | **2011** | **92+14** | 42 | 03 | 08 | 03 | 05 | 02 | 21 | 02 | 86 |

## 3.1.1 Intake of the Year (Admission Status)

| Course | Year | Total No. of Student |
|---|---|---|
| B.Tech. (IT) | 2014 | 167 |
| B.Tech. (ECE) | 2014 | 82 |
| M.Tech. | 2014 | 66 |
| MBA | 2014 | 18 |
| Dual D. M.Tech. (RM) | 2014 | 7 |
| Dual D. M.Tech. (SM) | 2014 | 7 |
| Dual D. M.Tech. (WCE) | 2014 | 6 |
| Dual D. M.Tech.(IS) | 2014 | 7 |
| Dual D. M.Tech.(HCI) | 2014 | 7 |
| Dual D. M.Tech.(BI) | 2014 | 6 |

| | | |
|---|---|---|
| Dual D. M.Tech.(ME) | 2014 | 7 |
| Dual D. M.Tech.(CLIS) | 2014 | 7 |
| Dual D. B.Tech.(IT) (MBA IT) | 2014 | 9 |
| Dual D. B.Tech.(ECE) (MBA IT) | 2014 | 4 |
| Dual D. B.Tech.(ECE) M.Tech (BME) | 2014 | 38 |
| Ph.D | 2014 | 35 |
| **M.Tech.-Ph.D.** | **2014** | **26** |
| **MBA-Ph.D** | **2014** | **4** |
| **RGIIT B.Tech (IT)** | **2014** | **88** |

## 3.1.2 Total Strength




## 4. The Faculty Update

### 4.1 Faculty Profile

**Prof. G.C. Nandi**
**Professor (Dean of Academic Affairs)**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
   Prof G C Nandi, Senior most Professor of the institute

2. **Academic Designation and Department:**
   Dean of Academic Affairs

**3. Publications (Books and Research Papers):**

**International Journal Publications:**

1. Vijay Bhaskar Semwal and G.C. Nandi, "Toward Developing a Computational Model for Bipedal Push Recovery–A Brief," in IEEE Sensors Journal, , vol.15, no.4, pp.2021-2022, April 2015 (Impact factor-1.9)
2. Vijay Bhaskar Semwal, Pavan Chakraborty and G.C. Nandi, "Less computationally intensive fuzzy logic (type-1)-based controller for humanoid push recovery", Robotics and Autonomous Systems, Volume 63, Part 1, January 2015, Pages 122-135. (Impact factor 1.3- H5 factor-37).
3. Vijay Bhaskar Semwal Manish Raj, and G.C. Nandi, Biometric gait identification based on a multilayer perceptron, Robotics and Autonomous Systems, Volume 65, March 2015, Pages 65-75, ISSN 0921-8890 (Impact factor 1.3- H5 factor-37).
4. Vijay Bhaskar Semwal Shiv A. Katiyar, Rupak Chakraborty, and G. C. Nandi, Biologically-inspired push recovery capable bipedal locomotion modeling through hybrid automata, Robotics and Autonomous Systems, Volume 70, August 2015, Pages 181-190 (Impact factor 1.3- H5 factor-37).
5. Vijay Bhaskar Semwal, Kaushik Mondal, and G. C.Nandi, Robust and more accurate feature and classification using deep neural network, Neural Computing and Application, Springer (Impact factor 1.7).
6. Neha Baranwal and G.C.Nandi." An Efficient Gesture based Humanoid Learning using Wavelet Descriptor and MFCC Techniques". International Journal of Machine Learning and Cybernetics (Springer) (SCI) (Accepted).
7. Neha Baranwal and G.C.Nandi." Real Time Gesture based Communication using Possibility Theory based Hidden Markov Model" International journal of uncertainty fuzziness and knowledgebase systems (world scientific) (SCI) (0.61 impact factor)(Accepted).
8. Avinash Kumar Singh, Piyush Joshi, G C Nandi, "Face Liveliness Detection through Face Structure Analysis", published in inderscience "International Journal of Applied Pattern Recognition". Digital Library:Vol.1, No.4, pp.338 – 360.
9. Avinash Kumar Singh, G C Nandi, "Visual Perception based Criminal Identification- a query based approach", accepted for the publication in "Taylor & Francis International Journal of Experimental & Theoretical Artificial Intelligence. SCI-Impact Factor: 1.0

**International Conference Publications:**

1. Neha Baranwal and G.C. Nandi. "Possibility Theory based Continuous Indian Sign Language Gesture Recognition" accepted and presented in 35th IEEE TENCON 2015, Macao, china, 1-4 Nov. 2015.
2. Neha Baranwal, Neha Singh and G.C. Nandi. "Implementation of MFCC based Hand Gesture Recognition on HOAP-2 using WEBOTs Platform" published in 3rd IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI 2014), September 2014, pp.1897 - 1902 (Received Best paper award).
3. Kumud Tripathi, Neha Baranwal and G.C. Nandi. "Continuous Indian Sign Language Gesture Recognition and Sentence Formation" published in 11th International Conference on Image and Signal Processing (ICISP 2015) (Elsevier Procedia), August 2015 vil.54, pp. 523-531.
4. Tripathi, K.; Baranwal, N.; Nandi, G.C., "Continuous dynamic Indian Sign Language gesture recognition with invariant backgrounds," in Advances in Computing, Communications and Informatics (ICACCI), 2015 International Conference on , vol., no., pp.2211-2216, 10-13 Aug. 2015. doi: 10.1109/ICACCI.2015.7275945
5. Neha Singh, Neha Baranwal and G.C. Nandi. "Implementation and Evaluation of DWT and MFCC based ISL gesture recognition" published in 9th IEEE international conference on Industrial and Information systems (ICIIS 2014), 15-17 Dec. 2014 pp. 1-7.
6. Neha Baranwal, Neha Singh and G.C. Nandi. "Indian Sign Language Gesture Recognition Using Discrete Wavelet Packet Transform" published in IEEE International Conference on Signal Propagation and Computer Technology (ICSPCT 2014), 12-13 July 2014.
7. Saurav, K.; Sonkar, S.; Raj, M.; Nandi, G.C., "ZMP based feedback control of ankle joint," in Industrial Instrumentation and Control (ICIC), 2015 International Conference on , vol., no., pp.1032-1037, 28-30 May 2015.
8. Saurav, K.; Sonkar, S.; Raj, M.; Nandi, G.C., Energy Optimized Trajectory Generation for Bipedal Locomotion International Conference on Computing in Mechanical Engineering (ICCME '15)
9. Avinash Kumar Singh and G C Nandi, "Sketch drawing by Nao Humanoid Robot", accepted for the publication in 35th IEEE International Conference TENCON 2015, held at Macau in November 1-4, 2015.
10. Avinash Kumar Singh, Neha Baranwal, G C Nandi, "Human Perception based Criminal Identification through Human Robot Interaction", published in Eighth International Conference on Contemporary Computing (IC3), 2015 International Conference on, pp.196-201, 20-22 August 2015.
11. Avinash Kumar Singh, Piyush Joshi, G C Nandi, "Face Recognition with Liveness Detection using Eye and Mouth Movement", published in IEEE, International Conference on Signal Propagation and Computer Technology (ICSPCT-2014), organized by Government Engineering College, Ajmer, Rajsthan-India. Digital Library, pp. 592-597 July 2014

12. Avinash Kumar Singh, Arun Kumar, G C Nandi and Pavan Chakraborty, "Expression Invariant Fragmented Face Recognition", published in IEEE, International Conference on Signal Propagation and Computer Technology (ICSPCT-2014), organized by Government Engineering College, Ajmer, Rajsthan-India. Digital Library, pp. 184-189 July 2014.

**Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

1. Addressed in the RAS chairperson's Workshop organized by IEEE RAS in the ICRA -2015, May 26-30, Seattle, USA
2. Delivered Key note address on "Challenges of bringing Humanoid Robots in a real world environment" in the UPCON-2015, December 4-6, 2015, IIIT-A

**Work done in projects undertaken in the Institute: Following are the research projects where Ph.D students submitted / about to submit their theses:**

- Analyzing links in Social Networks
- Multi Modal Gesture Based communication
- Humanoid sketch drawing robots
- Applying hybrid automata for biped locomotion modelling.
- **Lab & Curriculum Development :** Providing leadership in the institute's curriculum development process and taking initiative to develop subject-wise folders for effective teaching.

**Training program Organized:**

a. Organized Lecture by Prof. Davide Scaramuzza on "Towards Agile Flight of Vision-Controlled Micro Flying Robots", March 18, 2015
b. Conducted (jointly) IEEE RAS Workshop on Robotics and Wireless Sensor Networks, April 12, 2015
c. Conducted (jointly) "Inter-Institute Competitive Coding Competition, titled Codex 1.0", the first of it's kind, on Sunday, 13th of September, under IEEE RAS

## Prof. R.C. Tripathi
## Professor

**Academic Achievements (FOR ACADEMIC YEAR APRIL 2014- MARCH 2015)**

**Following courses were taught:**

**a)Jan-Jun 2014**

i)Intellectual Property Rights ( IPR's ) Elective to B.Tech IT and ECE VI sem students.
ii) Information Retrieval ( IR ) to M.Tech (HCI, IS and RO) II sem and B.Tech IT and ECE VI sem students.

**b) July-Dec 2014**

i) Internet and Web Security Protocols ( IWP 730 )to B. Tech. ( IT ) VII Sem students
ii) Cyber Law and Security Standards ( CLS131 ) to M. Tech. ( CLS ) ist Sem students.
iii) Software Requirement Estimation ( SRE 131 )to M. Tech. ( SE ) 1st Sem students

**c) Jan-Jun 2015**

i)Web Technologies along with its Lab Sessions to all the about 280 B.Tech IT VI sem students both at Jhalwa and Amethi Campuses
ii) Information Security and Audit to M.S. ( CLIS ) IV sem and M. Tech.(CLS) 2nd Sem students.

**Publications:**

1 Assessing the ICT Innovative position of India base on Patent Data and Research Publications--- Scientometrics ( In Press) ; a SCI Journal of Impact Factor 2.184

2 Patent Citation Network Analysis and Technology Roadmapping: Case Study of LCD Technology Evolution Scientometrics, ISSN: 01389130 (Print) 1588-2861 ( Online )

3. Multiple Feature Based Offline Handwritten Signature Verification System-- International Journal on Document Analysis and Recognition (Springer)

4. Moving Object Duplication Detection in Videos Based on Trajectory Analysis**:** IETE Journal of Research
5. Detection of Image based forgery in Digital Video using Correlation Maps**:** Multimedia Systems_.*Paper is under consideration for expanded version submission in SCI indexed Journal "Digital Investigation" as notified by Conference Organizer.*

6 Text mining and similarity search using extended tri-gram algorithm in the reference based local repository dataset, International Journal of Proceida Computer Science,

7 A Case Study of Impact of Patenting in the Current Developing Economies in ASIA", Springer Scientometrics (2011) 88: 575-587 [SCI Indexing Journal, Impact Factor 2.18]
8. Akriti Nigam, R.C. Tripathi. (*in press*). "Trademark image retrieval using weighted combination of SIFT and HSV correlogram". International Journal of Computer Applications in Technology, Inderscience, (2015).
9. Akriti Nigam, Vivek Kumar Singh, Prateek Singh, R.C. Tripathi, "A Multiple Feature Based Offline Handwritten Signature Verification System", sent for final reviewing after making revisions to International Journal on Document Analysis and Recognition, Springer, (2015)- **SCI**.
10.Akriti Nigam, Ajay Indoria, R.C. Tripathi, "Fuzzy Clustering of Image Trademark Database and Pre processing using Adaptive Filters and Karhunen Loeve Transform", International Journal of Image and Graphics, Vol. 13, No. 2, 1340008 (15 pages) (2013) .
11. Akriti Nigam, Rupesh Yadav, R.C. Tripathi, "Image Retrieval System for Composite Image Using Directional Chain Codes", International Journal of Advanced Science and Technology, Vol 58, pp 51-64, 2013.
12. Akriti Nigam, Arpit Garg, R.C. Tripathi, "Content Based Trademark Retrieval by Integrating Shape with Color and Texture Information", International Journal of Computer Applications, Vol 22, pp 40-45, 2011.
13. Akriti Nigam, Prateek Singh, R.C. Tripathi, "Robust Offline Signature Identification and Verification System using Directional Chain Codes", International Conference on Computing Sciences (ICCS-2013), Lovely Professional University, Jalandhar.
14. Akriti Nigam, Arpit Garg, R.C. Tripathi, "A Survey on Approaches for developing Content Based Trademark Retrieval System", National Conference on Emerging Trends in Intelligent Computing & Communication (EICC-2012), Galgotias College of Engineering & Technology.

**Conference Papers**

1. Finding Similar patents through Semantic Querry Expansion—Eleventh International Multi Conference on Information Processing - Elsevier Procedia Computer Science Bangalore

2. Efficient and Rotation Invariant Method to Detect Region DuplicationForgery for Uniform Background Images Conference Name: Eleventh International Conference on Image and Signal Processing ICISP 2015), Banglore India Published By: Science Direct

3 Detection of Frame Duplication Type of Forgery in Digital Video Using Sub-Block Based Features.--7th International Conference on Digital Forensics and Cyber Crime (ICDF2C), South Korea.Publisher: Springer Verlag (LNICST)

4. A Trigram Word Selection Methodology to Detect Textual Similarity with Comparative Analysis of Similar Techniques, 4th IEEE International Conference on Communication Systems and Network Technologies (CSNT), 7-9 April, 2014 Page 383-387

**Work done in Projects undertaken in the Institute (Apr 2012-Mar 2013)**

a) Coordinated the "Technology Incubation and Development of Entrepreneurs (TIDE)" scheme of DeitY, MCIT, GoI, New Delhi for which Rs 28.36 lakhs was received as the second installment during the year making the total funds received as Rs.68.36 lakhs out of approved outlay of Rs 155 lakhs for the scheme - duration extended upto March 31st 2017.

## Prof. U.S. Tiwary
## Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Prof. Uma ShankerTiwary, FIETE, SMIEEE

2. **Academic Designation and Department-**
   1. B.Tech (Electronics Engg.)-1983, Institute of Technology , B.H.U.,Varanasi, India.
   2. Ph.D. (Electronics Engg.)-1991, Institute of Technology, B.H.U.,Varanasi, India.

**3. Publications (Books and Research Papers)**

a) Natural Language Processing and Information Retrieval, Tanveer. Siddiqui and U. S. Tiwary, Oxford University Press, 2007. Fifth impression, 2014.

b) (i) National Journals- NIL

(ii) International Journals and Proceedings-

(1) Gyanendra K Verma and Uma Shanker Tiwary, "Multimodal Fusion Framework: A Multiresolution Approach for Emotion Classification and Recognition from Physiological Signals." NeuroImage (Impact Factor: 6.25). 11/2013; DOI:10.1016/ j.neuroimage.2013.

(2) Gyanendra K Verma and Uma ShankerTiwary, "Affect Representation and Recognition in 3D Continuous Valence-Arousal-Dominance Space". Multimedia Tools and Applications, Springer, Accepted for Publication 12/2015. DOI:10.1007/s11042-015-3119.y.

(3) Sudhakar Mishra , Uma ShankerTiwary, "Hear rate measurement using video in different user states for online HCI applications, Conference:InternationalConference on Intelligent Human Interaction, IHCI 2014, Paper accepted : 9 sept 2014

(4) Utkarsh Agrawal , Soumava Roy , Uma ShankerTiwary, "Wavelet based image de-noising using interval type-2 fuzzy set and multilevel adaptive thresholding" Conference : International conference on soft computing and machine intelligence , ISCMI 2014, Accepted : 28 Jul 2014

**4. Invited talks in Seminars/Workshops/Conferences/ Symposiums etc.**

Invited lecture Series at Department of Mechatronics, Gwangju Institute of Science and Technology, Gwangju, South Korea, June 2015.

**5. Work done in projects undertaken in the Institute**

Work done in Speech, Image and Language Processing (SILP) Laboratory of the Institute-

(i) Emotive EEG NeuroHeadset:

The NeuroHeadset has 14 electrodes as well as a two-axis gyroscope for detecting head movements.The device detects 13 kinds of movement - six directions (left, right, up, down, forward, and "pull/zoom") and six rotations (clockwise/anti- clockwise rotation, turn left and right, and sway backward and forward), plus one other visualization ("disappear"). The angular velocity of one's head can be measured in the yaw and pitch (but not roll) directions by the gyros embedded in the device. Several B. Tech and M. Tech semester projects based on this device have been completed and some projects and research are continuing.

(ii) A Cheap Neuroprosthetic hand apparatus using a non-invasive BCI - A cheap apparatus is presented using a non-invasive BCI (by Emotiv Systems) and a 3D printed prosthetic hand for such specially abled people so that they may be able to perform some specific day-to-day tasks. The choice of the headset was done keeping in mind that it should be cheap, can be positioned by subject itself and can transmit data wirelessly. The apparatus has been tested on amputees and with normal people too using computer-based GUI.

(iii) SR Research EyeLink 1000 Eye Tracker: EyeLink 1000 Eye tracker is a video input based system, which measures the point of gaze (where one is looking) on a screen. Eye trackers are used in research on the visual system, in psychology, in cognitive linguistics and in product design. Several B. Tech and M. Tech semester projects based on this device have been done and some projects and research works are going on.

In current research work, The eye tracker system is being used to find out difficulty level of words/phrase for a reader, assessment of the reader based on his/her reading pattern, and measuring improvement in the reader's comprehension skill.

(iv) Stereo Vision System: The Bumblebee XB3 is a 3-sensor multi-baseline 800Mb/s stereo camera designed for improved flexibility and accuracy. It features 1.3 mega-pixel sensors and has two baselines available for stereo processing. The extended baseline and high resolution provide more precision at longer ranges, while the narrow baseline improves close range matching and minimum-range limitations.

(v) Details of new Servers: Seven HP servers have been installed in SILP lab. Their descriptions are as follows:

a) HP DL380 Gen9 8SFF CTO Server: (Qty-2)Processor: Intel Xeon (R) CPU E5-2630 V3, CPU speed: 2.4 GHz, No. of Cores: 18, RAM size: 256 GB, RAID size: 1 TB, Graphics Card: NVidia 8 GB.

b)HP DL360 Gen9 8SFF CTO Server: (Qty-5)Processor: Intel Xeon (R) CPU E5-2630 V3, CPU speed: 2.4 GHz, No. of Cores: 16 to 40, RAM size: 32 to 64 GB, RAID size: 2 to 3 TB, Graphics Card: Not available.

**6. Lab & Curriculum Development - As above.**

**7. Extra – Curricular activities-**

(i) Organized Workshop of IEEE Computational Intelligence Workshop- CIW' 2014 held during Oct 13-15, 2014 at IIIT-Allahabad.

(ii) Organized 7th International Conference on Intelligent Human Computer Interaction (IHCI 2015) during December 14-16 2015 at IIIT-Allahabad.

**8. Awards/Honours/Recognition/Professional Awards received-**

Professional Awards-

(i) Senior Member, IEEE

(ii) Fellow IETE

(iii) Member CSI

**Administrative Experience : 20 years ;**

(i)Dean Infrastructure and Resource Planning IIIT-A from 18/11/2014 to date.
(ii) Chairman Purchase Committee, IIIT-A from 18/11/2014 to date.
(ii) Chief Vigilance Officer IIIT-A from 27/1/2014 till 18/11/2014.
(iii) Expert Member of Selection Committees at variousUniversities.
(iv)Member, Advisory Committee, Centre of Behavioural and Cognitive Sciences (CBCS), Allahabad University. Member of IT Infrastructure Committee, University of Allahabad.
Conferences Organized-
(i) Organized 7th International Conference on Intelligent Human Computer Interaction (IHCI 2015) during December 14-16 2015 at IIIT-Allahabad.

**9. Training Programmes Organized-**
(i) Organized Workshop of IEEE Computational Intelligence Workshop- CIW' 2014 held during Oct 13-15, 2014 at IIIT-Allahabad.

## Prof. Om Prakash Vyas
## Professor

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
Dr. Om Prakash Vyas

**2. Academic Designation and Department:**
Professor (IT) & Dean (R&D)

**3. Publications (Books and Research Papers) Total 8 Publications**
(Some significant ones are as below ;)

(i) Leveraging Bibliographic RDF Data for Keyword Prediction with Association Rule Mining (ARM): N Kushwaha, OP Vyas, Data Science Journal 13 (0), 119-126, 2014.
(ii) Fuzzy Rule Based Approach for Software Fault Prediction": Pradeep Singh, Nikhil R Pal, S Verma, OP Vyas in IEEE Transactions on Systems, Man and Cybernetics: Systems, 2014.
(iii) Monika Rani, RijuNayak, O.P. Vyas, An ontology-based adaptive personalized e-learning system, assisted by software agents on cloud storage, Knowledge-Based Systems, Volume 90, December 2015, Pages 33-48, ISSN 0950-7051, http://dx.doi.org/10.1016/j.knosys.2015.10.002.(SCI Journal).
(iv) LOD Cloud Mining for Prognosis Model (Case Study: Native App for Drug Recommender System) N Kushwaha, R Goyal, P Goel, S Singla, OP Vyas, Advances in Internet of Things 2014,

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
Organized Symposium on "IT innovations for Smart Cities" (14TH & 15TH March 2015) with 3 International Experts Prof. Vicky Hansen (ACM-Vice President, USA), Dr. Nathalie Mitton (Inria-France), Dr. Artus KG (Uni. Paderborn-Germany).

**5. Work done in projects undertaken in the Institute**
Project Coodinator – ATB Network Simulation Testbed (Army Technology Board Testbed)

**6. Lab & Curriculum Development**
Taught and developed Lab for various courses OO Software Engineering, Embedded Software Engineering.

**7. Extra – Curricular activities:**
Additional responsibilities as Estate Officer (IIITA)

8. Awards/Honours/Recognition/Professional Awards received

Visiting Professor at University of Paderborn (Germany)-Taught Mini Course to German students (2014)

**9. Training Programmes Organized:**
Android Application Development Training organized for Mobile Apps

**10. Any other Achievements/Distinctions (not included above):**
Worked at Inria-Lille (France on Indo French Research Project "IoT deployment for Smarter Cities" (2014)

## Prof. B.R. Singh

## Professor

1. **Full name (as published in the institute records, with prefix and suffixes, of degrees and distinctions):**
   B.R. Singh, Ph.D.
2. **Academic designation and department:**
   Professor, Department of ECE.
3. **Publications (Books and Research Papers):**

| Title of paper | Name of journal | Place of publication | Volume & Issue no. | Year | Pages from-to | Impact factor |
|---|---|---|---|---|---|---|
| Ionizing radiation effects on electrical and reliability characteristics of sputtered Ta2O5/Si interface | Radiation Effects and Defects in Solids | Taylor & Francis | Volume 170, No. 6 | 2015 | 510-518 | 0.6 |
| On the surface passivation of c-silicon by RF sputtered $Al_2O_3$ for solar cell application | Journal of Materials Science: Materials in Electronics | Springer | Volume 26, Issue 2 | 2014 | 639-645 | 1.966 |
| First Principles Calculations of Bonding and Charges at the $Al_2O_3$ Interface in a c-Si/$SiO_2$/am-$Al_2O_3$ Structure Applicable for the Surface Passivation of Silicon-Based Solar Cells | IEEE Transactions on Electron Devices | IEEE Trans.on Electron Devices | Accepted | - | - | - |
| Effects of Process Parameters on the Passivation Properties of Anodic Aluminum Oxide/Silicon Interface | **Journal of Photovoltaics** | IEEE | Communicated | - | - | - |

4. **Work done in projects undertaken in the Institute:**
   Under the project entitled "development and application of atomic layer deposition for high efficiency c-Si Photovoltaic solar cell" sanctioned by Solar Energy Research Initiatives, DST, New Delhi, we have successfully installed the Atomic Layer Deposition system and supporting facilities such as precursors, high purity gases etc. for thin film deposition. In addition to this, the multi angle ellipsometer is also installed for thickness measurement and characterization. All the facilities are now operational and the work on process optimization is currently in progress.
5. **Lab & Curriculum development:**
   Following facilities has been added to VLSI laboratory for research and development:
   a. Procurement and installation of the supporting facilities for the Atomic Layer Deposition system, such as establishment of Class 100 clean room, clean air workstation, Wet scrubber unit and chilled water unit.
   b. Procurement of Lifetime Tester from SINTON Instruments, USA, to measure the charge carrier lifetime in semiconductor wafers and to test the solar cell efficiency

## Prof. Krishna Mishra
## Professor

1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)
   **Prof. (Mrs.) Krishna Mishra, Ph.D., FNASc, FBRSI**
2. Academic Designation and Department

Publications (Books and Research Papers)

1. Books
   Ajay Kumar Singh and Krihna Mishra; Next Generation Sequencing Development in Cancer Research by Bioinformatics approaches; Nava Science Publishers, Inc. 400 Oser Avenue, Suite 1600 Hauppauge, NY-11788-3619, USA(2015)
2. National Journals
   i. In-Silico Designing of Molecular Beacon Probes for Sensitive and Rapid Detection of Water Borne Pathogenic Bacteria Proceedings of the National Academy of Sciences, India Section B: Biological Sciences ISSN 0369-8211 Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci (2015); DOI 10.1007/s40011-015-0516-y
   ii. P-Glycoprotein: A Critical Comparison of Models Depicting Mechanism of Drug Efflux and Role of Modulators; Proceedings of the National Academy of Sciences, India Section B: Biological Sciences ISSN 0369-8211 Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci (2015); DOI 10.1007/s40011-014-0405-9(2015)
   iii. Role of tetracycline and cAMP analogues in pancreatic β stem cell differentiation/proliferation process via modulation of epac2 protein; Indian journal of Biotechnology, vol 14, April 2015, pp 172-178
3. International Journals
   i. A comprehensive Metabolic Manuscript ID Omics: a journal of integrative biology (2013), Volume 17(11), Number: 10.1089/omi.2013.0007
   ii. Protective Effect of Theaflavin on Erythrocytes Subjected to In Vitro Oxidative Stress; Biochemistry Research International, Vol. 2013 (2013), Article ID 649759, 7 pages: http://dx.doi.org/10.1155/2013/649759
   iii. Atom-based 3D-QSAR, molecular docking and molecular dynamics simulation assessment of inhibitors for thyroid hormone receptor α and β. Journal of molecular modeling, 2014 [JMMO-D-14-00113R1] June 2014
   iv. Durg Vijay Singh, Santosh Kumar Bharti, Shikha Agarwal, Raja Roy, Krishna Misra, Study of interaction of human serum albumin with curcumin by NMR and docking; Journal of Molecular Modeling 00008R3 (Accepted June 17, 2014)
   v. Rajesh Kumar Kesharwani, Prabhakar Singh, Syed Ibrahim Rizvi, Vandana Srivastava, Kuruba Adeppa, Krishna Misra: A Novel Approach for Overcoming Drug Resistance in Breast Cancer Chemotherapy by Targeting new Synthetic Curcumin Analogues Against Aldehyde Dehydrogenase 1 (ALDH1A1) and Glycogen Synthase Kinase-3 β (GSK-3β). Applied Biochemistry and Biotechnology 2015 Aug;176(7):1996-2017. doi: 10.1007/s12010-015-1696-x. Epub 2015 Jun 26.
   **Research Gate information :**
   Krishna Mishra 33.11, Publication downloads 14, 442, Last week 56, Publication views 11,070 Last week 106, Citations 890 Last month 10, Profile views 2,677

Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.

1. National attended several, but have no records
2. International : No record

Any other Achievements/Distinctions (not included above)

- Chaired the Physical Sciences Committee for selection of projects for women under SoWA program of DST, New Delhi
- Chaired the advisory committee of STEM program of NCSTC, DST, New Delhi
- Gave lectures and acted as expert in many INSPIRE programs all over the country
- Gave lecture on women empowerment through Science and Technology at Pondicherry and Chennai
- Gave no. of lectures under several programs of NASI in different cities of the country and at other places e.g. CMS, Lko, Amity University, Lko CBMR, SGPGI Lko, Gorakhpur University, Gorakhpur Institute of Life Sciences, Ahmadabad etc. on different topics, Biotechnology, Biodiversity, Health, Hygiene, why study science, Neuro disorders and workshops for scientific writing.

**Dr. Anupam Agarwal**
**Associate Professor**

1. **Full name, as published in the Institute records, with prefix and suffixes, of degrees and distinctions, if any.**
   Prof. Anupam
   Total Research & Teaching Experience: **26** years +

2. **Academic Designation and Qualification:**
Professor, Coordinator of M.Tech. (Human-Computer Interaction).
Qualification: M.Tech. (CS&E), PhD(IT), Post-Doc Researcher (United Kingdom)

3. **Academic Achievements of the year 2014-2015**
**Brief Particulars:** Additional Research Degrees/ distinction achieved during 2014-2015

*** P**rincipal Investigator (PI) of the ongoing INDO-UK "BURD" Project funded by DST, India & EPSRC, UK.
*** S**erving as Professor In-charge of IIIT Lucknow currently under mentorship of IIIT-A.
*** T**hree students successfully completed their PhD thesis in 2015.
*** S**upervised five M.Tech. students for their thesis work and nearly 65 BTech students for their Mini./ Major projects during 2014-2015.
*** E**xternal PhD thesis examiner, Dept. of Computer Science & Engg., MGM's College of Engineering, Swami Ramanand Teerth Marathwada University, Nanded, India.
*** S**ubjects taught at IIIT-A & RGIIT:
Advanced Graphics & Animation (II Sem, MTech HCI)
Compiler Design (VI Sem, BTech IT)
Virtual Reality (III Sem, MTech HCI & IS)
Artificial Intelligence (V Sem, BTech IT)
Principles of Interaction Design (I Sem, MTech HCI)
*** S**erved as Chairman of BTech IT as well as MTech HCI Project Evaluation boards in both even and odd semesters.

4. **Publications during the year (2014-2015):**

1). Names of Books published **(Apr'2014 – Mar'2015)**

**Book Chapter**: "Real Time Hand Tracking For Dynamic Gesture Recognition", in Soft Computing for Problem Solving, Springer Advances in Intelligent Systems and Computing, ISBN 978-81-322-2219-4, 2014, pp. 153-164.
2). Publications of Articles/Research Papers in Journals/Magazines:
a. National Journals: NIL
b. International Journals: 01
***(Please give only the TITLE of Articles/Papers and Names of the Journals in which published during the year)***
**For details, please refer Annexure 1**

5. Participation in Seminars/Workshops/Conferences/ Symposiums etc. during the year (2014 – 2015)
[Names of Workshops etc. only]
a. National: NIL
b. International: 07
**For details, please refer Annexure 1**

6. **Work done in projects undertaken in the Institute**
1) Specify the contributions made during the year

*** A**s PI of the INDO-UK "BURD" project (funded by the DST), carrying out project development on "Distributing Industrial Optimizations Tasks to Rural Worker" in collaboration with the UK PI at the University of Strathclyde, Scotland, UK.
***** Had prepared & submitted 5 crore rupees FIST (DST) project proposal as PI. The grant was sanctioned to IIIT-A with outlay of Rs. 150 Lakh over a period of 5 years.

2) Brief project ABSTRACTS OF OBJECTIVES/BENEFITS, PROGRESS and RESULT, if any, with project related photographs etc.
**If Investigator / Co-Investigator, provide information as in(2)**

**Please refer Annexure 2**
(having details related to the ongoing INDO-UK "BURD" project)

7. **Research & Development during the year 2014-2015**
a. R & D Activities/ Inventions, if any (give only names and brief relevant particulars in support)

* Development of 2D & 3D Packing/ Shape alignment algorithms and also carrying out experimental trails for 2D & 3D Geometric reasoning & packing tests on workers of rural BPO centers under the INDO-UK "BURD" project.
* Supervising the "Interactive Technologies & Multimedia" Lab at IIITA to carry out training and R&D in related areas.
* Development of Computer Vision & Soft-computing algorithms in areas such as Gesture Recognition, Biometric Identification, Smart Home, Multi-modal HCI, Video Surveillance, Affective Computing and Remote Sensing Image Processing etc.
* Development of GPU-Accelerated Vision and Visualization/ Animation Algorithms.

8. **Extra – Curricular activities (2014-2015)**
Briefly Name the Extra-Curricular Activities (with photographs, articles etc.)

* Performed the duties of Professor In-Charge, IIIT Lucknow (planning & execution of start of BTech IT course at IIITA; also participating in IIIT-L meetings in New Delhi, Allahabad and Lucknow).
* Significantly contributed in organization of 9th Convocation at IIIT Allahabad as officiating Dean (Academics).
* Member of the Grievance Redressal Committee at IIIT-A.

9. **Awards/Honours/Recognition received, if any**

a. National level

* Member of Senate at IIITA.
* Member of Institute Advisory Committee (IAC) at IIITA
* Fellow of IETE, New Delhi
* Senior Member: CSI, Mumbai
* Chartered member of Institution of Engineers (India)

b. International level

* Senior Member of IEEE, USA
* Invited Reviewer of Intl. Journals:

IEEE Trans. on GRS; IEEE Trans. on ITS, Intl. J. RS and Intl. J. GIS (Taylor & Francis), Journal of Supercomputing (Springer), "Sensors" journal (MDPI), National Academy Science Letters (Springer), Journal of Electrical and Electronics Engineering Research (Academic Journals), Computer Vision and Image Understanding (Elsevier) and others.

* Invited Reviewer of Intl. Conferences:

IEEE IGARSS, ACM COMPUTE, IMCIC, INDICON and others.

10. **Training Programmes Organized (2014- 2015)**
Give names of
(a). In-Campus Training Programs
NIL
(b). Off-Campus Training Programs/ Workshop
*** O**rganized an Intl. Workshop under the "BURD" Project in Chennai in conjunction with the IEEE TIAR2015 conference.

11. **Any other Achievements/Distinctions not included in the above**
* Certificate of appreciation: for Overall In-charge/ Chairman of Security Committee during 7th Science Conclave, 2014 at IIIT Allahabad.
* Served as member of the committees for recruitment of faculty members at IIIT-A.
* Question paper setter for M.Sc. Computer Science/ BTech Computer Science courses and External examiner of BTech CS Project evaluations at JK Institute of Applied Physics & Technology, University of Allahabad, Allahabad.

Annexure-1

**Publications of Dr. Anupam, Professor, IIIT Allahabad**

***(Period April 2014 to March 2015)***

**List of Publications in Refereed International Journals (2014-2015)**

| Title of Paper | Name of the Journal | Publisher/ Place of Publication | Volume & Issue No. | Year | Pages from-to |
|---|---|---|---|---|---|
| Social Implications of Crowdsourcing in Rural Scotland | International Journal of Social Science & Human Behavior Study | The IRED Scientific Publishing, USA | Vol 1, No. 3 | Sept., 2014 | 47 - 52 |

**List of Publications in Referred International/ National Conferences (2014-2015)**

| Title of Paper Presented | Name of the Conference (page numbers) | Name of the organizing Institution / University | Dates on which the Conference was held | Name of supporting Professional Organization such as IEEE, ACM, AIMA etc. |
|---|---|---|---|---|
| An Efficient Method based on Wavelet for Fusion of Multi-sensor Satellite | ICECCT 2015 (pp. 1058 - 1062) | SVS College of Engg., Tamilnadu | 05-07 Mar'2015 | IEEE |

| | | | | |
|---|---|---|---|---|
| Images | | | | |
| Evaluation Schema for SAR image Segmentation based on Swarm Optimization in Neutrosopic Domain | ISSPIT 2014 (pp. 343-348) | JIIT, Noida | 15-17 Dec'2014 | IEEE |
| Geometric Invariant Model Based Human Action Recognition | ICIIS 2014 (pp. 229 – 234) | IIITM, Gwalior | 15-17 Dec.'2014 | IEEE |
| Emotion Recognition using Anatomical Information in Facial Expressions | ICIIS 2014 (pp. 260 – 265) | IIITM, Gwalior | 15-17 Dec.'2014 | IEEE |
| Classification of Emotions from Speech using Implicit features | ICIIS 2014 (pp. 266 – 271) | IIITM, Gwalior | 15-17 Dec.'2014 | IEEE |
| Towards Crowdsourcing Spatial Manufacturing Tasks from Rural India | ICMR 2014 (pp. 91 - 96) | Southampton Solent University, Southampton, UK | 09-11 Sept., 2014 | COMEH, UK |
| Social Implications of Crowdsourcing in Rural Scotland | SEM 2014 (pp. 43 - 48) | London, UK | 01-02 June, 2014 | SEEK Digital Library (the IRED) |

**Book Chapter:**

Varsha Dixit and Anupam Agarawal, "Real Time Hand Tracking For Dynamic Gesture Recognition", in Soft Computing for Problem Solving, Publisher: Springer Advances in Intelligent Systems and Computing, ISBN 978-81-322-2219-4, 2014, pp. 153-164.

Annexure-2

**Status of the DST funded INDO-UK "BURD" Project**

**Project Title**: Distributing Industrial Optimization Task to Rural Worker
**India PI**: Prof Anupam Agrawal, IIIT Allahabad
**UK PI**: Professor Jonathan Corney, University of Strathclyde, Scotland (UK)

**Aim of the project**: *To investigate if it is economical and technically feasible for industrial optimisation tasks to be outsourced to rural BPO workers*.

The **three phases** of the project are as follows:

**Phase 1 - Capabilities:** Document economic context and establish the capabilities of Indian and British BPO platform and worker capabilities through series of idealised 2D and 3D trials. This first phase will establish base lines measurements and provide the experience required for the later phases of the project.

**Phase 2 - 2D Studies:** Investigation (costs, performance, speed) of Industrial 2D problems (e.g. nesting, routing, symmetry etc.) using benchmark/ real data. The use of engineering data will allow the value of the BPO work to be quantified for different levels of performance and provide vital input to the business study.

**Phase 3 - 3D Studies:** Investigation of Industrial 3D problems (e.g. nesting feature recognition, shape similarity, symmetry detection etc.) using real data. These will be the most demanding problems tackled by the project and workers will need to have a command of 3D CGI to successfully complete the tasks. It would help to develop viable industrial work-flow for embedding a BPO approach to geometric optimisation in commercial CAD/CAM systems and also to establish a sustainable business model for both manufacturing industry and rural BPO providers.

**Progress made so far**:

The "Phase 1" is completed. The "Phase 2", which is primarily based on the online 2D packing/ nesting trails, is nearly completed (experimental trails on one more BPO center has been planned in December'2015/ January'2016). The 3D packing software required for "Phase 3" has been developed and is under refinement. The experimental trails to conduct 3D studies have been carried out at the rural BPO center in Babrala, UP (M/S RuralShores Business Services Pvt. Ltd.) and as well as at the rural BPO center in Jaigad, Ratnagiri Maharastra (M/S Simply Grameen Business Solutions Pvt Ltd.). The analysis of the data is being carried out. While performing next experimental trails, we are planning to first train the workers at the rural BPO center using in-house developed geometrical reasoning based animation software to analyze its effect on their performance while carrying out the 2D and 3D packing/ nesting tasks.

**Publications (2014-15)**:

1. "Crowdsourcing Solutions to 2D Irregular Strip Packing Problems from Internet Workers", ***International Journal of Production Research***, Taylor & Francis, UK (SCI Journal), Published online, 2015, ISSN: 0020-7543 (Print) 1366-588X (Online).

2. "Social Implications of Crowdsourcing in Rural Scotland," ***International Journal of Social Science & Human Behavior Study***, The IRED Scientific Publishing, Vol 1, No. 3, September 2014, pp. 47-52.

3. "Towards Crowdsourcing Spatial Manufacturing Tasks from Rural India," 12th Intl. Conference on Manufacturing Research (***ICMR2014***), during 09-11 September 2014 at Southampton Solent University, Southampton, UK, pp. 91-96.

4. "A Novel Hybrid Intelligence Approach for 2D Packing through Internet Crowdsourcing", IEEE International conference on Technological Innovations in ICT for Agriculture and Rural Development (***IEEE TIAR2015***), July 10-12, 2015, Chennai.

5. "Social Implications of Crowdsourcing in Rural Scotland," International Conference on Advances in Social Science, Economics and Management Study, ***SEM 2014***, during 01-02 June 2014, London, UK, pp. 43-48.

**Workshop Organized**:

Organized an ***International Workshop*** on "Creating Sustainable Rural Employment through Industrial Process Outsourcing" in conjunction with the IEEE TIAR2015 conference in Chennai on July 11th, 2015. The Workshop is part of the ongoing Indo-UK "BURD" project supported by DST (India) and EPSRC (UK).

**Photos**:


Fig 1: Presenting memento to the Invited speaker from Microsoft India during the BURD Workshop in Chennai

Fig 2: Experiments/ Trials at the M/S Simply Grameen's BPO Centre at Ratnagiri (MH)

Fig 3: Group Photograph after Completion of the BURD Workshop in Chennai


Fig 4: Experiments/ Trials at the M/S Rural Shore's BPO Centre at Babrala (UP)

**Dr. Anurika Vaish**
**Associate Professor**

**1. Full name, as published in the Institute records, with prefix and suffixes, of degrees and distinctions, if any.**
Dr. Anurika Vaish (Ph.D.; PGDBM)

**2. Academic Designation and Department:**
Department of Management Studies, IIIT-Allahabad

**3. Journal**

| | | | | | |
|---|---|---|---|---|---|
| Non Ferrous Metal & Investment Behavior: A Hedging Approach | Global Journal of Finance and Management | Research India Publications | Special Issue, Volume-6, Number 6 ISSN 0975-6477 | 2014 | Page 529-534 |
| Web content aging and filtering of Static html obsolescence | IMPACT: International Journal of Research in Engineering & Technology<br><br>(IMPACT: IJRET) | Impact Journals Publication | Vol. 2, Issue 6<br>ISSN(E): 2321-8843; ISSN(P): 2347-4599 | 2014 | 165-174 |
| Market Share & Dynamic Pricing: A Decision Tree Approach | Data Analytics & Business Intelligence: Emerging Paradigm (Special Issue)<br><br>OORJA: International Journal of Management & IT | India | Volume 12,<br>Number 1<br>(January-April 2014<br>**ISSN:** 0974-7869<br>**EISSN:** 2395-6771 | 2014 | Page 109-113 |
| Study of Variables Influencing Bullwhip Effect in Supply Chain | Data Analytics & Business Intelligence: Emerging Paradigm (Special Issue)<br><br>OORJA: International Journal of Management & IT | India | Volume 12,<br>ISSN: **0974-7869**<br>EISSN: **2395-6771** | 2014 | Page 5-14 |

**4. Conferences**

| Title of Paper Presented | Name of the Conference | Name of the organizing Institution / University | Dates on which the Conference was held |
|---|---|---|---|
| Exploring best cost cutting technique using TQM in Food Manufacturing Industry | Fourth National Conference on Management & Information Technology on Data Analytics & Business Intelligence: Emerging Paradigm | International School of Informatics & Management, Technical Campus & FMS-THE IIS University, Jaipur | April, 11-12, 2014 |
| Web Application Security: Protection from Advanced Persistent Threat | 9th National Conference on Smarter Approaches in Computing Technologies & Applications (SACTA-2014) | Institute of Technology & Science, Ghaziabad. | April, 19, 2014 |

**5. Project Undertaken**

| Project Undertaken | Abstracts of Objectives Progress and Result | Investigator/Co investigator |
|---|---|---|
| DST/RC-UK | India –UK Collaborative Research initiative in (Bridging the urban & rural device) distributing industrial optimization costs to rural worker. 3 yrs ongoing | PI-INDIA-Dr. Anupam Agarwal<br>CoI- INDIA- Dr. Anurika Vaish & Prof M. Krishnan |

**6. Faculty Development Program**

Title: Paradigm Shift in Management Education held on 19th -20th January, 2015 at IPER Bhopal

## Dr. Shekhar Verma
## Associate Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
Dr. Shekhar Verma

2. **Academic Designation and Department:**
Associate Professor, Department of IT

**3. Publications (Books and Research Papers) :**

1. Authentication in Cloud Computing Environment Using Two Factor Authentication. *Proceedings of the Third International Conference on Soft Computing for Problem Solving. Springer India*, 2014.
2. Network Connectivity in VANETs. *Proceedings of the Third International Conference on Soft Computing for Problem Solving. Springer India*, 2014.
3. Optimal Positioning of Base Station in Wireless Sensor Networks: A Survey. *Intelligent Computing, Networking, and Informatics. Springer India*, 2014. 1135-1143.
4. "Secure pay while on move toll collection using VANET." *Computer Standards & Interfaces* 36.2 (2014): 403-411.
5. "Secure data aggregation in wireless sensor networks using homomorphic encryption." *International Journal of Electronics,*102.4 (2015): 690-702.
6. "Performance analysis of fuzzy logic-based geographical node-disjoint path routing for WSNs." *International Journal of Electronics*101.4 (2014): 435-440.
7. "Privacy Provisioning in Wireless Sensor Networks." *Wireless personal communications*,75.2 (2014): 1115-1140.

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.:**

1. Centre for Airpower Studies, IAF New Delhi on 26.10.2014.
2. Workshop on "Computational Intelligence CIW" 13-15, October 2014.

**5. Lab & Curriculum Development:**
Network Security and Cryptography laboratory

## Dr. Shirshu Varma
## Associate Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions) :**
Dr.Shirshu Varma

2. **Academic Designation and Department:**
Associate Professor

3. Publications (Books and Research Papers) :

**International Journals**

i. ShirshuVarma et al., "**Challenges and Implementation on Cross Layer Design for Wireless Sensor Networks**", Accepted for PublicationThe Wireless Personal Communications, Springer.-2015
ii. ShirshuVarma et al., "**Flexible Service Oriented Network Architecture for Wireless Sensor Networks**" In the International Journal of Computers Communications & Control, Romania, ISSN 1841-9836,October 2014.

**Book Chapters**

i. ShirshuVarma et al., "**Energy Efficient Wireless Sensor Networks using Learning Techniques**", Case Studies in Intelligent Computing, Taylor & Francis, Sep 2014, 407 -426, 2014

ii. ShirshuVarma et al., "**Security Issues and Challenges in Wireless Sensor Network**," Book chapter Accepted for publication in Strengthening Security Mechanism for Wireless Network Routing, IGI Global Publisher-2015 Papers Communicated

**International Journals**

i. ShirshuVarma et al., "**A 3-D Radio Irregularity Model (3DRIM)for WSN**",communicated in Wireless Personal Communication, Springer-2015

ii. ShirshuVarma et al., "**Multidimensional Support Vector Regression Based Range-Free Localization Technique for 3-D Sensor Network**", Communicated in Wireless Personal Communication Springer special issue "Advances & Challenges in convergent Communication Network".- 2015

iii. ShirshuVarma et al., "**A Novel Computational Geometry Based Node Deployment Sceme in 3-D Wireless Sensor Network**", Communicated in IJSNET Inderscience; First Review done by the reviewers. 2014

iv. ShirshuVarma et al., "**Critical Inspection of Wireless Sensor Networks Localization using Rigid Graphs**", communicated in International Journal of Electronics, Taylor & Francis. 2014

4. **Lab & Curriculum Development:**
Enhanced the research activity in the wireless sensor network lab

## Tapobrata Lahiri
## Associate Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
Dr. Tapobrata Lahiri

2. **Academic Designation and Department:**
Associate Professor, Dept. of Applied Sc.

3. **Publications (Books and Research Papers):**
Book nil, Journal paper 1 (published) & 1 (accepted)

Bharali SS, Lahiri T, Singh K, "Investigation of coronary artery blockade diagnosis through analysis of ill-posed thermographic images". International Journal of Computer Engineering and Applications (2014), Volume 8(2), pages 26-32.

Singh K, Lahiri T., "An improved protein surface extraction method using rotating cylinder probe", Interdisciplinary Sciences: Computational Life Sciences (SCI Journal), Springer (Accepted)

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc. 1**

Guest Speaker in the symposium on "Digital Medicine" on 25th July 2014, and workshop on "Bioinformatics in Medical Sciences" on 26th July 2014 organized by Centre for Genetic Disease & Molecular Biology, Department of Biochemistry, Pt. J.N.M. Medical College, Raipur (C.G.)

5. **Work done in projects undertaken in the Institute:**
Departmental project submitted under FIST program to DST

6. **Lab & Curriculum Development: Teaching lab:**
Biological Simulations and Modelling,

Research Lab: Reorganization of Biomedical Informatics Lab

7. **Extra – Curricular activities:**

Initiative has been taken as a member of Waste Management Committee under Clean India activity to start Bio gas power plant utilizing the institutional wastes and detail proposal has been submitted.

8. **Awards/Honours/Recognition/Professional Awards received:**

i) The responsibility of Head, Department of Applied Science has been assigned.
ii) Made member of Senate of the Institute.

9. **Training Programmes Organized: Nil**

10. **Any other Achievements/Distinctions (not included above):**
Ph.D. thesis submitted under my supervision:
"Signal and Three Dimensional Image Reconstruction and its application on Shape-Phenomenology study of various objects" submitted by Subrata Sarkar under Jadavpur University, Calcutta on June 18, 2014.

**Dr. Pavan Chakraborty**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
Dr. Pavan Chakraborty, PhD (2001) (Physics-Astrophysics) M.Sc. (Physics)
2. **Academic Designation and Department:**
Assistant Professor

3. **Publications (Books and Research Papers)**

R Doriya, K Suraj, **P Chakraborty;** *A C2DM Based Framework for Detection and Notification of Terrorist Activities on Android Platform,* Lecture Notes on Software Engineering 3 (4) 2015

VB Semwal, **P Chakraborty**, GC Nandi; *Less computationally intensive fuzzy logic (type-1)-based controller for humanoid push recovery,* Robotics and Autonomous Systems 63, 122-135, 2015.

S Chakraborty, SK Singh, **P Chakraborty,** *Local directional gradient pattern: a local descriptor for face recognition,* Multimedia Tools and Applications, 1-16, 2015.

A Nandy, R Chakraborty, **P Chakraborty**, GC Nandi
*A novel Approach to Human Gait Recognition using possible Speed Invariant features*
International Journal of Computational Intelligence Systems 7 (6), 1174-1193. 2014.

A Nandy, A Pathak, **P Chakraborty**, GC Nandi; *Gait identification using component based gait energy image analysis*. International Conference on Signal Propagation and Computer Technology (ICSPCT), IEEE, 2014

R Doriya, N Wadhwa, K Suraj, **P Chakraborty**, GC Nandi; *Dynamic vehicle traffic routing problem: Study, implementation and analysis using ACO and GA.* Control, Instrumentation, Communication and Computational Technologies. 2014

M Raj, A Bansal, A Makhal, **P Chakraborty**, GC Nandi; *An approach towards rescue robotics in bore well environment.* International Conference Communications and Signal Processing (ICCSP), 2014.

D Deb, **P Chakraborty;** *Verification of the Spectral Classification of Stars Using the Hipparcos Catalogue*. Publications of the Astronomical Society of Australia 31, e046 2014.

A Nandy, **P Chakraborty**, GC Nandi; *Person tracking and segmentation for human gait biometric system*. International Journal of Biometrics 6 (3), 205-230. 2014.

A Nandy, S Bhowmick, **P Chakraborty**, GC Nandi; *Gait Biometrics: An Approach to Speed Invariant Human Gait Analysis for Person Identification.* Proceedings of the Second International Conference on Soft Computing for . 2014

S Bhowmick, A Nandy, **P Chakraborty**, GC Nandi; *A speed invariant human identification system using gait biometrics.* International Journal of Computational Vision and Robotics 4 (1-2), 3-22. 2014

A Nandy, S Bhowmick, **P Chakraborty**, GC Nandi; *A Sensor-Based Technique for Speed Invariant Human Gait Classification*. Intelligent Computing, Networking, and Informatics, 549-556. 2014.

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

A popular Science Talk at the Summer School conducted by the National Academy of Sciences, India (NASI) for School children at IIIT-Allahabad on June 8, 2015.

***How Light Throws Light in Astronomy***: a kee note talk at the Astronomical Telescope Making Workshop held at Jawahar Planetarium, Anand Bhavan, Allahabad, Uttar Pradesh held from 5 to 16 January 2015. The workshop was organized jointly by Vigyan Parisar, ARIES and Jawarhar Planetarium.

***GAIT BIOMETRICS understanding the Human LOCOMOTION*** **on October 10, 2014**
National School on "Recent Computational Trends & Techniques in Computer Science" (Oct. 8 – 15, 2014)
Dept. of Computer Science & Informatics, University of Kota.

**6. Lab & Curriculum Development**

Development of the UG and PG manual for the institute. Committee consists of Prof. Shekher Verma, Dr. Pavan Chakraborty and Dr. Akhilesh Tiwary.

**9. Training Programmes Organized**

Coordinator at the First SERB Summer School on Robotics held at IIIT-Allahabad from June 7 to 13 2014.

Coordinator for Night Sky Viewing through Telescopes and Planetarium shows during the Seventh Science Conclave of Nobel Laureates held in December 2014.

## Dr. Vijaishri Tewari
## Assistant Professor

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions) :**
Dr. Vijaishri Tewari

**2. Academic Designation and Department:**
Asst. Prof. Dept of Management Studies

**3.** Publications (Books and Research Papers)

**4.** Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.

**5.** Work done in projects undertaken in the Institute

**6. Lab & Curriculum Development**
Restructuring of MBA curriculum along with departmental Head.

**7. Extra – Curricular activities**
Student Counsellor

**8. Awards/Honours/Recognition/Professional Awards received**
NA

**9.** Training Programmes Organized
NA

**10.** Any other Achievements/Distinctions (not included above)

## Dr. Manish Goswami
## Assistant Professor

**1. Full name, as published in the Institute records, with prefix and suffixes, of degrees and distinctions, if any.**
Dr. Manish Goswami, B.E, M.E, Ph. D

**2. Academic Designation and Department**
Assistant Professor , Electronics & Communication Engg

**3. Publications ( Books and Research Paper)**

*1. Saloni,* **M. Goswami***, B R Singh, Ashok Srivastava "Low Power Variable Resolution ADC"* ***Journal of Low Power Electronics, Vol 2, No 10, 2014***

2. Anush, **Manish Goswami**. B. R. Singh and D. Pal, "A low power 8-bit Asynchronous SAR ADC design using Charge Scaling DAC " **IEEE ISED, 2014**

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

NIL

**5. Work done in Projects undertaken in the Institute Preliminary work started in SMDPC2SD project**

**6. Lab & Curriculum Development**
VLSI Design LabvContributed in syllabus development for ECE deptt.

**7. Extra-Curricular activities**

**8. Awards/Honours/Recognition/Professional Awards received**
Winners in All India Mentor Graphics University Design contest 2014

**9. Training Programmes Organized**
Bagged Runners Up award in CADENCE All India Design contest 2013

**10. Any other Achievements/Distinctions (not included above)**

**Dr. Vrijendra Singh**
**Assistant Professor**

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
Dr. Vrijendra Singh

**2. Academic Designation and Department:**
Assistant Professor, IT

**3. Publications (Books and Research Papers)**
1. Jalal, AS, Singh, V, "A framework for background modeling and shadow suppression for moving object detection in complex wavelet domain", Multimedia Tools and Applications, 73, 2, 2014, Springer US.
2. Pranshu Bajpai, Nikhil Raj Singh, Vrijendra Singh, "Analysis of Current Wi-Fi Security Practices via War Driving and Proposed Solution", International Journal of Advanced Computational Engineering and Networking, Vol. 2, Issue 7, ISSN 2320- 2106, 2014.
3. Mishra, Vaibhav, Singh, Vrijendra, "Factors affecting the adoption or acceptance of internet banking services: a review and analysis of past research", International Journal of Electronic Business, 11, 3, pp. 234- 255, Inderscience Publishers, 2014.
4. Sahai, Manjari, Agarwal, Prince, Mishra, Vaibhav, Bag, Monark, Singh, Vrijendra, "Supplier Selection through Application of DEA", IJEM-International Journal of Engineering and Manufacturing (IJEM), Vol. 4, 1, 1, 2014.
5. Vishwakarma, Pankaj, Kumar, Gaurav, Singh, Vrijendra, "Comparative Analysis of E-commerce portal based on user's Feedback–A Cognitive Task Approach", International Journal of Research, Vol. 1, No. 4, pp. 1- 7, 2014.
6. P Agarwal, V Mishra, M Sahai, M Bag, V Singh, "Supplier Selection in Dynamic Environment using Analytic Hierarchy Process", International Journal of Information Engineering and Electronic Business (IJIEEB),Vol. 6, Issue 4, pages 20, 2014.

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
1. Mishra, Vaibhav, Singh, Vrijendra, "Analyzing the gap in the adoption of Internet Banking Services: Managers' perspective", Business and Information Management (ICBIM), 2nd International Conference on, 42- 46, IEEE, 2014.
2. Jatav, Vinod Kumar, Singh, Vrijendra, "Mobile WiMAX network security threats and solutions: A survey", Computer and Communication Technology (ICCCT), International Conference on, 135- 140, IEEE, 2014.
3. Jatav, Vinod Kumar, Singh, Vrijendra, "Collaborative Attack Model at Physical Layer of Mobile WiMAX Network", Computational Intelligence and Communication Networks (CICN), International Conference on, 787-792, IEEE, 2014.
4. Suman, Preetam, Karan, Subhdeep, Singh, Vrijendra, Maringanti, R, "Algorithm for Gunshot Detection Using Mel-Frequency Cepstrum Coefficients (MFCC)", Proceedings of Ninth International Conference on Wireless Communication and Sensor Networks, 155-166, Springer India, 2014.

**5. Work done in projects undertaken in the Institute**

Other – Collaborator, "Wireless Sensor Networks for Protecting Wildlife and Humans", DIT, India & NSF USA, 2013 - 2015, IIITA Budget: 123.79 Lakhs

6. **Lab & Curriculum Development**
Curriculum and experiments have been developed for Modeling and Simulation lab and Data Information & Cryptography Lab.

7. **Extra – Curricular activities : Nil**

8. **Awards/Honours/Recognition/Professional Awards received: Nil**

9. **Training Programmes Organized: Nil**

10. **Any other Achievements/Distinctions (not included above): Nil**

**Dr. Sanjai Singh**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
Dr. Sanjai Singh, D. Phil.
2. **Academic Designation and Department :**
Assistant Professor, Applied Sciences

3. **Publications (Books and Research Papers)**
None

4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.
None

5. **Work done in projects undertaken in the Institute**
None

6. **Lab & Curriculum Development**
Physics Lab

7. **Extra – Curricular activities**
Organized different sports and academics activities at RGIIT-Amethi, (An extension campus of IIIT-A, Allahabad)

8. **Awards/Honours/Recognition/Professional Awards received**
None

9. **Training Programmes Organized**
None

10. **Any other Achievements/Distinctions (not included above)**

**Dr. Sanjeev BS**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
Dr. Sanjeev BS, PhD
2. **Academic Designation and Department :**
Assistant Professor, Department of Applied Sciences

3. **Publications (Books and Research Papers)**
Insights into the structural integrity and dynamics of siRNA-PAZ complex (Submitted)

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
N/A

5. **Work done in projects undertaken in the Institute**
N/A

6. **Lab & Curriculum Development**
N/A

7. **Extra – Curricular activities**

N/A

8. **Awards/Honours/Recognition/Professional Awards received**
N/A

9. **Training Programmes Organized**
N/A

10. **Any other Achievements/Distinctions (not included above)**
N/A

## Dr. Manish Kumar
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions) :**
Dr. Manish Kumar, M.Tech.(CS), Ph.D (IT)

2. **Academic Designation and Department:**
Assistant Professor, Department of IT

3. **Publications (Books and Research Papers):**
Editing book "Applied Big Data Analytics in Operational Management" [In process]

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
Coordinator "IEEE Computational Intelligence Workshop (CIW-2014)" held on 13-15 October 2014.
Delivered invited talk on "Applications of Data Mining" in CIW-2014.

5. **Work done in projects undertaken in the Institute**

6. **Lab & Curriculum Development**

7. **Extra – Curricular activities**
Faculty Coordinator, Conducted Annual Sports in IIIT

8. **Awards/Honours/Recognition/Professional Awards received**

9. **Training Programmes Organized**

10. **Any other Achievements/Distinctions (not included above)**

## Dr. Neetesh Purohit
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
Dr. Neetesh Purohit

2. **Academic Designation and Department**
Associate Professor & Head, Department Of Electronics & Communication Engineering

3. **Publications (Books and Research Papers)**

Purnendu Pandey, S. Verma, Neetesh Purohit, "Wireless Networks using Matroid along with Network Coding", Accepted for publication in the Journal of Internet Technologies, National Ilan University Yilan, Taiwan. 2015

Rachit Garg, Gaurav Mishra, Vishal Kesari, Neetesh Purohit, "Beam-Steering in a Three-Element Circular Antenna-Array", International Journal of Microwave and Wireless Technologies, Cambridge university press, USA, DOI: http://dx.doi.org/10.1017/S1759078714000312

(About DOI), Published online: 14 March 2014.

Ashutosh Kumar Singh, Neetesh Purohit, "An optimised fuzzy clustering for wireless sensor networks, International Journal of Electronics", Taylor & Francis, Volume 101, Issue 8, 2014.

Siddarth Mishra, Vikas Mishra, N. Purohit, "Design of Wide Band Circularly Polarized Textile Antenna for ISM Bands at 2.4 and 5.8 GHz", **IEEE** International Conference SPICES 2015, NIT Calicut, Feb 19-21, 2015.

N. Lulla, N. Purohit, "An Improved Algorithm for Efficient Computation of MFCC", **IEEE** International Conference INDICON 2014, Pune, India, Dec 11-13, 2014.

P. S Pandey; N.Purohit, "Improving Multicasting approach in UMTS network," **IEEE** International Conference on Green Computing, Communication and Electrical Engineering (ICGCCEE 2014),6-8 March 2014

**4. Invited talks in Seminars/Conferences/Workshops/Symposiums etc.**

'The Smart Antenna', One Week Workshop On Advances in Wireless and Optical Networks (AWON-2014), MNNIT Allahabad, June 02 - 07, 2014

**5. Work done in projects undertaken in the Institute**

1) Technology development for fair and cashless crop trading system.

2) Development of ICT application to investigate pathophysiological modulation of human cardiovascular diseases, respiratory ailments through Yoga process.

3) The identification of objects hidden in foliage is another need for wild life protection.

4) Introducing the rotating beam and MIMO capabilities in the wireless sensor node.

5) The development of Cognition Technologies for Recognition of Complex Mental States of Human and Exploring its Application for Designing Gossiping Computer.

**6. Lab & Curriculum Development**

1) Revised curriculum of B. Tech. (ECE)

2) Revised curriculum of Duel Degree B. Tech. (ECE) & M. Tech. (Bio Medical Engineering)

3) Development of Wireless Communication Lab.

**7. Extra – Curricular activities** Nil

**8. Awards/Honours/Recognition/Professional Awards received** Nil

**9. Training Programmes Organized**

**Organizing Chair, and Track Chair (Signal Processing),** IEEE UP Section Conference, UPCON 2015, Dec 4-6, 2015, IIITA.

**10. Any other Achievements/Distinctions (not included above)**

**Administrative responsibilities undertaken and respective contributions**

(a) **Member, Institute's advisory committee (IAC)**: Under the chairmanship of Hon'ble Director of the institute the committee do thorough analysis of various aspects for betterment in the functioning of the institute and place its recommendations before the BOM of the institute for consideration.

(b) **HOD (Electronics and Communication):** https://ece.iiita.ac.in/ece/home.php : New Initiatives: Faculty recruitment and retention

drive, Opening the project lab with an on-duty staff all 7 days 9 AM-12 midnight, Creation of departmental Training and placement teams and arranging sufficient infrastructure for T&P activities, Renovation, restructuring and up-gradation of various ECE labs, Building the department's website for the first time, Data collection about current students and alumni of the department, Research group formation and systematic project allotment and evaluation system, Best project award from 5th to 8th semesters, Counseling and feedback system by assigning limited students to all faculty members, Redefining the ECE curriculum for imparting focused knowledge/training on latest streams of ECE and ensuring sufficient skill development of Information Technology so that students of B. Tech. (ECE) should be able to get placed in any IT company, started official twitter account @DeptChairECE, The Interaction programme with alumni, etc.

(c) **Faculty In-charge (Exam and Admission):** https://examcell.iiita.ac.in/ : New Initiatives: Extended the functioning of the examcell for all 7 days 9 AM-6 PM with single window facility to students, Development of a Portal for facilitating online services like result declaration, submitting various types of applications, online admission forms etc., time bound response by exam cell on various student's applications, , Renovation, restructuring and infrastructure development, squeezing the midsem examination time period, introduction of flying squad and tight invigilation, allowing compensatory leave for staff engaged on weekend examination duties, Discontinuation of redundant activities like issuing migration/character certificates, Redesigning of grade-card, transcripts, degree by incorporating several security features, started official twitter account @examcell_iiita, standardized the paper coding scheme etc.

(d) **Faculty In-charge (Library)** http://library.iiita.ac.in/ : New Initiatives: Extended the opening time for all 7 days 9 AM-10 PM, additional hours opening during examination period, Renovation and restructuring for better utilization of space, Infrastructure development, Introduction of book donation scheme, better circulation rate for all types of books, organizing book fair, budget planning, transparent purchase procedure, allowing rolling advertisement for vendors registration, E-book reading facility development etc.

(e) **Member, Legal Cell of IIITA :** The legal cell members are responsible for recommending the hiring of various legal counsels, discussing various issues with the respective counsels and contributing in preparing the counter affidavits on behalf of the institute in various writ petitions filed against the institute. Visiting various courts of law for monitoring that the institute's interests must be properly protected by the institute's counsels.

(f) **Secretary, IIITA Employee Welfare Society (IEWS)** http://profile.iiita.ac.in/iews/ : Contributions and New Initiatives: Played leading role in the constitution of IEWS in Jan 2014, building its memorandum of association and registering it at society registration office. Many programmes are routinely organized under the flagship of IEWS.

(g) **Chair, Bharat Swachha Abhiyaan at IIITA :** New Initiatives: Awareness drive by displaying hoardings, IIITA campus was divided into various zones and dedicated teams of faculty staff and student volunteers was constituted for maintaining each zone, due to competitive spirit significant improvement has been observed in last year. A detailed report along with photographs has been submitted to GoI. Currently, Dr. Vijay Chourasiya is leading the Bharat Swachha abhiyaan at IIITA.

(h) **Member, Senate of IIITA :** The senate is the supreme body of the institute for all academic matters.

(i) **Chairman, Senate Undergraduate Committee (SUGC):** The SUGC considers the recommendations of DUGC's and other matters related to UG education at the institute.

(j) **Member, Management Committee Kendriya Vidyalaya Jhalwa Allahabad:** This take major decisions for governing the Vidyalaya. The principal calls the meeting presents the performance report and various proposals for betterment in the functioning of the Vidyalaya. The committee thoroughly look into these and takes the decisions.

(k) **Additional Secretary, IEEE UP Section Robotics and Automation society :** The society organizes various events for strengthening the research in the field of robotics and automation. 3 major events have been organized by the society.

(l) **Member, IEEE UP Section Computer and Signal Processing Society :** The society organizes various events for strengthening the research in the field of computer science and signal processing. The international conferences UPCON 2015, IHCI 2015 are scheduled to be organized in Dec 2015.

(m) **Member, IEEE :** IEEE is a renowned organization operating through IEEE UP section in this region.

(n) **Member, Core Committee CCMT 2015:** The committee framed various rules and regulations for conducting CCMT 2015, addressed every major and minor glitch for ensuring successful completion of the counselling.

(o) **Incharge, Reporting Center at IIITA CCMT 2015 :** The reporting center is a crucial part of CCMT 2015 admission process which directly interacts with the candidates for document verification and confirming the admission. Several other responsibilities are

also associated with RC.

(p) **Incharge, Help Center at IIITA CCMT 2015 :** The candidates can contact the help center in person or via email, phone and mobile for clarifying their doubts about CCMT rules and regulations.

(q) **PIADMIN IIITA CSAB 2015 :** Communicating with CSAB on behalf of IIITA and completing the online admission formalities associated with CSAB.\

(r) **PIADMIN RGIIT CSAB 2015 :** Communicating with CSAB on behalf of RGIIT and completing the online admission formalities associated with CSAB.

(s) **PIADMIN IIITL CSAB 2015:** Prepared the website of IIIT Lucknow as per the requirement of CSAB for enrollment. Communicating with CSAB on behalf of IIITL and completing the online admission formalities associated with CSAB.

(t) **Chairperson of various enquiry committees and member of some other committees**

**Dr. Pragya Singh**
**Assistant Professor**

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions) :**
Dr. Pragya Singh

**2. Academic Designation and Department :**
Assistant Professor, Department Of Management Studies

**3.** Publications (Books and Research Papers) 03 RESEARCH PAPERS

(a) RESEARCH PUBLICATIONS IN **INTERNATIONAL** JOURNALS:

| S.No | Name of Faculty Member | Name of the Journal | Title | Year of Publication |
|---|---|---|---|---|
| 1 | DR. PRAGYA SINGH | INTERNATIONAL JOURNAL OF COMPUTER TECHNIQUES<br>ISSN : 2394 -2231 | Domino's Pizza and Pizza Hut in Allahabad: A Comparative Study | 2015 |
| 2. | DR. PRAGYA SINGH | ICTACT JOURNAL ON COMMUNICATION TECHNOLOGY ( AN INTERNATIONAL PUBLICATION OF ICT ACADEMY OF TAMIL NADU) | ANALYSIS OF ANDROID VULNERABILITIES AND MODERN EXPLOITATION TECHNIQUES | 2014 |
| 3 | DR. PRAGYA SINGH | INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING. VOLUME 5, ISSUE 4, 2015 ISSN: 2277 128X | THE COMPARISON OF EXPOSURE TO INFORMATION SECURITY RISK OF WEB USERS BY ANALYSING THEIR WEB BROWSING HISTORY | 2015 |

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
NO

**5. Work done in projects undertaken in the Institute:**
NO

**6. Lab & Curriculum Development :**
01 COURSE CURRICULUM OF B. TECH I-SEMESTER (IN CONSULTATION WITH HEAD OF DEPARTMENT) LAB FOR COMMUNICATION SKILLS

**7. Extra – Curricular activities IN IIIT-A (2014-2015)**

1. Participation as an active member of Help desk in Science Conclave 2014.
2. Active member of different committees in :
   A) EFFERVESCENCE 2014 & 2015
   B) CONVOCATION 2014 & 2015
3. Member of flying Squad committee in
   a) Mid - semester Examination 2014.
   b) Mid - semester Examination 2015.
   c) End - semester Examination 2014.
   d) End - semester Examination 2015.
4. Panel Expert in MBA Entrance Exam (Group Discussion) in 2014 and 2015.
5. Coordinating and handling academic responsibilities of the MBA division since 2013 till present.
6. Joint secretary of IIIT- Allahabad Faculty Forum since January 2015.
7. Handling responsibility as Warden of Research Scholar Apartments since 2015.

**8. Awards/Honours/Recognition/Professional Awards received :**

Won first prize in poster presentation held at iiit-allahabad in vigilance awareness week in october 2015.

**9. Training Programmes Organized:**

Organized Pre-Eureka Workshop On 2nd October, 2015 In Coordination With E-Cell Iit Bombay In IIIT-Allahabad.

**10. Any other Achievements/Distinctions (not included above) :**

Participated in harmony workshop in october 2015 organized by IIT-BHU, Varansi.

**Dr. Rajat Kumar Singh**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
   Dr. Rajat Kumar Singh

2. **Academic Designation and Department:**
   Assistant Professor, Department of Electronics and Communication Engineering

3. **Publications (Books and Research Papers):**
   International Journals: 3, International Conferences: 3
   List of Publication during Apr'14-Mar'15:
   International Journal:

   **[1].** Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "Local Neighborhood Based Robust Colour Occurrence Descriptor for Colour Image Retrieval," *IET Image Processing*, Vol. 9, No. 7, pp. 578-586, July 2014.

   **[2].** Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "A Multi-Channel based Illumination Compensation Mechanism for Brightness Invariant Image Retrieval," *Multimedia Tools and Applications*: DOI: 10.1007/s11042-014-2226-5 (Springer), (Available Online on August 14, 2014).

   **[3].** Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "Rotation and Illumination Invariant Interleaved Intensity Order Based Local Descriptor," *IEEE Transactions on Image Processing*, Vol. 23, No. 12, pp. 5323-5333, Dec'2014.

   **International Conference:**

   **[1].** Rakesh Roshan, Utpal Pandey and **Rajat Kumar Singh,** "Dual Wideband Planer Monopole Antenna for Mobile and WiFi/WLAN Application" *IEEE SCES 2014,* MNNIT, Allahabad, May, 2014.

   **[2].** Rakesh Roshan and **Rajat Kumar Singh,** "Dual ISM Band MIMO Antenna for WiFi and WiMax Application" *IEEE ICSPCT 2014,* Ajmer, July, 2014.

   **[3].** Harshita Tiwari, Rakesh Roshan and **Rajat Kumar Singh,** "PAPR Reduction in MIMO-OFDM using combined methodology of Selected Mapping (SLM) and Partial Transmit Sequence (PTS)" *IEEE ICIIS 2014,*Gwalior, India, December, 2014.

4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.
   **Nil**

5. Work done in projects undertaken in the Institute:
   **Nil**

6. Lab & Curriculum Development: **Electronics and Communication Engineering**

7. Extra – Curricular activities:
   **Nil**

8. Awards/Honours/Recognition/Professional Awards received:
   **IEEE Senior member**

9. Training Programmes Organized:
   **Nil**

10. Any other Achievements/Distinctions (not included above): **Nil**

**Dr. Madhvendra Misra**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr Madhvendra Misra

2. **Academic Designation and Department :**
   Asstt. Prof. Dept. of Management Studies

3. **Publications (Books and Research Papers):**
   Research Papers
   - Tewari, Sumant Kumar, and Madhvendra Misra. "Information and communication technology: a tool for increasing marketing efficiency." *Int. J. of Information Technology and Management* 14.2/3 (2015): pp-215.
   - Srivastava, Shagun, and Madhvendra Misra. "Tracking technology trajectory through regression modelling: a retrospective techno-analysis." *Technology Analysis & Strategic Management* 27.4 (2015): 420-436.
   - M Misra, S. Srivastava. "Developing Evaluation Matrix for Critical Success Factors in Technology Forecasting." *Global Business Review* 15.2 (2014): 363-380.

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
   Lecture on Innovation & Entrepreneurship, IEEE Sponsored Leadership Workshop- Nov 01, 2014Indian Institute of Information Technology Allahabad

5. **Work done in projects undertaken in the Institute**

| | |
|---|---|
| TIDE Project | DeitY |
| Technology Innovation & Entrepreneurship | DST & IIT-BHU |

6. **Lab & Curriculum Development**
   Business Analytics Lab

7. **Extra – Curricular activities**
   Attended 3 day Harmony workshop

8. **Awards/Honours/Recognition/Professional Awards received**
   none

9. **Training Programmes Organized**
   None

10. **Any other Achievements/Distinctions (not included above)**
    - **Pedagogical Innovation:** As a pedagogical intervention 'War Room' (A scenario based study scheme) has been introduced in the Strategic Management Course.
    - **Outreach Initiatives:** 'Management Clinic' as an outreach initiative to help and support Micro & Small Business:
      - To create efficient and effective enterprises through 'Consulting' & 'Process Management'.
      - Introducing lean and agile methods / technologies for BPM (Business Process Management)

**Dr. Vijay Kumar Chaurasiya**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr. Vijay Kumar Chaurasiya, Ph.D., M.Tech.

2. **Academic Designation and Department:**
   Assistant Professor, Information Technology

3. **Publications (Books and Research Papers)**
   1. Saxena, Aditya K; Sharma, Shweta; Chaurasiya, Vijay K; Neural Network Based Human Age-group Estimation in Curvelet Domain, Procedia Computer Science, Volume 54, pp 781-789, 2015, Elsevier.
   2. Chaurasiya, Vijay K; Jain, Neeraj; Nandi, GC; A novel distance estimation approach for 3D localization in wireless sensor network using multi dimensional scaling, Information Fusion, Volume 15, 2014, Elsevier
   3. Saxena, Aditya K; Chaurasiya, Vijay K; Fingerprint based human age group estimation, India Conference (INDICON), 2014 Annual IEEE, 2014, IEEE

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc. :**
   NA

5. **Work done in projects undertaken in the Institute :**
   NA

6. **Lab & Curriculum Development :**
   NA

7. **Extra – Curricular activities :**
   Organized Member Effervescence, the cultural festical of the Institute.
   Organized Member Foundation Day of the Institute.
   Organizing Member of Aparoksha, the technical festival of the Institute.
   Organizing Member of Asmita, the sports festival of the Institute
   Organized various lectures on motivation, self discipline, stress management etc.
   Organized Yoga Day program at the Institute.
   Chairman of Swatch Bharat Abhiyan of the Institute.
   Organized Tree Plantation Drive at the Institute.

8. **Awards/Honours/Recognition/Professional Awards received :**
   NA

9. **Training Programmes Organized:**
   Organized a three day meditation camp at the Institute.

10. **Any other Achievements/Distinctions (not included above)**
    Submitted a project to the Department of Science and Technology by the title “Development of ICT application to investigate pathophysiological modulation of human cardiovascular diseases, respiratory ailments through yoga process.”

## Dr.Pritish Kumar Varadwaj,
## Assistant Professor

**1.** Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)
**Dr.Pritish Kumar Varadwaj, PhD**

**2.** Academic Designation and Department:
**Assistant Professor**

**3. Publications (Books and Research Papers)**

1. Utkarsh Raj, Himansu Kumar, Saurabh Gupta, Pritish Kumar Varadwaj (2015). Exploring dual inhibitors for STAT1 and STAT5 receptors utilizing Virtual Screening and Dynamics Simulation Validation. Journal of Biomolecular Structure and Dynamics. Doi: 10.1080/07391102.2015.1108870. **[IF: 2.912]**
2. Saurabh Gupta, A. R. Rao, Pritish Kumar Varadwaj, Sachinandan De, Trilochan Mohapatra (2015): Extrapolation of Inter Domain Communications and Substrate Binding Cavity of Camel HSP70 1A: A Molecular Modeling and Dynamics Simulation Study", PLoS ONE, 10(9): e0138961. doi: 10.1371/journal.pone.0138961**[IF: 3.23]**
3. Utkarsh Raj, Himansu Kumar, Saurabh Gupta, Pritish Kumar Varadwaj (2015). Novel Natural inhibitors for DOT1L receptor involved in Mixed Lineage Leukemia: A Virtual Screening, Molecular Docking and Dynamics Simulation study. Asian Pacific journal of cancer prevention: APJCP, 16(9), 3817-3825. **[IF: 2.514]**
4. Utkarsh Raj, Pritish K. Varadwaj (2015). Flavonoids as multi-target inhibitors for proteins associated with Ebola virus: in-silico discovery using virtual screening and molecular docking studies. Interdisciplinary Sciences: Computational Life Sciences 1-10. Doi: 10.1007/s12539-015-0109-8. **[IF: 0.8]**
5. Himansu Kumar, Utkarsh Raj, Swati Srivastava, Saurabh Gupta, Pritish Varadwaj (2015) In-silico identification of inhibitors against mutated BCR-ABL protein of Chronic Myeloid Leukemia: A Virtual Screening and Molecular Dynamics Simulation study. Journal of Biomolecular Structure and Dynamics. **[IF: 2.912]**

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

1. Utkarsh Raj, Himansu Kumar, Saurabh Gupta, Pritish Kumar Varadwaj (2015) An In Silico approach to find novel Inhibitors to disrupt the interactions between EZH2-EED receptors of PRC2 complex. National Conference on Bioinformatics Panorama in Agriculture and Health (NCBPAH), Allahabad on 5-6 October. [Got 1st Prize in Oral Presentation]
2. Utkarsh Raj, Pritish Kumar Varadwaj. Inhibitory activity of natural compounds against Ebola viral receptors: A Virtual Screening and Molecular Dynamics study, National Conference on Lead Development & Drug Designing: Emerging Opportunities, organized by United Institute of Pharmacy in association with Indian Science Congress Association, Allahabad on 26 September, 2014. [Got 1st Prize in Poster Presentation]
3. Ashwani Kumar, Utkarsh Raj, Pritish Kumar Varadwaj, Tiratha Raj Singh (2015) Insights from Docking and Molecular Dynamic Simulation of Acetyl cholinesterase Inhibitors (AChEI) Structural Model for Possible Therapeutic of Alzheimer's disease (AD). National Conference on Bioinformatics Panorama in Agriculture and Health (NCBPAH), Allahabad on 5-6 October.
4. Pooja Gupta, Utkarsh Raj, Pritish K. Varadwaj (2015) Prediction of Blood Brain Barrier Permeability of Ligands Using Sequential Floating Forward Selection and Support Vector Machine.Smart Innovation, Systems and Technologies Volume 31, Springer India, 447-458
5. Rashmi Tripathi, Vandana Kumari, Sunil Patel, Yashbir Singh and Dr. Pritish, Proceedings of 5 th Annual International Conference on "Advances in Biotechnology" (BIOTECH 2015) organized by Global Science and Technology Forum (GSTF), Singapore, in partnership with Indian Institute of Technology, Kanpur (IITK) held at IITK, India (March 13-15, 2015) [doi: 10.5176/2251-2489_BioTech15.74]

## Dr.Sonali Agarwal,
## Assistant Professor

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
SONALI AGARWAL (Ph. D.)

**2. Academic Designation and Department:**
Assistant Professor, IT Department, IIIT Allahabad

**3.** Publications (Books and Research Papers)

**International Journal Papers**

- Divya Tomar, Sonali Agarwal "Twin Support Vector Machine: A review from 2007 to 2014" published in Egyptian Informatics Journal, Elsevier, Vol. 16, issue 1, March 2015, Pages 55–69.
- Divya Tomar, Sonali Agarwal "An Emotion Detection System Based on Multi Least Squares Twin Support Vector Machine" published in Advances in Artificial Intelligence, Hindawi Publishing Corporation, Vol. 2014, Article ID 282659, 11 pages, 2014. doi:10.1155/2014/282659.
- Divya Tomar, Sonali Agarwal "Hybrid Feature Selection Based Weighted Least Squares Twin Support Vector Machine Approach for Diagnosing Breast Cancer, Hepatitis, and Diabetes" published in Advances in Artificial Intelligence, Hindawi Publishing Corporation, Vol. 2015, Article ID 265637, 10 pages, 2015. doi:10.1155/2015/265637
- Bakshi Rohit Prasad, Sonali Agarwal "Handling Big Data Stream Analytics using SAMOA Framework - A Practical Experience " published in International Journal of Data Base and Application (IJDTA) Vol.7, No.4 (2014), pp. 197-208 http://dx.doi.org/10.14257/ijdta.2014.7.4.
- Sonali Agarwal, Divya Tomar "A Survey on Pre-processing and Post-processing Techniques in Data Mining "published in International Journal of Data Base Theory and Application (IJDTA) Vol.7, No.4 (2014), pp.99-128 http://dx.doi.org/10.14257/ijdta.2014.7.4.09.
- Sonali Agarwal, Divya Tomar "A Feature Selection Based Model for Software Defect Prediction"published in International Journal of Advanced Science and Technology Vol. 65 (2014), pp.39-58 http://dx.doi.org/10.14257/ijast..2014.65.04
- Divya Tomar, Shubham Singhal, Sonali Agarwal, "Weighted Least Square Twin Support Vector Machine for Imbalanced Dataset"published in International Journal of Database Theory and Application Vol. 7, No. 2 (2014), pp.25-36 http://dx.doi.org/10.14257/ijdta.2014.7.2.03.
- Divya Tomar, Sonali Agarwal, "Feature Selection based Least Square Twin Support Vector Machine for Diagnosis of Heart Disease" published in International Journal of Bio-Science and Bio-Technology Vol. 6, No.2(2014), pp.69-82 http://dx.doi.org/10.14257/ijbsbt.2014.6.2.07

**International Conference Papers**

- Divya Tomar, Sonali Agarwal 2015 "Direct acyclic graph based multi-class twin support vector machine for pattern classification " In Proceedings of the Second ACM IKDD Conference on Data Sciences (CoDS '15). ACM, New York, NY, USA, 80-85. DOI=10.1145/2732587.2732598 http://doi.acm.org/10.1145/2732587.2732598
- Bakshi Rohit Prasad, Sonali Agarwal "Modeling Risk Prediction of Diabetes - A Preventive Measure" presented in 9th International Conference on Industrial and Information Systems (ICIIS) at Atal Bihari Vajpayee Indian Institute of Information Technology and Management Gwalior, India during December 15-17 2014.
- Pradeep Kumar Saini, Divya Tomar, Sonali Agarwal "High Numeric Coherent Association Rule Mining with a Particular Categorical Consequent Class Attribute" presented in 9th International Conference on Industrial and Information Systems (ICIIS) at Atal Bihari Vajpayee Indian Institute of Information Technology and Management Gwalior, India during December 15-17 2014.
- Divya Tomar, Bakshi Rohit Prasad, Sonali Agarwal "An efficient Parkinson disease diagnosis system based on Least Squares Twin Support Vector Machine and Particle Swarm Optimization" presented in 9th International Conference on Industrial and Information Systems (ICIIS) at Atal Bihari Vajpayee Indian Institute of Information Technology and Management Gwalior, India during December 15-17 2014.
- Manish Shukla, Sonali Agarwal "Hybrid Approach for Tuberculosis Data Classification Using Optimal Centroid Selection Based Clustering" presented in IEEE Student's Conference on Engineering and System, SCES-2014, MNNIT, May 28-30, 2014, Allahabad, India.
- Manoj Kumar, Anubha Sharma, Sonali Agarwal, "Clinical Decision Support System for Diabetes Disease Diagnosis Using Optimized Neural Network" presented in IEEE Student's Conference on Engineering and System, SCES-2014, MNNIT, May 28-30, 2014, Allahabad, India.

**4.** Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.
NA

**5.** Work done in projects undertaken in the Institute
NA

**6.** Lab & Curriculum Development

- Developed curriculum for Operating System Lab.
- Developed curriculum for IT Infrastructure and service management.

**7.** Extra – Curricular activities
NA

**8.** Awards/Honours/Recognition/Professional Awards received
NA

**9.** Training Programmes Organized
NA

**10.** Any other Achievements/Distinctions (not included above)
NA

**r. Satish Kumar Singh**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
Dr. Satish Kumar Singh, *SMIEEE*

2. **Academic Designation and Department:**
Assistant Professor in the Department of IT

3. **Publications (Books and Research Papers):**

- Local Wavelet Pattern: A New Feature Descriptor for Image Retrieval in Medical CT Databases, *IEEE Transactions on Image Processing*, vol 24, no.12, pp. 5892-5903, 2015. (IEEE)
- Local Bit-plane Decoded Pattern: A Novel Feature Descriptor for Biomedical Image Retrieval, *IEEE Journal of Biomedical and Health Informatics*, 2015. (IEEE)
- Rotation and scale invariant hybrid image descriptor and retrieval, *Computers & Electrical Engineering*, 2015. (Elsevier)
- Local neighbourhood-based robust colour occurrence descriptor for colour image retrieval, *IET Image Processing*, vol. 9, no. 7, pp. 578-586, 2015. (IET)
- Local Diagonal Extrema Pattern: A new and Efficient Feature Descriptor for CT Image Retrieval, *IEEE Signal Processing Letters*, vol. 22, no. 9, pp. 1215-1219, 2015. (IEEE)
- Identity verification using shape and geometry of human hands, *Expert Systems with Applications*, vol. 42, no. 2, pp. 821-832, 2015. (Elsevier)

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

5. **Work done in projects undertaken in the Institute**
- Local Coordinator, MHRD GIAN
- Nodal Officer, Grid Connected Solar PV Power Project by MHRD & MNRE

6. **Lab & Curriculum Development**
- Data Compression (Elective, PG Course)
- Computer Vision and Biometrics Laboratory (Teaching and Research lab)

7. **Extra – Curricular activities**
- Member Secretary, Student Travel Support Committee, IIIT Allahabad
- Organizing Chair, IEEE UPCON 2015
- Faculty Coordinator, IEEE Student Branch, IIIT Allahabad
- Faculty Advisor, IEEE WIE Affinity Group, IIIT Allahabad
- Secretary, SP/C joint Chapter, IEEE UP Section

8. **Awards/Honours/Recognition/Professional Awards received**
- Senior Member, IEEE

9. Training Programmes Organized

10. Any other Achievements/Distinctions (not included above)

## Dr. Shailendra Kumar
## Assistant Professor

1. **Full name, as published in the Institute records, with prefix and suffixes, of degrees and distinctions, if any.**
   Dr. Shailendra Kumar

2. **Academic Designation and Qualification:**
   Assistant Professor; M. Com., M.B.A., Ph.D.

3. **Publications during the year (2014-2015):**
   1. ***Nandkeolyar, D., Pandey, N., Kiran, R., and Kumar, S., (***April 2014***). "Strategic Marketing Options and Firm Performance: A case of an Independent Automotive Workshop", South Asian Journal of Marketing and Management Research,*** Vol. 4, No. 4, pp. 1-14.
   2. ***Bansal, Y., Kumar, S., & Verma, P.*** (July 2014). ***"Commodity Futures in Portfolio Diversification: Impact on Investor's Utility", Global Business and Management Research: An International Journal,*** Vol. 6, No. 2, pp. 112-121.
   3. ***Kumar, S., Vikalp, Arya, S., & Bharadwaj, S.*** (July 2014). ***"Analysis of IT Infrastructure as a factor affecting E-Commerce and its impact on Consumer Satisfaction", Prastuti- Journal of Management & Research,*** Vol. 3, No. 1, pp. 35-45.
   4. ***Mathur, B., Ojha, D., & Kumar, S.*** (July 2014). ***"Impact of Social Networking on Employee Engagement at Workplace: An Empirical Study based on IT Industry in India", Prastuti- Journal of Management & Research,*** Vol. 3, No. 1, pp. 46-52.
   5. ***Bansal, Y., Kumar, S., & Verma, P.*** (August 2014). ***"Co-Integration and Causality between Equity and Commodity Futures: Implications for Portfolio Diversification", Global Journal of Management and Business Research,*** Vol. 14, No. 5, Version 1.0, pp. 35-44.
   6. ***Kaur, G., Pandey, N., Kiran, R., and Kumar, S., (***March 2015***). "Employee Attrition in ITeS Call Centers in Selected Clusters of North India: Need to have a Relook", Technics Technologies Education Management (ttem: Journal of Society for development of Teaching and Business Processes in New Net Environment in B&H),*** Vol. 10, No. 1, pp. 124-135.

5. **Participation in Seminars/Workshops/Conferences/ Symposiums etc. during the year (Apr'2014 – Mar'2015)**
   [Names of Workshops etc. only]
   **1. Sharma, A., Sharma, A., Gupta, B., Kumar, S., (2014). "*Android Based Application: Security and Compliance*", 9th** National Conference on **"Smarter Approaches in Computing Technologies & Applications"** 19th April, 2014, organized by **Institute of Technology & Science, Ghaziabad (U.P.)**.

6. **Research & Development during the year 2014-2015**
   1. Supervised Ms. Yasika Bansal on the topic **"Commodity Futures as an 'Asset Class': An Empirical Evidence from Indian Commodity Futures Market"** as a Principal Supervisor in Thapar University, Patiala. **(Ph. D. Thesis Submitted)**

7. **Extra – Curricular activities (Apr'2014-Mar'2015)**
   1. Editor-in-Chief**, B-Cognizance- An E-Magazine,** published at MBA(IT)-MSCLIS Division, at Indian Institute of Information Technology (IIIT-A) Allahabad.

8. **Awards/Honours/Recognition received, if any**

9. **Training Programmes Organized (April 2014- March 2015)**

10. **Any other Achievements/Distinctions not included in the above**

## Dr. S. Venkatesan
## Assistant Professor

1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)
   **Dr. S.Venkatesan M.Tech., PhD**

2. Academic Designation and Department :
   **Assistant Professor, Department of Information Technology**

3. Publications (Books and Research Papers)

**Venkatesan S., Vladimir A. Oleshchuk, Chellappan C., and Sourabh Prakash, "Analysis of Key Management Protocols for Social Networks", accepted to publish in International Journal of Social Network Analysis and Mining, Springer.**

**4.** Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.: **NIL**

**5.** Work done in projects undertaken in the Institute: **NIL**

**6.** Lab & Curriculum Development

**Lab: Network Security & Cryptography Lab**

**Curriculum: Database Security - for M.Tech CLIS**

**7.** Extra – Curricular activities : **NIL**

**8.** Awards/Honours/Recognition/Professional Awards received : **NIL**

**9.** Training Programmes Organized : **NIL**

**10.** Any other Achievements/Distinctions (not included above) : **NIL**

## Dr. Krishna Pratap Singh
## Assistant Professor

**1.** Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)-
**Dr. Krishna Pratap Singh, Ph.D.**

**2.** Academic Designation and Department-
**Assistant Professor, Department of Information Technology, IIIT Allahabad**

**3. Publications (Books and Research Papers)**

Cuckoo Search Optimization for Job Shop Scheduling Problem, Proceedings of Fourth International Conference on Soft Computing for Problem Solving, 2015.

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

1. Workshop on "**Advances in Wireless and Optical Networks (AWON-2014)"** during **2nd to 7th June-2014**. Department of Electronics and Communication Engineering at MNNIT Allahabad.
2. Organized a lab session in IEEE Computational Intelligence Workshop"(CIW-2014) being organized on 13-15th October, 2014.

**5. Work done in projects undertaken in the Institute –**
NIL

**6. Lab & Curriculum Development –**
Probability and Stochastic Process, M.Tech. Course

**7. Extra – Curricular activities/Administrative Responsibilities-**

1. Warden- BH#1
2. Coordinator International Division
3. In-charge-Time table
4. Member organizing Committee- Annual Student Cultural Program

**8. Awards/Honours/Recognition/Professional Awards received**

**9. Training Programmes Organized –**
Organizing member**,** IEEE Computational Intelligence Workshop"(CIW-2014) being organized on 13-15th October, 2014.

**10. Any other Achievements/Distinctions (not included above)**

## Dr. Akhilesh Tiwari
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr. Akhilesh Tiwari

2. **Academic Designation and Department :**
   Assistant Professor, Department of Applied Science

3. **Publications (Books and Research Papers)**

   4. Investigation of interfacial phenomena during condensation of humid air on a horizontal substrate, **Akhilesh Tiwari**, J.-P. Fontaine, A. Kondjoyan, J.B. Gros, C. Vial, C. G. Dussap, Oil & Gas Science and Technology – Rev. IFP Energies nouvelles, 69, No. 3 2014, pp.445-456.

4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.
   3. Invited talk on the topic "Space Farming and Plant Technology at Microgravity" in the short term course on Plant and Enzyme Technology held at Motilal Nehru National Institute of Technology (MNNIT) Allahabad, India from 24-28 January 2015.
   4. Invited talk on the topic "Modeling of condensation mass transfer for solid state fermentation process in an abiotic environment" in the short term course on Recent Advances in Fermentation Technology held at Motilal Nehru National Institute of Technology (MNNIT) Allahabad, India from 14-18 January 2015.
   5. International Conference on Emerging Trends in Biotechnology (ICETB 2014), XI Convention of the Biotech Research Society, India (BRSI), Indo- Italian Workshop on Industrial Pharmaceutical Biotechnology held at Jawaharlal Nehru University (JNU), New Delhi from 06-09 November 2014. (Chaired a session)

5. **Work done in projects undertaken in the Institute**

6. **Lab & Curriculum Development**

7. **Extra – Curricular activities**
   1. Won two gold medals in Institute's Annual Athletics Meet (ASMITA-2015)
   2. Won a gold medal in Institute's Independence day Marathon Race

8. **Awards/Honours/Recognition/Professional Awards received**

9. **Training Programmes Organized**
   1. Organized 1st workshop on **Advanced Materials and Instrumentation in Biomedical Engineering** -2014 (**AMIBE - 14**) held at IIIT Allahabad funded by Department of Science and Technology (**DST**), New Delhi, Council of Scientific and Educational Research (**CSIR**), New Delhi and The National Academy of Sciences India (**NASI**), Allahabad.

   2. Guided Two French M. Tech. (Physics Engineering) Interns as an International Collaboration with University of Blaise Bascal, France.
      1. Mr. Quentin Izzanic, Polytech Engineering School 'Clermont-Ferrand, France
      2. Mr. Valentin Contat, Polytech Engineering School 'Clermont-Ferrand, France

10. **Any other Achievements/Distinctions (not included above)**

## Dr. Amit Prabhakar
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
   **Dr. Amit Prabhakar**

2. **Academic Designation and Department:**
   Assistant Professor, Department of Applied Sciences, IIITA

3. **Publications (Books and Research Papers):**
   1. Nishant Kumar, Amit Prabhakar, M. Tikekar, S.G. Singh, and A. Agrawal, Blood flow in non-circular microchannel under pulsating condition, Journal of Micro-Nano Scale Transport, 2014, Volume 4, Number 1, 33-50.

2. AmitPrabhakar, Y V Bala VarunKumar, Siddhartha Tripathi, Amit Agrawal, A novel, compact and efficient microchannel arrangement with multiple hydrodynamic effects for blood plasma separation, Microfluidics and Nanofluidics, 2014, (DOI: 10.1007/s10404-014-1488-6).
3. S. Tripathi, Y. V. B. V. Kumar, A. Prabhakar, S. Joshi, and A. Agrawal (2015), Perfor-mance Study of Microuidic Device for Blood Plasma Separation - A Designers Perspec-tive", *J. Micromech. Microeng.*, (doi:10.1088/0960-1317/25/8/084004).
4. S. Tripathi, Y. V. B. V. Kumar, A. Prabhakar, S. Joshi, and A. Agrawal, Passive Blood Plasma Separation at Micro-scale: A Review of Design Principles and Microdevices, *J. Micromech. Microeng* (doi:10.1088/0960-1317/25/8/083001).
5. S. Tripathi, Y. V. B. V. Kumar, A. Prabhakar, S. Joshi, and A. Agrawal, Synthesis of bio-physical and geometrical effects for developing a microdevice for plasma separation from whole human blood, *(submitted to Lab Chip)*
6. Amit Prabhakar and Soumyo Mukherji, "Embedded Duel Bend - Serpentine / Spiral Waveguides for an Efficient Evanescent Wave Absorption Based On-Chip Bio/Chemical Sensing Applications"
*(submitted to Biomedical Microdevices).*

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

S. Tripathi, Y. V. B. V. Kumar, A. Prabhakar, S. Joshi, and A. Agrawal, Plasma Separation from whole Human Blood in a Hybrid Microdevice", (submitted to FMFP 2015).

**5. Work done in projects undertaken in the Institute**

Details of Projects submitted to various funding agencies:

| S. No | Title | Cost in Lakh | Month of submission | Role as PI/Co-PI | Agency | Status |
|---|---|---|---|---|---|---|
| 1 | Gold Nanoparticle Coated/ Embedded, Colour-Barcoded Magnetic Microparticles for Lab on chip Localized Surface Plasmon Based Label Free Multiplexed Bioassays | 48.4 | Jan 2014 | PI | Department of Science and Technology, New Delhi, India | Recommended for final approval |
| 2 | A Comprehensive and Compact Lab on Chip Device, with Microfluidic Blood Plasma Separation Unit, Coupled to an Embedded Bend Waveguide Biosensor, for Real-Time Sensing of Blood Analytes | 52.5 | May 2015 | PI | Department of Biotechnology, Government of India, New Delhi, India | Under Review |
| 3 | Microfluidic Chip With Silver Nanoparticle Coated Polymer Waveguide, for Bioreceptor Free, Localised Surface Plasmon Resonance Based, (Bio)Sensing of Silver Ion Susceptible Microbes. | 63.34 | May 2015 | PI | DRDO, New Delhi | Under Review |
| 4 | A Novel Water Purification System with Silver Nanoparticle Coated Micro-Channel Arrangement for Filter Less Purification of Water and Embedded Waveguide for Purity Indicator | 98.49 | June 2015 | PI | Department of Science and Technology, New Delhi, India | Has been screened in for next level of evaluation. |
| 5 | Label Free and Multiplexed, On Chip – Bioassays, Using Microfabricated, Gold Nanoparticle Immobilized, and Color Coded Magnetic Microparticles | 36.7 | June 2015 | PI | DST Start Up Reseach Grant (Young Scientists) | Has been screened in for next level of evaluation. |

**6. Lab & Curriculum Development:**

Actively involved in development of new Biomedical engineering courses in Department of Applied Sciences i.e. Bio-Mechanics, Bio-MEMS, Medical Imaging, Biosensors and Transducers etc.

**7. Extra – Curricular activities:**

- Helping students as Faculty In-charge of Music Club of IIITA.
- Helping students as Warden of Boys Hostel-3.

**8. Awards/Honours/Recognition/Professional Awards received:**

None

**9. Training Programmes Organized:**

Member of Organizing committee for AIBME 2015 organized at IIITA.

**10. Any other Achievements/Distinctions (not included above):**

None

**Dr. Pramod Kumar**
**Assistant Professor**

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr. Pramod Kumar

2. **Academic Designation and Department:**
   Assistant Prof. and Applied Sciences

3. **Publications (Books and Research Papers):**
   **[1].** Structural, negative magnetization and heat capacity properties in M2Fe2O(AsO4), **Kumar et. al**. JAP, **2015**(Under review, JAP: MS #JR15-9869)**.**
   **[2].** NdRu2Ge2 and NdRu2Si2: A Comparative Study, **Kumar** et. al. JMMM, **2015** (Under review, MAGMA-D-15-02153)**.**
   **[3].** Synthesis and ultrafast spectroscopic study of new [6,6]methanofullerenes, **Kumar** et. al. Carbon**,** 2015 (Under review ,CARBON-D-15-02664)**.**
   **[4].** Spin Glass behavior in TbRu2Ge2 compound, **Kumar** et. al. Adv. Mat. Lett., **2015** ( **AML1406309**).
   **[5].** Pressure dependent Magnetic, AC Susceptibility and Electrical Properties of Nd7Pd3, **Pramod Kumar**, Puneet Jain and Rachana Kumar, 2015, RSC Adv. 5(**2015**)58928.
   **[6].** Magnetocaloric effect and refrigeration cooling power in amorphous Gd7Ru3 alloys, **Pramod Kumar** and Rachana Kumar, 2015, AIP advances 5(**2015**)077125.
   **[7].** Bulk synthesis of highly conducting graphene oxide with long range ordering, Rachana Kumar,Samya Naqvi, Neha Gupta,Kumar Gaurav,Saba Khan,**Pramod Kumar**,Aniket Rana,Rajiv K. Singh,Ramil Bharadwajand Suresh Chand, RSC Adv.(**2015**) 5, 35893.
   **[8].** Stable Graphite Exfoliation by Fullerene Intercalation via Aqueous Route: R. Kumar, **Pramod Kumar**, S. Naqvi, N. Saxena, J. Gaur, G. D. Sharma, R. Bharadwaj, J. K. Kushwaha, and S. Chand **2014** New J. Chem. DOI: 10.1039/C4NJ00907J.
   **[9].** Crystal structure and negative magnetization in $Sm_2Al$ and $Sm_{1.988}Gd_{0.012}Al$, **Pramod Kumar**, S. Pandey, Rachana Kumar, K.G. Suresh and A.K. Nigam, Physica B 448 (**2014**)6 .
   **[10].** Complex magnetic behavior of sawtooth Fe chains in $Rb_2Fe_2O(AsO_4)$: L. D. Sanjeewa, **Pramod Kumar** and S. J. Hwu, Phy. Rev. B 89 (**2014**) 014426.

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
   1. International conference on Magnetic Materials and Applications (ICMAGMA 2015), India
   2. 20th International Conference on Magnetism (July 2015) Barcelona, Spain
   3. International conference on Magnetic Materials and Applications (ICMAGMA 2014), India

5. **Work done in projects undertaken in the Institute**
   1. Convener and organizer of "1ST WORKSHOP ON ADVANCE MATERIAL AND INSTRUMENTATION IN BIO MEDICAL ENGINEERING (AMIBE 2014)": March 8-12, 2014, Indian Institute of Information Technology Allahabad, INDIA.

   2. Convener and organizer of "2ND WORKSHOP ON ADVANCE MATERIAL AND INSTRUMENTATION IN BIO MEDICAL ENGINEERING (AMIBE 2014)": May 9-13, 2015, Indian Institute of Information Technology Allahabad, INDIA.

6. Lab & Curriculum Development:
   **Nanotechnology or Spintronic and Magnetic Materials Laboratory**

7. Extra – Curricular activities

8. Awards/Honours/Recognition/Professional Awards received
   Best Poster Award by American Chemical Society (ACS) in MACRO -2014 conference

9. Training Programmes Organized: **AMIBE 2014 AND AMIBE 2015**

10. Any other Achievements/Distinctions (not included above)
    1. **BRNS Project**: (*Ref No- 2015083704RP00950-BRNS*, under review) 2015 **145lakh**
       "High efficiency excitation of spin current in metallic end dielectric thin films"
    2. **DRDO Project**: (*Ref No - ERIP/ER/1500484/M/01*,under review) 2015 **100 lakh**
       Development of graphene-based hybrid spintronic devices
    3. **CSIR Project**: (*Ref No - 5870/NS*, under review) 2015 **45 lakh**
       Daric Material

## Dr. Ashutosh Mishra
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr. Ashutosh Mishra

2. **Academic Designation and Department:**
   Assistant Proffessor

**3. Journal publications:**

i. "Computational Analysis of Similar Repeat Patterns and their Secondary Structure Variation", S. Suman, A. Kulshreshtha, R. Singh, A. Mishra; Int. J. of Adv. Res. 3 (9). 1186-1193; Sept. 2015.

ii. "A connectionist model for finding identical repeat pattern in proteins", S. Suman, A. Kulshretha, A. Mishra; Int. J. of Current Life Sciences; Vol. 5, Issue, 8, pp, 705-709, August, 2015

ii. "In Silico Analysis To Study Blockade Of Potassium Channels By Common Poisons And Their Relative Affinity Of Binding", S. Patel, A. Mishra, M. Patel; Neuroscience and Biomedical Engineering, 3(1), pp. 11-19, 2015

**4. International visit:**

2 week visit to UC Berkley for discovery and discussions with Blum center for setting up a innovation lab at IIIT-ALLAHABAD.

**5. New courses developer and offered:**

I. Engineering processes in Biological Systems.
II. Biomedical Instrumentation
III. Biosignal Processing.

## Dr. Nidhi Mishra
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr Nidhi Mishra

2. **Academic Designation and Department**
   Assistant Professor in department of Applied Sciences

3. **Publications (Books and Research Papers) :** 02

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.** 02

5. **Work done in projects undertaken in the Institute:** nil

6. **Lab & Curriculum Development Drug Delivery and Pharmaceutical Engineering**

7. **Extra – Curricular activities Warden GH II and member Grievance Redressal committee**

8. **Awards/Honours/Recognition/Professional Awards received nil**

9. **Training Programmes Organized AMIBE 2015**

10. **Any other Achievements/Distinctions (not included above)**

## Dr. Sangeeta Singh
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions) :**
   Dr. Sangeeta Singh, Ph.D

2. **Academic Designation and Department:**
   Assistant Professor and Applied Science Department

3. **Publications (Books and Research Papers)**

   Raavi, Ayushi Gupta, Divakar Badal and Sangeeta Singh. In Silico Potential Drug Target Identification for Pseudomonas aeruginosa Biofilm. Proceedings of the 9th INDIACom-2015; IEEE Conference ID: 35071 2015, International Conference on "Computing for Sustainable Global Development", 11th–13th March, 2015, New Delhi. IEEE XPLORE, 863-867/2015.

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

5. **Work done in projects undertaken in the Institute:**

6. **Lab & Curriculum Development: Contributed in Curriculum Development of Integrated M.Tech (BME)**

7. **Extra – Curricular activities: Member of organizing committee for 7th Science Conclave held on 8-12 December 2014, IIIT Allahabad**

8. **Awards/Honours/Recognition/Professional Awards received:**

9. **Training Programmes Organized:**

10. **Any other Achievements/Distinctions (not included above)**
    Editorial Board Member of Indian Journal of Biotechnology and Pharmaceutical Research (ISSN: 2347-3266).

## Dr. Ranjana Vyas
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr.Ranjana Vyas

2. **Academic Designation and Department :**
   Assistant Professor on Contract

3. Publications (Books and Research Papers)

4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.

5. **Work done in projects undertaken in the Institute**
   Contributed to the Institute Administration in various developmental activities as Warden of Girls Hostel.

6. **Lab & Curriculum Development**

Taught DBMS,OOM in BTech and MIS in MBA.
Developed Lab experiments for Object Oriented Modeling and Mini projects for DBMS courses of BTech and MBA.

7. **Extra – Curricular activities**
**Duties of Warden-GH1, IIIT Allahabad**

8. **Awards/Honours/Recognition/Professional Awards received**
Taken initiatives in establishing ACM-W Chapter (Association for Computing-Women) at IIIT Allahabad.

9. **Training Programmes Organized**
Organized Talks under the category "Women in Computing" by German Researcher Ms Claudia Schiting (University of Weimar) and by Prof.Vicky Hansen-Vice Chairman-ACM.

10. **Any other Achievements/Distinctions (not included above)**
Guided Mini projects to BTech & MBA students.

## Dr. Guttula.Satyavani
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
Dr. Satyavani Guttula
2. **Academic Designation and Department:**
Assistant Professor, Bioinformatics, Department of Applied Science.

3. **Publications (Books and Research Papers)**

**International Journal Publications:**

1. G Satyavani, 2014, Frequency Estimation of Prothrombin Allelic Polymorphisms in Indian Population, Asian Journal of Medical Sciences 6 (5), 50-55.
2. Satyavani Guttula, Amit Chaudhary, Rashmi Tripathi, and Yashasvi Jain 2015, Antioxidant therapies to oxidative stress related Neurotrophins involved in alzheimer's disease, *EJPMR,* 2015, 2(3), 245-26.
3. Yashbir Singh, Satyavani Guttula, Rashmi Tripathi, Sunil Patel (2015). A review on epidermal Manifestation of pappiloma Virus infection in human, International Journal of Pharma Sciences and Research (IJPSR) 6(2), ISSN : 0975-9492.

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

1. Guttula. Satyavani 2014, Applications of Next generation Sequencing Technology in Health and disease.
International Conference on computational intelligence: Health and Disease, 27- 28 th December 2014 Visakhapatnam, Andhra Pradesh.

5. **Work done in projects undertaken in the Institute : None**

6. **Lab & Curriculum Development :**

1. Developed Systems Biology Lab for M.Tech Bioinformatics.
2. Designed Next Generation Sequencing Dry Lab Experiments.
3. Developed Curriculum for Nano Biotechnology along with Prof Krishna Misra for M.Tech (Bio Medical Engineering)

7. **Extra – Curricular activities:**

1. Assistant Proctor- IIITA, Member in Disciplinary committee for various student events conducted in the Institute.
2. Organizing Committee member for International Conference on Computational intelligence and Soft Computing- 19-20 December 2014, Visakhapatnam, Andhra Pradesh.

8. **Awards/Honours/Recognition/Professional Awards received:**
None

**9. Training Programmes Organized:**
None

**10. Any other Achievements/Distinctions (not included above) :**
NA

**Dr. Rahul Kala**
**Assistant Professor**

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
Dr. Rahul Kala

**2. Academic Designation and Department:**
Assistant Professor, IT

**3. Publications (Books and Research Papers)**

Books

- R. Kala (2016) *On-Road Intelligent Vehicles: Motion Planning for Intelligent Transportation Systems*, Elsevier, Waltham, MA. [In Press]. Papers
- R. Kala (2016) Homotopic Roadmap Generation for Robot Motion Planning, *Journal of Intelligent and Robotic Systems*, DOI: 10.1007/s10846-015-0278-z. [In Press].
- R. Kala (2016) Reaching destination on time with cooperative intelligent transportation systems, *Journal of Advanced Transportation*, DOI: 10.1002/atr.1352 [In Press].
- R. Kala, K. Warwick (2015) Intelligent Transportation System with Diverse Semi-Autonomous Vehicles, *International Journal of Computational Intelligent Systems*, 8(5): 886-899.
- R. Kala, K. Warwick (2015) Congestion Avoidance in City Traffic. *Journal of Advanced Transportation*, 49(4): 581–595.
- R. Kala, K. Warwick (2014) Computing Journey Start Times with Recurrent Traffic Conditions. *IET Intelligent Transport Systems*, 8(8): 681 – 687.
- R. Kala, K. Warwick (2014) Dynamic Distributed Lanes: Motion Planning for Multiple Autonomous Vehicles. *Applied Intelligence*, 41(1): 260-281.
- R. Kala (2014) Navigating Multiple Mobile Robots without Direct Communication. *International Journal of Intelligent Systems,* 29(8): 767–786.
- R. Kala, K. Warwick (2014) Heuristic based evolution for the coordination of autonomous vehicles in the absence of speed lanes. *Applied Soft Computing*, 19: 387–402
- R. Kala (2014) Coordination in Navigation of Multiple Mobile Robots. *Cybernetics and Systems*, 45(1): 1-24.
- A. Gupta, S. Bhalla, S. Dwivedi, N. Verma, R. Kala (2015) On the Use of Local Search in the Evolution of Neural Networks for the Diagnosis of Breast Cancer, *Technologies*, 3(3): 162-181
- R. Kala, K. Warwick (2015) Motion Planning of Autonomous Vehicles on a Dual Carriageway without Speed Lanes. *Electronics*, 4(1): 59-81.
- S. M. H. Jafri, Rahul Kala (2016) Path Planning of a Mobile Robot in Outdoor Terrain, In *Intelligent Systems Technologies and Applications Vol. 2*, Springer, pp. 187-195.

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc. :**
Plenary talk on "Motion Planning for Multiple Autonomous Vehicles" at the 17th International IEEE Conference on Intelligent Transportation Systems, Qingdao, China, October 8-11, 2014.

Conducted a Workshop on "Robot Motion Planning" and a gave talk on "Robot Motion Planning: Approaches and Research Issues" at the First SERB Summer School on Robotics 7-13 June, 2014 held at IIIT Allahabad.

**5. Work done in projects undertaken in the Institute :**
NIL

**6. Lab & Curriculum Development:**
Introduced course entitled "Robot Motion Planning" and the lab component of the same course.

**7. Extra – Curricular activities :**
NIL

**8. Awards/Honours/Recognition/Professional Awards received:**
Awarded First Prize in Best PhD Dissertation award by the IEEE Intelligent Transportation Systems Society. Awarded at the 2014 IEEE Intelligent Transportation Systems Conference at Qingdao, China.

**9. Training Programmes Organized: .**
NIL

**10. Any other Achievements/Distinctions (not included above) :**
NIL

## Dr. Pooja Mishra
## Assistant Professor

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
Pooja Mishra

**2. Academic Designation and Department :**
Assistant Professor, Department of Electronics and Communication

**3. Publications (Books and Research Papers)**

**Publication in Journal**

1. **Pooja Mishra**, Shailesh Kumar and Dharmendra Singh, "An approach for finding possible presence of water ice deposits on lunar craters using MINISAR data," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing,* vol.8, no.1, **2015**.
2. **Pooja Mishra** and Dharmendra Singh, "A statistical measure based adaptive land cover classification algorithm by efficient utilization of polarimetric SAR observables," *IEEE Transactions on Geoscience and Remote Sensing, vol.52, no.5, pp.2889-2900,* ***2014.***

**Publications in International Conferences\Workshops\Symposiums**

1. Pooja Mishra, Shailesh Kumar, Keshava P Singh, Dharmendra Singh, "Pattern analysis of MiniSAR data for differentiation of icy craters in lunar surface," *IEEE International Geoscience and Remote Sensing Symposium,* 2015, Milan, Italy.
2. **Pooja Mishra,** Keshav P Singh, Dharmendra Singh and Naveen Singh Rajput, "Critical analysis of deorientation effect on various land covers: an application of polSAR data, in *IEEE International Geoscience and Remote Sensing Symposium*, 2014, Quebeck, Canada.
3. **Pooja Mishra** and Dharmendra Singh, "Critical analysis of lunar surface for its physical properties: an application of MiniSAR data," *45th Lunar and Planetary Science Conference, 2014,* 17-21 March, The Woodlands, Texas.

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

**5. Work done in projects undertaken in the Institute**

**6. Lab & Curriculum Development**

**7. Extra – Curricular activities**

**8. Awards/Honours/Recognition/Professional Awards received**

**9. Training Programmes Organized**

**10. Any other Achievements/Distinctions (not included above)**

## Dr. Bibhas Ghoshal
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
   Dr. Bibhas Ghoshal

2. **Academic Designation and Department**
   Assistant Professor (on contract), Dept. of IT, IIIT Allahabad

3. Publications (Books and Research Papers)
   *Bibhas Ghoshal*; Kanchan Manna; Sanatanu Chattopadhyay; Indranil Sengupta, *"In-Field Test for Permanent Faults in FIFO Buffers of NoC Routers,"* IEEE Transactions on Very Large Scale Integration (VLSI) Systems, vol.PP, no.99, pp.1,1, doi: 10.1109/TVLSI.2015.2393714

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
   Presented lecture sessions and conducted lab sessions for the summer school on Fundamentals of Digital Design and Automation held at Indian Statistical Institute, Kolkata during July 22-26, 2014

5. **Work done in projects undertaken in the Institute**

6. **Lab & Curriculum Development**

7. **Extra – Curricular activities**

8. **Awards/Honours/Recognition/Professional Awards received**
   a. Awarded PhD degree in Computer Science and Engineering by IIT Kharagpur
   b. PhD thesis selected in the PhD forum of a premier conference named Design Automation and Test in Europe (DATE'15) 2015

9. **Training Programmes Organized**

   Presented lecture sessions and conducted lab sessions for summer course titled "FPGA Prototyping using Verilog" held at Dept. of Computer Science and Engineering, IIT Kharagpur for faculties, people working in industries and students

10. **Any other Achievements/Distinctions (not included above)**

## Dr. Rekha Verma
## Assistant Professor

1. **Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**
   Dr. Rekha Verma

2. **Academic Designation and Department:**
   Assistant Professor, Dept. of ECE

3. **Publications (Books and Research Papers):**

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc. :**

5. **Work done in projects undertaken in the Institute :**

6. **Lab & Curriculum Development :**
Assisted in developing "Nanoscale Electro-Thermal research laboratory (NET lab)" at the Department of ECE, IIIT Allahabad.

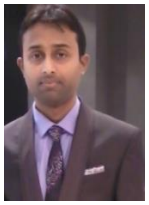
7. **Extra – Curricular activities**
Supervised departmental website development for T&P activities.

8. **Awards/Honours/Recognition/Professional Awards received:**
   - Reviewer, IEEE-Transactions on Electron Devices.
   - Member, IEEE, Electron Device Society.
   - Member, Association for Computing Machinery.
   - Member, KVPY 2014 interview board at Harish-Chandra Research Institute, Allahabad.

9. **Training Programmes Organized**
Successfully organized a half-day workshop on "COMSOL Multiphysics 5.1" at the Department of ECE, IIIT Allahabad on July 24, 2015.

10. **Any other Achievements/Distinctions (not included above)**

**Dr. Sitangshu Bhattacharya**
**Assistant Professor**



1. **Full name, as published in the Institute records, with prefix and suffixes, of degrees and distinctions, if any.**
Dr. Sitangshu Bhattacharya
2. Academic Designation and Qualification :
Ph.D, Assistant Professor

3. **Publications (Books and Research Papers):**

**Books published from IIIT-Allahabad affiliations**

1). **"Heavily-Doped 2D-Quantized Structures and the Einstein Relation"**, Authors: K.P.Ghatak and **SITANGSHU BHATTACHARYA,** *Springer Tracts in Modern Physics*, Vol. 260, pages: 374, ISBN: 978-3-319-08380-3, (2015).

2). **Publications of Research Papers in Journals with IIIT-A affiliations:**

***International Journals:***

**(i) SITANGSHU BHATTACHARYA**, D. Saha, A. Bid and S. Mahapatra, "A continuous electrical conductivity model for monolayer graphene from near intrinsic to far extrinsic region", *IEEE TRANSACTIONS ON ELECTRON DEVICES*, USA, Vol. 61, pp. 3646-3653, (2014).

(ii) D. Saha, A. Sengupta, **SITANGSHU BHATTACHARYA** and S. Mahapatra, "Impact of Stone-Wales and lattice vacancy defects on the electro-thermal transport of the free standing structure of metallic ZGNR", *JOURNAL OF COMPUTATIONAL ELECTRONICS (SPRINGER),* Vol. 13. pp. 862-871, (2014).

***National Conferences:***
Dipankar Saha, **SITANGSHU BHATTACHARYA** and Santanu Mahapatra, "Modeling of Sheet Concentration and Temperature Dependent Resistivity of a Suspended Monolayer Graphene." IEEE 2nd International Conference on Emerging Electronics (ICEE), December 3-6, Bangalore-India, pages: 1-4, (2014)

4. **Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**
***National***
Invited speaker in "Indo-French workshop on EMERGING TRENDS IN ELECTRON DEVICE MODELLING" (30 March-1st April 2015) held at IISc Bangalore.

5. **Work done in projects undertaken in the Institute (Apr' 2014- Mar'2015)**

1) We presented a continuous model of chemical potential for single layer graphene which spans from temperature T<< TF (Fermi temperature) to T>>TF. The model is used to provide a thumb rule to predict graphene electrical conductivity for all temperatures. Earlier prediction were made at either near-intrinsic of highly extrinsic graphene sample cases.
2) We address a simplified physics-based analytical model for the temperature- as well as the sheet-concentration-dependent resistivity of the free-standing monolayer graphene sheet. The analytical solution is achieved through the formulation of the sheet-concentration as the function of the external current. To determine the temperature-and sheet-concentration-dependent resistivity of the suspended layer of graphene, we have utilized the Landauer formalism in the diffusive limit. Besides, the overall contribution of different scattering mechanisms has been calculated considering both the in-plane and the flexural phonons. The analytical model presented in this work is in good agreement with the available experimental data.

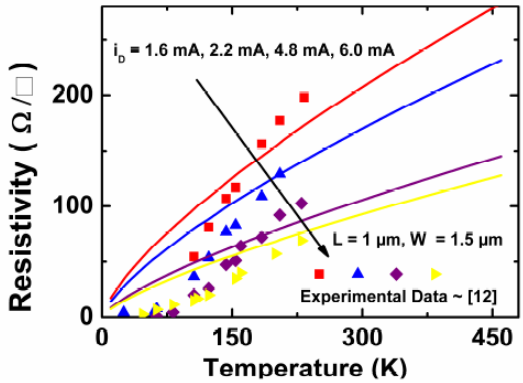



Fig. 2. Temperature-dependent Resistivity plots for different $i_D$ values.

These results have been published in the journals mentioned above.

6. **Lab and Curriculum Development**

The Nanoscale ELectro-thermal laboratory or the ***NET lab*** at Room No. 2226, CC-I was started in 2014 by Dr. Sitangshu Bhattacharya and focuses strongly on electrical and thermal management of emerging materials and devices, both in bulk as well as in the submicron or nanoscale order. At present we are mainly engaged to conduct theoretical research to explain electronic and phononic transport properties like electrical and thermal conductivity, Seebeck coefficient, interface physics, noise and RF modelling in 2D graphene/dichalcogenides based heterostructure transistors, Joule-heating effect in interconnects and vias and RF/Analog ICs and low power VLSI systems. We use the Boltzmann transport theory and many body physics based advanced analytical formalisms with mathematical and computational tools like Green's function, first principle techniques, etc. to explain the said properties. The lab is currently funded by the Department of Science and Technology (DST), India and IIIT-Allahabad.

Course Curriculum: Novel contents added to the course "**Modeling & Analysis of VLSI Devices":**

(a) Schrödinger's equation and quantum well problems, Fermi energy and Carrier concentration, Fermi Golden Rule, Boltzmann Transport equation, Relaxation time approximation, Scattering rates and mobility
(b) Landauer transport formalism, Mobility model,: transmission coefficient, 1D and 2D MOS electrostatics, Non-equillibrium Green's function (NEGF) formalisms, scattering matrix, self-energies
(c) Injection and transport model, Continuity equation, Planer Double Gate MOSFET transistor current and threshold voltage Modeling
(d) Ebers and Moll and Gummel-Poone model, depletion type MOSFET, depletion capacitance, series resistance, early effect

The followings are our field of studies:

1. **Power Scaling, Noise and RF modeling in Carbon based devices:** Two-dimensional (2D) single layer graphene (SLG) or simply an SLG sheet in recent years has demonstrated exceptional electronic and thermal transport properties that was never found in the counterpart of Si and other conventional materials. Two of such properties are the electron or hole mobility and the thermal conductivity, that happens to be extremely high (of the order of 2,00,000 $cm^2V^{-1}s^{-1}$ and 5000 $Wm^{-1}K^{-1}$ respectively for suspended SLG) and thus attracts attention. One can now think to fabricate high quality

channels of what is now called as graphene-based FETs. Both of these merit manifests a large amount of *on* or saturation current as well as showing improved immunity towards Joule heating. But due to the absence of energy band gap, 2D SLG FETs has less fortune for digital applications where fast switching is mandetory. On contrary, the same has potential applications in the domain of analog or RF transistors where the device is needed to be always *on* condition. Within such domain and in order to boost further current levels one should analyze the electrical conductivity coupled to the Joule heating in detail, not to mention the choice and role of the underlying dielectric so that heat could also see a low resistance to flow down. Thus, in order to track down the transistor current both at low and high electric field, estimation of the electrical conductivity is a must. This electrical conductivity (σ) of SLG sheet is the most puzzeling one to persue in the sense that it does not follow the universal minimum conductance formalsim, which other 2D materials strictly does. This non-universality is further added to the demonstrated intreguing fact that SLG behaves both as insulating as well as metallic in the same temperature range regardless of whether it is put suspended over the contacts or placed on the substrate. This makes the study interesting in a way that it roots deep into the dynamically screened electron-electron interaction arising from the graphene intrinsic plasmon as well as the graphene-dielectric interface surface plasmon. This domain thus originates from the aforementioned observations and thus focusses on estimating the SLG sheet transistor on-current, using physics based analytical as well as computationally efficient models, over different polar-dielectrics in the presence of Joule heating or more specifically self-heating.

2. **Thermoelectric Devices and Circuits: Power Scaling & Efficiency:** As of today, the world's energy consumption that relies on non-renewable fossil fuels is approximately 88%. About 75% of this energy is wasted into the environment while converting into useful work by the internal combustion heat engines which have a mere efficiency of about 40%. Recovering this grass-root waste heat and transforming it into electrical energy without any using moving parts can be done through what is known as solid state thermoelectric (TE) devices. TE device works on the principle that the heat can be transformed into useful electricity as long as there is a temperature difference (ΔT) or gradient. This phenomenon is known as Seebeck effect and was discovered, using dissimilar metals subjected to a temperature gradient, by the German scientist Thomas Johann Seebeck in 1891. The measured output electrical voltage was found to be proportional to the temperature difference. This initiated the motivation of obtaining electricity using the waste heat from the environment and quest for TE device performance and efficiency limits. A conventional internal structure of a commercial TE device is shown below that uses a cascade of p- and n- type semiconductors. Although there is no limit on the temperature difference between the substrates as shown in the figure below, however depending on the type of application this ΔT could be from low (near room temperature) to almost above 1000 K. For example, a TE based electronic watch uses almost $10^{o}$C difference (standard room temperature is 300 K and body heat is almost 310 K) to run, whereas an electricity generator generally needs as high as 500-1000 K of ΔT from industry/nuclear plant. In view of VLSI circuits, in last few years it has been observed that with the increasing hot-spots due to the addition of trillions of transistors inside an integrated chip in a VLSI device, micro -TE based sensors are in high demand because of their ability to drive other devices efficiently from the waste heat generated from the chip where the temperature rise could be as high as 100 $^{0}$C.
   The primary goal of this domain of research is mathematically analyzing the overall stability and efficiency of a TE device that can extract and channel the heat from the chip. The proposed model can then be used efficiently to estimate the electrical and thermal properties of thermoelectric materials as well as their arrays at such geometries and analyse their performances as miniaturized Thermoelectric Generators (TEGs) and coolers. Conventionally, the efficiency ($\eta$) of a TE material is measured via the dimensionless "Thermoelectric Figure of Merit (TFM)", generally denoted as *ZT* and depends solely on the materials' Seebeck coefficient (S), Electrical conductivity (σ) and electronic thermal conductivity ($\kappa_e$) and lattice thermal conductivity ($\kappa_{ph}$). Typical values of a very good *ZT* are in the range of 1, 2 and 3 and finds practical applications as TEGs and coolers and in commercial and industrial sectors. However, achieving a value of more than 2 is horrendously challenging, given a specific operating temperature zone, and requires severe amount of material assortment and design, together with optimization of charge carriers densities and material dimensionality.

3. **Interface Physics of Solar Cell Materials and Circuits:** Amorphous materials like $Al_2O_3$ has rapidly gained in popularity in the past years as thin film passivation material for c-Si photovoltaics (PV). $Al_2O_3$ is a wide band gap (~8.8 eV for bulk material) dielectric which consists in different crystalline forms. However, for passivation layers amorphous $Al_2O_3$ films are used with a somewhat lower band gap (~6.4 eV) and with a refractive index of ~1.65 at a photon energy of 2eV. The films are therefore fully transparent over the wavelength region of interest for solar cells. The films are typically quite stoichiometric ([O]/[Al] ratio = ~1.5) although there can be a slight excess of O in the film. When prepared by CVD-based techniques, the films exhibit also a low hydrogen content (typically 2-3 at.%) and this hydrogen is mostly bonded to the (excess) O as –OH groups. It has however been observed that the excellent passivation properties do not depend sensitively on the $Al_2O_3$ properties such as stoichiometry and material purity. The hydrogen content of the $Al_2O_3$ films is however found to be very important for the chemical passivation of c-Si obtained from the $Al_2O_3$ films. This holds also to the interfacial layer of $SiO_x$ (1-2 nm thickness) that is (always) formed between the $Al_2O_3$ and the Si when applying CVD-based techniques. The domain of this research spans ab-initio methodologies to capture the interface physics of amourphous/c-Si based solar cells under different physical conditions.
4. **Mott- Transition Field Effect Transistors (MOTT-FET):** Mott insulators are extremely interesting in the sense that these are a class of materials that conducts electricity when under an electric field and at a particular temperature. This insulator-metal transition/phase change is called as Mott-transition and can be used to make FET switches and memory devices. Besides electric field excitation, the Mott phase transition can also be triggered by photo- and thermal excitations for potential optical and thermal switches. There are few complex oxides like $VO_2$ that makes transition at comparatively low temperature from insulator to metal which however forbids their usage in high chip packaging temperature like at 85° C. Here we thus focus on complex oxides for the electron-electron interactions or in short the strongly and weekly correlated systems using Mott-Hubbard model. Understanding the electronic arrest mechanisms while de-coupling from structural Peierls distortions is one of our interests.

**7. Extra – Curricular activities (Apr'2014-Mar'2015)**

**8. Awards/Honours/Recognition received, if any**

Enlisted in the IEEE Electron Device Society Golden list of Reviewer-2014. http://eds.ieee.org/publications/517-2013-t-ed-golden-reviewers

**9. Training Programmes Organized (April 2014- March 2015)**

In campus: Successfully organized a workshop on COMSOL Multiphysics. Faculties involved: Dr. Sitangshu Bhattacharya and Dr. R. Verma @ECE departmment. The response of people from IIIT-Allahabad and MNNIT-Allahabad was overwhelming on **24th July 2015.**

**10. Any other Achievements/Distinctions not included in the above**

## Dr. Prasanna Kumar Misra
## Assistant Professor

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
Dr. Prasanna Kumar Misra

**2. Academic Designation and Department: Visiting Facuty, Department of Applied Sciences**
Assistant Professor (On Contract), Electronics and Communication Engineering

**3. Publications (Books and Research Papers)**
: Under Progress

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc**
: NIL

**5. Work done in projects undertaken in the Institute:**
Co-Investigating the Project titled "Special Manpower Development Program-Chip2System Design in VLSI and related area.

**6. Lab & Curriculum Development:**
VLSI System Design Laboratory and Embedded System Design Laboratory has been developed and the non-disclosure agreement was signed with United Microelectronics corporation (UMC) and Innovations for High Performance Microelectronics (IHP) to access the commercial process design kits for designing and fabricating integrated circuits and systems.

**7. Extra – Curricular activities:**
Member in Departmental Undergraduate Committee in Electronics and Communication Engineering, Reviewer and Track Chair in IEEE UPCON 2015 Conference.

**8. Awards/Honours/Recognition/Professional Awards received:**
NIL

**9. Training Programmes Organized:**
NIL

**10. Any other Achievements/Distinctions (not included above):**
NIL

## Dr. Ayon Ganguly
## Visiting Faculty

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions)**
Ayon Ganguly

**2. Academic Designation and Department:**
Visiting Facuty, Department of Applied Sciences

**3. Publications (Books and Research Papers):**

- **Ganguly, A.**, Kundu, D., and Mitra, S. (2015), *Bayesian Analysis of Simple Step-stress Model under Weibull Lifetimes*, *IEEE Transaction on Reliability*, Vol. 64:473–485.
- Samanta, D., **Ganguly, A.**, Kundu, D., and Mitra, S. (2014), *Order Restricted Bayesian Inference for Exponential Simple Step-stress Model*, Communication in Statistics - Simulation and Computation (Accepted for publication).

- Hanagal, D., Pandey, A. and **Ganguly, A.** (2015), *Correlated Gamma Frailty Models for Bivariate Survival Data*, Communication in Statistics - Simulation and Computation (Accepted for publication).
- **Ganguly, A.** and Kundu, D. (2015), *Analysis of Simple Step-stress Model in Presence of Competing Risks*, *Journal of Statistical Computation and Simulation* (Accepted for publication).

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.:**

- I am invited to deliver a talk at International Indian Statistical Association Conference 2015 at Pune. The conference will be held during December 20-24, 2015.
- One of my paper has been accepted for oral presentation at Ninth International Triennial Calcutta Symposium on Probability & Statistics. The conference will be held during December 28-31, 2015.

**5. Work done in projects undertaken in the Institute:**

None.

**6. Lab & Curriculum Development:**

None

**7. Extra – Curricular activities:**

None

**8. Awards/Honours/Recognition/Professional Awards received:**

None

**9. Training Programs Organized:**

None

**10. Any other Achievements/Distinctions (not included above):**

None

## Dr. Jagpreet Singh
## Assistant Professor

**1. Full name (as published in the Institute records, with prefix and suffixes, of degrees and distinctions):**

Dr. Jagpreet Singh

2. **Academic Designation and Department:**

Visiting Faculty

**3. Publications (Books and Research Papers)**

Jagpreet Singh, and Nitin Auluck, "Controlled Duplication Scheduling of Real-Time Precedence Tasks on Heterogeneous Multiprocessors". in proceedings of 19th Workshop on Job Scheduling Strategies for Parallel Processing (JSSPP), IPDPS workshop, Hyderabad, India, 29 May 2015.

**4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.**

Presented research paper on "Controlled Duplication Scheduling of Real-Time Precedence Tasks on Heterogeneous Multiprocessors". at 19th Workshop on Job Scheduling Strategies for Parallel Processing (JSSPP), IPDPS workshop, Hyderabad, India, 29 May 2015.

**5. Work done in projects undertaken in the Institute**

**6. Lab & Curriculum Development**

I was involved in development of course curriculum of the IT Department. The course material was collected from various faculty members and the information was compiled in the form of a booklet that contains the complete syllabus for Btech (IT) and all of the Mtech streams along with the lab contents.

**7. Extra – Curricular activities**

Organized research scholar seminar series from January 2015 to May 2015. In this series, on every Friday evening, one scholar presented their research work. Also, a session was organized to teach scholars about making presentations in Latex Beamer class.

**8. Awards/Honours/Recognition/Professional Awards received**

**9. Training Programmes Organized**

**10. Any other Achievements/Distinctions (not included above)**

# Brief Summary of the department's activities during the year 2014-15

## 4.1 Department of Information Technology
## Website: https://it.iiita.ac.in/it/home.php

The institute primary aims to achieve excellence in Information Technology and related fields. All programmes offered by IIITA are in the area of IT or in the cusp area of IT and other allied fields. The Department of IT was formally established along with other departments in 2014 to strengthen teaching and research in information technology. The department offers BTech in IT (at both Jhalwa Allahabad and RGIIT, Amethi), dual-degree (BTech(IT)+ MTech in IT with specialization in different areas like "Intelligent Systems, Cyber Laws and Information Security, Wireless Communication Engineering, Human Computer Interaction, Robotics, and Software Engineering "; BTech(IT)+ MBA), PhD and Integrated MTech + PhD programme. To that end, considerable initiative have been taken by the department to establish state of the art teaching and research laboratories in the area of natural language processing, Robotics, Wireless Sensor Networks, Human Computer Interaction, Speech and Language Processing, Biometrics, Data Analytics and Cryptography and Information Security. The programmes at most undergraduate and post graduate level are evolving from a rigid structure to a flexible course structure to allow the students specialize and diversify at the time. Students are encouraged to undertake project in a group starting from V semester and advance research project in VIII semester emerging areas. Opportunity for innovation and incubation is provided at this stage to successful projects by the institute for industrial standards. The department offers financial support to its young faculty for cutting edge research and also encourages them to undertake sponsored research from industry and government agencies. Presently several projects sponsored by both government and industry are being undertaken in the department.

**Administrative and Academic Restructuring:**

During the past year (2014-15) various committees have been formed at the departmental level to look after each and every activity related to undergraduate & post-graduate programmes, training & placements, purchase, etc, of the department. For all academic matters pertaining to the undergraduate programme(s) and Postgraduate programme(s) offered by the Department, the Departmental Under Graduate Committee (DUGC) and Departmental Post Graduate Committee (DPGC) have been constituted. To streamline procurement of various equipment and other official requirements of the faculty members, a departmental purchase committee has been constituted.

**Faculty Recruitment**

In past years, the department was facing a severe crunch of faculty due to large enrolment of undergraduate and postgraduate students. To manage this, the department is actively involved to attract and retain young talent. For this, the department has invited applications for the post of Assistant Professor (on contract), Assistant Professor (regular), and visiting faculty from personnel from universities, institutes, R&D labs, industries, and Government, in India or Abroad.
A rolling advertisement has been floated on the Institute website. Faculty recruitment has been constant ongoing process so that promising talent can be inducted as and when available. One regular selection committee met in December 2014 and in the session 2014-15, four new faculty members have joined the department. Another round of selection is due in October 2015.

**Research and Development:**

The department has well established undergraduate laboratories wherein desktop computers are issued to individual students. The laboratories are open 24 hrs with free access to the Internet through two dedicated Internet connections (more than 2 Gbps). A large number of software is available to support laboratory classes. In addition to regular class laboratories, state of art research have been strengthened in the past year which include

- New Laboratories:

a. Cryptography and Information Security laboratory

b. Biometrics

c. Data Analytics

- Strengthening of Existing laboratories

a. Robotics

b. HCI

c. SILP

d. Language technologies

**Training and Placement:**

It was yet another season where IIIT-A surpassed its previous records with majority of the students getting placed in the Dream Round Companies. Some of our top recruiters were Google , Amazon , Adobe , DIRECTI , Cisco , Morgan Stanley , De Shaw , Qualcomm , Myntra , Flipkart , Arista , Dev Factory etc . Majority of the top companies offered a package close to 25 lpa or more and a substantial amount of IT students got placed in these companies. This season also boasts of various startups that visited our campus which gives us an idea of the reputation of IIIT-A in the industry.
This season also stood out because of the fact that almost all the companies that hired from our college before returned with more slots reserved for IIIT-A. This tells us about our alumni base which has reached out to all the spheres of this industry and is performing exceptionally well. This placement season also noticed a substantial increase in the number of third year students that were hired for summer internships. Also the conversion rate from Internships to PPOs was almost 100%.

Almost all the top recruiters that visited us for Full Time Employment also took significant number of interns which will help vast number of our students to get industry exposure at a very early stage.
The feedback we received from the companies that visited us was that they were elated to see the talent pool of our college and immensely satisfied with their hiring. Even the companies that visited us last were also jubilant to see the depth of knowledge in our students. They also told us that the basics of the students were very clear and also advised us to improve a bit in the practical domain. In short all the companies were really satisfied from their visit and this ensures us their return during the next season. Overall we did better than last year and we will strive to continue the same.

**Concluding Remarks:**

The department is in the process of strengthening academics through course development, revision of existing programmes by planning to hold an external review of all academic and administrative processes. Different committees have been constituted to stream academic processes by making academic decision making fast and transparent. The faculty recruitment process has been streamline to attract t he best talent and their retention is being ensured by providing the best possible facilities and academic environment for personal progress. The department continues to strive to achieve excellence in teaching and research through these endeavours.

## 4.2 Department of Electronics and Communication Engineering

**Website: https://ece.iiita.ac.in/ece/home.php**

The department of Electronics & Communication Engineering at Indian Institute of Information Technology, Allahabad was established in the year 2006 with the aims of pioneering interdisciplinary research with Information Technology. To that end, the institute provides greater exposure of core areas of Information Technology to the students of ECE department at IIITA as compared to the students registered in similar program at other premier institutes of India. The department offers BTech in ECE, M. Tech. in Microelectronics, Dual-degree in B Tech (ECE) and M Tech in Bio Medical Engineering or Microelectronics, Dual Degree B. Tech (ECE) and MBA, Integrated M Tech and PhD program along with the direct PhD program. The department provide healthy environment to students and faculties to carry out inter department collaborative research in area like bio medical engineering, robotics, human computer interface etc. Having undergone such a robust academic programme under the supervision of highest quality faculty members all passing out students of the department are capable of visualizing, planning and developing big projects of commercial and research interests in their respective field of expertise.

The new initiatives undertaken by the department towards further expansion and the value addition during the year 2014-15 are summarized hereunder:

**Faculty Recruitment**

At the start of the year 2014 the department had just 4 faculty members which have now been increased to 15. At the same time this is a pleasure to report thatno compromisewith the qualityhas been done as the newly recruited faculty members have very good academic record including their highest degree from prestigious institutes like IISC Bangalore, IIT Kanpur, IITRooraki etc. with impressive research publications. The process of selection involves departmental screening, research and teaching presentation/demonstration followed by the interview through selection committee of experts. The department is actively involved to attract and retain such high quality young faculty. For this, the department has put up a rolling advertisement for the post of Assistant Professor (on contract), Assistant Professor (regular), and visiting faculty from personnel from universities, institutes, R&D labs, industries, and Government, in India or Abroad.

**Administrative and Academic Initiatives**

The department has innovatively restructured the courses offered which include subjects ranging from the conventional core ECE courses as well the emerging areas of IT and biomedical to the highest level of research (leading to the doctoral degree). Various committees have been formed at the departmental level to look after each and every activity related to undergraduate & post-graduate programmes, training & placements, purchase, etc, of the department. For all academic matters pertaining to the undergraduate programme(s) and Postgraduate programme(s) offered by the Department, the Departmental Under-Graduate Committee (DUGC) and Departmental Post-Graduate Committee (DPGC) have been constituted. To speed up and help purchasing of various equipment and other official requirements of the faculty members, a departmental purchase committee has been formed. A most recent and much needed step has been taken by the department is the constitution of departmental training and placement (T&P) cell to enhance the training & placement activities of ECE students. This result in ever-increasing campus placements;about 86% of our students are already placed (intern+full time job/ full time job) in one semester itself in best of the national and multinational companies till date, still some more companies are yet to visit the institute for placements.A team of students under the supervision of HoD and T&P faculty in-charge had developed a departmental website that acmes primary and the detailed information regarding our course-curriculum, faculty profiles, projects undertaken by the students, awards and honours, etc. To encourage the undergraduate students to develop their technical skills and all round personality development, following awards have been introduced by the department:

- Best Student Award in a particular batch basedon the criterion of overall best performance in academics& extra-curricular activities.
- Best Project Award from 5$^{th}$ semester -7$^{th}$semesters to develop hands-on skills along with the class room study.

**Research and Development:**

Research is an integral part of any academic institution. The department has well established undergraduate as well as research laboratories viz., the Basic Electronics lab, Basic and Advance Programming lab, Bio Electronics lab, Cad lab, Communication System lab, Control System lab, Mobile Comminationlab,Fiber Optics Research lab, VLSI Technology lab etc. To meet the current thirst research requirements and to strengthen advanced studies in emerging fields, following laboratories have additionally been developed:

- VLSI System Design laboratory and Embedded System Design Laboratory has been developed and the non-disclosure agreement was signed with United Microelectronics corporation (UMC) and Innovations for High Performance Microelectronics (IHP) to access the commercial process design kits for designing and fabricating integrated circuits and systems.
- The Nano Scale Electro Thermal laboratory (NET Lab) was established to make use of technologies in typically unusual domains in innovative ways to strengthen the state-of-the-art research in novel semiconductor materials and devices at nanoscale.
- A wireless communication laboratory equipped with cognitive wireless software defined radio (SDR) test-beds has been developed to reinforce the wireless technology.
- The department has recently installed Atomic Layer Deposition(ALD) System in VLSI Technology laboratory. We now have most of the equipment/machinery needed for fabrication and characterization of semiconductors devices that includes silicon based transistors and sensors.

**Training and Placements:**

As in previous years, formal campus placements involving company interviews for the academic session 2014-15 wasconducted. There were a total of 90 students from BTech (ECE) final year registered for campus placements in 2014-15.Student registration for campus placements opened in August 2014 with thecustomary introduction to the placement processby the institute's TPO and student placement team. Companies were invited from July 2014 onwards to fill up online "Job Notification Forms" whichopened to students registered for placementsfrom early August. Pre-placementtalks by some companies,provided an avenue for interaction and familiarizationof students withrecruiting organizationsand their work profileas a run up to formal placements.The recruiters appreciated the knowledge and training of our students. However, there is a strong need to polish few areas like soft skills and IT based courses for BTech-ECE students. A majority of our past recruiters held their faith in our student's abilities and came to recruit in large numbers. Qualcomm, Freescale, Morgan Stanley, Tiny Owl, Walmart, Infurnia Furnishings Pvt. Ltd., Flipkart, Naukri.com, Grey Orange, Grofers, Incture, EXL / Goldman Sachs, EXL / RBS, ZS, Zomato, Accenture, IBM, Mahindra Comviva, Zopnow, Power2SME, TCS / Freescale/Ignite World, Unicommerce, Infosys , Icon Resources, KPMG, HT Media, Hashedin, Juniper, Polaris, Wipro, etc, to name a few that visited campus and recruited our students. The placement activities during the academic year 2014-15 for the Batch Strength 90 of B. Tech. (ECE) students 100 % placement has been attained with highest CTC = 27 Lakhs/Annum and average CTC= 12 Lakhs/annum.

**Awards and Honours:**

The department proudly congratulates to the achievers of the academic year 2014-15.

Ms.RaginiUpadhyay,Batch 2010-14 And Mr.GauravSrivastava, batch 2011-15 have been awarded the very recently introduced "The Best Student Award" for their overall best performance in academics& extra-curricular activities.

A team of Mr.Raghvendra Singh Tolia, Ms.Manisha, Mr.Aadithiya Ajaykummar, Mr.MandadiSowmith Reddy and Mr.Jonnalagadda K. Chaitanya of BTech-ECE VII semester, have received the "Best Project Award 2015" for their project "Automation using internet of things" under the guidance of Dr.NeeteshPurohit. In this series, the "Best Project Award 2015" for BTech-ECE V semester is given to the team of Mr.Nitin Kumar Singh, Mr.VipinVerma, Mr.Amol Kumar Paswan, Mr.Abhilash Gupta and Mr.Anil Kumar for their project entitled "WI-Fi Controlled Obstacle Remover Robot Car" under the guidance of Mr.Arun Kant Singh.

Another team of Subodh Kant, Sachin Saxena, Rohit Joshi and AkshayTiwari won the first prize in IEEE sponsored project design contest, "SRAJAN'15" at MA-NIT BHOPAL. It was an Event sponsored by the IEEE and carries significant reputation.

A team of KetanJhadav, SumitGautam, and Rohit Joshi secured the first poition in 5th All India Mentor Graphics University Design contest 2014 under the guidance of Dr. Manish Goswami.

One of our recent faculty recruitsDr.RekhaVermahas won the prestigious "TechnoInventor Award 2014" from Indian Electronics and Semiconductor Association (IESA) for outstanding research contribution in her PhD thesis.

**Concluding Remarks**

Under the dynamic leadership of visionary Prof. Somenath Biswas, Director IIIT Allahabad, the department has attained significant improvement in the field of academics, research, administration and students' placement. We are marching ahead for producing vibrant young innovative minds for the betterment of technology and the society as well.

**(Dr. Neetesh Purohit)**
**HOD, ECE**

**4.3 Department of Management**

**1. The department introduced two new courses:**

a. 5 Year Integrated MBA (B.Tech. IT + MBA)

i. India requires manpower that not only has the vision but also the capability to drive India tomorrow. To realise this dream India requires blend of world class engineers and competent and sincere managers. The objective behind B.Tech IT +MBA programme was to provide good technical manpower with strong managerial skill.

b. 4 Year Integrated MBA (MBA + Ph.D.)

i. The objective behind MBA+ Ph.D. programme was to improve the research environment in India by giving good researchers with strong academic bent of mind. It was believed that if students are focused towards the research from their post-graduation then given the infrastructural support, they can be good researcher at the end and can contribute significantly to the pool of knowledge.

**2. Course Curriculum Restructuring:**

a. A two member departmental committee was appointed by the director for re-structuring the present course structure and for the development of new courses structure for the proposed courses after incorporating the opinions from academia and industry.

b. The committee sought the opinion from industry experts (Wipro, PepsiCo, HSBC, Cognizant, E&Y etc.) and academia (IIM Lucknow, MDI, FMS, IIM Ahmedabad etc.) on the criteria of academic coverage with industry fitment and their holistic view of the programme.

c. Later on, these suggested changes were incorporated in the existing course structure (MBA-IT) for make it fit to the industry aspirations. This change in the course structure was episodic in nature because it changed the entire look of the course structure and introduces more vibrancy into it.

d. Most importantly, it became closer to industry fitment with wide academic coverage. While inculcating suggested changes, it was emphasized that IT should be intervened into the course structure from all the sphere viz. fundamental, application and advanced so as to elicit thoughtful business intelligence.

e. These changes were quite instrumental in setting up a platform for a perfect IT driven course which is also our USP.

**3. Lab Development:**

a. Department has developed **Business Analytics Lab** which will be equipped with most of the relevant Database and Data Analysis Softwares covering most of the functional areas of management like IT, Operations, Finance, Marketing etc.

**4. Pedagogical Innovation:**

a. As a pedagogical intervention 'War Room' (A scenario based study scheme) has been introduced in the Strategic Management Course.

b. A 'Reading Room' facility has been developed in the department to help the student with easy access to information in related area. One leading publisher has agreed to support this initiative.

**5. Research & Publication:**

a. 2 PhD in Management are being awarded.

b. Faculty and research scholars have visited institutions like including IIMC & IIT-BHU etc.

c. The E-magazine 'B-cognizance' has successfully completed its 10 year of publication still running.

**6. Placements:**

a. Top consulting firms like Ernst & Young and KPMG visited for MBA Campus hiring.

**7. Outreach Initiatives:**

a. The department is ready to launch 'Management Clinic' as an outreach initiative to help and support Micro & Small Business:

i. To create efficient and effective enterprises through 'Consulting' & 'Process Management'.

ii. Introducing lean and agile methods / technologies for BPM (Business Process Management)

**4.4 Department of Applied Science**

1) **The formation of Department of Applied Science on February 23, 2015**
2) **Completion of Internal review of the departmental activities.**
3) **Start of departmental review process by external reviwers to review the departmental activities and the courses being run under the department, viz., M.Tech. in IT(Specialization in Bioinformatics) and Integrated M.Tech. in Biomedical Engineering.**

**(Dr. Tapobrata Lahiri)**
**HOD, Applied Science**

# 6. RESEARCH AND PROJECTS

## 6.1 PROJECTS OF THE INSTITUTE

| Sr. No. | List of IIIT-A Project | Coordinator | Funding Agency | Remarks | Total amount Sanctioned cost | Total Amount Received | Period of Project |
|---|---|---|---|---|---|---|---|
| 1 | Development of New method and algorithms to identify exon-intron boundary and finding signatory signal pattern for genetic engineering like autism | **Dr.Pratish Vardwaj** | DST | to be closed | 20,70,860 | 12,27,930 | 2011-13 |
| 2 | Development of transgenic wheat plant against cereal Cyst Nematode (Heterodera Avenue and sunnpest (Eurygaster intergriceps puton ) by using Bioinformatics and Genetic engineering Approaches | **Dr. CVS Siva Prasad** | DST-ILTP | to be closed | 53,97,620 | 4226116 | 2009-13 |
| 3 | Disaster management system for large scale deployment of sensor network using a fault tolderant mechanism | **Dr. Shirshu Verma** | DST | to be closed | 1,58,47,800 | **73,08,000** | 2011-15 |
| 4 | Universal Digital Library- Content creation in Tibetan, Sanskrit and English | **Director/ Dr. Ratna Sanyal** | MIT | Project Closed (Account is not closed) | 1,05,00,000 | 8811008 | 2010-14 |
| 5 | Fund for Improvement of Science & Technology infrastructure in Universities and higher educational Institutions (Fist program-2007) | **Prof.U.S.Tiwary/ Prof. R.C.Tripathi** | DST | No transcation from last two year | 1,40,00,000 | 1,00,00,000 | 2008-13 |
| 6 | National Mission on education through information and communication technology --( ICT ) | **Director** | MHRD | No transcation from last two year | 1,50,00,000 | 75,00,000 | 2009-14 |
| 7 | Development of a computer aided microscopic pool for structural derivation of pathologically significant proteins (No.52/8/2005-BMS)ICMR ,Ansari Nagar– New Delhi | **Dr. T. Lahiri** | I.C.M.R | No transcation from last one year | 2683391 | 2344570 | 2009-12 |
| 8 | TDIL -( English-Indian Language machine Translation System )-Phase 2nd | **Dr. Ratna Sanyal** | MCIT | Running | 12809000 | 9264625 | 2011-15 |
| 9 | TDIL-( Indian Language-Indian Language Machine Translation System ) 2nd Phase | **Dr. Ratna Sanyal** | MCIT | Running | 2956000 | 2353288 | 2011-15 |
| 10 | TDIL-Development of Robust document analysis and recognition system for printed Indian Scripts-( OCR ) -2nd Phase | **Prof. Sudip Sanyal** | MCIT | Running | 7170500 | 4112700 | 2011-15 |
| 11 | Technology incubation and Development of Entrepreneurs(Tide) Scheme | **Prof. R. C.Tripathi** | DIT | Running | 1,65,00,000 | 40,00,000 | 2008-17 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12 | Setting up of an ASEAN-India Science & Technology Library Sanction letter No.-AB/244/10/07 dated 29.10. | **Director** | M E Affairs ASEAN | | $7,29,753 | 31757033 | 2009-12 |
| 13 | Allahabad High Court Digitilization Project | **Director/ Dr. Ratna Sanyal** | Alld High Court | Running | 51100000 | 25550000 | 2012-18 |
| 14 | ATB Netwok simulation Tastbed at MCTE,MHOW (MP) | **Prof. M.Radhakrishna** | CDA Jabalpur | Running | 1,44,40,000 | 8299623 | 2011-15 |
| **15** | Indo -US project Wireless Sensor Network (WSN) for protecting Wildlife and Humans | **Prof. M.Radhakrishna** | DEITY | Running | 8100000 | 3944000 | 2012-15 |
| **16** | Distributing Industrial Optimization tasks to Rural Worker- INDO UK BURD Project | **Prof. Anupam** | DST | Running | 6088130 | 2355024 | 2012-15 |
| **17** | Topological Materials and Application Science and Research Board | **Dr. Pramod Kumar** | SERB | Running | 2330000 | 1075000 | 2013-16 |
| **18** | DST - RFBR Project- Development of logic programming approach to intelligent monitoring of anomalous human activities DST-Russian Federation of Basic Research | **Dr. Abhishek Vaish** | DST | Running | 1683908 | 865610 | 2013-2015 |
| **19** | Development & Application of atomic layer Deposition for High efficiency c-Si Photovoltaic Solar cells | **Prof. B.R.Singh** | DST | Running | 21662000 | 19876000 | 2014-17 |
| **20** | Spintronic material and its applications | **Dr. Pramod Kumar** | SERB | Running | 3808025 | 2600000 | 2014-17 |
| **21** | Inspire Faculty Award | **Shri Shitannshu B.** | DST | Running | **3500000** | **93000** | **2014-17** |

## 6.2 PROJECTS BY RESEARCH SCHOLARS

### Title of the Thesis: Flexible Service Oriented Network Architecture for Wireless Sensor Networks

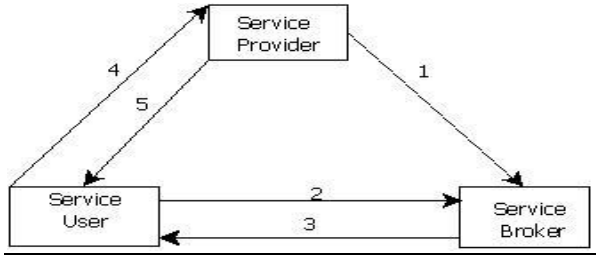
**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

There has been an increase in software and hardware resources for the current applications and effort have been carried out to fulfill the future unseen demands by the research and scientific communities to provide way for the innovation in Wireless Sensor Network. Current Wireless sensor network is designed for specific applications with tightly coupled architecture but future WSNs are envisioned to comprise large number of heterogeneous services for wide range of applications. A new flexible architecture is required, having support to unforeseen demand of applications and users. Therefore we propose a service oriented model based architecture Flexible Service Oriented Network Architecture for the WSN.

**PROGRESS/ CURRENT STATUS OF THE PROJECT**

The Proposed architecture FSONA provides the facility to the developer and scientific communities for the development or innovation of service in sensor network without worrying about the difficulty of change in current tightly coupled architecture. As developers we have done the implementation of DV-hop, Centroid, APIT algorithm as service for WSNs .

**Images of active Research being done / Labs etc.**



**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**

1. Akhilendra Pratap Singh, O.P. Vyas, Shirshu Varma, "Flexible Service Oriented Network Architecture for Wireless Sensor Networks" In the International Journal of Computers Communications & Control, Romania, ISSN 1841-9836,October 2014.(SCI Indexed)
2. Akhilendra Pratap Singh, O.P. Vyas, Shirshu Varma," A Framework of Service Selection and Composition for Flexible Network Architecture", Quality, Reliability, Security and Robustness in Heterogeneous Networks, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering Volume 115, 2013, pp 998-1007.
3. Akhilendra Pratap Singh, O.P. Vyas, Shirshu Varma, "Flexible Service Oriented Networks Architecture for Wireless Sensor Network Applied to Future Innovations, In the Proceeding of Eighth International Conference on Communication Networks (ICCN-2014), 2014, Bangalore, INDIA, Elsevier".
4. Akhilendra Pratap Singh, O.P. Vyas, Shirshu Varma, "A Method of Service Selection and Composition for Wireless Sensor Networks", 2nd IEEE International Conference on Computing for Sustainable Global Development (INDIACom), New Delhi, 2015, pp 482 – 486.

Name of Supervisor: **Prof. O.P. Vyas**

Name of Co-Supervisor: **Dr. Shirshu Varma**

Name of Research Scholar: **Akhilendra Pratap Singh**

Roll No.: **RS-112**

Name of Division where worked: **IT**

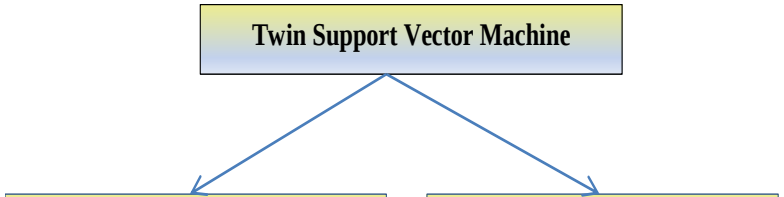
***Name of supervisor***: *Prof OP vyas*
***Name of Research Scholar***: *Bharat Singh*
***Roll Number***: *RS97*
***Name of Division where Working***: *Information Technology*

## Title of the Thesis: EXPLORING DATA ANALYTICS WITH SPECIAL REFERENCE TO FEATURE SELECTION

In recent years, as the technology advances, the data generated in various fields, have become increasingly larger in both a number of instances and a number of features. Among these, data with high number of attributes has been called as high dimensional data. These accumulations of very high

**Title of the Thesis:Twin Support Vector Machine: Multiclass extension and applications**

**Brief Note on the Project and its Outcome**




**Name of Supervisor:** Dr. Sonali Agarwal

**Name of Research Scholar:** Divya

**Roll No.:** RS-140

**Name of Division where working:**
Information Technology

**Title of the Thesis: Detection of Tree cutting & Vehicle Movement in Forest Environment**

Tree cutting activity and vehicle passing usually associated with unusual sound levels in the forest area due to the usage of engine of vehicles and tree cutting tool like chainsaws. The recorded signal consists of main signal (signal of interest) and noise signal (any signal other than main signal

**Name of Supervisor:**

**Dr. Manish Kumar**

**Name of Research Scholar:**

**Gajendra Sharma**

## Title of the Thesis:Ontology Engineering for knowledge Discovery

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

One of challenges of semantic web (3.0) is to construct ontology from text. Ontology learning is the automatic or semi-automatic creation of ontologies, including extracting the corresponding domain's terms and the relationships between those concepts from a corpus of natural language text, and encoding them with an ontology language for easy retrieval. As building ontologies manually is extremely labor-intensive and time consuming, there is great motivation to automate the process. The objective is to create ontology from text which can enhance the ability of traditional or current e-learning for

Name of Supervisor: **Prof.Dr.O.P.Vyas**

Name of Co-Supervisor: **Dr.Amit Kumar Dhar**

Name of Research Scholar: **Monika Rani**

Roll No.: **RS-130**

Name of Division where worked: **IT**

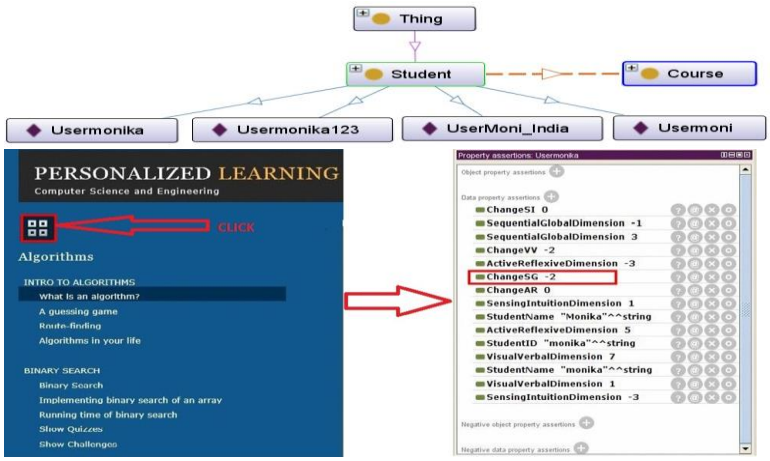
**PROGRESS/ CURRENT STATUS OF THE PROJECT**

An ontology-driven system has proposed to implement the Felder Silverman learning style modeling addition to the learning contents. Software agents are employed to monitor the learner's actual learning style and modify the accordingly. The learner's learning style and their modifications are made within the proposed e-learning system. Cloud storage is used as the primary back-end in order to maintain the ontology. Experimental analysis of this work is going on.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**

1. Monika Rani, Riju Nayak, O.P. Vyas, An ontology-based adaptive personalized e-learning system, assisted by software agents on cloud storage, Knowledge-Based Systems, Volume 90, December 2015, Pages 33-48, ISSN 0950-7051, http://dx.doi.org/10.1016/j.knosys.2015.10.002. **(SCI Journal).**
2. Rani, Monika, Maybin K. Muyeba, and O. P. Vyas. "A hybrid approach using ontology similarity and fuzzy logic for semantic question answering."Advanced Computing, Networking and Informatics-Volume 1. Springer International Publishing, 2014. 601-609.**(International Conference).**

**IMAGES OF ACTIVE RESEARCH BEING DONE/LABS**




**ree Dimensional Wireless Sensor Network Deployment and Localization**

**BRIEF NOTE ON THE PROJECT AND ITS OUTCOME**

The research work has three modules, where a deployment scheme has to be developed for maximum coverage in 3-D WSN; an efficient Localization Technique for 3-D WSN ; and finally a routing technique in 3-D WSN.

The expected outcome of this research would a Resource Constrained model for 3-D WSN

**Name of Supervisor**: Dr. Shirshu Varma

**Name of Co Supervisor**: NA

**Name of Research Scholar**: NihakaAnand

**Roll No**.: RS 144

**PROGRESS/CURRENTSTATUSOFTHESIS**

The initial implementation of both 3-D deployment and localization has been done. The final implementation of 3-D routing scheme in WSN is remaining. Four papers have been communicated in Science Citation Indexed journals, the list with the current status of the communicated is as follows:

1. **A Novel Computational Geometry Based Node Deployment Scheme in 3-D WSN**- First review has been done by the reviewers of IJSNET Inderscience.
2. **A 3-D Radio Irregularity Model (3DRIM)for WSN** : Communicated to WPC Springer. The paper is under review.
3. **Multidimensional Support Vector Regression Based Range-Free Localization Technique for 3-D Sensor Network** : Communicated to WPC Springer special issue "Advances & Challenges in convergent Communication Network". The paper is under review.
4. **Energy Efficient Routing for Collision Avoidance in WSN: A Cross Layer Approach**: Communicated to WPC Springer. The paper is under review.
5.

PAPER PRESENTED IN CONFERENCES/SEMINARS, IF ANY

"**Scrutinizing Localized Topology Control in WSN Using Rigid graphs**," Proc. of 9th INDIACom – 2015, IEEE Conference, 2015,2nd International Conference on Computing for Sustainable Global Development, 11– 13March – 2015, pp – 349 – 352.

## Title of the Thesis: Designing Architectural Framework for Cognitive Robotics

**Brief Note on the Project and its Outcome**: - Study of cognitive robotics draw inspiration from cognitive science combined with state of the art robotics algorithms. The core challenges in cognitive robotics are as following.

1. Reasoning in a situation that require commonsense knowledge which is either learned or provided.
2. Avoiding unnecessary repetitive behaviors.
3. In their efforts to make robots "think like human," early cognitive robotics researchers focused on high level cognition and gave no mechanism for building control from the bottom up. Although the intention was to model humans, most of the systems did not, like humans, acquire their knowledge from the real world.
4. Memory and accumulation of knowledge.
5. Need for metrics and evaluation measures for cognition.
6. Integration of inter- disciplinary knowledge.

The proposed work includes development of a cognitive architecture to overcome above challenges. There are mainly three types of cognitive architectures, symbolic, connectionist, and their combination hybrid.

**Name of Supervisor:**

Prof.G.C.Nandi

**Name of Research Scholar:**

Padmakar Pandey

**Roll No.:** RS 175

**Name of Division where working:**

IT (Robotics & AI Lab)

**Images of active research being done / Labs etc. 1-**

Currently I am using MATLAB and R tools for simulation of different brain activities.

**Title of the Thesis: Analysis of Reading Behaviour based on Eye-Movements and development of a framework of the system**

Name of Supervisor: **Prof. U. S. Tiwary**

Name of Co-Supervisor: **NA**

Name of Research Scholar: **Santosh Kumar Barnwal**

Roll No.: **RS128**

**BRIEF NOTE ON THE PROJECT AND ITS OUTCOME**

The main objective of the proposed research work is to identify difficult words/phrase for a reader, assessment of the reader based on his/her reading pattern, and to evaluate improvements in the reader's reading pattern by comparing his/her current reading path with previous ones.

**PROGRESS / CURRENT STATUS OF THE PROJECT**

Eye-movement Features of readers and text information features have been carried out. Currently, analysis of features representing reader's mental states during reading is in progress.

## Title of the Thesis:Coupled Attacks in WiMAX Network Security

**Brief Note on the Project and its Outcome**

Worldwide-Interoperability for Microwave Access (WiMAX) is an emerging wireless technology which provides higher data transmission rate (70 Mbps) with a broad coverage (30 miles). Like other wireless networks, WiMAX network protocol layers are also sophisticated to many of the security flaws. Many of the vulnerabilities in WiMAX networks have been solved with the evolutions of WiMAX extension. However, there is a need of incorporated view of all security solutions and comparisons of those solutions.

Proposed research work includes the coupling of WiMAX Network attacks. Collaboration of multiple attackers (with synchronized activities) may accomplish disruption against the targeted network systems. Combined efforts of many attackers may be more destructive to the network security.

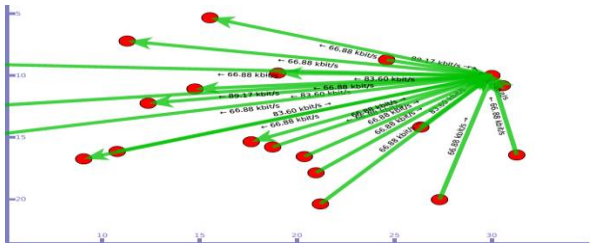
**Progress / Current Status of Project.**

Currently I am working on Collaborative approach for WiMAX Network Attacks Implementation and their Countermeasures.

**Papers presented in Conferences / Seminars, if any**

- Jatav, Vinod Kumar, and Vrijendra Singh. "Collaborative Attack Model at Physical Layer of Mobile WiMAX Network." *In International Conference on Computational Intelligence and Communication Networks (CICN), 2014*, pp. 787-792. IEEE, 2014.
- Jatav, Vinod Kumar, and Vrijendra Singh. "Mobile WiMAX network security threats and solutions: A survey." *In International Conference on Computer and Communication Technology (ICCCT), 2014*, pp. 135-140. IEEE, 2014.

**Images of active Research being done / Labs etc.**



**Name of Supervisor:** Dr. Vrijendra Singh

**Name of Research Scholar:** Vinod Kumar Jatav

**Roll No.:** RS 142

**Name of Division where working:** IT

**Self-Photograph**

## Title of the Thesis: In-network Inference in Wireless Sensor Networks

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

**The objectives of the research are focussed on improving the monitoring and reporting of events, maximizing the network lifetime and inferring the in-network parameters.**

**Inferring the lossy nodes, lossy links and lossy areas in the deployed area can improve the overall performance of the deployed network.**

Name of Supervisor: **Dr. Manish Kumar**

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: **Vishal Krishna Singh**

Roll No.: **RS 149**

Name of Division where worked: **IT**

PROGRESS/ CURRENT STATUS OF THE PROJECT

- **A detailed analysis of the related work has been completed.**
- **Two research papers have been communicated**

**PAPERS PRESENTED IN CONFERENCES/SEMINARS**

Paper Title: **Data Aggregation Based Link Loss Inference in WSN**

Conference: **UPCON – 2015**

Date: **04 December 2015 to 06 December 2015**

## Title of the Thesis: Pairing Based Cryptography

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

The requirement of the robust and fast cryptographic mechanism is a most desired aspect of information security domain. Pairing based cryptography is future of upcoming security models.
We need to work conceptually over a pairing concept to demonstrate and prove its usability for the construction of a simple but robust cryptographic signature scheme. Afterwards the practice implementation of pairing concept will take place. And final expected outcome is proposal of a lightweight cryptography scheme.

Name of Supervisor: S. Venkatesan

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: Sourabh Prakash

Roll No.: **RS 153**

Name of Division where worked: IT

**PROGRESS/ CURRENT STATUS OF THE PROJECT**

Literature survey on Elliptic curve cryptography and Pairing Based Cryptography is done.

Work over Algorithm is under progress.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS**

**APPRECIATION/AWARDS IF ANY**

Renowned Workshops Attended

National Instructional Workshop on Cryptology-2014 (*NIWC*-2014), 5-9 June 2014, workshop organized by CRSI at MNNIT Allahabad Campus.

National Instructional Workshop on Cryptology-2015 (*NIWC*-2015), hosted by Department of Mathematics and Statistics, Himachal Pradesh University, Shimla, under the aegis of CRSI, during 18 - 22 May 2015, at Shimla, Himachal Pradesh.

**Title of the Thesis: Fabrication, characterization of controlled drug delivery devices for the applications in the development of oral drug delivery system**

## Brief Note of the thesis:

Drug delivery is still challenging in the therapeutic treatment. The current technology uses the common methods such as pills, ointments, intravenous solutions etc. These methods aim at a very quick reaction and they depend on particular reaction and concentration of the drug. The concentration of the drug gets degraded with time, therefore in order to sustain its effect the drug has to be reused after a certain time. This can be achieved by the delivery devices which are bio compatible.

The proposed research work is focusing on to the fabrication, characterization of the micro devices for controlled drug delivery and their applications in the development of oral drug delivery system. The micro devices for controlled drug delivery devices using different materials will be simulated and fabricated and characterized. The different actuation techniques, the drug dissolution rate and compatibility of the drug with the fabricated device will be experimented and compared.


Name of Supervisor: **Dr.Manish Goswami**

Name of Co supervisor:**Prof. B.R Singh**

Name of the research Scholar: **Joyline Germine Dsa**

Roll No: **RS155**

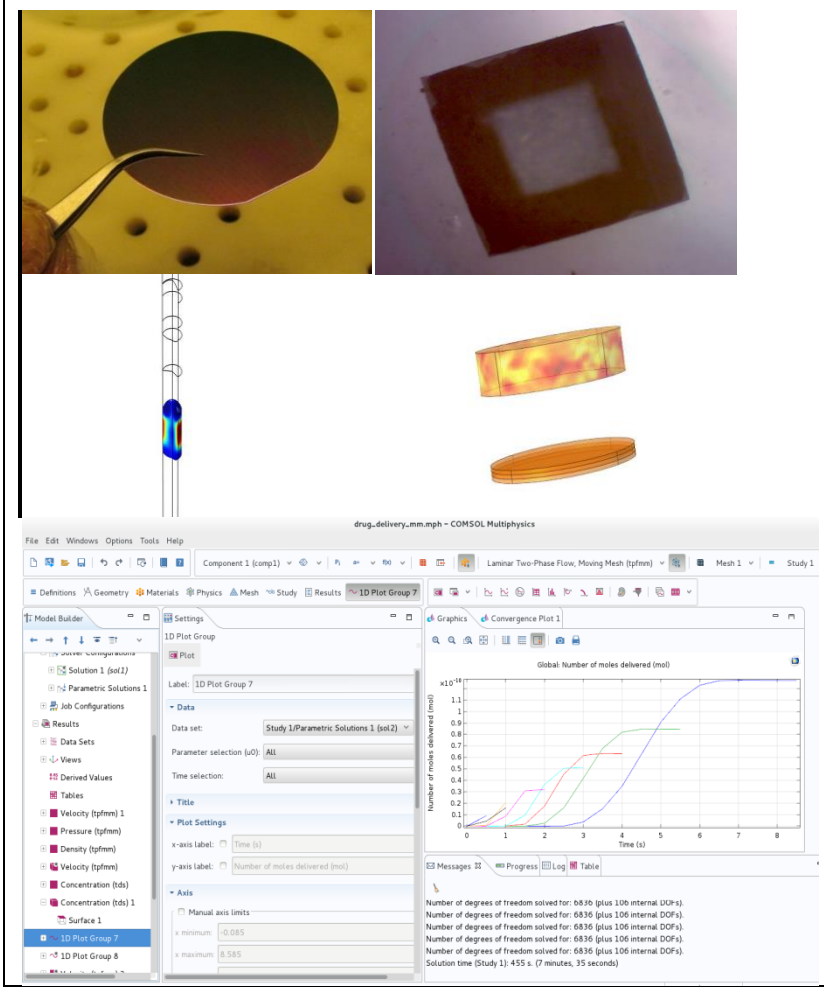
Name of division: **Electronics and communication**


## Current research progress:

- Simulation on the drug delivery systems using COMSOL5.2 is been carried out.
- Fabrication of electrically actuated implantable drug device using Silicon is been carried out.

**Self Photograph**

## Workshops:

| | |
|---|---|
| Attended INUP hands on training on Nanoelectronics devices held at IISc Bangalore from 3rd to 11th August 2015. | |
| **Images of the work being carried out:**<br>  | |

## Title of the Thesis: FABRICATION AND CHARACTERIZATION OF FERROELECTRIC THIN FILMS FOR NON VOLATILE MEMORY APPLICATIONS

**BRIEF NOTE ON THE PROJECT AND ITS OUTCOME**: The research is structural and electrical study of three different materials (PZT, SBN and SBT) with different buffer layer, which can be used at the gate in Field effect transistor. The outcome will be the material with optimized thickness and annealed at optimized temperature with the suitable buffer layer, which result in largest data retention capacity for longer time period.

Name of supervisor= **Dr. Rajat Kumar Singh**

Name of Co-Supervisor= **Prof. B. R. Singh**

Name of Research Scholar= **Prashant Singh**

Roll No.= **RS-164**

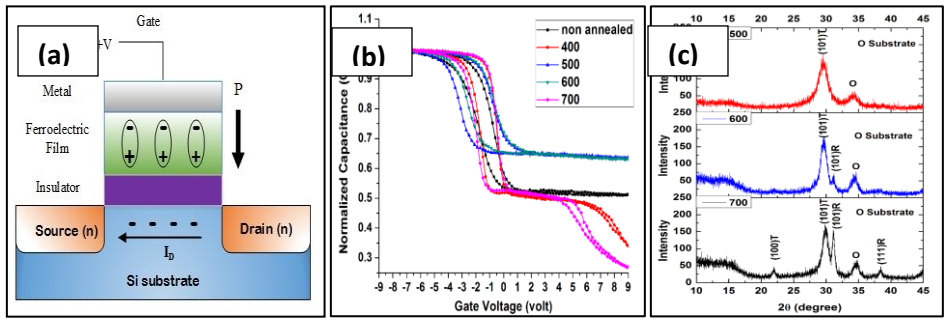
Name of division where working= **Dept. of ECE.**

**Progress/Current status of project:** Structural and electrical characterization of PZT with $HfO_2$ as the buffer layer is complete and PZT with $Al_2O_3$ as the buffer layer is in progress.

Papers presented in conference/Seminar, if any: **NIL**

Appreciation/awards received, if any: **NIL**

Images of active research being done/Labs etc.





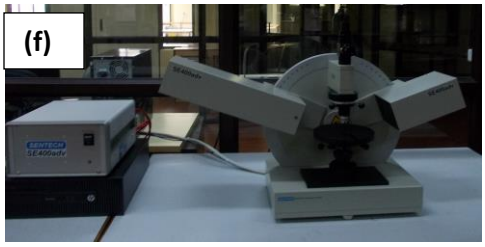






**Fig. a.** Ferroelectric MOS transistor.
**b**. C-V characteristic of fabricated MFIS capacitor.
**c**. XRD results of deposited PZT film.
**d**. Fabricated MOS capacitors.
**e.** Thermal evaporator for metallization.
**f**. Ellipsometer for thickness measurement.
**g**. Sputtering unit for thin film deposition.
**h**. Four probe system.

Self-photograph

## Title of the Thesis: Performance evaluation and optimization of Amplify- and - Forward (AF) relaying based two-way cellular network.

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

The aim is to evaluate and optimize the performance of two- way AF relay in cellular context under various fading channels. With this, we will analyze several performances measure such as outage probability, symbol error rate and ergodic sum-rate. In addition we will optimize the system performance by optimizing the several factors such as power allocation, relay location, joint power allocation and traffic asymmetric parameter.

**PROGRESS/ CURRENT STATUS OF THE PROJECT**

A cellular two-way relaying system have been considered in which a multi-antenna base station (BS) communicates bidirectionally with one of several single-antenna mobile stations (MSs) via a single-antenna relay using analog network coding. With such a general setup, an overall system outage probability analysis over **Nakagami fading channels** have been performed. For more insights, we derive a closed-form asymptotic expression for overall outage probability and an upper bound expression for ergodic sum-rate of the system. Based on these expressions, we show that the system achieves a performance gain, and a diversity order of minimum of the number of BS antennas and the number of MSs. Moreover, we address the problem of optimization of relay location in order to minimize the overall system outage under asymmetric traffic conditions.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**

**Not Yet**

Name of Supervisor: **Dr. Neetesh Purohit**

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: **Mahendra Kumar Shukla**

Roll No.: **RS-177**

Name of Division where worked: Electronics and Communication Engineering.

## Title of the Thesis: Information Diffusion in Indian Stock Market: An Empirical Study

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

Based on the literature reviewed in the area of Information diffusion, return predictability and the Stock markets around the world, we find that not much work has been done in terms of return predictability in the Indian Stock Market. The main motivation of our research work is to fill this gap and investigate the as to whether, can we **predict the returns** *and the* **effect of Information diffusion on the stock returns in the Indian Stock Market**.

Name of Supervisor: Dr. Shailendra Kumar

Name of Co-Supervisor: Dr. Manish Singh

Name of Research Scholar: Purav Parikh

Roll No.: RS-120

Name of Division where worked: MANAGEMENT STUDIES

PROGRESS/ CURRENT STATUS OF THE PROJECT

Problem identification and formulation is complete. Research objectives have been finalized. Data setup strategy is currently being worked out and research proposal is in final stage for approvals.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**

PARIKH, P. KUMAR, S., SINGH, M. 2015, Information Diffusion In Stock Markets – A Soft Computing Perspective, *World Congress on Advance Management Practices in Business, Banking, Economics, E-Commerce, Marketing and Tourism (BEMT – 2015),* Krishi Sanskriti, September, 2015, Jawaharlal Nehru University, New Delhi, India

**APPRECIATION/AWARDS IF ANY**

Participated in the *Young Researchers Conclave 2012* held at Indian Institute of Technology, Gandhinagar on 27-29 in December, 2012. I was selected from around the world and was part of the 40 young researchers selected and invited to attend the conclave.

## Title of the Thesis: The determinants of employee retention in IT consulting companies in India (Tentative).

**BRIEF NOTE ON THE PROJECT AND ITS**

**OUTCOME**: Retaining IT employees whose knowledge has high competitive value is becoming a critical and well-recognized challenge. Ample of literature is available in the area of employee turnover, its causes and remedies but there is very limited literature available on employee retention which had its focus on IT consulting industry in India. In my research I have identified the gap which was not covered earlier. On the basis of the identified gap I have identified and defined problem and prepared questionnaire to increase employee retention in IT consulting companies in India.

Name of supervisor= **Dr. Vrijendra Singh**

Name of Co-Supervisor= **NA**

Name of Research Scholar= **Arti Gupta**

Roll No.= **RS-147**

Name of division where working= **Dept. of Management studies.**

**Progress/Current status of project:**
Successfully completed course work of 19 credits, thorough review of literature completed, research gap identified as to what is lacking and less covered in the study till now, research problem hasbeen understood and defined, questionnaire prepared.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS**

1. Arti Gupta, Anuria Vaish, Vrijendra Singh (2015), 'An Exploratory study on factors affecting retention of talented professionals in Indian IT industry", 8th doctoral thesis conference, IBS, Hyderabad,23-24 Aprail.
2.Arti Gupta, Vrijendra Singh (2015), "The Relationship between Human Resource Practices and Employee Retention"68th all India commerce conference, Vinoba Bhawe university, Jharkhand, 6-8 November.

## Title of the Thesis: "Interplay between ncRNome & Epigenome in Cancer using Next Generation Sequencing"

**BRIEF NOTE ON THE PROJECT AND ITS OUTCOME**

The primary objective of the project is to identify genomic and epigenomic hub operating in different cancer stages of a particular cancer type (lung cancer, breast cancer, etc.). Furthermore, we will try to identify targets (non-coding RNAs) and establish the relationship between significantly regulated ncRNAs and differentially expressed genes obtained from high throughput NGS dataset. Studying expression alteration of lncRNAs and evaluating mechanism underlying mRNA/miRNA dysregulation in cancer system. Intensive study of the aberrant expression pattern to find out the epigenetic marks in metastatic and non-metastatic cancerous cells, which show differential expression in different clinical stages of cancer or different types of cancer, depending on the progress of analysis.

Name of the Supervisor: Dr. Pritish Varadwaj

Name of the Co-Supervisor: Dr. Pavan Chakraborty

Name of the Research Scholar: Rashmi Tripathi

Roll No.: RS154

Name of the Division: Applied Sciences & Bioinformatics

**PAPERS PRESENTED IN CONFERENCE AND SEMINARS**

1. Participated in the conference and authored paper presentation entitled "Prediction of lncRNA using Deep Learning Approach", at 5th Annual International Conference BioTech 2015, 13th-15th March, IIT-Kanpur.
2. Poster presentation at the National Conference on Bioinformatics Panorama in Agriculture and Health (NCBPAH-2015), Department of Computational Biology and Bioinformatics, JSBB, SHIATS (05 - 06 October,

**PROGRESS/ CURRENT STATUS OF PROJECT**

Data of different cancer system was extracted from SRA database. Softwares and tools involved in NGS analysis (RNA-seq analysis) was done on the LINUX platform for analysing high throughput sequencing data. Data was converted to different file formats, further was pre-processed and mapped. To find the differential expression patterns a pipeline was built. Differential expression for the condition specific genes of the mapped sequenced are under process.

**AWARDS RECIEVED**

1. Won 1st Prize in Poster Presentation at the National Conference on Bioinformatics Panorama in Agriculture and Health (NCBPAH-2015), Department of Computational Biology and Bioinformatics, JSBB, SHIATS (05 - 06 October, 2015).

**Title of the Thesis: Roles of various pathological factors in cancer disease process - a study based on formation and analysis of multiple factors driven correlation network**

## BRIEF NOTE ON THE PROJECT & ITS OUTCOME

The current work is related to identify the roles of various pathological factors in cancer disease process with the help of constructing multiple factors driven correlation network.

It will lead to identification and establishment of common key factors of cancer disease process and how the different forms of cancers are related various pathological factors.


Name of Supervisor: Dr Tapobrata Lahiri

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: Gautam Kumar

Roll No.: **RS 161**

Name of Division where worked: Department of Applied Science


## PROGRESS/ CURRENT STATUS OF THE PROJECT

Literature Survey: Literature survey has been done and being continued.

Data Collection: Data for 10 cancerous and 10 non-cancerous genomic data (methylated) collected which represents the total 4162 genes for breast tissue cancer and the collection process is being continued.

Pilot Work: Pilot work has been started and the analysis is being continued.

Course Work: Almost done.

## PAPERS PRESENTED IN CONFERENCES/SEMINARS

PCV: An alignment free method for finding homologous nucleotide sequence and its application in phylogenetic study - **Interdisciplinary Sciences, SCI Journal (Accepted).**

Improvement of efficiency of protein active site prediction model using machine learning approach. Poster Presentation at SHIATS.

A comparative study of breast cancer microarray data using Discriminant analysis (under preparation)

## APPRECIATION/AWARDS IF ANY --NA--

## IMAGES OF ACTIVE RESEARCH BEING DONE/LABS

## Title of the Thesis: Application of optimization and simulation techniques to solve the problem of medical informatics.

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME:**

In computational medical science, the target is always to mine the information related to internal pathophysiological process leading to manifestation of a disease. In this context simulation of biomedical data including signal and images will be applied to solve this problem, finally the simulation parameters will be optimized.


Name of Supervisor: Dr. Tapobrata Lahiri

Name of Co-Supervisor: Prof. Krishna Misra

Name of Research Scholar: Manoj Kumar Pal

Roll No.: RSS2015003

Name of Division where worked: Applied Science


**PROGRESS/ CURRENT STATUS OF THE PROJECT**

Literature survey and exploration of tools and techniques are being carried out.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS**

List of papers which are not fully related to thesis work is as follow:

- "PCV: AN ALIGNMENT FREE METHOD FOR FINDING HOMOLOGOUS NUCLEOTIDE SEQUENCE AND ITS APPLICATION IN PHYLOGENETIC STUDY" (COMMUNICATED IN INTERDISCIPLINARY SCIENCES, SCI JOURNAL)
- "IMPROVEMENT OF EFFICIENCY OF PROTEIN ACTIVE SITE PREDICTION MODEL USING MACHINE LEARNING APPROACH" (POSTER PRESENTATION AT SHIATS)
- IMPROVING THE EXTRACTION OF PROTEIN – PROTEIN INTERACTION DATASETS FOR SUPERVISED MACHINE LEARNING METHODS (UNDER PREPARATION)

**APPRECIATION/AWARDS IF ANY:** NA

**IMAGES OF ACTIVE RESEARCH BEING DONE/LABS etc.**

## Title of the Thesis: Simulation based study and characterization of disease process using biomedical signals and images.

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME:** The area of automated diagnosis is commonly based on the application of machine learning. In this regard the machine learning model acts as a black box which is accepted on the basis of its diagnostic efficiency. However, the underlying disease process that drives forward manifestation of this disease as input symptoms is ignored in this field of research.

- To study relationship of biomedical signals and images with internal physiological activities through literature survey and subsequent implementation of existing and novel simulation methods.
- Extraction of knowledge of rules (stochastic and/or deterministic simulation based) and grammar giving rise to formation of these signals to characterize some selected disease process on the basis of extracted set of rules and parameters.

Name of Supervisor: Dr. Tapobrata Lahiri

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: Rahul Gupta

Roll No.: **RS-158**

Name of Division where worked: Applied Science

**PROGRESS/ CURRENT STATUS OF THE PROJECT**

**Literature survey:** Literature survey has been done and being continued.

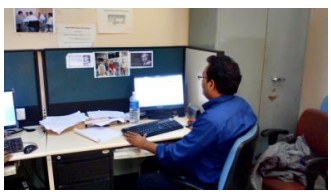
**Data Collection:** Quite a number of ECG data has been collected. The collection process is being continued. Pilot work has been started following the report in 2005; Neuroimage, 24:961-968 and Patrick et al, 2003.

**Course work:** It is almost over.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS**

- "PCV: AN ALIGNMENT FREE METHOD FOR FINDING HOMOLOGOUS NUCLEOTIDE SEQUENCE AND ITS APPLICATION IN PHYLOGENETIC STUDY" (COMMUNICATED IN INTERDISCIPLINARY SCIENCES, SCI JOURNAL)
- "IMPROVEMENT OF EFFICIENCY OF PROTEIN ACTIVE SITE PREDICTION MODEL USING MACHINE LEARNING APPROACH" (POSTER PRESENTATION AT SHIATS)
- IMPROVING THE EXTRACTION OF PROTEIN – PROTEIN INTERACTION DATASETS FOR SUPERVISED MACHINE LEARNING METHODS (UNDER PREPARATION)

**IMAGES OF ACTIVE RESEARCH BEING DONE/LABS etc.**



## Title of the Thesis: In-silico study of circular RNA biogenesis and its role

### BRIEF NOTE ON THE PROJECT & ITS OUTCOME

The new type of RNAs named circular RNAs has given the opportunity to explore the new parallel world of Transcriptome. Reported some functions like working as sponge for miRNA has opened the new arena of treatment of cancer and also act as biomarker for cancer. Realizing the importance of these new RNA we have proceed for the *in-silico* study of the circular RNA biogenesis and its role.


Name of Supervisor: Dr Tapobrata Lahiri

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: Rajnish Kumar

Roll No.: **RS 160**

Name of Division where worked: Department of Applied Science


### PROGRESS/ CURRENT STATUS OF THE PROJECT

Literature Survey: Literature survey has been done and being continued.

Data Collection: Some part of the data has been collected and the collection process is being continued.

Pilot Work: Pilot work has been started and the analysis is being continued.

Course Work: Almost done.

### PAPERS PRESENTED IN CONFERENCES/SEMINARS

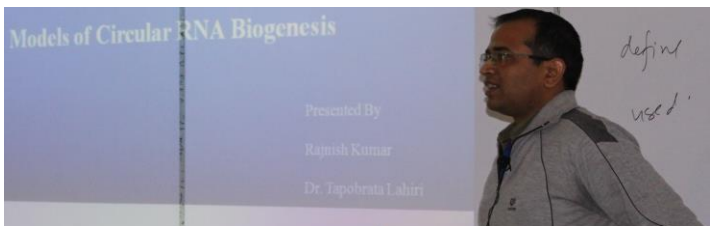
PCV: An alignment free method for finding homologous nucleotide sequence and its application in phylogenetic study - Interdisciplinary Sciences, SCI Journal (Accepted).

Improvement of efficiency of protein active site prediction model using machine learning approach. Poster Presentation at SHIATS.

Models of circular RNA biogenesis (IEEE **UPCON 2015**)

### APPRECIATION/AWARDS IF ANY --NA--

### IMAGES OF ACTIVE RESEARCH BEING DONE/LABS



## Title of the Thesis: Magneto Caloric Effect in Rare Earth Based Intermetallic Compounds

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

This project focuses on the study of novel RE based intermetallic magnetic materials having high MCE that is an intrinsic property of a magnetic material and is defined as the thermal response (heating or cooling) of a magnetic substance when a magnetic field is applied or removed. A higher value of MCE is needed for magnetic refrigerant. It is known that magnetic refrigeration due to MCE can be an alternate to the serious environmental concerns caused by the use of current refrigeration technology.


Name of Supervisor: **Dr Pramod Kumar**

Name of Co-Supervisor: **Dr Akhilesh Tiwari**

Name of Research Scholar: **Rashmi Singh**

Roll No.: **RSS2015001**

Name of Division where worked: **Applied Sciences**


**PROGRESS/ CURRENT STATUS OF THE PROJECT**

1. Course work
2. Literature review
3. Abstract submitted

(i)Correlation between magnetic and magnetocaloric effect in RAl compounds
Rashmi Singh, Puneet Jain, Faizan Ahmad, Pramod Kumar and Rachana Kumar

(ii) Large MCE in $R_3Co$
Pramod Kumar, Rashmi Singh, Puneet Jain, Faizan Ahmad and Rachana Kumar

(iii) Anomalous magneto resistance in topological insulator $Bi_2Te_3$
Pramod Kumar, Rashmi Singh, Puneet Jain, Faizan Ahmad and Rachana Kumar

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**

$NdRu_2Ge_2$ and $NdRu_2Si_2$: A Comparative Study of the magnetic property Rashmi Singh, Puneet Jain, Faizan Ahmad, Akhilesh Tiwari, N. Kumar and Pramod Kumar. (2015)

**APPRECIATION/AWARDS IF ANY**

Not yet

## Title of the Thesis: Systems Biology and Computational Proteomics approaches to Study Abiotic Stress Tolerance in Plant

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

The study is designed to identify of crucial coding/non-coding region of RNA sequence, transcription factors and stress related proteins, which plays important role in different abiotic stress cycles. This has been designed to elucidate the molecular mechanisms and actions of various components in metabolonomics pathways as an outcome.


Name of Supervisor: **Dr. Pritish Kr. Varadwaj**

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: **Saurabh Gupta**

Roll No.: **RS-159**

Name of Division where worked: **APPLIED SCIENCES**


**PROGRESS/ CURRENT STATUS OF THE PROJECT**

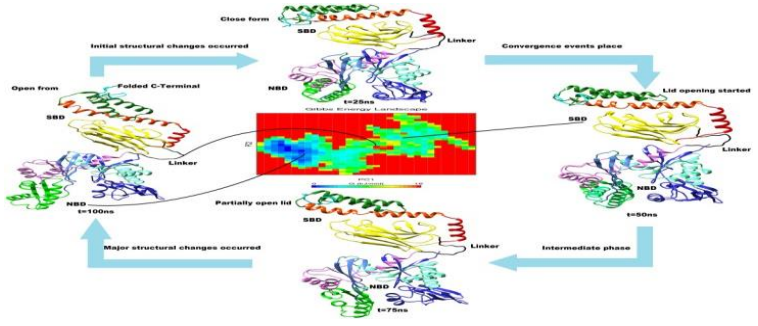
The identification, collection of required array expression data, Genome Sequences, RNA-Seq and Protein sequence/structure has been carried out. The metabolonomics study related components are yet to be analyzed.

RNA-Seq, Microarray data analysis and protein structure dynamics simulation in progress.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**


**1. Saurabh Gupta,** A. R. Rao, Pritish Kumar Varadwaj, Sachinandan De, Trilochan Mohapatra (2015): Extrapolation of Inter Domain Communications and Substrate Binding Cavity of Camel HSP70 1A: A Molecular Modeling and Dynamics Simulation Study", ***PLoS ONE,*** 10(9): e0138961. doi: 10.1371/journal.pone.0138961


**IMAGES OF ACTIVE RESEARCH BEING DONE/LABS**



## Title of the Thesis: Comparative Genomics of Candida albicans focusing the Factors responsible for its pathogenecity

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

The project basically focuses on the genetic factors responsible for inducing pathogenecity in *Candida* and further we might concentrate on its relation with Cancer.

**PROGRESS/ CURRENT STATUS OF THE PROJECT**

Currently we are working on literature review and data collection for further analysis**.**

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**

**1. Mishra, S**., Kumar, H., Raj, U., Varadwaj, P. K., & Misra, K., 2015. Designing and Development of Novel Natural Inhibitors for Dihydrofolate Reductase as Suppressors for Psoriasis: A Virtual Screening and Molecular Docking Study, India, ISBN: 978-93-5107-313-0.

**2. Mishra, S**., Krishna Misra*, Molecular beacon based biosensing for detection of pathogenic water borne multiple fungal strains: An in-silico approach, Current Proteiomics, 2015 (Accepted by Bentham Science Journal).

Name of Supervisor: **Prof Krishna Misra**

Name of Co-Supervisor: **Dr Sangita Singh**

Name of Research Scholar: **Sonali Mishra**

Roll No.: **RSS2015002**

Name of Division where worked: **Bioinformatics**

## Title of the Thesis: Epigenetic Regulatory Network in Cancer

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

This project intends to target the epigenetic regulatory networks involved in cancer in order to identify novel epigenetic regulators, their mechanism of action & pathways responsible for the cancer. It involves the identification of novel natural inhibitors for the epigenetic targets for cancer therapy; mathematical modeling of the selected pathways involved in epigenetic regulation of cancer; and finding novel epigenetic target from the NGS data responsible for epigenetic regulation.

**PROGRESS/ CURRENT STATUS OF THE PROJECT**

1. Intense literature survey about various epigenetic regulators involved in cancer has been completed.
2. Structural insights of these epigenetic regulators with the existing inhibitors have also been studied.
3. Identification of the promising targets involved in epigenetic regulation for cancer therapy has also been done.
4. Exploration of novel natural inhibitors for five reported receptor targets by *in silico* screening, docking, dynamics & ADMET studies is completed.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS**

1. Utkarsh Raj, Himansu Kumar, Saurabh Gupta, Pritish Kumar Varadwaj (2015) An In Silico approach to find novel Inhibitors to disrupt the interactions between EZH2-EED receptors of PRC2 complex. National Conference on Bioinformatics Panorama in Agriculture and Health (NCBPAH), Allahabad on 5-6 October, 2015.
2. Utkarsh Raj, Himansu Kumar, Pritish Kumar Varadwaj (2015). Novel Natural inhibitors for DOT1L receptor involved in Mixed Lineage Leukemia: A Virtual Screening, Molecular Docking and Dynamics Simulation study. Asian Pacific journal of cancer prevention: APJCP, 16(9), 3817-3825.
3. Utkarsh Raj, Pritish Kumar Varadwaj (2015). Flavonoids as Multi-target inhibitors for proteins associated with Ebola virus: in-silico discovery using virtual screening and molecular docking studies. Interdisciplinary Life Sciences – Springer.
4. Utkarsh Raj, Pritish Kumar Varadwaj. Inhibitory activity of natural compounds against Ebola viral receptors: A Virtual Screening and Molecular Dynamics study, National Conference on Lead Development & Drug Designing: Emerging Opportunities, organized by United Institute of Pharmacy in association with Indian Science Congress Association, Allahabad on 26 Sept, 2014.

**APPRECIATION/AWARDS IF ANY**

1. 1st Prize in Oral Presentation at National Conference on Bioinformatics Panorama in Agriculture and Health (NCBPAH), Allahabad on 5-6 Oct, 2015.
2. 1st Prize in Poster Presentation at National Conference on Lead Development & Drug Designing: Emerging Opportunities, organized by United Institute of Pharmacy in association with Indian Science Congress Association, Allahabad on 26 Sept, 2014.

**IMAGES OF ACTIVE RESEARCH BEING DONE/LABS etc.**

Name of Supervisor: **Dr. Pritish Kr. Varadwaj**

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: **Utkarsh Raj**

Roll No.: **RS156**

Name of Division where worked: **APPLIED SCIENCES**

## Title of the Thesis: Elucidation of genes for the early detection of cervical cancer and effect of ultrashort electric pulses on the cervical cancer cells. (Tentative)

**BRIEF NOTE ON THE PROJECT & ITS OUTCOME**

The Pap test, also called as "Pap smear" is being practiced as a screening test for cervical cancer. Pap test examines the presence of abnormal cells in the smear of cells from the cervix. The cell samples are sent to pathologists for the detailed examination under microscope. The rate of smear failure for invasive cancer has always been very high, approximately 50%. According to various studies it was documented that 20% smears obtained within 1 year before the diagnosis was made, were false negative. The system has deficiencies that are based on human factors and cannot be remedied readily by rules and regulation. One of the ways to conquer the false negatives is to possibly employ other characteristics of these cell samples and automate the examination procedure of the pap smear. Towards this, targeting specific gene/protein as a biomarker of pre-cancerous cell of cervix and, studying the response of cervical cancer cells under ultra-short electric pulses can be a good approach.

Name of Supervisor: **Dr. Ashutosh Mishra**

Name of Co-Supervisor: **-NA-**

Name of Research Scholar: **Shikha suman**

Roll No.: **RS-174**

Name of Division where worked: Bioinformatics and Applied science

**PROGRESS/ CURRENT STATUS OF THE PROJECT**

Literature review for the work has been completed.

Data for cervical pre-cancerous cell data collected.

Differentially expressed genes identified.

Genes analyzed.

Preparation for electroporation study done.

**PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/**

**Not Yet**

**APPRECIATION/AWARDS IF ANY**

Not yet

**IMAGES OF ACTIVE RESEARCH BEING DONE/LABS**

# 7. The Infrastructural development

## 7.1 Infrastructural Facilities

The Jhalwa campus includes **three Computer Centers with several labs each, lecture halls, a newly built auditorium, electronic library, and a residential campus**. Various other facilities are under development. **The NSC complex** includes five laboratories, eight computer laboratories, five lecture halls, a conference room, auditorium, library, cafeteria, office space and other facilities. The total covered area is about 25,000 sq. ft. Besides this, there is an open space of 50,000 sq. ft. that is used for parking, lawns and sporting activities.

The new campus has been developed on **100 acres of land at Devghat, Jhalwa, on the outskirts of Allahabad.** The architecture aims to transcend established design conventions and make a statement about the similarities between atoms and bits. Instead of the traditional geometric lines, the campus and other buildings have been **styled on patterns developed by internationally acclaimed scholar and mathematician, Roger Penrose.**

**Penrose Geometry**
This grid was chosen because the process of constructing a **"Penrose Universe"** has a remarkable congruence with the fundamentals of information theory. The basic units of information are aggregated in simple or complex sequences to provide a variety of "information structures" that span the entire range of human activity.

Sprawling on 100 acres lush green lawns and expanse of rich flora and devise floriculture, the Campus includes Visitors Guest House, Faculty Guest House, VIP Guest House, 4 Boys' Hostels with capacity of 275 inmates each, 2 Girls' Hostels, 60 Residential Quarters of Type I, II, III & IV, Married Scholar Apartments, Students Activity Centre, Bank, Post Office, Health and Shopping Complexes, Squash Courts, Tennis Courts, Badminton Courts, Pavilion & Playgrounds and Girls' Hostel, Boys' Hostels and academic Staff Quarters at RGIIT-Amethi Campus of IIIT-Allahabad.

**Elements of the new campus**
Within the Penrose layout for the campus, a central zone has been marked out for the academic core consisting of an administrative building, lecture theater complex, electronic library, computer laboratories and research facilities. The sun pattern has been chosen for laying out the library and the lecture hall complex. The computer laboratories and the administrative buildings are **derived from selected tessellated blocks in the star pattern.** The lecture theater complex has **pentagonal lecture halls seating 100 students**. Multimedia labs, tutorial rooms, faculty rooms, language labs and meeting rooms are also included. The basement of the building contains the air-conditioning plant and other service machinery.

Also present is an **electronic library that provides students with connectivity to the latest technological material** through networked workstations. There will be a total of 140 systems distributed over two floors. Reading space is provided at convenient locations. The central portion has computer labs, while the arms of the building house faculty rooms and classrooms. The building has three levels, with an **area of approximately 3820 sq.m. The total covered area in the academic campus is approximately 15,600 sqm.** Dholpur stone and rough cast plaster are the two main finishes chosen for the building exteriors.

Sports facilities are located within the main campus, with a **500-seat sports complex**.

This infrastructure is proposed to accommodate the needs of the institute for **more than a decade.** The students have access to a **regular bus service from the Jhalwa campus to central Allahabad (the Nehru Science Centre campus)**. The bus service also covers the Naini and Civil Lines areas. The residential campus consists of a mens" hostel with **capacity for 240 students, womens" hostel for 60 students, 40-room air-conditioned guest house and staff residences for senior professors and other staff.** Faculty hostels with two-room and one-room units meant for visiting professors are also be provided.

There are separate hostels for men and women, with single rooms (for the senior most batches) and twin sharing rooms. The spacious accommodations are provided with computers, along with **24-hour backup power supply. The hostel mess caters to the students' meals. Facilities for recreation and sports like cricket, football, badminton and table tennis** are available with more on the way.

**Salient Features in brief**

- Fully furnished separate Hostels for Boys & Girls is available
- 24 Hours Internet Connectivity through 1 GBPS Leased Line
- Normally each student allotted P4 and above computers
- All computer points backed by 100% Uninterrupted Power Supply
- All students are encouraged to undertake Projects in cutting-edge areas under active supervision of faculty members. Students are also encouraged to undertake Industrial trainings/projects during vacations.
- Academic Regulations as being practiced at other IIT's are broadly followed at the Institute **mutatis mutandis**
- All courses are envisaged to be delivered by experts
- State-of-the-art facilities for all labs
- All academic and administrative areas are fully air conditioned
- Unique opportunity to participate and contribute in leading National and internationally sponsored projects
- Selected students may also get the opportunity to work in foreign Universities under special institutional MoU's with them. Academic Exchange of students program with international educational institutions of repute
- Different sport facilities like volleyball court, basketball court, football court, snooker, cricket ground, swimming pool, GYM facilities, etc are available for all the students
- Banking & ATM facilities available in the Institute premises itself
- Medical facilities available on the Campus at any hour of the day and night. However, selected students must have Insurance before taking admission
- State of Art A/C library covering different books, magazines related to Computers, Management, Electronics, etc. Electronic library available for academic and general mental development of the students
- Messes in the Hostels are fully air-conditioned
- Institute is having canteen providing hygienic foods / snacks
- One of the salient features of the training imparted to the students is the hands-on computer assembly training. The students themselves have assembled almost all of the Institute's computers, under guidance of the specially trained technical staff. This has not only enabled the Institute in bringing down the cost of new computers, but also made

almost 100% instant trouble shooting of any faults, resulting in no requirement of any computer related AMC's

- IIIT- Allahabad is the first academic campus in the country to implement.
- (BPL) (Broadband over Power Line .

**Sports:** IIIT-Allahabad has an excellent physical activity infrastructure for its residents to ensure that academic development is duly supplemented by sufficient physical development as well. A good football ground – complete with spectator stands serves as the principal venue for most of the sports events organized by "Spirit" – the sports club of IIIT-Allahabad. A duly marked athletic track circumscribing the ground serves to provide for a safe track for not only the athletic events – but the early morning joggers as well. Aquatic sports are catered to by a 25*12m swimming pool that is maintained to strict hygiene standards. The institute also provides flood lit basketball, tennis and squash courts to ensure that students have sufficient venues to engage in games of their choice. To further complement these venues, the air-conditioned Student Activity Center (SAC) also houses a table tennis facility along with a billiards room for those interested in indoor activities.

**Health Facility:** The health center of the institute is a 24×7 functional body that provides OPD care and first aid facilities for the residents where prompt treatment for ailments and small wounds can be availed. A multi-bed hospital meant for admitting students with greater illness is also maintained. Facilities like ECG and Pathology for basic routine tests on weekdays are also available and can be availed as per need.

The Medical Claim and Accidental Insurance Policy (MCAIP) ensure timely hospitalization and the best of treatments available for the students. An ambulance meant for transporting patients from institute to Nazareth Hospital and SRN Hospital in case of major illness or emergency is available round the clock. Homeopathic treatment is available on selected days. The students are required to reveal their medical history of any type and nature such as asthma, epilepsy, HTN, diabetes or any other chronic illness, during the time of admissions so that proper treatment and care can be provided to them during emergencies or otherwise. A team of well qualified doctors headed by CMO Dr. R Dayal, ensure the best of health care for the residential students.

**Services:** All kinds of required network services, like DNS, NIS, NFS servers, Windows Domain Controllers, Mail and Web servers are managed and maintained by the lab staff and students. Services for Intranet and Internet are separated by firewall. The web and mail services are also appropriately divided for external and internal use. Further, efforts are ongoing to enable the campus with Wi-Fi Networks.

**Networking**

IIITA has a well established network infrastructure both for the local (LAN) as well as access to the internet. It is a medium-size network and approximately consists of 2000 nodes. The internal design is powered by providing dedicated wired as well as shared wireless network to every node in the campus. The network spans through every building on the campus using optical cables where high quality equipments (including layer 3 managed switches) have been installed ensuring a high speed intranet access during all hours of the day. The internet is facilitated by a dedicated link from National Informatics Center of 250Mbps bandwidth including a redundant wireless link of 10Mbps to ensure connectivity in case of technical breakdown. A centralized server room in the lecture theater monitors all network behaviour and facilitates distribution of the secure network to the entire campus. The IIITA network infrasture is sophisticated and uses cutting edge technologies.

**Software:** The PC's use mainly Windows XP and Linux. The labs have a very rich repository of software ranging from integrated development environments for C/C++, Java, Visual Basic, to RDBMS like Oracle 9i, MySQL. Several specialized software for core labs or projects like Statistica, Rational Rose, SPSS 10.0, Argo UML, Systat 12 and various software for Testing and Decision Purposes for Managers have been acquired with adequate user licenses. ERP prototype packages are being acquired for facilitating the students with the latest in enterprise applications.

**Hardware:** Computer laboratories and the administrative buildings are derived from selected tessellated blocks in the star pattern. Out of IIITA's 35 labs the computer labs provided to the MBA/MS division comprises of Latest PCs having Core 2 Duo, Quad Core, i5 ,i7 with a 24 hours Internet access through 1 GBPS Leased line. Scanners, CD-DVD writers, Laser printers are also available in the Labs.

**INFRASTRUCTURE DURING XIth PLAN**

<table>
<tr><th>Item of Expenditure</th><th colspan="4">Particulars</th></tr>
<tr><td rowspan="12">Hostels (no. of seats created) (1280 – Ann-01)</td><td>Sl. No</td><td colspan="2">Detail</td><td>Occupancy</td></tr>
<tr><td colspan="4">IIIT-A Jhalwa & RGIIT-A Campus</td></tr>
<tr><td>1.</td><td colspan="2">Girls' Hostel – I</td><td>52</td></tr>
<tr><td>2.</td><td colspan="2">Girls' Hostel – II</td><td>88</td></tr>
<tr><td>3.</td><td colspan="2">Girls' Hostel – III</td><td>248</td></tr>
<tr><td>4.</td><td colspan="2">Boys' Hostel – I</td><td>264</td></tr>
<tr><td>5.</td><td colspan="2">Boys' Hostel – II</td><td>264</td></tr>
<tr><td>6.</td><td colspan="2">Boys' Hostel – III</td><td>264</td></tr>
<tr><td>7.</td><td colspan="2">Boys' Hostel – IV</td><td>352</td></tr>
<tr><td>8..</td><td colspan="2">Married Scholar Apartments</td><td>50</td></tr>
<tr><td>9.</td><td colspan="2">Boys' Hostel(Amethi)</td><td>218</td></tr>
<tr><td>10</td><td colspan="2">Girls' Hostel (Amethi)</td><td>60</td></tr>
<tr><td>8.</td><td colspan="2">TOTAL</td><td>1780</td></tr>
<tr><td rowspan="7">Faculty housing (no. of units by type created)</td><td colspan="2">Type</td><td>Sqm.</td><td>Quantity</td></tr>
<tr><td colspan="2">A</td><td>55</td><td>08</td></tr>
<tr><td colspan="2">B</td><td>85</td><td>28</td></tr>
<tr><td colspan="2">D</td><td>120</td><td>24</td></tr>
<tr><td colspan="2">E</td><td>165</td><td>06</td></tr>
<tr><td colspan="2">F</td><td>200</td><td>05</td></tr>
<tr><td colspan="2">Total</td><td></td><td>71</td></tr>
</table>

<table>
<tr><td rowspan="5">Laboratory facilities (no./type)<br><br>(Names & Particulars of Labs given in Ann -__)</td><td>Name of Building</td><td>No. of Labs</td></tr>
<tr><td>Computer Centre – 3</td><td>30 Labs, 12 Lecture Halls & 35 Faculty Rooms</td></tr>
<tr><td>Computer Centre – 1<br><br>(Top Floor)</td><td>02</td></tr>
<tr><td>Computer Centre – 2<br><br>(Top Floor)</td><td>02</td></tr>
<tr><td>Lecture Theatre<br><br>(Top Floor)</td><td>02</td></tr>
<tr><td>Library facilities</td><td colspan="2">CD-ROMs, Online databases, audio-video cassettes, books, e-journals, patents, e-standards, theses, project reports and Newspapers etc.</td></tr>
<tr><td rowspan="8">Technology infrastructure and facilities</td><td colspan="2">Swimming Pool</td></tr>
<tr><td colspan="2">Auditorium</td></tr>
<tr><td colspan="2">1) Pavilion<br>2) Volleyball Court<br>3) Lawn Tennis Court<br>4) Athletic Track</td></tr>
<tr><td colspan="2">Squash Court</td></tr>
<tr><td colspan="2">Cafeteria</td></tr>
<tr><td colspan="2">1) Health Centre<br>2) Bank & Post Office<br>3) Telephone Exchange<br>4) Shops, Dormitory<br>5) Student Activity Centre</td></tr>
<tr><td colspan="2">(RGIIT-Amethi)<br><br>1) Auditorium<br>2) Canteen</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td>Others</td><td colspan="2">A. Computer Centre – 3<br>1) Lecture Halls<br>2) Faculty Rooms<br>3) Meeting Rooms<br>4) Laboratories<br>5) Essential Services Rooms</td></tr>
<tr><td colspan="2">B. Director’s Residence & Camp Office</td></tr>
</table>

| | |
|---|---|
| | **C.** HVAC & associcated work |
| | **D.** Internal Furnishing for academic buildings, Hostels and Auditorium |
| | **E.** Office equipments |
| | **F.** Upgrading of Internet & Wi-Fi Facilities |
| | **G.** Sewage Treatment Plant |
| | **H.** Spillover of 10th Plan |
| | **I.** Expenditure towards Ongoing Constructions<br>**1)** Boys' Hostel – V<br>**2)** Residences Type II, III, IV |

**More Constructions**

| Name of the Building | Covered Area (in Sq.m.) |
|---|---|
| Boys' Hostel – V | 19836.0 |
| Girls' Hostel – III | 10607.0 |
| Additional Residences (54 nos.)<br>[Type – I (06 nos.) Type – II (16 nos.), Type – III (20 nos.) and Type - IV (12 nos.)] | 6424.15 |
| Extension of Administrative Building | 3660.00 |
| Construction of Community Centre | 705.00 |
| Construction of Security Office cum Reception Complex | 150.00 |
| Construction of Bus Stops at Campus | 186.00 |
| Construction of 69 no. 4-wheeler and 109 no. 2-wheeler parking place at CC-3 building | 1270.00 |
| **SUBTOTAL (ii)(c)** | **42838.15** |

**Hostel Facilities**

The Institute has state-of-the-art Hostel facilities for both Boys and Girl students with good ventilated rooms equipped with computers, fully air-conditioned modular Mess with electronic equipments and playing facilities.

| Hostel | Single Rooms | Double Rooms | Total Rooms | Occupancy Capacity |
|---|---|---|---|---|
| Girls' Hostel – I | 10 | 21 | 31 | **52** |
| Girls' Hostel – II | 10 | 39 | 49 | **88** |
| Girls' Hostel – III | 128 | 48 | 176 | **224**<br>**(+ 24 single suites)** |

| | | | | |
|---|---|---|---|---|
| Boys' Hostel – I | 108 | 78 | 186 | **264** |
| Boys' Hostel – II | 108 | 78 | 186 | **264** |
| Boys' Hostel – III | 108 | 78 | 186 | **264** |
| Boys' Hostel – IV | 168 | 92 | 260 | **352** |
| Boys' Hostel – V | 347 | 210 | 557 | **767 (+ 64 single suites)** |
| Married Scholars' Apartments | | | 50 | **50** |
| | **TOTAL** | | | **2325** |

## Residential facilities

| Sl. No. | Existing Accommodation | No. of Rooms |
|---|---|---|
| 1. | Number of Faculty houses<br>(F type, 200 Sqm.)<br>(E type, 165 Sqm.)<br>(D type, 130 Sqm.)<br>(C type, 110 Sqm.)<br>(B type, 85 Sqm.) | 65<br>05<br>14<br>28<br>02<br>16 |
| 2. | 1. Visitors' Hostel I*: AC Room suites<br>(Refrigerators, TV, computer facilities in six suits), all double beds)<br>AC Rooms (TV, All Double beds)<br>Non-Ac Rooms<br>(*Dining Hall, cyber café-3 computers, gym facilities)<br>2. Visitor Hostel II:<br>(For VIP / International Visitors mainly with all essential facilities)<br>3. Visitor Hostel III:<br>AC Suites, AC single | 10<br><br>20<br>10<br><br>-<br><br>28<br>02 |

| | More Residential Accommodation | | | |
|---|---|---|---|---|
| **Sl. No.** | **Type of Quarter** | **Area** | **No. of Quarters approved by the Board** | **No. of Quarters constructed in First Phase** |
| 1. | **Type – I** | **55 Sqm.** | **12 (2 blocks)** | **06** |
| 2. | **Type – II** | **85 Sqm.** | **32 (2 blocks)** | **16** |
| 3. | **Type – III** | **100 Sqm.** | **40 (2 blocks)** | **20** |
| 4. | **Type – IV** | **120 Sqm.** | **24 (2 blocks)** | **12** |
| 5. | | | **108** | **54** |

### Classroom Infrastructure

| | | |
|---|---|---|
| 1 | **Campus area in acres** | 100 Acres |
| 2 | **Total number of class rooms - 32**<br>Computer Centre CC1<br>Computer Centre CC2<br>Lecture Theatre LT<br>Nehru Science Centre NSC<br>C.V. Raman Bhawan (CC-III) | <br>05<br>05<br>10<br>**03**<br>12 |
| 3 | **Number of Faculty cabins - 108**<br>Computer Centre CC1<br>Computer Centre CC2<br>Lecture Theatre LT<br>Nehru Science Centre NSC<br>C.V. Raman Bhawan (CC-3) | <br>22<br>22<br>10<br>**05**<br>54 |
| 4 | **Number of laboratories - 72**<br>Computer Centre CC1<br>Computer Centre CC2<br>Lecture Theatre LT<br>Nehru Science Centre NSC<br>C.V. Raman Bhawan (CC-3) | <br>16<br>16<br>05<br>05<br>**01**<br>30 |

## 7.2 LABS AND RESEARCH FACILITIES

Computer laboratories and the administrative buildings are derived from selected tessellated blocks in the star pattern. A lot of emphasis is laid on research and learning via project work. This is exemplified by the numerous laboratories setup for research and projects pertaining to various emerging and contemporary fields like image Processing, Wireless Communication, Neural Networks, VLSI, Robotics and Bio-Informatics to name a few. They house softwares from widely used to be state-of-the-art technology. Laboratories that have been set up can be classified into two categories – general and specialized laboratories. Students have been provided independent systems in at least one general laboratory. Students can use laboratory facilities all round the clock. Laboratories open at their request, so students can conveniently work even when it is a public holiday. They can use these systems to install and run programs of their choice, carry out assignments and project works under course curriculum.

The computer labs comprise of latest PCs having Core 2 Duo, Quad Core, I5 with a 24 hours Internet access through 1 GBPS Leased line, Scanners, CD-writers, Laser printers are also available in the Labs. Multimedia projectors, Webcams, Video Cameras are extensively used for communication skills labs and various Presentations. Efforts are on to provide students with the latest Laptops. All computer points are backed by 100% Uninterrupted Power Supply.

Software: The PC's use mainly Windows XP and Linux. The labs have a very rich repository of software ranging from integrated development environments for C/C++, Java, Visual Basic, to RDBMS like Oracle 9i, MySQL. Several specialized software for core labs or projects like Statistica, Rational Rose, SPSS 10.0, Argo UML, Systat 12 and various software for Testing and Decision Purposes for Managers have been

acquired with adequate user licenses. ERP prototype packages are being acquired for facilitating the students with the latest in enterprise applications.

The Institute maintains licensed copies of all software (systems, applications and academics) that students require and ensures that the licenses are kept up to date. It discourages the use of illegally procured software. Students have the prerogative to request the Institute to procure any software or hardware that they require in their assignments, projects or research activities.

**RESEARCH LABORATORIES**

The Institute has about 35 specialized labs for B.Tech & M.Tech students and research labs in the following specialized areas for Ph.D. students. Some of them are:

- Signal Processing Laboratory
- Computer Graphics Laboratory
- Digital Data Communication Laboratory
- Robotics Laboratory
- Bio-informatics Laboratory
- Electronics Laboratory
- Wireless computing Laboratory
- Embedded Systems Laboratory
- VLSI Design Laboratory
- VLSI Fabrication Laboratory
- MBA-IT Computing Laboratories
- Research Laboratories (MBA / MSCLIS)
- MSCLIS Computing Laboratories
- Information Security Lab
- Forensic Lab
- Data Center Lab
- Project Laboratories

**Facilities**

1. 4 sets Virtual Reality System
2. 2 sets VR Platform
3. Neural/ brain Signal Capture System
4. Smell, Taste Sensor & associated
5. 3D Projector system
6. 3D Scanner system
7. Other supportive devices

**MICROELECTRONICS LAB**

A new microelectronics laboratory has been set up at IIIT/A recently with modern fabrication tools. Students get comprehensive training on design, fabrication and analysis of VLSI circuits and systems. Special emphasis is given to design at the FPGA level. Simulation of tasks for designing microelectronics circuits at micron and sub-micron level can be done.

The Institute has signed MoU with EPFL, Switzerland for establishment of centre of excellence in Microelectronics supported by Department of Science and Technology GoI. Accordingly the lab has been developed to become one of the best labs with up-to-date facilities in Microelectronics.

**COMPUTER FORENSICS LAB**

This lab is the first of its kind in an academic institution in the country. It houses much proprietary software and hardware's including mobile forensic work stations.

**North Zone Resource Centre for generating Contents, Mentors/Teachers etc. by conducting specialized Short term HRD Courses for IT/ITES sector**

The centre has developed e-content in twelve designated areas ranging from computer science and e-services.

**VLSI DESIGN LAB**

This lab gives a unique opportunity to work in a clean environment towards development of VLSI designs and also exposes students in area of etching and related practices. Students have the prerogative to request the Institute to procure any software or hardware that they require in their assignments, projects or research activities.

**MBA-IT & MSCLIS COMPUTING LABS**

These are the general purpose programming labs meant for programming and research for the students enrolled in MBA (IT) and MSCLIS Program.

**RESEARCH LABORATORIES (MBA/MSCLIS)**

This is a specialized research lab wherein research scholars are working.

**FINANCE LAB**

Many databases are subscribed for Research & Development eg. Capitalline, india stat, Systat etc.

**INFORMATION SECURITY LAB**

- A full-fledged Information Security Laboratory is set up for manpower training.
- A number of useful software's have been managed and installed.

**ROBOTICS AND ARTIFICIAL INTELLIGENCE LAB**

The main vision of the laboratory is to nurture young minds towards creativity and steer their talents towards high quality research in different areas of Robotics and Intelligent Systems using Information Technology.

The laboratory provides state-of-the-art facilities to learn complex concepts of Artificial Intelligence. Students are encouraged to learn by doing it through many available development environments like Humanoid Open Architecture Platform (HOAP), Interactive Graphics Robot Instruction Program (IGRIP), Humanoid & Mobile Robot Simulation Platform, WEBOT, where students can create and control different kinds of robots using both C++ and Java. Apart from that we have hardware robots which include Humanoid robot HOAP-2, manipulating robots like Robix, SCARA and LEGO Mind storm kits. Our mission is to create an international standard for research and teaching, excel in the area of robotics and cognitive sciences, produce high quality engineers having self confidence and who can take part in nation's knowledge building endeavor and create a brand name for the Institute as a temple of learning. At present the laboratory has a number of collaborations like with Bio inspired robotics group of EPFL, Switzerland, Artificial Limb Manufacturing Corporations (ALIMCO), Kanpur.

Following are some of the project modules –

- Development of Adaptive Modular Active Leg (AMAL)
- Maneuvering Robotics Arm using Robix Software
- Implementing technology on Humanoid Open Architecture Platform (HOAP)
- Implementing Programmable Logic Controller (PLC) for designing industrial automation
- Simulation and fast prototyping of humanoid robot actions on Webots

**List of Devices (1 to 5) purchased from FIST Project available in SILP lab, IIIT-Allahabad**


1. **DG5-V Hand Data Glove 3.0 (1 Pair):**

   Hand Data Glove is an input device for human–computer interaction worn like a glove. In a Data Glove, five sensor strips captures bending of fingers, and a motion tracker captures the rotation movement of wrist. Thus this device converts hand movement into digital data, which can be recognized as gesture such as Sign Language. Therefore, several Human-computer programs can be developed, which could be controlled through user's hand movements. Several B. Tech and M. Tech semester projects based on this device have been done.

2. **Face Tracker Device (1 Qty.):**

   Face Tracker Device converts the movements of parts of a person's face (such as forehead, eyebrow, cheek, lip, Chin etc.) into digital signals using camera and laser light. This digital signal is used to produce computer animation for movies, games, or real-time avatars. Because the motion of computer graphics characters is derived from the movements of real people, it results in more realistic computer character animation.

3. **The Mirage Augmented Reality Head-mounted display (1 Qty.):**

   Head-mounted display (HMD) is a Virtual Reality display device, worn on the head that has a small display optic in front of eyes. It allows a computer-generated virtual image to be

superimposed on a real-world view. Several student-semester projects based on this device have been done.

4. **a) IBM System X3400 Server (4 Qty.) and b) IBM DS3400 FC System Storage (2 Qty.)** Servers and Storages are used to store open-source datasets; open-source library; student projects; research papers; courseware materials, such as presentation, demo, video, e-book etc. and provides download facility to students via ftp service.

5. **SR Research EyeLink 1000 Eye Tracker (1 Qty.):**

   EyeLink 1000 Eye tracker is a video input based system, which measures the point of gaze (where one is looking) on a screen. Eye trackers are used in research on the visual system, in psychology, in cognitive linguistics and in product design. Several B. Tech and M. Tech semester projects based on this device have been done and some projects and research works are going on.

6. **Emotive EEG NeuroHeadset (1 Qty.):**

   The NeuroHeadset has 14 electrodes as well as a two-axis gyroscope for detecting head movements. The device detects 13 kinds of movement - six directions (left, right, up, down, forward, and "pull/zoom") and six rotations (clockwise/ anti- clockwise rotation, turn left and right, and sway backward and forward), plus one other visualization ("disappear"). The angular velocity of one's head can be measured in the yaw and pitch (but not roll) directions by the gyros embedded in the device. Several B. Tech and M. Tech semester projects based on this device have been completed and some projects and research are continue.

## Introduction of SILP Lab (#4222)

**Speech, Image and Language Processing Lab** abbreviated SILP lab, provides facilities to researchers and students to perform research and experiments in computer science and Information Technology. The core area of these research and experiments are:

(a) Automatic speech and speaker recognition;

(b) Text to Speech and vice versa conversion;

(c) Music analysis and retrieval;

(d) User's Eye movement Analysis for HCI and behaviour recognition;

(e) Language Processing;

(f) Document Summarization;

(g) Virtual reality systems such as Augmented Reality HMD, Face tracker and Hand data gloves;

(h) Information retrieval;

(i) Image Processing;

(j) EEG Signal analysis;

(k) Video Processing for HCI and visual surveillance;

(l) Cognitive processing and modelling;

(m) Affective computing.

All M. Tech students and Research scholars, supervised by Prof. U. S. Tiwary, are the member of this lab. This lab opens 24 X 7 days for research and experiments.

## 7.3 LIBRARY FACILITIES

The sun pattern has been chosen for laying out the library. The IIIT-A library is stocked with books that cater to the student's academic and research requirements. Audio and multimedia versions of some course modules are also available. In addition, dictionaries, journals, thesaurus and encyclopedias are provided for reference purposes. Present is an electronic library that provides students with connectivity to the latest technological material through networked workstations. There are a total of 25 systems distributed over two floors. Reading space is also provided at convenient locations. There is a premier section of Theses/Project Reports for the students. This new library has already acquired more than 50,000 books on various courses along with IT related latest titles. The library uses web-based software, developed in-house, for maintaining the database and circulation related daily operations. Besides, Institute is also the member of INDEST consortium, through which all ACM Digital Library, IEEE Digital Explore, Elsevier-Science Direct, Springer, Emerald Management, Harvard Business Review, Sage Online Journals etc. and various tutorials and journals are accessible throughout the campus, in digital form.

**LIBRARY Functioning**

- Before the beginning of each semester a mail is floated to Faculty members and students for procurement of books, journals, magazines, database based on current Industry trends and practices.
- The various requisitions are processed and finally the order is placed in consultation with the competent authority.
- The library has optimum blend titles, covering reference interests and also text books.
- If required special orders are also placed during the mid semester

**Peripheral Activities in the Library**

- Tracking of Usage Rate and Renewing the Subscription of Journals, Magazines, Databases accordingly.
- E-Books repository is being created
- Archiving of Thumb impression Library
- Subscription for Plagiarism Checking Website

**a). The Conventional Library**

The mission of the IIIT-A Library is to provide information services and access to bibliographic and full text digital and printed resources to support the scholarly and information needs of the Institute Community. The Library is well equipped with modern facilities and resources in the form of CD-ROMs, Online databases, audio-video cassettes, books, e-journals, patents, e-standards, theses, project reports and Newspapers etc. The library homepage provides electronic access to various full text & bibliographical databases & e-journals. Links from the library homepage provide the information on library policies, hours, collections, services, sections and the location of materials. The library hosts all its catalogues online through web interfaces for search and status of documents and readers. It is also equipped with auto generated mailing services to the members for reservation of documents, issue / return notification, loan status, overdue status and new arrivals in the library. Students can locate the books of their choice from their desktop on a click. The web-enabled MIS used in the library is a software product and copyright of IIIT-A itself.

The IIIT-A Library is stocked with books that cater to the students' academic and research requirements. Audio and Multimedia versions of most of the course modules are available in electronic section. In addition dictionaries, thesaurus and encyclopedias are provided for reference purposes.

**Procurement**

Books or any other document for the library can be procured on the recommendation of faculty members

Cross checking of the book(s) with requisition details given by the faculty member(s)

Registration / Stock Entry of the received books

**Database Entry and placement of the books**

- Database entry of each and every book is done online according to the accession number which also indicates the location of book
- Books are placed in various shelve according to the shelf number
- At least one copy of every title is kept in the library for reference purpose

**Circulation Process**

Opening of library account and issuing of the books on the basis of Institute's Identity Card

Online book reservation facility is available through OPAC if the book is not readily available in the library

Auto generated e-mail alert facility for New Arrivals, Loan Status, Overdue Reminder and availability status of reserved books etc. is sent to every registered member.

**Full Text Online E-resources**

Online e-resource like – IEEE, ACM Springer, Elsevier – Science Direct (Computer Science), Elsevier – Science Direct (Management), Emerald Management and Sage Publication etc. subscribed by the Institute with IP authenticated (user name and password is not required), multiple user accessibility with unlimited download facilities are available within the Campus. Following are brief details of Library:

| Sl. No. | Collection | | | | |
|---|---|---|---|---|---|
| | **Books** | **Online Journals** | **Magazine** | **CDs / Softwares** | **Lectures / Video Couses** |
| 1. | 57034 | 12927 | 52 | 2775 | 1005 |

Following online full text databases are being subscribed by the Institute based on IP authenticated (Username and Password is not required) multiple user accessibility, full text of current and archival issues with unlimited download facilities –

1. ACM Digital Library
2. IEEE / IEE Electronic Library (Journals)
3. IEEE / IEE Conference Proceedings
4. IEEE / IEE Standards
5. Springer Link
6. Emerald Management
7. Elsevier – SD (Computer Science)
8. Elsevier – SD (Business, Management & Accounting)
9. Sage Publication (Management & organization studies)
10. Sage Publication (Criminology)

# Glimpses of IIIT-A Library

## 8. Scholarship /Fellowship /Assistantships

There are various scholarships/financial assistantships provided by the Central & State Government to the students of the Institute. A brief overview of some of the various Scholarships is as follows:

| Sl. No. | Name of Scholarships/ Regular Educational Aids | Executed by / Funded by | General Conditions / Eligibility | Amount Reimbursable (In Rs.) | Remarks If any, |
|---|---|---|---|---|---|
| **1.** | **POST MATRIC SCHOLARSHIPS (ALL INDIA)** | | | | |
| | B.Tech / MBA / MSCLIS | Govt. of India, Ministry of Social Justice & Empowerment | Annual Income Limit (for Post Matric Scholarships):<br><br>For SC/ST Category – Rs. 2.0 Lakhs<br><br>For General Category – Rs. 2.0 Lakhs (applicable only for students of U.P. origin)<br><br>For OBC Category – Rs. 2.0 Lakhs (only U.P., Bihar States are sanctioning as at present. Students of other States may enquire from their Native States)<br><br>For Minority Category (U.P. State Scheme) – Rs. 2.0 Lakhs<br><br>For Minority Category (Central Scheme) – Rs. 2.0 Lakhs | For SC/ST Category – Full Fee + Maintenance Charges = 1200/- p.m. x 10 months<br><br>For OBC / General / Minority Category<br><br>U.P. Govt. Rates<br><br>Plus Maintenance Charges = 1200/- p.m. x 10 months<br><br>For Other States (OBC/Minority) – Reimbursement on respective State Govt. Rates | |

| | | | | | |
|---|---|---|---|---|---|
| **2.** | **INSTITUTE MERIT SCHOLARSHIP (Performance Award)** | | | | |
| | B.TECH / MBA / MSCLIS | Paid by Institute<br><br>(IIIT-Allahabad) | A.IIIT-A<br>1. B.Tech (IT) - **10**<br>2. B.Tech (EC) - **06**<br>3. MBA (IT) - **04**<br>4. MS(CLIS) - **04**<br>**TOTAL - 24**<br>B. RGIIT-Amethi<br>1. B.Tech (IT) - **06**<br>**GRAND TOTAL - 30**<br><br>**Eligibility: Merit of 1st Year**<br>**Renewal: Based on Merit** | Rs. 3,000/- p.m. for 12 months of the year<br><br>(Rs. 36,000/- per year) | |
| **3.** | **INSTITUTE MERIT-INCENTIVE AWARD (MERIT-BASED)** | | | | |
| | B.Tech | Paid by Institute<br><br>(IIIT-Allahabad) | 1. Merit of qualifying exam<br>2. 10% from each State Board<br>3. Minimum 80% attendance in a Semester<br>4. Continuation in successive Semesters subject to obtaining at least 'B' Grade marks in previous Sem | Rs. 3,000/- p.m. for 12 months of the year (Rs. 36,000/- per year)<br><br>(Six monthly RENEWAL) | |
| **4.** | **INSTITUTE MERIT-CUM-MEANS AWARD (INCOME-BASED)** | | | | |
| | B.Tech | Paid by Institute<br><br>(IIIT-Allahabad) | 1. Annual Parental Income below Rs. 2.0 Lakh per annum<br>2. Minimum 80% attendance in a Semester<br>3. Continuation in successive Semesters subject to obtaining at least 'B' Grade marks in previous Sem | Rs. 3,000/- p.m. for 12 months of the year (Rs. 36,000/- per year)<br><br>(Six monthly RENEWAL) | |
| **5.** | **MERIT-CUM-MEANS MINORITY SCHOLARSHIP** | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Undergraduate & Postgraduate Students | Ministry of Minority Affairs, GoI | Eligible UG Students<br><br>(Annual Income of Parents should be below Rs. 2.5 Lakhs) | Rs. 30,000/- for Hostellers<br><br>Rs. 25,000/- for Day Scholars<br><br>FULL FEE REIMBURSEMENT FOR GOVT. INSTITUTIONS | 1.Muslims, Christians, Sikhs, Buddhists, Jains<br><br>2. 50% Marks<br><br>3. 30% for Girls<br><br>4. Parent's Income below Rs. 2.5 Lakhs |
| **6.** | **INDIAN OIL SCHOLARSHIPS** | | | | |
| | B.TECH / MBA | Indian Oil Corporation, Govt. of India | 1). 100 No. for B.Tech on All India Basis<br><br>2). 60 No. for MBA on All India Basis<br><br>**ELIGIBILITY**<br><br>1. On All India Basis<br>2. 50% for SC/ST/OBC + 60% marks<br>3. 25% for Girls – 60% marks<br>4. 10% for PHs – 50% marks<br>5. General – 65% marks | Rs. 3,000/- p.m. | |
| **7.** | **PRATIBHA SCHOLARSHIPS** | | | | |
| | B.Tech Students of Andhra Pradesh Only | Govt. of Andhra Pradesh | Eligible B.Tech Students of Andhra Pradesh State Only<br><br>1. SC/ST/Gen/OBC<br><br>2. Min. 60% marks in Intermediate/12th Class or CGPA of | Rs. 20,000/- per year | |

| | | | | | |
|---|---|---|---|---|---|
| | | | 06 per semester<br><br>3. Native of Andhra Pradesh<br><br>4. Non-recipient of any other Scholarship<br><br>5. Parents Income Rs. 1.00 Lakh p.a. | | |
| **8.** | **BIRSA MUNDA TECHNICAL SCHOLARSHIPS** | | | | |
| | ST Category B.Tech | Govt. of Jharkhand State | Eligible ST Category B.Tech students of Jharkhand<br><br>1). Parents Income Rs. 1.00 Lakh p.a.<br><br>2). ST Certificate | 12 months' tuition fees, admission fees, examination fees and other University fees (Caution Money not included) | |
| **9.** | **NCERT SCHOLARSHIPS** | | | | |
| | B.Tech | National Council For Educational Research & Training, Govt. of India | Qualifying Exam:<br><br>Class VIII (appearing)<br><br>1. Reservation: 5% for SC, 7.5% for ST, 3% for PH each in respect of class VIII | Rs.500/- p.m. (Rs. 6,000/- per year) | |
| **10.** | **CENTRAL SECTOR TOP CLASS EDUCATION SCHOLARSHIP (FOR SC / ST)** | | | | |
| | B.Tech | Ministry of Social Justice & Empowerment (for SC) & Ministry of Tribal Affairs (for ST), GoI | B.TECH<br><br>Top 10 SC<br><br>Top 05 ST<br><br>(AIEEE Merit Ranking)<br><br><u>ELIGIBILITY</u><br><br>1. AIEEE Merit Ranking<br><br>2. Non-recipient of | 1. Full Refundable/Non-refundable Fee for year<br><br>2. Lodging<br><br>3. Boarding<br><br>4. Contingency/Book Exp. =3,000/-<br><br>5. Cost of Computer =45,000/- | |

| | | | | | |
|---|---|---|---|---|---|
| | | | other Scholarship<br><br>3. Successful performance in Annual Exam<br><br>4. Parents Annual Income Rs. 4.5 Lakh p.a. | | |
| **11.** | **SCHOLARSHIPS FOR PHYSICALLY HANDICAPPED** | | | | |
| | Post Matric professional<br><br>/technical Courses | Govt. of India | 500 new scholarships, Post Matric professional<br><br>/technical Courses<br><br>1. 40% or more disability<br><br>2. Pursuing Professional/Technical Courses<br><br>3. Parents Income = Rs. 15,000 per month<br><br>(Rs. 1,80,000/year) | Day Scholars = 700 per month<br><br>Hostellers = 1,000 per month<br><br>+ Reimbursement of Course Fee = 10,000 per year<br><br>(Financial Assistance for computer with editing software for blind/deaf students) | |
| **12.** | **EARN-WHILE-YOU-LEARN** | | | | |
| | Poor meritorious students | Paid by Institute | Nature of Work:<br><br>1. Some Administrative, Academic and Project work in spare time to finance their studies<br><br>2. 150 Students benefited every year | Decided by authorities as admissible under the Projects | |
| **13.** | **STIPEND/ASSISTANTSHIP** | | | | |
| | M.Tech Students | Paid by the Institute | Eligible M.Tech students of SC/ST/OBC/General Category | 8,000 per month<br><br>+ Contingency @ 10,000 per annum | |

| | | | | | |
|---|---|---|---|---|---|
| | | | Eligibility<br><br>1. For GATE Scorers only<br><br>2. Teaching Assistantship under a Faculty is necessary<br><br>3. Not for sponsored/MBBS candidates<br><br>4. Teaching for 8 hours per month, if reqd. | | |
| **14.** | **SINGLE GIRL CHILD SCHOLARSHIP** | | | | |
| | M.Tech Girl Students | Govt. of India | Only for Girls<br><br>SC/ST/<br><br>General Category (Based on eligibility)<br><br>Eligibility<br><br>1). Single Girl Child in family (should not have any other brother or sister)<br><br>2). Age upto 30 years<br><br>3).Certificate from First Class Magistrate/Gazetted Officer reg. ONLY CHILD IN FAMILY Status | 2,000 per month | |
| **15.** | **POST GRADUATE SCHOLARSHIP FOR PROFESSIONAL COURSES, UGC** | | | | |
| | M.Tech Students | UGC, GoI | Based on eligibility<br><br>i) The candidate must have obtained Graduate degree in the relevant subject and obtained | 5,000 per month<br><br>No. of slots available = 1000 per year<br><br>Tenure of award = two/three years depending upon tenure of | |

| | | | | | |
|---|---|---|---|---|---|
| | | | admission at Postgraduate level for regular full time course in any of the Professional subject in a recognized University/Institution/College.<br>ii) Candidates pursuing post graduate course in professional subjects by correspondence or by Distance Education mode are not eligible to receive financial assistance under this scheme.<br>iii) The upper age limit for male applicants is 45 years as on 1st July on the year of application, and 50 years in the case of female candidates. In exceptional cases, the age may be relaxed. | the PG Course<br><br>Scholarship:<br><br>@ Rs.5,000/- p.m. for M.Tech<br>@Rs.3,000/- p.m. for other courses.<br><br>Contingency:<br><br>@Rs.15,000/- p.a. for M.Tech<br>@Rs.10,000/- p.a. for other courses | |
| **16.** | **DLF SCHOLARSHIPS** | | | | |
| | | DLF Foundation, Gurgaon | Eligibility:<br><br>parental annual income upto Rs. 1,80,000/-<br><br>No. of scholarships = 4<br><br>selected by Selection Committee of the Institute<br><br>Scheme for students belonging to States of Haryana, Uttar Pradesh and Union Territory of Delhi | Reimbursement Rs. 40,000/- per year covering tuition fees and allied expenses on books, instruments and equipments | |

# 9. The Statistics

## 9.1 Financial Statistics of the Year

**NON-PLAN:-**

Resource mobilization of the Institute on the **Non-Plan** side during the year **2014-15** was to the tune of **Rs. 3271.18 lakh**, out of which Grant-in-aid accounted for **Rs. 1172.22 lakh** and the rest of **Rs. 2098.96 lakh** was raised through the internal resources of the Institute comprising of mainly academic fees and interest on savings bank accounts etc.

The Grant-in-Aid of **Rs. 1172.22 lakh** was released by the MHRD, GoI in the following **03rd installments:-**

1. F.No. 25-2/2014-TS-1 dt. 10.06.14 Rs. 500.00 lakh
2. F.No. 25-2/2014-TS-1 dt. 24.07.14 Rs. 172.22 lakh
3. F.No. 25-2/2014-TS-1 dt. 05.09.14 Rs. 500.00 lakh

**Total = Rs. 1172.22 lakh**

The **Non-Plan** Expenditure was to the tune of **Rs. 2646.06 lakh** resulting in excess of **Rs. 1473.84 lakh** from the Govt. grant received and income from internal sources taken together to meet the recurring expenses of the Institute.

**PLAN:-**

The MHRD, GoI released the **Plan Grant** of **Rs. 4550.00 lakh {Rs. 1800.00 lakh for IIIT-A Campus and Rs. 2750.00 lakh for RGIIT Amethi Campus}** during the year **2014-15** in the following **05th installments:-**

1. F.No. 25-1/2014-TS-1 dt. 10.06.14 Rs. 750.00 lakh
2. F.No. 25-1/2014-TS-1 dt. 30.07.14 Rs. 250.00 lakh
3. F.No. 25-1/2014-TS-1 dt. 05.09.14 Rs. 500.00 lakh
4. F.No. 25-1/2014-TS-1 dt. 13.11.14 Rs. 2750.00 lakh
5. F.No. 25-1/2014-TS-1 dt. 27.03.15 Rs. 300.00 lakh

**Total = Rs. 4550.00 lakh**

Apart from above Plan Grant, **Ministry of Social Justice and Empowerment, New Delhi** released Grant of **Rs. 270.00 lakh towards Construction of Hostel for OBC Boy's as 01st installment during the year 2014-15** vide their Letter F.No.11015/16/2014-BC-1 dt. 27.11.14 and **Department of Science and Technology, GoI** released Grant of **Rs. 100.00 lakh towards INSPIRE Internship Program 2014** vide their Letter No. DST/INSPIRE/7th Conclave/2014/1 dated 17.09.14. Against total grant of **Rs. 4920.00 lakh,** a sum of **Rs. 4630.06 lakh** was utilized for the purpose for which the Grant was sanctioned leaving an unspent balance of Grant amounting to **Rs. 289.94 lakh** as on **31.03.15.**

## 9.2 Receipts and Payment Accounts of IIIT-A for Projects funded by sponsored agencies by Major Head
**Financial Year 2014-2015**

| Sr. No. | NAME OF PROJECT | RECEIPTS | | | | | PAYMENTS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | T | E | F | G | H | I | T |
| 1 | To Establish and Operationalize Bio-Technology (Bioinformatics )Centre--IRCB | 4.51 | 0 | 0 | 0.09 | 4.6 | 4.6 | 0 | 0 | 0 | 0 | 4.6 |
| 2 | Establishment of Joint Indo-Russian Centre for Bio-Technology at IIIT, Allahabad | 0.1 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0.1 |
| 3 | Digital Library Mega Centre-Language Technology and content Development & Content Creation in Tibetan, Sanskrit & English | 0.01 | 0 | 0 | 0 | 0.01 | 0 | 0 | 0 | 0 | 0.01 | 0.01 |
| 4 | Information Security Education & Awareness | 7.38 | 0 | 0 | 0.19 | 7.57 | 4.97 | 0 | 0 | 2.6 | 0 | 7.57 |
| 5 | Development of English to Indian Language Machine Translation System | 3.75 | 19.96 | 0 | 0.37 | 24.08 | 12.26 | 0 | 0 | 3.05 | 8.77 | 24.08 |
| 6 | Development of Indian to Indian Language Machine Translation System | 0 | 3.88 | 0 | 0.06 | 3.94 | 3.54 | 0 | 0 | | 0.4 | 3.94 |
| 7 | Development of Robust Document analysis and Recognition system for printed Indian Scripts (OCR) | 1.9 | 11.17 | 0 | 0.19 | 13.26 | 4.09 | 0 | 0 | 1.46 | 7.71 | 13.26 |
| 8 | Allahabad Michigan University Collaborative Fund | 0.11 | 0 | 0 | | 0.11 | 0.11 | 0 | 0 | | 0 | 0.11 |
| 9 | Fund for Improvement of S & T Infrastructure in Universities and Higher educat-ional Institutions (Fist Program-2007) | 1.18 | 0 | 0 | 0.05 | 1.23 | 1.23 | 0 | 0 | | 0 | 1.23 |
| 10 | Development of Algorithm Using ECG Bio-signal & Bio-Images | 0.02 | 0 | 0 | | 0.02 | 0.02 | 0 | 0 | | 0 | 0.02 |
| 11 | Technology Incubation and Development of Entrepreneurs (Tide Scheme) | 0.29 | 28.36 | 0 | 24.78 | 53.43 | 0.29 | 0 | 0 | | 53.14 | 53.43 |
| 12 | Institutional partnership project (IPP) -Centre of Excellence in Micro-Electronics & Microsystems ,EPFL, and Lausanne Under -Indo Swiss Project | 1.31 | 0 | 0 | 0.08 | 1.39 | 1.39 | 0 | 0 | | 0 | 1.39 |
| 13 | Indigenization of Broadband over powerline technology (BPL) from Corinex,Canada by connecting adjoining villages around IIIT, Allahabad and RGIIT, Amethi using existing power lines | 25.52 | 0 | 0 | 0.78 | 26.3 | 26.3 | 0 | 0 | | 0 | 26.3 |
| 14 | Establishment of North Zone Resource Centre of Generating Contents,Mentors,Teachers etc.by Conducting Specialized short term HRD Courses for IT/ITES Sector | 50.62 | 0 | 0 | 1.74 | 52.36 | 0.04 | 0 | 0 | 52.32 | 0 | 52.36 |
| 15 | Methods for Compensation & localization of Interferences in Ultra wide-band wireless Sensor Networks | 0.32 | 0 | 0 | 0.03 | 0.35 | 0.35 | 0 | 0 | | 0 | 0.35 |
| 16 | Setting UP of an ASEAN -INDIA Science & Technology Library | 64.59 | 0 | 2.32 | 1.21 | 68.12 | 7.39 | 0 | 0 | | 11.58 | 68.12 |
| 17 | Allahabad High Court Digitilization Project | | 0 | | | | 30 | 0 | 0.23 | 18.92 | | |
| 18 | Development of Transgenic Wheat Plant against Cereal Cyst nematode (*Heterodera Avenae*) and Sunnpest (*Eurygaster intergriceps Puton*) by using Bioinformatics and Genetic Engineering Approaches | 3.68 | 0 | 0 | 0.15 | 3.83 | 0.02 | 0 | 0 | | 3.81 | 3.83 |
| 19 | Development of a Neuron like system for Real Time Visual Object Detection | 0.68 | 0 | 0 | 0.02 | 0.7 | 0.7 | 0 | 0 | | 0 | 0.7 |
| 20 | Development of a Computer aided Microscopic pool for structural deri-vation of pathologically significant proteins | 1.43 | 0 | 0 | 0.06 | 1.49 | 0.02 | 0 | 0 | | 1.47 | 1.49 |
| 21 | National Mission on Education through Information & Communication Technology (ICT) | 1.61 | 0 | 0 | 0.09 | 1.7 | 0.02 | 0 | 0 | 1.68 | 0 | 1.7 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 | Development of new method and algorithms to identity exon-intron boundary and finding signatory signal pattern for genetic abnormalities like autism-(A-8.25) | 1.96 | 0 | 0 | 0.08 | 2.04 | 0.02 | 0 | 0 | | 2.02 | 2.04 |
| 23 | Disaster Management system for large scale deployment of sensor network using a fault tolerant mechanism | 51.06 | 0 | 0 | 1.84 | 52.9 | 3.2 | 0 | 26.06 | | 23.64 | 52.9 |
| 24 | Army Technology Board-Network simulation Testbed at MCTE,MHOW | 22.6 | 0 | 0 | 0.63 | 23.23 | 7.04 | 0 | 0.75 | | 15.44 | 23.23 |
| 25 | DISTRIBUTING INDUSTRIAL OPTIMIZATION TASKS TO RURAL WORKER - INDO UK BURD PROJECT | 17.27 | 0 | 0 | 0.57 | 17.84 | 7.49 | 0 | 1.49 | | 8.86 | 17.84 |
| 26 | Indo-US project Wireless Sensor Network (WSN) for protecting Wildlife and Humans | 20.63 | 0 | 0 | 0.53 | 21.16 | 21.16 | 0 | 0 | | 0 | 21.16 |
| 27 | Topological Materials and Application Science and Research Board | 10.84 | 0 | 0 | 0.42 | 11.26 | 0.99 | 0 | 2.73 | 1.25 | 6.29 | 11.26 |
| 28 | DST - RFBR Project- Development of logic programming approach to intelligent monitoring of anomalous human activities DST-Russian Federation of Basic Research | 0 | 8.66 | | 0.26 | 8.92 | 0.23 | | 0 | | 8.69 | 8.92 |
| 29 | Development & Application of atomic layer Deposition for High efficiency c-Si Photovoltaic Solar cells | 0 | 198.76 | | 3.03 | 201.79 | 4.82 | | 29.04 | 130.59 | 37.34 | 201.79 |
| 30 | Spintronic Materials & Application | 0 | 26.00 | | 0.4 | 26.4 | 0.35 | | 0 | 1.22 | 24.83 | 26.4 |
| 31 | INSPIRE Faculty Award- IFA-12-ENG-39 | 0 | 0.93 | | 0 | 0.93 | 0 | 0 | 0 | 0 | 0.93 | 0.93 |
| | **Total** | 293.37 | 297.72 | 2.32 | 37.65 | 631.06 | 142.74 | 0 | 60.3 | 213.09 | 214.93 | 631.06 |

**A : Opening Balance B : Grants Received from sponsoring Agencies C : Income on Investment D : Other Income**
**E : Expenses F : Investments G : Fixed Assets Payments H : Other Payments I : Closing Balance**

# 9. The Statistics

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The Grant-in-Aid of **Rs. 1172.22 lakh** was released by the MHRD, GoI in the following **03rd installments:-**

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5. F.No. 25-2/2014-TS-1 dt. 24.07.14 Rs. 172.22 lakh
6. F.No. 25-2/2014-TS-1 dt. 05.09.14 Rs. 500.00 lakh

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**Total = Rs. 1172.22 lakh**

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10. F.No. 25-1/2014-TS-1 dt. 27.03.15 Rs. 300.00 lakh

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**Total = Rs. 4550.00 lakh**

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**9.2 Receipts and Payment Accounts of IIIT-A for Projects funded by sponsored agencies by Major Head**
**Financial Year 2014-2015**

| Sr. No. | NAME OF PROJECT | RECEIPTS | | | | | PAYMENTS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | T | E | F | G | H | I | T |
| 1 | To Establish and Operationalize Bio-Technology (Bioinformatics )Centre--IRCB | 4.51 | 0 | 0 | 0.09 | 4.6 | 4.6 | 0 | 0 | 0 | 0 | 4.6 |
| 2 | Establishment of Joint Indo-Russian Centre for Bio-Technology at IIIT, Allahabad | 0.1 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0.1 |
| 3 | Digital Library Mega Centre-Language Technology and content Development & Content Creation in Tibetan, Sanskrit & English | 0.01 | 0 | 0 | 0 | 0.01 | 0 | 0 | 0 | 0 | 0.01 | 0.01 |
| 4 | Information Security Education & Awareness | 7.38 | 0 | 0 | 0.19 | 7.57 | 4.97 | 0 | 0 | 2.6 | 0 | 7.57 |
| 5 | Development of English to Indian Language Machine Translation System | 3.75 | 19.96 | 0 | 0.37 | 24.08 | 12.26 | 0 | 0 | 3.05 | 8.77 | 24.08 |
| 6 | Development of Indian to Indian Language Machine Translation System | 0 | 3.88 | 0 | 0.06 | 3.94 | 3.54 | 0 | 0 | | 0.4 | 3.94 |
| 7 | Development of Robust Document analysis and Recognition system for printed Indian Scripts (OCR) | 1.9 | 11.17 | 0 | 0.19 | 13.26 | 4.09 | 0 | 0 | 1.46 | 7.71 | 13.26 |
| 8 | Allahabad Michigan University Collaborative Fund | 0.11 | 0 | 0 | | 0.11 | 0.11 | 0 | 0 | | 0 | 0.11 |
| 9 | Fund for Improvement of S & T Infrastructure in Universities and Higher educat-ional Institutions (Fist Program-2007) | 1.18 | 0 | 0 | 0.05 | 1.23 | 1.23 | 0 | 0 | | 0 | 1.23 |
| 10 | Development of Algorithm Using ECG Bio-signal & Bio-Images | 0.02 | 0 | 0 | | 0.02 | 0.02 | 0 | 0 | | 0 | 0.02 |
| 11 | Technology Incubation and Development of Entrepreneurs (Tide Scheme) | 0.29 | 28.36 | 0 | 24.78 | 53.43 | 0.29 | 0 | 0 | | 53.14 | 53.43 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | Institutional partnership project (IPP) -Centre of Excellence in Micro-Electronics & Microsystems ,EPFL, and Lausanne Under -Indo Swiss Project | 1.31 | 0 | 0 | 0.08 | 1.39 | 1.39 | 0 | 0 | | 0 | 1.39 |
| 13 | Indigenization of Broadband over powerline technology (BPL) from Corinex,Canada by connecting adjoining villages around IIIT, Allahabad and RGIIT, Amethi using existing power lines | 25.52 | 0 | 0 | 0.78 | 26.3 | 26.3 | 0 | 0 | | 0 | 26.3 |
| 14 | Establishment of North Zone Resource Centre of Generating Contents,Mentors,Teachers etc.by Conducting Specialized short term HRD Courses for IT/ITES Sector | 50.62 | 0 | 0 | 1.74 | 52.36 | 0.04 | 0 | 0 | 52.32 | 0 | 52.36 |
| 15 | Methods for Compensation & localization of Interferences in Ultra wide-band wireless Sensor Networks | 0.32 | 0 | 0 | 0.03 | 0.35 | 0.35 | 0 | 0 | | 0 | 0.35 |
| 16 | Setting UP of an ASEAN -INDIA Science & Technology Library | 64.59 | 0 | 2.32 | 1.21 | 68.12 | 7.39 | 0 | 0 | | 11.58 | 68.12 |
| 17 | Allahabad High Court Digitilization Project | | 0 | | | | 30 | 0 | 0.23 | 18.92 | | |
| 18 | Development of Transgenic Wheat Plant against Cereal Cyst nematode (*Heterodera Avenae*) and Sunnpest (*Eurygaster intergriceps Puton*) by using Bioinformatics and Genetic Engineering Approaches | 3.68 | 0 | 0 | 0.15 | 3.83 | 0.02 | 0 | 0 | | 3.81 | 3.83 |
| 19 | Development of a Neuron like system for Real Time Visual Object Detection | 0.68 | 0 | 0 | 0.02 | 0.7 | 0.7 | 0 | 0 | | 0 | 0.7 |
| 20 | Development of a Computer aided Microscopic pool for structural deri-vation of pathologically significant proteins | 1.43 | 0 | 0 | 0.06 | 1.49 | 0.02 | 0 | 0 | | 1.47 | 1.49 |
| 21 | National Mission on Education through Information & Communication Technology (ICT) | 1.61 | 0 | 0 | 0.09 | 1.7 | 0.02 | 0 | 0 | 1.68 | 0 | 1.7 |
| 22 | Development of new method and algorithms to identity exon-intron boundary and finding signatory signal pattern for genetic abnormalities like autism-(A-8.25) | 1.96 | 0 | 0 | 0.08 | 2.04 | 0.02 | 0 | 0 | | 2.02 | 2.04 |
| 23 | Disaster Management system for large scale deployment of sensor network using a fault tolerant mechanism | 51.06 | 0 | 0 | 1.84 | 52.9 | 3.2 | 0 | 26.06 | | 23.64 | 52.9 |
| 24 | Army Technology Board-Network simulation Testbed at MCTE,MHOW | 22.6 | 0 | 0 | 0.63 | 23.23 | 7.04 | 0 | 0.75 | | 15.44 | 23.23 |
| 25 | DISTRIBUTING INDUSTRIAL OPTIMIZATION TASKS TO RURAL WORKER - INDO UK BURD PROJECT | 17.27 | 0 | 0 | 0.57 | 17.84 | 7.49 | 0 | 1.49 | | 8.86 | 17.84 |
| 26 | Indo-US project Wireless Sensor Network (WSN) for protecting Wildlife and Humans | 20.63 | 0 | 0 | 0.53 | 21.16 | 21.16 | 0 | 0 | | 0 | 21.16 |
| 27 | Topological Materials and Application Science and Research Board | 10.84 | 0 | 0 | 0.42 | 11.26 | 0.99 | 0 | 2.73 | 1.25 | 6.29 | 11.26 |
| 28 | DST - RFBR Project- Development of logic programming approach to intelligent monitoring of anomalous human activities DST-Russian Federation of Basic Research | 0 | 8.66 | | 0.26 | 8.92 | 0.23 | | 0 | | 8.69 | 8.92 |
| 29 | Development & Application of atomic layer Deposition for High efficiency c-Si Photovoltaic Solar cells | 0 | 198.76 | | 3.03 | 201.79 | 4.82 | | 29.04 | 130.59 | 37.34 | 201.79 |
| 30 | Spintronic Materials & Application | 0 | 26.00 | | 0.4 | 26.4 | 0.35 | | 0 | 1.22 | 24.83 | 26.4 |
| 31 | INSPIRE Faculty Award- IFA-12-ENG-39 | 0 | 0.93 | | 0 | 0.93 | 0 | 0 | 0 | 0 | 0.93 | 0.93 |
| | **Total** | 293.37 | 297.72 | 2.32 | 37.65 | 631.06 | 142.74 | 0 | 60.3 | 213.09 | 214.93 | 631.06 |

**A : Opening Balance B : Grants Received from sponsoring Agencies C : Income on Investment D : Other Income**
**E : Expenses F : Investments G : Fixed Assets Payments H : Other Payments I : Closing Balance**

| S. No | Company | Number of Student Placed |
|---|---|---|
| 1. | Accenture | 42 |
| 2. | Accenture Sapient Nitro | 1 |
| 3. | ACCOLITE | 3 |
| 4. | ADOBE | 3 |
| 5. | AMAZON | 4 |
| 6. | Apigee | 2 |
| 7. | ARISTA | 3 |
| 8. | Avanti | 1 |
| 9. | Belzabar | 4 |
| 10. | Blackrock | 4 |
| 11. | Bluejeans | 1 |
| 12. | CISCO | 5 |
| 13. | CITI | 6 |
| 14. | DEVFACTORY De Shaw Google | 1 |
| 15. | DIRECTI | 3 |
| 16. | EXL | 6 |

## 9.3 Placements

| | | |
|---|---|---|
| 17. | Factset | 7 |
| 18. | FLIPKART | 9 |
| 19. | FRACTAL | 1 |
| 20. | FREESCALE | 1 |
| 21. | FUTURES FIRST | 2 |
| 22. | HashedIn | 2 |
| 23. | HeroMoto | 1 |
| 24. | Hidden Reflex | 1 |
| 25. | Hike | 1 |
| 26. | HT Media | 5 |
| 27. | IBM | 15 |
| 28. | INFOEDGE | 5 |
| 29. | Infosys | 8 |
| 30. | Jigserv | 1 |
| 31. | Jobtessio | 1 |
| 32. | Juniper | 8 |
| 33. | Kritikal | 3 |
| 34. | Kuliza | 4 |
| 35. | Leafair | 1 |
| 36. | MAQ | 5 |
| 37. | MORGAN STANLEY | 3 |
| 38. | Mu Sigma | 4 |
| 39. | MyDeals 24x7 | 7 |
| 40. | Myntra | 2 |
| 41. | Nagarro | 3 |
| 42. | NEC Tech | 4 |
| 43. | Nucleus Software | 2 |
| 44. | OFSS | 2 |
| 45. | PAGALGUY | 1 |
| 46. | PAYU | 8 |
| 47. | Qualcomm | 3 |
| 48. | RBS | 2 |
| 49. | Valuefy | 2 |
| 50. | SAP labs | 9 |
| 51. | Sapient Nitro | 5 |
| 52. | Sigmoid MyDeals 24x7 | 1 |
| 53. | SUTA | 1 |
| 54. | Sutra | 3 |
| 55. | TCS | 7 |
| 56. | TESCO | 8 |
| 57. | Thorogood | 1 |
| 58. | Verizon | 2 |
| 59. | VIZ | 4 |
| 60. | WALMART | 9 |
| 61. | WhistleApp | 1 |
| 62. | XPEDIA | 6 |
| 63. | ZopHop | 2 |
| 64. | ZS | 11 |

# 9.4 MEDALS AND AWARDS

## List of B.Tech. ECE
**Students recommended for Award of Institute Medals**
**Academic Batch July 2010 – June 2014**

**GOLD**
**Suraj**
**IEC2010080**

**SILVER**
**Khushboo Sangal**
**IEC2010102**

**BRONZE**
**Rajat Gupta**
**IEC2010095**

## List of B.Tech. ECE
**Students recommended for Award of Institute Medals**
**Academic Batch July 2011 – June 2015**

**GOLD**
**Ankur Raj**
**IEC2011050**

**SILVER**
**Amit Kumar Singh**
**IEC2011015**

**BRONZE**
**Nitesh Lulla**
**IEC2011042**

## List of B.Tech. IT
**Students recommended for Award of Institute Medals**
**Academic Batch July 2010 – June 2014**

**GOLD**
**Nayan Singhal**
**IIT2010164**

**SILVER**
**Mayank Tuteja**
**IIT2010099**

**BRONZE**
**Ayushi Jain**
**IIT2010169**

## List of B.Tech. IT
### Students recommended for Award of Institute Medals
### Academic Batch July 2011 – June 2015

**GOLD**
**Priyansh Goel**
**RIT2011048**

**SILVER**
**Raman Goyal**
**IIT2011021**

**BRONZE**
**Divanshu Garg**
**IIT2011077**

## List of M.Tech (IT)
### Students recommended for award of Institute's Medal
### Academic Batch: July 2012– June 2014

**GOLD**
**Manoj Kumar**
**ISE2012020**

**GOLD**
**Shashank Srivastava**
**ISE2012006**

**SILVER**
**Shuchi Malaviya**
**ISE2012002**

**BRONZE**
**Manish Sharma**
**IRO2012006**

## List of M.Tech (IT)
## Students recommended for award of Institute's Medal
## Academic Batch: July 2013– June 2015

**GOLD**
**Geetanjali Chaurasia**
**ISE2013020**

**SILVER**
**Shikha Mittal**
**IWC2013001**

**SLIVER**
**Vaibhav Panwar**
**IRO2013001**

**BRONZE**
**Vandana Kumari**
**IBI2013010**

**List of M.Tech (EE)**
**Students recommended for award of Institute's Medal**
**Academic Batch: July 2012 – June 2014**

**GOLD**
**Hareshwar Kumar**
**ICE2012002**

**GOLD**
**Abhay Kumar**
**ICE2012016**

**SILVER**
**Akash Kumar**
**ICE2012003**

**SILVER**
**Syed Danish Kamal**
**IMI2012005**

**BRONZE**
**Saurabh SHukla**
**ICE2012005**

## List of M.Tech (EE)
## Students recommended for award of Institute's Medal
## Academic Batch: July 2013– June 2015

**GOLD**
**Ritika Khurana**
**IMI2013005**

**SILVER**
**Sonam Srivastava**
**ICE2013001**

**BRONZE**
**Aditya Nath Bhatt**
**IMI2013018**

## List of MBA (IT)
## Students recommended for Award of Institute Medals
## Academic Batch July 2012 – June 2014

**GOLD**
**Shivendu Pandey**
**IMB2012044**

**SILVER**
**Nikita Gupta**
**IMB2012001**

**BRONZE**
**Pankaj Vishwakarma**
**IMB2012013**

## List of MSCLIS

**Students recommended for Award of Institute Medals**
**Academic Batch July 2012 – June 2014**

**GOLD**
**Gaurav Srivastava**
**IMS2012020**

**SILVER**
**Nikhil Raj Singh**
**IMS2012001**

**BRONZE**
**Gopal Shivhare**
**IMS2012043**

## List of MBA (IT)

**Students recommended for Award of Institute Medals**

**Academic Batch July 2013 – June 2015**


**GOLD** **SILVER** **BRONZE** **Tanushree Lakshmi** **Anil Yadav** **Jyoti Srivastava**
**IMB2013012** **IMB2013044** **IMB2013035**

## List of MSCLIS

**Students recommended for Award of Institute Medals**
**Academic Batch July 2013 – June 2015**

**GOLD** **SILVER** **BRONZE** **Sanchi Manchanda** **Akansha Pandey** **Venkateshwaran K**
**IMS2013063** **IMS2013001** **IMS2013003**

**Students recommended Megha Goyal Memorial Gold Medal for th year 2014**

**GOLD**
**Khushboo Sangal**
**IEC2010102**

## Students recommended Megha Goyal  Memorial Gold Medal for th year 2015


**GOLD**
**Nidhi Chincholikar**
**IEC2011033**

## Students recommended Chancellor's Gold Medal for the year 2014

**Nayan Singhal**
**IIT2010164**

## Students recommended Chancellor's Gold Medal for the year 2015

**Priyansh Goel**
**RIT2011048**

## Students recommended Prof. Claude Cohen- Tannoudji Gold Medal for the year 2014

**Prachi Sharma**
**IIT2010044**

## Students recommended Prof. Claude Cohen- Tannoudji Gold Medal for the year 2015

**Anjali Sharma**
**RIT2011041**

## Students recommended Shri T C M Pillay Memorial Gold Medal for the year 2014

**Nayan Singhal**
**IIT2010164**

## Students recommended Shri T C M Pillay Memorial Gold Medal for the year 2015

**Raman Goyal**
**IIT2011021**

## Students recommended Shahshank Varma Memorial Gold Medal for the year 2014

**Nayan Singhal**

IIT2010164

## Students recommended Shahshank Varma Memorial Gold Medal for the year 2015

**Priyansh Goel**
**RIT2011048**

## Students recommended Prof. Joelle Cohen Tannoudji Gold Medal for the year 2014

**Sikha Suman**
**IBI2012001**

## Students recommended Prof. Joelle Cohen Tannoudji Gold Medal for the year 2015

**Vandana Kumari**
**IBI2013010**

## Students recommended Shri T.N. Vaish Memorial Gold Medal for the year 2014

**Shivendu Pandey**
**IMB2012044**

## Students recommended Shri T.N. Vaish Memorial Gold Medal for the year 2015

**Ashutosh Joshi**
**IMB2013018**

## Students recommended Late Pandit Yadunath Tiwari Memorial Gold Medal for the year 2014

**Saumya Dubey**
**IIT2010163**

## Students recommended Late Pandit Yadunath Tiwari Memorial Gold Medal for the year 2015

**Pramiti Goel**
**IIT2011100**

## Students recommended Prof. Dr. Ing. Matthias Kleiner Gold Medal for the year 2014

**Nayan Singhal**
**IIT2010164**

## Students recommended Prof. Dr. Ing. Matthias Kleiner Gold Medal for the year 2015

**Divanshu Garg**
**IIT2011077**

## 9.4 Events of the Year

## 01 April 2014 to 31 March 2015

| Date | Subject |
|---|---|
| 12 May , 2014 | fVªiyvkbZVh ds 75 Qhlnh Nk=ksa dks feyk ^Mªhe tkWc* % Hkkjrh; lwpuk izkS\|ksfxdh laLFkku] bykgkckn us lyslesaV ds vius iqjkus VªSd fjdkMZ dks cjdjkj j[kk gSA lysl esaV 'kr izfr'kr 65 yk[k :i;s rd dk vkd"kZd iSdstA |
| June 4, 2014 | IIIT-A embraces 4-tier flexible cadre structure for teachers: institutes' apex decision making body gives go ahead to move; will help attain pay parity with IITs, NITs, attract best teaching talents. |
| June 7, 2014 | On the initiative taken by the Science and Engineering Research Board (SERB) of the department of Science and technology (DST), government of India to boost research in robotics, especially in the field of humanoids and social robots, the Indian Institute of Information Technology, Allahabad organised a one-week summer school on its Jhalwa campus. Prof Somenath Biswas, director, IIIT-A inaugurated the summer school. |
| June 10, 2014 | The prestigious IIIT-A has once again bagged a place among top 25 engineering colleges of the country in the latest rankings published by national news magazine India Today. |
| July 30, 2014 | IIIT-Allahabad among 200 best universities of BRICS nations: IIIT-A has added another feather to its cap. The Institute has bagged a place among the best 200 universities in the BRICS countries comprising Brazil, Russia, India, China and South Africa. The QS University Rankings BRICS, a dedicated ranking of the top 200 Universities has ranked IIIT-A at 109th place Internationally and 16th in India in its latest edition of the rankings released recently. |
| August 12, 2014 | IIIT-A celebrated 16th foundation day in style: IIIT-A celebrated its 16th foundation day with enthusiasm and colourful cultural programme on Tuesday.<br>The programme started with a Saraswati Vandana and lighting of the lamp followed by various dance, drama, music and literary performances in the newly built auditorium. On the occasion, the Director launched a website dedicated to effervescence-2014, the annual technical-cum-management and cultural festival of IIIT-Allahabad. |
| 13-15 October 2014 | IEEE Computational Intelligence Workshop (CIW-2014) was organized at campus. |
| 17th-19th Oct, 2014 | The three-day annual cultural-cum-technical festival of IIIT-A-Effervescence-got off to a blazing start here. The event aims to take both education and entertainment to new hights. The programme got underway with the puzzle competition perlexuz. Like each year, this year too participants in large numbers from across the country have come to the Indian Institute of Information Technology here. Participants were seen trying all wants to solve the puzzles in perplexuz. The Celebrity Night of 19th October, 2014 on Effervescence Concludes at IIIT-A Noted singer Sona Mahapatra leaves audience spellbound. |
| 31 October, 2014 | jk"Vªh; ,drk fnol ds :Ik esa euh iVsy t;arh l |
| 01 November, 2014 | 'IT, e-governance are effective tools against corruption : Chief Vigilance officer Prof. US Tiwari on Saturday said that information Technology (IT) and e-governance proved to be the most effective tools against corruption as there has been a drastic decrease in corruption with the use of IT tools. |
| 28 November, 2014 | Efgykvksa esa bUVjusV ds izfr c<+h :fp % orZeku le; esa dkedkth efgykvksa esa baVjusV ds izfr :>ku dkQh c<+h gSA efgyk, baVjusV ds tfj, O;atu cukus dh fof/k;ksa dh tkudkjh izkIr dj jgh gS] mlesa iM+us okyh vko";d lkexzh eksckby ,Ik ds tfj, lh/ks [kjhn jgh gSA Hkkjrh; lwpuk izkS\|ksfxdh laLFkku] bykgkckn esa dEI;wfVax esa ukjh dh Hkwfedk fo'k; ij "kfuokj dks gqbZ laxks'Bh esa mDr ckrs teZu "kks/kkFkhZ DykmfM;k flf"aVx us dghA MkW fdju fo"okl us foKku ,oa rduhdh ds vU; {ks=ksa dh rqyuk esa dEI;wVj foKku] lwpuk izkS\|ksfxdh ds {ks= esa efgykvksa dh mUufr ,oa lQyrk dh laHkkoukvksa dh tkudkjh nhA |

| | |
|---|---|
| 8-12 December, 2014 | IIITA organized the 7th Science Concave and Inspire program 2014 during December 8-12, 2014. About 500 delegates comprising graduates, teaches and researchers from all parts of the country participated in the event. INSPIRE program initiated by the Department of science and technology, Govt. of India was a great attraction for secondary level young scientist to sharpen and augment their intellect with interaction with Nobel laureates and famous scientist number of participants for INSPIRE program .<br>Apart from the Noble Laureate Prof Curl and Turin Awardees Prof. J. Sifakis of France Bhatnagar Awardees Scientists and other senior scientists of the country interacted with the participants. They answered to the inquisitiveness of budding scientists of India to shape their destinies. |
| 25 December 2014 | nks Nk=ksa dks Ms<+ djksM+ dk iSdst % laLFkku ds nks Nk=ksa us dSail lsysD"ku esa lSyjh iSdst ikus dk vc rd dk lkjk fjdkMZ cszd dj fn;k gSA nksuksa Nk=ksa dks xwxy us tkWc vkWQj dh gSA cnys esa bUgsa Ms<+&Ms<+ djksM+ :Ik, dk b;jyh iSdst vkWQj fd;k x;k gSA nksuksa Nk=ksa dks chVsd lkrosa lsesLVj dk bXtke fn;k gSA |
| 01 January, 2015 | cszLV dSalj ds bykt esa enn djsxk fVªiyvkbZVh % Hkkjrh; lwpuk izkS\|ksfxdh laLFkku] bykgkckn vius okys le; esa czsLV dSalj dh otg ryk"kus vkSj mlds bykt ds fy, nok cukus esa egRoiw.kZ Hkfedk vnk djsxkA lapkj ,oa izkS\|ksfxdh ea=ky; ds ,d izkstsDV ds rgr laLFkku esa cszLV dSalj ds fcx MkWVk ds oSKkfud fo"ys'k.k dk {ks=h; dsUnz cukus dh ;kstuk gSA laLFkku us y[kuÅ fLFkr dsUnzh; vkS'kf/k vuqla/kku laLFkku ¼lhMhvkjvkbZ½ ls le>kSrk fd;k gSA bl ifj;kstuk ds fizafliy buosfLVxsVj ,oa laLFkku ds vf/k'Bkrk ¼lalk/ku ,oa ;kstuk½ izks- ;w-,l- frokjh gSA |
| 02 January, 2015 | fVªiyvkbZVh y[kuÅ dh d{kk,a "kgj esa pysaxh % y[kuÅ esa cuus okys lwcs ds nwljs Hkkjrh; lwpuk izkS\|ksfxdh laLFkku esa vxys "kSf{kd l= ls izos"k "kq: gks tk,xkA bldh d{kk,a >yok fLFkr bykgkckn fVªiyvkbZVh esa pysaxhA chVsd&vkbZVh vkSj chVsd dEI;wVj lkbal ,.M bathfu;fjax esa blds fy, nkf[kyk gksxkA |
| 07 January, 2015 | IIIT-A to spur innovation : A first short-term course, research in discipline on anvil; to incorporate topics in B.Tech, M Tech, a dedicated lab encourage design and innovation also to be set up : The move has got in-principle approval of the institutes highest body for all academic affairs academic council – in its meeting held on January 05, 2015. Indian institute of information technology, Allahabad (IIIT-A) is all set to expand its portfolio of courses by undertake research in the emerging field of design and innovation. |
| 10 February, 2015 | Four IIITs join hands for projects, initiatives : in-principle agreement<br>Coming days will witness a never-before inter institute cooperation with joint projects collaborative studies, students exchange initiatives and common faculty development exercises among the four Indian Institutes of Information Technology of the country. An principle agreement in this regard has been reached among the directors of these institutes including Somenath Biswas of IIIT, Allahabad, Aparajita Ojha of Indian Institute of Information Technology, Design and Manufacturing (IIITD&M), Jabalpur, SG Deshmukh of Indian Institute of Information Technology and Management (IIITM), Gwalior, and R Gnanmoorthy of Indian Institute of Information Technology Design and Manufacturing (IIITD & M), Kancheepuram. |
| 15-16, March, 2015 | Foreign Experts Provide insight on facilities to come with smart city: Policing in smart cities would be vital Meet on IT Innovations opens at IIIT-A, Smart ATMs to predict about snags in advance : Role of police would be very vital in upcoming smart cities, therefore they would need drastic assistance from information technology experts, said Bhagwan Swaroop, DIG, Allahabad zone. He was inaugurating two day symposium cum workshop on IT innovations for Smart City and Research colloquium on IT, Electronics & Communication organized on the campus of IIITA. |
| 18 March, 2015 | IEEE robotics chapter opens at IIIT-A : the robotics and artificial laboratory of IIIT-A has opened the robotics and automation society chapter of institution of electronics and electrical Engineers (IEEE) on Thursday. Delivering the inaugural lecture, an expert in robotics from University of Zurich, Switzerland, Prof Davide Scaramuzza, Spoke about the world of robotics. |

| | |
|---|---|
| 21 March, 2015 | Aparoksha -2015 off to a flying start at IIIT-A : Maiden edition of Aparoksha-2015, the tree day technical fest of Indian Institute of Information Technology, Allahabad (IIIT-A), kicked-off with an impressive opening ceremony on Saturday. Social entrepreneur Arunachalam Muruganantham, while inaugurating the fest, spoke about his journey from a small village in Coimbatore to TIME Magazine's top 100 influential people in the world' |

## 9.5 EXAMINATION RESULTS

**(Number of students passed/ Awarded degree in the year 2014)**

**Regular Mode**

| Level | Program | Discipline / Subject | Total Number of Students Appeared | | Total Number of Students Passed/ Awarded Degree | |
|---|---|---|---|---|---|---|
| | | | Total | Girls | Total | Girls |
| Post Graduate | MSCLIS | **MSCLIS** | **69** | **14** | **66** | **14** |
| Post Graduate | MBA | **MBA** | **63** | **23** | **63** | **23** |
| Post Graduate | M.Tech. (Branch wise) | **SE** | **26** | **03** | **26** | **03** |
| | | **RO** | **13** | **02** | **13** | **02** |
| | | **WCC** | **22** | **04** | **22** | **04** |
| | | **HCI** | **13** | **04** | **13** | **04** |
| | | **MI** | **19** | **08** | **19** | **08** |
| | | **IS** | **14** | **04** | **14** | **04** |
| | | **BI** | **09** | **03** | **09** | **03** |
| | | **CE** | **18** | **03** | **18** | **03** |
| Under Graduate | B.Tech. | IT | **252** | **37** | **252** | **37** |
| Under Graduate | B.Tech. | ECE | **97** | **14** | **97** | **14** |
| Post Graduate | Ph.D | - | **08** | **00** | **08** | **00** |

# 10. Preventive and Redressal Measures by the Institute

## 10.1 Grievance Redressal Measures

In pursuance of implementation of Point 20 of the 20 point Program relating to responsive administration as communicated vide G.O. F.No. 28-29/2002-TS.1 dated October 11, 2002 read with G.O. F.No.C.36011/11/2005-PG Gol, MHRD dated 17.11.2005 as amended up-to-date. and in supersession of Office Order No. lllT-A/DIR/1446(2012 dated July 23, 2012. the Grievance Redressal Committee of lllT-A is reconstituted as follows with immediate effect:

| | | |
|---|---|---|
| **1.** | **Prof. Sudip Sanyal** | **- Chairperson (Grievance Officer)** |
| **2.** | **Prof. Anupam** | **- Member** |
| **3.** | **Dr. Nidhi Mishra** | **- Member** |
| **4.** | **Dr. Vijaishri Tiwari** | **- Member** |
| **5.** | **Dr. Vijay Kumar Chaurasia, Chief Proctor** | **- Member** |
| **6.** | **Dr. Asheesh Kumaar, Deputy Registrar (M)** | **- Member and Coordinator** |
| **7.** | **Mr. K. S. Aeron (Office Representative)** | **- Member** |
| **8.** | **Mr. Yogesh Kardarn (Representative of SC/ST)** | **- Member** |
| **9.** | **Ms. Blessy Anniesahju (Representative of Minority)** | **- Member** |
| **10.** | **Mr. Purnendu Pandey (Representative of Student)** | **- Member** |
| **11.** | **Ms. Farha Naz** | **- Member** |
| **12.** | **Ms. Manisha Tiwari (Project Staff)** | **- Member** |

Prof. Sudip Sanyal is designated as fulltime Grievance Officer of the Institute. He will be assisted by the Grievance Redressal Committee in discharge of his duties as Grievance Officer of the Institute us per orders of the Government from time to time in this regard.

The Grievance Officer is desired to amicably and promptly remove all grievances of students, employees and public at large relating to the Institute. He will, on an application/complaint filed before him and also on suo-moto. inquire into the matter and require parties to the grievances to file papers, adduce evidence and afford opportunities to the parties for examination and cross examination as per law of the land and after proper hearing, make a reasoned recommendation in all cases for action by the Director and shall maintain a record in that regard.

In discharge of his duties, he will have the right to call for any information, papers and records etc. from the office of the Institute and it will be the duty of the Institute officials concerned to promptly produce relevant records called for by the Grievance Officer for his expeditious disposal of grievances.

The Grievance Officer will have all secretarial assistance in the Institute for proper discharge of his duties.

This is an in-house mechanism for 'Redressal of Grievances', if any, by all concerned that may be availed of. so that a conducive academic/administrative ambience may be maintained in the Institute.

## 10.2 Prevention of Harassment of women at workplace

In supersession to O.M. No. IIlT-A/DIR/1447/2012 dated July 23, 2012; the Committee for prevention of Sexual Harassment of women at workplace is reconstituted as follows with immediate effect:

| | | |
|---|---|---|
| **1.** | **Prof. Krishna Mishra (Faculty Representative)** | **- Chairperson** |
| **2.** | **Dr. Pallavi Dixit (Staff Representative)** | **- Member** |
| **3.** | **Prof. Nisha Srivastava (Allahabad University)** | **- External Member** |
| **4.** | **Mr. Vaibhav Kaushik, Advocate (Legal Counsel)** | **- External Member** |
| **5.** | **Dr. Asheesh Kumaar (Office Representative)** | **- Member & Coordinator** |
| **6.** | **Sri Yogesh Kardarn (SC/ST Representative)** | **- Member** |
| **7.** | **Topper of B.Tech IVth Semester (if the topper is a boy, then next girl in merit)** | **- Member** |
| **8.** | **Topper of MBA IInd Semester (if the topper is a girl, then next boy in merit)** | **- Member** |
| **9.** | **Topper of M.Tech IInd Semester (if the topper is a boy, then next girl in merit)** | **- Member** |
| **10.** | **Ms. Blessy Anniesahju (Minority Representative)** | **- Member** |
| **11.** | **Ms. Farha Naz** | **- Member** |
| **12.** | **Ms. Manisha Tiwari (Project Staff )** | **- Member** |

On the receipt of any written complaint, the Committee will promptly proceed with inquiry as per rules and submit its findings /recommendations to the Director for necessary action.

The Committee is constituted in view of Government Letter F.No. C.36011/7/2005-VIG dated 29.03.2006.

This issues under the order of competent authority.

## 10.3 Prevention of Ragging in the Institute

Ragging in the educational institutions has been yet another social evil that has been taking its toll every year over the country so much so that many a youthful prodigies have lost their careers and even their lives solely on account of this evil. All preventive measures have often failed and the malady has been evading cure unabatedly.
The Supreme Court, of late, has taken a very serious view of this social evil and has issued stern directions in asking the Government and all organs under the Government to stop the menace of Ragging altogether with immediate effect. It has also issued stern action against non-observance of the Appellate Court instructions through the Government and the UGC.

IIIT-A, therefore, has undertaken positive measures to implement the Apex Court directions in this regard through an Office Memorandum No. IIIT-A/DIR/1358/2009 dated 10.07.2009 and multi-structured Committees have been constituted as under for its implementation:

1. **Institute level Anti-ragging Committee**
   - Dean, Students' Affairs - Chairman
   - Head of the Division - Member
   - Warden/Counselor of the concerned Hostel - Member
   - Registrar/Dy. Registrar/Assistant Registrar of Institute - Member
   - Legal Counsel - Member
   - Nominated person - Member

2. **Institute level Anti-ragging Squads**
   - Dean, Students' Affairs - Chairman
   - Assistant Proctor (two by rotation) - Member
   - Security Officer - Member
   - One M.Tech/Ph.D. Student nominated - Member
   - Warden (nominated) - Member

3. **Hostel Level Anti-ragging Squads**
   - Warden of the Hostel
   - Two Prefects
   - One representative of Freshers

Wide publicity of these preventive measures have been made through notice boards, handouts and website of the Institute at all possible places on the Campus, hostels and other vulnerable points. The structured Committees are on the prowl all the times to deal with any inkling of the malady.

### 10.4 Prohibitions and Bans

The Institute is committed to ensure observance of Prohibitions and Bans promulgated under orders of the Supreme Court, Government and regulatory authorities under the Govt.

Accordingly, the following prohibitions and bans are strictly imposed in the Institute:

- ❖ Use of alcohol, tobacco and its products are totally banned in and around the Institute

- The entire area inside the Campuses of the Institute is a Smoking Free Zone. Therefore, smoking is strictly prohibited
- Use of mobiles in classrooms, labs, academic, administrative, cultural and extra-curricular activities, Seminars, Workshops and other official gatherings of the Institute is strictly prohibited under orders of the Parliament
- Any other prohibition or ban as may be promulgated under orders of the Competent Authority from time to time

# 11. Significant Events- A Glance

## HOLDING OF 7TH SCIENCE CONCLAVE

(8 Dec, 2014 to 12 Dec, 2014)

The Seventh Science Conclave and the Inspire fellowship Program were organized by the Indian Institute of Information Technology, Allahabad from 8 Dec, 2014 to 12 Dec, 2014, for 5 days. Necessary clearances of MHRD, MEA, MHA of Govt. of India were obtained before the conduct of the program. The main features of the conclave are as under:

**1. Participants - Inspire**

A total of **449** Inspire participants attended the program. All the participants were from UP. The breakup of the participants is as under:
Number of male teachers in the conclave: 8
Number of Female teachers in the Conclave: 1
Number of female students: 153
Number of male students: 287

**2. Participants - Universities**

A total of **172** participants from universities attended the program. The participants came from all over the country. The participants were selected based on their rank (within the first three ranks in the university).
The gender-wise break up: Female participants: 80 and male participants: 92.
The subject-wise breakup: Biology 59, chemistry 61, Physics 39, mathematics 13

**3. Participants – from IIIT, Allahabad**

A total of **110** students were selected based on CGPA.

4. **Participants from abroad - 06**

   Pakistan -1 Male, Bangladesh - 1 Female, Sri Lanka female 1 and Male 2, Kuwait 1 male

5. Participant Scientists – Nobel & other Laureates
   Professor Robert F Curl, Nobel Laureate
   Professor Joseph Sifakis, Turing Awardee
6. Participant Scientists from abroad – 11
   (Please see Annexure 1)
7. Participant Scientists from India – 15
   (Please see Annexure 1)

## 8 Schedule of Activities

A variety of activities were organized during the science conclave. The schedule of the activities for university participants.

The main activities are listed below:

- A short inaugural session was organized where Profs. R F Curl, Joseph Sifakis, J Bhattacharjee, N Vedachalam, J V Narlikar were felicitated and a brief introduction to the Science conclave was given to the participants.
- Generally talks by the participating scientists were organized from 9.00 to 13.30 hrs and an additional talk was scheduled from 15.00 to 15.50 for Inspire students and 17.15 to 18.05 for university students. The schedule of all the talks is given in **Annexure 1**.
- Interaction sessions for university students were organized from 15.00 to 17.00 and the Interaction sessions for Inspire students were organized from 16.05 to 18.05. These scientists participated in the interaction action sessions. Information to the students and scientists on how the interaction sessions are organized.
- The Inspire group has a number of other activities such as laboratory work, educational toy making, fun with mathematics besides interaction.
- Two mobile/ portable planetariums were organised and the students could watch the planetarium shows in small groups from 18.30 to 22.30 hrs. from 9 to 12 Dec. One of the planetariums was taken on rent and the second planetarium was taken from the Allahabad planetarium.
- Night sky watch was organized from 8 to 12 Dec from 18.30 to 22.30 hr every day with 5 telescopes.
- Cultural programs were organised on all the five days
- A panel discussion on "Fostering Innovation" was organised on 11th Dec, from 9.00 to 11.30 hrs. It was chaired by Prof J. Bhattacharjee and the other panelists are: Profs RF Curl, J Sifakis, J.V. Narlikar Man Gon Park, D P Agrawal, Anish Arora, Lina Nillson, Harish Joshi, S Biswas, and Radhakrishna. The report/recommendations of the panel discussion are given in **Ann - 2**.

**Annexure 1**

# List of Scientists & Schedule of talks of Science Conclave 2014

| S No | Date | Time | Speaker | Affiliation | Email address | Topic |
|---|---|---|---|---|---|---|
| | 8 Dec | 9.00-9.50 | Inauguration | | | Inauguration |
| 1. | 8 Dec | 09.50-10.40 | Robert Curl | Rice University | rfcurl@rice.edu | Discovery of C60 |
| 2. | 8 Dec | 10.40-11.30 | J Bhattacharjee | HRI, Allahabad | director@hri.ac.in | Unusual dynamics and mathematical modelling |
| 3. | 8 Dec | 11.50–12.40 | Ashoke Sen | HRI, Allahabad | **ashokesen1999@yahoo.com** | String theory and cosmology: Tying the two ends |
| 4. | 8 Dec | 12.40-13.30 | N Vedachalam | **VSSC-ISRO (Retd.)** | **n_vedachalam@vssc.gov.in** | Space Transport System |
| 5. | 8 Dec | 15.00-15.50 | N Vedachalam | **VSSC-ISRO** | **n_vedachalam@vssc.gov.in** | Mangalyan mission |
| 6. | 8 Dec | 17.15-18.05 | Neeraj Jain | NBRC, Gurgaon | neeraj.jain@nbrc.ac.in | 'What do Spinal Cord Injuries do to the Brain' |
| 7. | 9 Dec | 09.00-09.50 | J V Narlikar | Inter-University Centre for Astronomy and Astrophysics, Pune | jvn@iucaa.ernet.in | The amazing world of Astronomy |
| 8. | 9 Dec | 09.50-10.40 | Joseph Sifakis | EPFL, Switzerland | **joseph.sifakis@imag.fr** | The Internet of Things – A Revolution not to Miss |
| 9. | 9 Dec | 10.40-11.30 | Kuniharu- Takei | Osaka Prefecture University | takei@pe.osakafu-u.ac.jp, | Printable inorganic nanomaterial devices: Fabrication process, characteristics, and applications |
| 10. | 9 Dec | 11.50-12.40 | Lina Nilsson | Berkeley University | nilsson@berkeley.edu, | Social Innovator OnRamp: Connecting basic research to specific challenges in society |
| 11. | 9 Dec | 12.40-13.30 | Narahari Sastry | IICT, Hyderabad | gnsastry@gmail.com | Philosophy of Chemistry, Biology, and chemical Biology |
| 12. | 9 Dec | 15.00-15.50 | Ameeta & Aneeta Kumar | | | pHLIP – A beacon of hope in early detection of cancer |
| 13. | 9 Dec | 17.15-18.05 | Ashok Srivastava | Lousiana State University | eesriv@lsu.edu, | Carbon-based Electronics – Transistors and Interconnects at Nanoscale |
| 14. | 10 Dec | 09.00-09.50 | Joseph Sifakis | | | Is Computing a Science? |
| 15. | 10 Dec | 09.50-10.40 | Robert Curl | | | Nanotechnology |

| S No | Date | Time | Speaker | Affiliation | Email address | Topic |
|---|---|---|---|---|---|---|
| 16. | 10 Dec | 10.40-11.30 | Man-Gon Park | PKNU University, Koria | mpark@pknu.ac.kr | Smart Learning Systems for Smart Work Centers toward Ubiquitous World |
| 17. | 10 Dec | 11.50-12.40 | D P Agrawal | University of Cincinnati | dpa@cs.uc.edu | Exploring Cell/Mobile Phones and Wireless Technologies |
| 18. | 10 Dec | 12.40-13.30 | GPS Raghava | IMTECH, Chandigarh | raghavagps@gmail.com, | Bio-informatic approach for designing bio-molecule based therapy |
| 19. | 10 Dec | 15.00-15.50 | | | | |
| 20. | 10 Dec | 17.15-18.05 | D N Talwar | *IUP*, Indiana | talwar@iup.edu, | Novel III-V materials: Physics Characterization and Applications |
| 21. | 11 Dec | 11.50 – 12.40 | Anish Arora | Ohio State University, Columbus | anish@cse.ohio-state.edu | Green Computing with Wireless Sensor Networks |
| 22. | 11 Dec | 12.40-13.30 | Mitali Mukerji | Institute of Genomics and Integrative Biology, Mall Road, Delhi. | mitali@igib.res.in, | Genomics: What, Why and where to? |
| 23. | 11 Dec | 15.00-15.50 | Mangala Narlikar | | | Mathematical Induction and it's uses |
| 24. | 11 Dec | 17.15 – 18.05 | Pinaki Majumdar | HRI, Allahabad | pinaki@hri.res.in, | Visualising Quantum Systems |
| 25. | 12 Dec | 09.00-09.50 | Harish C Joshi | Emory University, Atalanta | harish.joshi@emory.edu, | Microtubules in health and disease |
| 26. | 12 Dec | 09.50 – 10.40 | Viji Draviam Sastry | Cambridge University | viji.draviam@gen.cam.ac.uk, | How are forces generated within cells |
| 27. | 12 Dec | 10.40-11.30 | Madhavi Sastry | | **Madhavi.Sastry@deshaw.com** | Computational modeling and drug design |
| 28. | 12 Dec | 11.50 – 12.40 | Raja Reddy | Retd Director of NIMS, Hyderabad Consultant neuro surgon Apollo, Hyderabad | palvashareddy@gmail.com, | Fluorides are ubiquitous in nature and how they affect human health |
| 29. | 12 Dec | 12.40-13.30 | Mohd Arif | (Retired) Govt. of India, MInistry of Defense, DRDO, Defense | **arif527@rediffmail.com** | Antarctic fauna and their adaptation |

| S No | Date | Time | Speaker | Affiliation | Email address | Topic |
|---|---|---|---|---|---|---|
| | | | | Institute of Bio-Energy Research Haldwani-263139 (Nainital) | | |

**Annexure - 2**

# Panel Discussion

11th Dec 2014 (9 AM to 11.30 AM)
Topic: Fostering innovation

**Objectives:**

Innovation is a need based, natural habit of healthy and active individual. Innovation is important for any society. Innovation is also to be nurtured, if it is not to be sporadic and accidental. Though societies play an important role in supporting innovation, but the responsibility for fostering / nurturing innovation is also with the educational system. This panel discussion focuses on identifying the role of the ed-ucational Institutions and the activities within these institutions to foster innovation.

**Discussion points:**

1. What is innovation ?
2. What are the characteristics of innovative society ?
3. What is the importance of innovation to the educational system/Institute ?
4. What is the role of universities in creating and supporting local and regional in-novation ecosystems ?
5. What preparation is needed in terms of Knowledge, skills, attitudes, environment, and resources to promote/ foster innovation in the students/institutions/universities ?
6. What is relationship between science and innovation ?
7. What is relationship between Technology and Innovation ?
8. Where does innovation stand in relation to technology ?
9. What Industry - Institution interaction is desired to foster/sustain innovation ?
10. What is the relationship between entrepreneurship and innovation ?
11. Should either one of them or both of them be the goals of educational system ?
12. What conditions in the Institution foster innovation ?
13. What conditions in the society foster innovation ?
14. Identi cation of reasons for very low level of Innovation during the past several centuries in India.

**Procedure:**

The chairman would introduce the topic and would invite each of the panelists to give their views on the points raised by the chairman. (The points would be provided to the panelists) After the rst round the chairman may ask the panelists to elaborate any of the points that needed elaboration. He may then invite the audience to raise queries or comments. The audience may also write their suggestions and give them.

**Report:**

A report of the proceedings and recommendations will be prepared and presented in the valedictory session. It will be followed up by the Institution.

Criteria for selection of university of students:

Ranks in the first year M.Sc (for University students) Ranks in the final year M.Sc (for research scholars. Equitable distribution from among four Zones and

university students studying M.Sc were selected based on the rank in the first year M. Sc and the research students were selected based on the rank in the final year M.Sc. IT students were selected based on the rank.

The discipline-wise participation from university stream is as under:

Physics: 39 Chemistry: 61 Biology: 58

Mathematics: 13 IT : 117

In addition, the SAARC countries nominated three participants from Sri Lanka, one from Bangladesh, and one from Pakistan. One person attended from Kuwait. While the Sri Lankan govt bore the travel expenses, the ICTP bore the expenses of Bangladesh and Pakistan.

Scientists: A total of 25 scientists attended the programme, The breakup of the scientists is as under:
Nobel Laureates: 1
Turing award winner: 1
Scientists from abroad: 11
Scientists from India: 15

A total of 11 invited scientists attended from abroad and 15 attended the conclave from within the country and delivered talks. The number of young scientists participated in the conclave is 3.

This year the number of university participants were restricted due to the capacity of the auditorium. While the travel expenses of the school students were borne from Inspire fellowship, the university students were asked to bear their own expenses. Further the university students were restricted to M. Sc final year and PhD programmes from the disciplines of Mathematics, Physics, chemistry and Biology. The IT students came predominantly from IIIT.

ICTP permitted the Institute to print and distribute the book entitled " One hundred reasons to be a scientist". It was a collection of 100 essays written by a number of Nobel Laureates and other eminent scientists.

A total of 29 talks were delivered for the participants. The list of the talks is enclosed as annexure 1 and the schedule of talks is given as Annexure 2.

Besides the talks by the scientists, a panel discussion on "fostering innovation" was organised on 11 Dec, from 9 to 11.30 AM under the chairmanship of Professor Jayant Bhattacharjee. The recommendations of the panel discussion are provided in Annexure 3.

Interaction sessions were conducted on all the afternoons where the participants could interact freely with the scientists. The schedule of interaction sessions is given in Annexure 4.

In the evenings (from 19.30 to 21.00 hrs) cultural programmes were organised. The schedule of cultural programmes is given Annexure 5.

In the interaction programmes, the student sessions were organized, discipline-wise to understand the perspective of the students regarding the status of the science education in the universities. Considering that innovation is the driver for the growth and well being of the society, a panel discussion was organized to capture the perspectives of the eminent participants

from different countries. It was chaired by Prof Jayant Bhattacharjee with the participation of Prof Curl, Prof Sifakis, Profs. Man gon Park, Dharma Agrawal, Anish Arora, Lina Nilsson, Harish Joshi, Somenath Biswas, Radhakrishna. The discussion focused on

What is innovation and characteristics of innovative society, the role of educational systems, preparation is needed in the universities to foster innovation. Dependency relationship between innovation, science, technology and industry collaboration and finally supporting conditions needed in the society for fostering Innovation. The report would be prepared and circulated to all the panelists and put on the conclave site for the participants' views. It will then be sent to MHRD & DST for further follow up.

## 12. Students' Gymkhana 2015

The Students' Gymkhana is now fully functional as the councils have been formed. Following is the list of all the councils with their respective members.

| Student Welfare Council | |
|---|---|
| Vishal Singh (S) | IEC2013010 |
| Kshitij Tripathi | ISM2014501 |
| Abeer Khan | IIT2014001 |
| Ravi Shankar | IEC2014087 |
| Cultural Council | |
| Akash Dubey (S) | IIT2013141 |
| Shikhar Bhatia | IEC2013042 |
| Sarthak Sharma | IIT2014160 |
| Parth Parakh | IEC2014088 |
| Sports Council | |
| Tanmay Binjrajka (S) | IEC2013038 |
| Ashish Reddy | IIT2014116 |
| Ujjain Bana | IIT2014127 |
| Poojita Reddy | IIT2014145 |
| Technical Council | |
| Abhishek Vijayan (s) | IIT2013166 |
| Rajat Bhai | IIT2013030 |
| Sanath Surya | IEC2013077 |
| Saurav Mishra | IBM2013011 |
| Academic Council | |
| Supriya Mishra (S) | IMB2014019 |
| Nipun Jindal | IIT2013102 |
| Aparajita Basu | IBM2013016 |
| Shivam Singh | IEC2014007 |
| Amethi Council | |
| Harshit Gupta (S) | RIT2012048 |
| Jitendra Mohan Prasad | RIT2012036 |
| Mohit Ojha | RIT2013028 |

| | |
|---|---|
| Rupesh Maity | RIT2013066 |
| Harshit Khandelwal | RIT2014059 |
| Varun Singh | RIT2014067 |

## 12.1 Activities of Gymkhana

The Indian Institute of Information Technology, Allahabad has been a center of excellence in academia, sports and technology for over 15 years now. It has pushed the allegorical boundaries, scaled the emblematic mountains and struggled against every metaphorical obstacle thrown our way. The aim of any education system is to produce leaders who can contribute to the society they are a part of. Sports and extracurricular activities has for long, been considered a brilliant tool to groom and mold students into team players and leaders. IIIT A has continually endeavored to push the boundaries in all disciplines. IIIT-Allahabad provides excellent infrastructure for its residents to ensure that academic development is duly supplemented by sufficient physical and personality development as well.

Today the institute is offering its students a creative ecosystem where inquisitiveness and ingenuity is not only encouraged but also rewarded. A healthy amalgamation of academic, sports and cultural undertakings is helping students excel in what they want, making the institute a haven for visionaries and game changers. We have come a long way in such a short time and I hope we continue on this exponential growth trajectory and go far beyond the figurative skies of human struggle and triumph.

Indian Institute of Information Technology, Allahabad has created a self governing democratic organization called Students' Gymkhana. The Students' Gymkhana is empowered to achieve the following objectives with the active help and support of its members and the infrastructure available at its disposal:

1. To foster and develop all student activities in the Institute.
2. To promote and develop organizational abilities in students.
3. Identify student issues and promote discussion on them.

4. To develop a well-informed, articulate and participative student community life, and to increase social awareness.

Student's Gymkhana together with its councils and societies, is successfully organizing several events in the Institute. Some of the important events organized by various councils of Gymkhana are listed below:

1. **Sports Council**

   The IIIT Allahabad Sports Society brings you the spirit of life, the spirit of competition, the spirit to win, the spirit to participate and ultimately prove the one within you. We have the energy, the courage and the enthusiasm to bring to you the most lively sports events of IIITA. It's events like Gully Cricket, Street Football etc. are most interesting during fest.

   The Sports Council of Gymkhana Organize three days Annual Sports Meet named Asmita in the Month of February Every Year. During Asmita, various competitive track and field events are organized. Asmita gives a platform to the students, faculty and staff members of the Institute to showcase their physical and mental ability to compete in various track and field events organized during the three days of February.

   In addition to Asmita, Sports Council also organizes the annual Independence Day marathon and participates in other intra college events. Teams from IIIT Allahabad have participated in sports meets in several colleges including IIIT Gwalior, MNNIT Allahabad, and IIT BHU among others and have outperformed teams from all across the country to make us all proud.

2. **Technical Council**

   Without our amazing Technical Council, we wouldn't have half of the events at our fests. Continuing with our marvel superheroes theme, the Technical Society is definitely is the Batman -the silent guardian and watchful protector looking out for all of us.

   The Technical Council of Gymkhana Organizes three days Annual Technical Festival named Aparoksha in the Month of March every year. During Aparoksha, various competitive technical events are organized. Aparoksha gives a platform to the students, faculty and staff members of the Institute to showcase their technical and analytical ability to compete and won various events organized during the three days of March. Apart from competitive events many technical workshops are being organized during Aparoksha which let the students to have hands on experience in the fields of many upcoming technologies.

3. **Cultural Council**

   This council is responsible for the promotion cultural activities in order to preserve the heritage of the Institute and inculcate among students, a sense of cultural unification.

   The Cultural Council of Gymkhana Organizes three days Annual Cultural Festival named Effervescence in the Month of October Every Year. During Effervescence, various competitive cultural events are organized.

Effervescence gives a platform to the students, faculty and staff members of the Institute to showcase their extracurricular ability to compete and won various events organized during the three days of October. Apart from competitive events many workshops and other fun filled activities are organized during Effervescence which let the students to de-stress from the academic activates and rejuvenate them to perform better in the academic activities. The events organized during Effervescence are as follows:

**a. Model United Nations**

The Literary Club of the institute successfully conducted the IIITA Model United Nations Conference for the first time ever. The two day conference needs a special mention, as it tested the mettle of a student as a delegate and representative of another country and helped them in transforming as better citizens and leaders.

**b. Cognoscentia**

One of the most awaited events, the brain wreaking quiz contest witnessed participation from some of the best quizzers of the nation, and brought out the best of brains and most aware minds. The audience was enthralled by the vast knowledge of the participants.

**c. Trash Talk**

It was an informal event with burning topics in which the participants had to speak out their minds on a slightly different and unusual topic which was given to them by a trash master.

**d. FootLoose (Group Dance)**

The main stage event on is" October was judged by eminent choreographers of the city and saw massive participation from different institutes and dance academies.

**e. Carpediem (Solo Dance)**

One cannot forget the solo dance competition of Effervescence, Carpe Diem where the participants set the stage on fire. This year the heart grooving event took place on17th October and had participation from many top notch colleges.

**f. La Frenze(Duet Dance)**

The third and final event of the dance society took place on 16th October where more than 15 teams performed dance numbers and the ones that qualified for the second round were supposed to perform impromptu face offs.

Stunning Du was introduced first time in this year. This was an event to discover the most talented duo in the Institute. The objective of this event was to find the imagination, creativity, and flexible ways of thinking

among the participants. The reason of forming couples at the time was to find their adaptability among them.

Apart from above major events, Student Gymkhana has many societies who are actively organizing many other competitive events and non competitive events round the year. The detail of events organized by various societies of Gymkhana is as follows:

**4. Literary Society**

It organizes debates, extempore and other literary competitions. It is also responsible for publishing IMHO (in English) and swacchanda (in Hindi), two magazines for in-campus circulation. Literary Society is the place to take halt and unveil your talent of appreciating the beauty of expression.

Literary Society marked the onset of a new tradition at IIIT-ALLAHABAD by taking the celebration of Republic Day by organizing SHAURYA -the republic week A plethora of events were organized by the club throughout the week. It also organize ABHIVYAKTI, An open creative writing competition saw an overwhelming participation of over writers from the college and MAN THAN, a parliamentary debate. Manthan saw a huge participation of team from the college and was held for 3 days.

**5. Acoustics and Media Society**

The institute is proud to have the services of this Society, which has been very efficient in managing lights, audio equipment, visual recording of various events staged at IIIT -A. All the audio and lights works of college events taken care by this society as a whole. Learners are also welcomed.

**6. Music Society**

The Music Society of Gymkhana is responsible to provide a platform to the students to showcase their musical talent. The society apart from having a college band has been successful in putting up wonderful performances and also being helpful in letting the student bite the music bug. The society attends various concerts and musicals during the year.

**7. Dance Society**

Synergy of thought, symphony of movement, artistic expression and a sense of idyllic beauty - this symbolizes the USHMA of the dance society. It is one of the most active societies of IIIT -A. It manages dance performances in Effervescence and other society events. The society has performed various dance forms.

**8. Dramatics Society**

The dramatics society at IIIT Allahabad, RangTarangini is responsible for organizing workshops (acting as well as scriptwriting) and holding drama competitions where young talent can be showcased. The society has been active in staging excellent performances both in, Hindi and English at various occasions.

**9. The Fine Arts Society**

The Fine Arts Society endeavors all of its members to pull of something unique, creative and out of the box each time. It is for the art lovers of the institute. All the creative work and art in and around the campus you see may very likely be a part of their work and creativity.

**10. Social Outreach Programs of the Institute**

IIIT Students are also involved in organizing many social outreach activities like PRAYAS, which helps economically weaker students in their studies and work towards their overall upliftment. IIIT also organizes many blood donation camps round the year to help the needy people. IIIT also involved in promoting SWATCH BHARAT ABHIYAN and time to time organize activities and events under its banner.

# Annexures

**Annexures -01**

## 13. Annexures

### The IIIT-A Society

| | | |
|---|---|---|
| 1. | Sri P.R. Dasgupta<br>Hon'ble Chairman, IIIT-A Society<br>Director<br>Bangalore International Centre, TERI Complex<br>Bangalore – 560071 | Chairman |
| 2. | Secretary<br>Deptt. of Education, MHRD | Member |
| 3. | Secretary<br>Deptt. of Space<br>Govt. of India | Member |
| 4. | Secretary<br>Deptt. of Atomic Energy<br>Govt. of India | Member |
| 5. | Secretary<br>Deptt. of Electronics<br>Govt. of India | Member |
| 6. | Secretary<br>Deptt. of Science and Technology<br>Govt. of India | Member |
| 7. | Director General<br>NIC, New Delhi | Member |
| 8. | Vice Chairman/Member Secretary<br>AICTE, New Delhi | Member |
| 9. | President<br>National Academy of Sciences, Allahabad | Member |
| 10. | Financial Adviser, MHRD | Member |
| 11. | Vice Chancellor<br>Allahabad University | Member |
| 12. | Director<br>IIT, Kanpur | Member |
| 13. | Director<br>Institute of Technology<br>BHU | Member |
| 14. | Prof. Ashoka Chandra<br>Director, IAMR<br>New Delhi | Member |
| 15. | Prof. H.C. Pandey<br>Vice Chancellor Emeritus<br>Ranchi | Member |
| 16. | Director<br>IIIT&M, Gwalior | Member |
| 17. | Prof. Dutta Majumdar<br>Calcutta | Member |

| | | |
|---|---|---|
| 18. | Prof. H.S. Mani<br>Director, MRI, Allahabad | Member |
| 19. | Prof. A.K. Gupta<br>JK Institute, Allahabad | Member |
| 20. | Commissioner<br>Allahabad Division<br>Allahabad | Member |
| 21. | Principal Secretary (In-change IT)<br>U.P. Government | Member |
| 22. | Dr. Y.K. Sharma<br>DDG, NIC | Member |
| 23. | Representative of Bureau of Technical Education, MHRD | Member |
| 24. | CMD<br>Hindustan Futuristic Communications Ltd.<br>Himachal Pradesh | Member |
| 25. | CMD, WIPRO | Member |
| 26. | CMD, INFOSYS | Member |
| 27. | Executive Director, C-DAC | Member |
| 28. | CMD, Reliance Telecommunications | Member |
| 29. | CMD, Bharati Telecom | Member |
| 30. | Director / OSD<br>IIIT, Allahabad | Member Secretary |

**Annexures -02**

# Board of Management

| | | |
|---|---|---|
| 1 | Prof. Somenath Biswas<br>Director<br>IIIT Allahabad | Chairperson |
| 2 | Prof. Ganesh Pandey, FNA, FNASc, FASc<br>Director<br>Centre for Biomedical Magnetic Resonance (CBMR)<br>Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGIMS) Lucknow | Member |
| 3 | Prof. Manindra Agarwal<br>Dean, Resource Planning & Generation & N Rama Rao Chair Professor<br>Dept. of CSE, IIT Kanpur | Member |
| 4 | Prof. R.K. Shyamasundar<br>FIEEE, FACM<br>Senior Professor & JC Bose National Fellow<br>Faculty of Technology & Computer Science<br>Tata Institute of Fundamental Research, Mumbai | Member |
| 5 | Prof. R.K. Sharma<br>Director<br>Senior Professor & Head, Dept. of Nephrology Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGIMS) Lucknow | Member |
| 6 | Prof. G.C. Nandi<br>Dean (Academic)<br>IIIT-Allahabad | Member |
| 7 | Prof. O.P. Vyas<br>Dean (R&D)<br>IIIT- Allahabad | Member |
| 8 | Prof. S. Sanyal<br>Professor<br>IIIT Allahabad | Member |
| 9 | Prof. U.S. Tiwary<br>Professor<br>IIIT Allahabad | Member |
| 10 | Prof. B.R. Singh<br>Professor<br>IIIT- Allahabad | Member<br>Secretary |

**Annexures -03**

# Academic Council

| | | |
|---|---|---|
| 1 | Prof. Somenath Biswas<br>Director<br>IIIT Allahabad | Chairperson |

| | | |
|---|---|---|
| 2 | Prof. G.C. Nandi<br>Dean(A)<br>IIIT Allahabad | Member |
| 3 | Prof. P. B. Sharma<br>Vice Chancellor<br>Delhi Technological University | Member |
| 4 | Prof. Bharat Bhasker<br>Professor, Information Technology & Systems<br>Indian Institute of Management (IIM), Lucknow | Member |
| 5 | Prof. K. N. S. Yadava<br>Vice Chancellor<br>Rani Durgavati University, Jabalpur | Member |
| 6 | Prof. A.K. Bakshi<br>Vice Chancellor<br>Uttar Pradesh Rajarshi Tandon Open University, Allahabad | Member |
| 7 | Prof. Jayanta Kumar Bhattacharjee<br>Director<br>Harish Chandra Research Institute (HRI), Allahabad | Member |
| 8 | Prof. S.K. Kak<br>Vice Chancellor<br>Mahamaya Technical University, Noida | Member |
| 9 | Prof. R.C. Tripathi<br>Professor<br>IIIT Allahabad | Member |
| 10 | Prof. M. Radhakrishna<br>Professor<br>IIIT Allahabad | Member |
| 11 | Prof. G.N. Pandey<br>Professor<br>IIIT Allahabad | Member |
| 12 | Prof. Sudip Sanyal<br>Professor<br>IIIT Allahabad | Member |
| 13 | Prof. Hari Prakash<br>Professor<br><br>IIIT Allahabad | Member |
| 14 | Prof. Ramji Lal<br>Professor<br>IIIT Allahabad | Member |

| | | |
|---|---|---|
| 15 | Prof. B.R. Singh<br>Professor<br>IIIT Allahabad | Member |
| 16 | Prof. U.S. Tiwary<br>Professor<br>IIIT Allahabad | Member |
| 17 | Prof. Anupam Agarwal<br>Professor<br>IIIT Allahabad | Member |
| 18 | Dr. Anurika Vaish<br>Associate Professor<br>IIIT Allahabad | Member |
| 19 | Dr. Shekhar Verma<br>Associate Professor<br>IIIT Allahabad | Member |
| 20 | Dr. Shirshu Verma<br>Associate Professor<br>IIIT Allahabad | Member |
| 21 | Dr. T. Lahiri<br>Associate Professor<br>IIIT Allahabad | Member |
| 22 | Dr. Pavan Chakraborty<br>Assistant Professor<br>IIIT Allahabad | Member |
| 23 | Dr. Vrijendra Singh<br>Assistant Professor<br>IIIT Allahabad | Member |
| 24 | Dr. B.S. Sanjeev<br>Assistant Professor<br>IIIT Allahabad | Member |
| 25 | Prof. O. P. Vyas<br>Dean (R&D)<br>IIIT Allahabad | Member Secretary |

**Annexures -04**

# Finance Committee

| | | |
|---|---|---|
| 1 | Prof. Somenath Biswas<br>Director<br>IIIT Allahabad | Chairperson |
| 2 | Prof. G.C. Nandi<br>Dean(A)<br>IIIT Allahabad | Member |
| 3 | Sri Navin Soi | Member |

| | | |
|---|---|---|
| | Director (Finance)<br>Dept. of H.E., MHRD, New Delhi | |
| 4 | Sri S.N. Jha, IAS (Retd.)<br>Former Secretary, Govt. of India<br>Noida, U.P. | Member |
| 5 | Sri Chandra Lal<br>Retd. AG(A&E)<br>U.P. Allahabad | Member |
| 6 | Prof. Ramesh Chandra<br>Founder Director<br>Dr. B.R. Ambedkar Centre for Biomedical Research<br>University of Delhi | Member<br>(Co-opted) |
| 7 | Dr. Asheesh Kumaar<br>Deputy Registrar (Administration)<br>IIIT-Allahabad | Member<br>Secretary |

**Annexures -05**

# Building Works Committee

| | | |
|---|---|---|
| 1 | Prof. Somenath Biswas<br>Director<br>IIIT Allahabad | Chairperson |
| 2 | Prof. G.C. Nandi<br>Dean(A)<br>IIIT Allahabad | Member |
| 3 | Director<br>MHRD, New Delhi | Member |
| 4 | Sri S.K. Khanna | Member |

| | | |
|---|---|---|
| | Retd. Chief Engineer CPWD, New Delhi<br>& Advisor (Technical), IIIT-Allahabad | |
| 5 | Sri S.C. Singhal<br>Superintending Engineer (UPPWD)<br>& Advisor (Technical), IIIT-Allahabad | Member |
| 6 | Prof. S.K. Srivastava<br>Emeritus Fellow (AICTE)<br>Member, Executive Council, West Bengal Technical University<br>Varanasi & Faculty, IIIT-Allahabad | Member |
| 7 | Prof. R.C. Tripathi<br>Professor<br>IIIT Allahabad | Member |
| 8 | Dr. Asheesh Kumaar<br>Deputy Registrar (Administration)<br>IIIT Allahabad | Member |
| 9 | Sri H.D. Tiwari<br>Advisor (Finance)<br>IIIT Allahabad | Member<br>Secretary |

**Annexures -06**

# Institute Placements 2014-15

| Sl.No. | Name | PLACED IN |
|---|---|---|
| 1. | Amit Kumar Singh | Accenture |
| 2. | Pramila Choudhary | Accenture |
| 3. | akhilesh kumar singh | Accenture |
| 4. | PIKANSHU KUMAR | Accenture |
| 5. | Abhishek Singh | Accenture |
| 6. | Ashwaray Raj Singh Chauhan | Accenture |
| 7. | NIKHIL ANAND | Accenture |
| 8. | Piyush Agarwal | Accenture |
| 9. | Ravi Bhaskar | Accenture |
| 10. | Krishna Kanhaiya | Accenture |
| 11. | Manvinder Singh | Accenture |

| | | |
|---|---|---|
| 12. | Ashik Shrestha | Accenture |
| 13. | Himanshu Singh | Accenture |
| 14. | Rahul Pal | Accenture |
| 15. | Ajeet Kumar Meena | Accenture |
| 16. | Upharika Sagar | Accenture |
| 17. | MONICA SINGH | Accenture |
| 18. | Priyanka Singh | Accenture |
| 19. | nikhil kumar singh | Accenture |
| 20. | kamnee maran | Accenture |
| 21. | Vishal Chaudhary | Accenture |
| 22. | Anuj Khandelwal | Accenture |
| 23. | Saurabh Rawal | Accenture |
| 24. | Sumit Kumar | Accenture |
| 25. | Rohit Kumar | Accenture |
| 26. | Anchit | Accenture |
| 27. | Monika | Accenture |
| 28. | GAURAV VERMA | Accenture |
| 29. | Atul Sakhala | Accenture |
| 30. | Pavan Kumar | Accenture |
| 31. | NAVEEN KUMAR | Accenture |
| 32. | PRAKASH KUMAR | Accenture |
| 33. | ARVIND DAS | Accenture |
| 34. | Aman Aggarwal | Accenture |
| 35. | Rajdeep Singh | Accenture |
| 36. | Atul Kumar | Accenture |
| 37. | vishwanath arya | Accenture |
| 38. | vinay pratap | Accenture |
| 39. | Sumit Kumar Singh | Accenture |
| 40. | AMAN VERMA | Accenture |
| 41. | Jayant Singh | Accenture |
| 42. | Pretty Meena | Accenture |
| 43. | Rohit kumar | Accenture Sapient Nitro |
| 44. | Mohammad Gauhar Haris | ACCOLITE |
| 45. | Sumit Bana | ACCOLITE |
| 46. | sudheer singh | ACCOLITE |
| 47. | Rupak Chakraborty | ADOBE |
| 48. | Shivam Mishra | ADOBE |
| 49. | Vishal Srivastava | ADOBE |
| 50. | Himalay Mohan Joriwal | AMAZON |
| 51. | Aditya Chaturvedi | AMAZON |
| 52. | Prateek gupta | AMAZON |

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|---|---|---|
| 53. | Uma Sharma | AMAZON / Google |
| 54. | Aman Agarwal | Apigee |
| 55. | Swarn Avinash Kumar | Apigee |
| 56. | Saloni Agarwal | ARISTA |
| 57. | Sidharth Singla | ARISTA |
| 58. | Kshitij Rastogi | ARISTA Qualcomm |
| 59. | Mohd Shahzad | Avanti |
| 60. | Sumit Kumar Satnalika | Belzabar |
| 61. | TANISH GUPTA | Belzabar |
| 62. | mohit sonkar | Belzabar |
| 63. | N.Surya Teja | Belzabar |
| 64. | Aman Verma | Blackrock |
| 65. | Sunil | BLACKROCK |
| 66. | Siyaram malav | Blackrock |
| 67. | MAYANK DIDWANIA | Blackrock |
| 68. | Mohit Tater | Bluejeans |
| 69. | Siddharth | CISCO |
| 70. | Parvez | CISCO |
| 71. | Prabhat Kulratna | CISCO |
| 72. | vikas sharma | Cisco |
| 73. | Ankit Jat | CISCO |
| 74. | Himanshu Verma | CITI |
| 75. | Sudhanshu Agarwal | CITI |
| 76. | Vijender Singh Aswal | CITI |
| 77. | Jiten Agarwal | CITI |
| 78. | SHAILENDRA PRATAP SINGH | CITI |
| 79. | Megha Garg | CITI |
| 80. | Divanshu Garg | DEVFACTORY De Shaw Google |
| 81. | Aviral Sahai | DIRECTI |
| 82. | Swapnil R Mehta | DIRECTI |
| 83. | Shubham sharma | DIRECTI / DevFactory |
| 84. | Ankur Raj | EXL |
| 85. | Ishan Gupta | EXL |
| 86. | SHIVANGI SINGH | EXL |
| 87. | Sudhanshu Bansal | EXL |
| 88. | abhishek singh chauhan | EXL |
| 89. | B C N Vardhan | EXL |
| 90. | Anjali Sharma | Factset |
| 91. | Anupama Gupta | Factset |
| 92. | NITISH JAIN | Factset |
| 93. | Anuradha Yadav | Factset |

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|---|---|---|
| 94. | Ashutosh Gupta | Factset |
| 95. | Surabhi Singh | Factset |
| 96. | Gagandeep singh | Factset |
| 97. | Mohammad Talha Khan | FLIPKART |
| 98. | Archit Mittal | FLIPKART |
| 99. | Suyash Agarwal | FLIPKART |
| 100. | Shubham Tyagi | FLIPKART |
| 101. | Aman Shrivastava | FLIPKART |
| 102. | Aaquib Khwaja | FLIPKART |
| 103. | Ankesh Maheshwari | FLIPKART |
| 104. | Chintu Kumar | FLIPKART |
| 105. | Nilendu Das | FLIPKART |
| 106. | Samyuktha Kodali | FRACTAL |
| 107. | Ayush Dobhal | FREESCALE |
| 108. | Akshay Gupta | FUTURES FIRST |
| 109. | Divya Mehto | FUTURES FIRST |
| 110. | Abhishek Singh | HashedIn |
| 111. | Hemny Singh | HashedIn |
| 112. | Manmeet Kaur | HeroMoto |
| 113. | Rishabh Bindal | Hidden Reflex |
| 114. | Rahul Gupta | Hike |
| 115. | Prakhar pratap singh solanki | HT Media |
| 116. | Navneet suman | HT Media |
| 117. | Himanshu Pal | HT Media |
| 118. | Vamshi Krishna S | HT Media |
| 119. | SHANI SINGH | HT Media |
| 120. | murarishetti santhosh mohan | IBM |
| 121. | Patlola Praveen Kumar Reddy | IBM |
| 122. | Sreekanth Reddy Tippani | IBM |
| 123. | Gunda Ravi theja | IBM |
| 124. | DIMPI MILI | IBM |
| 125. | ASHWIN SINHA | IBM |
| 126. | Prachi Jain | IBM |
| 127. | Khushal Gautam | IBM |
| 128. | Rishav Raushan | IBM |
| 129. | Hitesh Kumar | IBM |
| 130. | Nurzin Angmo | IBM |
| 131. | Nikhil Passey | IBM |
| 132. | manoj kumar verma | IBM |
| 133. | SUNITA KUMARI | IBM |
| 134. | Deepanshi Maheshwari | IBM Sapient Nitro |

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|---|---|---|
| 135. | B SAI NAVEEN | INFOEDGE |
| 136. | Ashutosh Gupta | INFOEDGE |
| 137. | saurabh kushwaha | INFOEDGE |
| 138. | Niraj Kumar Bittu | INFOEDGE |
| 139. | Khirod Kant Naik | INFOEDGE |
| 140. | Ankit Kumar | Infosys |
| 141. | Saurabh Singh | Infosys |
| 142. | Harshit Pahuja | Infosys |
| 143. | Vaibhav Dixit | Infosys |
| 144. | Vijay Kumar Yadav | Infosys |
| 145. | Abhinav Mishra | Infosys |
| 146. | Dara Kavya | Infosys |
| 147. | Mohan Lal | Infosys |
| 148. | AMIT KUMAR | Jigserv |
| 149. | Mohammad Maaz Khan | Jobtessio |
| 150. | Praveen Kumar | Juniper |
| 151. | Shivam Aggarwal | JUNIPER |
| 152. | Sarita Yadav | Juniper |
| 153. | Deepak kumar Dhakad | Juniper |
| 154. | Sumit Parsa | Juniper |
| 155. | Vishwajeet singh | Juniper |
| 156. | Praneeth Daitha | Juniper |
| 157. | Palash Gupta | Juniper |
| 158. | Vikash Kumar | Juniper Leafair |
| 159. | Pramiti Goel | Kritikal |
| 160. | Harshi Agarwal | Kritikal |
| 161. | TARUN SHARMA | Kritikal |
| 162. | amit kumar kamboj | Kuliza |
| 163. | Sawai Singh Parihar | Kuliza |
| 164. | amanpreet singh | Kuliza |
| 165. | shashi shekhar | Kuliza |
| 166. | Tabrez Khan | Leafair |
| 167. | SHREYA SINGH | MAQ |
| 168. | Prerna Jeslani | MAQ |
| 169. | Nagaragiri Sai Kiran | MAQ |
| 170. | Amit kumar | MAQ |
| 171. | ANKIT BATHLA | MAQ |
| 172. | Shantanu Agrawal | MORGAN STANLEY |
| 173. | Aayush Varshney | MORGAN STANLEY |
| 174. | Snehasish Roy | MORGAN STANLEY |
| 175. | Divya Porwal | Mu Sigma |

| | | |
|---|---|---|
| 176. | Rahul Srivastava | Mu Sigma |
| 177. | Senjuti Kundu | Mu Sigma |
| 178. | Shivam Sahu | Mu Sigma |
| 179. | Suresh Kumar Yadav | MyDeals 24x7 |
| 180. | Akshat Adawal | MyDeals 24x7 |
| 181. | Lakhan Singh | MyDeals 24x7 |
| 182. | rakhi meena | MyDeals 24x7 |
| 183. | Abhishek Kumar | MyDeals 24x7 |
| 184. | Mohd Ahmad | MyDeals 24x7 |
| 185. | Willson Birua | MyDeals 24x7 |
| 186. | SUSHMITA AGRAWAL | Myntra |
| 187. | hemant kumar | Myntra |
| 188. | Gaurav Srivastava | Nagarro |
| 189. | Abhimanyu Singh | Nagarro |
| 190. | MANOJ SINGH ADHIKARI | Nagarro |
| 191. | Waseem Akram | NEC Tech |
| 192. | Alok Royal | NEC Tech |
| 193. | shailendra kumar | NEC Tech |
| 194. | Mohammad Zeeshan | NEC Tech |
| 195. | Yash Vardhan Singh | Nucleus Software |
| 196. | shivam | Nucleus Software |
| 197. | Nidhi Chincholikar | OFSS |
| 198. | KUNAL SRIVASTAVA | OFSS |
| 199. | Charul | PAGALGUY |
| 200. | VIJAY KUMAR SWARNKAR | PAYU |
| 201. | Shweta Agrawal | PAYU |
| 202. | Shivam Dixit | payu |
| 203. | Shashwat Tiwari | PAYU |
| 204. | Atul Vaibhav | PAYU |
| 205. | D SRIKAR BHARGAV | PAYU |
| 206. | Yashpreet Singh | PAYU |
| 207. | Shiv Shankar Verma | PAYU/Jobtessio |
| 208. | Koteswar | Qualcomm |
| 209. | CHHAYA CHAUDHARY | Qualcomm |
| 210. | Swapnil Shrivastava | Qualcomm |
| 211. | Namrata Singh Chauhan | RBS |
| 212. | PALASH GUPTA | RBS |
| 213. | Niket gupta | SAP labs |
| 214. | saurabh agrawal | SAP labs |
| 215. | Lakshya Goel | SAP labs |
| 216. | vignan lavu | SAP labs |

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|---|---|---|
| 217. | Vikhyat Tandon | SAP labs |
| 218. | Upendra Gupta | SAP labs |
| 219. | Nayan Chauhan | SAP labs |
| 220. | Prashant Joshi | SAP labs |
| 221. | Navaz Mannan | SAP labs |
| 222. | Abhishek Maurya | Sapient Nitro |
| 223. | Abhinav Tripathi | Sapient Nitro |
| 224. | rishabh sinha | Sapient Nitro |
| 225. | Monika Sharma | Sapient Nitro |
| 226. | Udit Kumar | Sapient Nitro |
| 227. | JAI PRAKASH | Sigmoid MyDeals 24x7 |
| 228. | Manish Kumar | SUTA |
| 229. | Nikhil Sanwal | Sutra |
| 230. | Vishal Tyagi | Sutra |
| 231. | Naveen Jindal | sutra |
| 232. | akarshan arora | TCS |
| 233. | Pramod Kumar Maurya | TCS |
| 234. | Neha Sah | TCS |
| 235. | Anshu Rani | TCS |
| 236. | Ashok Danga | TCS |
| 237. | Vishal Gangwar | TCS |
| 238. | sudhanshu gaur | TCS |
| 239. | Ankit Kumar Singh | TESCO |
| 240. | Himanshu Jain | TESCO |
| 241. | Shubham Kesarwani | TESCO |
| 242. | Mukesh Kumar | TESCO |
| 243. | DHIRENDRA KUMAR | TESCO |
| 244. | Karshit Kumar | TESCO |
| 245. | Vaibhav Singh | TESCO |
| 246. | Prakhar Agarwal | TESCO Nucleus Software |
| 247. | Akshay Chaturvedi | Thorogood |
| 248. | Arpit Dixit | Verizon |
| 249. | Ankur Shukla | Verizon |
| 250. | Jatin Mehta | VIZ |
| 251. | Akshay Gupta | VIZ |
| 252. | Aman Kumar Raj | VIZ |
| 253. | Neelesh Nirmal | VIZ |
| 254. | Priyansh Goel | WALMART |
| 255. | Amanraj Varshney | WALMART |
| 256. | Deepak Agrawal | WALMART |
| 257. | Nishtha Rai | WALMART |

| | | |
|---|---|---|
| 258. | Ishabh Gupta | WALMART |
| 259. | Shubham Agarwal | WALMART |
| 260. | Aradhya Upadhyay | WALMART |
| 261. | Amit Kumar | WALMART |
| 262. | Prabhat Kumar | WALMART |
| 263. | Aman Choudhary | WALMART / DevFactory |
| 264. | SUSHANT KUMAR | WhistleApp |
| 265. | Raman Goyal | XPEDIA |
| 266. | Nikita Gupta | XPEDIA |
| 267. | Raghvendra Singh | XPEDIA |
| 268. | Shubham Mishra | XPEDIA |
| 269. | Harsh Sinha | XPEDIA |
| 270. | Alisha Singh | XPEDIA |
| 271. | Ratnesh Kumar Ray | ZopHop |
| 272. | Akash Bhatia | ZopHop |
| 273. | Nitesh Lulla | ZS |
| 274. | Shalini Sahu | ZS |
| 275. | Jyotirmay Bhaskar | ZS |
| 276. | Nityanand Srivastava | ZS |
| 277. | Jyoti | ZS |
| 278. | AAKASH ARUN | ZS |
| 279. | kunwar krishna ayush | ZS |
| 280. | Akhil Sharma | ZS |
| 281. | Anuj Sharma | ZS |
| 282. | Shivank | ZS |
| 283. | Parth Sharma | ZS |

**Annexure – 07**

**Nodal Officer for implementation of the Cigarettes and other Tobacco Products Act, 200 - Dr. Sudip Sanyal**

**Annexure – 08**

## ACADEMIC STAFF 2014-15

| S.No | Name | Designation |
|---|---|---|
| 1. | Prof. G. C. Nandi | Professor |
| 2. | Prof. R. C. Tripathi | Professor |
| 3. | Prof. U.S. Tiwary | Professor |
| 4. | Prof. Sudip Sanyal | Professor |
| 5. | Prof. O. P. Vyas | Professor |
| 6. | Prof. Ramji Lal | Professor |
| 7. | Prof. Hari Prakash | Professor |
| 8. | Prof. G. N. Pandey | Professor |
| 9. | Prof. M. Radhakrishna | Professor |
| 10. | Prof. Krishna Mishra | Professor |

| | | |
|---|---|---|
| 11. | Prof. B. R. Singh | Professor |
| 12. | Prof. Anupam | Professor |
| 13. | Dr. Shekhar Verma | Associate Professor |
| 14. | Dr. Anurika Vaish | Associate Professor |
| 15. | Dr. Tapobrata Lahiri | Associate Professor |
| 16. | Dr. Shirshu Verma | Associate Professor |
| 17. | Dr. C. V. S. Siva Prasad (Under Suspension) | Associate Professor |
| 18. | Dr. Sanjeev B. S. | Assistant Professor |
| 19. | Dr. Vrijendra Singh | Assistant Professor |
| 20. | Dr. Madhvendra Mishra | Assistant Professor |
| 21. | Dr. Pavan Chakraborty | Assistant Professor |
| 22. | Dr. Vijayshri Tewari | Assistant Professor |
| 23. | Dr. Vijay Kumar Chaurasiya | Assistant Professor |
| 24. | Dr. Pritish Kumar Varadwaj | Assistant Professor |
| 25. | Dr. Manish Kumar | Assistant Professor |
| 26. | Dr. Ashutosh Mishra | Assistant Professor |
| 27. | Dr. Neetesh Purohit | Assistant Professor |
| 28. | Dr. Sanjai Singh | Assistant Professor |
| 29. | Dr. Abhishek Vaish | Assistant Professor |
| 30. | Dr. Rajat Kumar Singh | Assistant Professor |
| 31. | Dr. Manish Goswami | Assistant Professor |
| 32. | Dr. Subramanin Venkatesan | Assistant Professor |
| 33. | Dr. Sonali Agarwal | Assistant Professor |
| 34. | Dr. Pragya Singh | Assistant Professor |
| 35. | Dr. Pramod Kumar | Assistant Professor |
| 36. | Dr. Akhilesh Tiwari | Assistant Professor |
| 37. | Dr. Amit Prabhakar | Assistant Professor |
| 38. | Dr. Guttula Satyavani | Assistant Professor |
| 39. | Dr. Sangeeta Singh | Assistant Professor |
| 40. | Dr. Satish Kumar Singh | Assistant Professor |
| 41. | Dr. Shailendra Kumar | Assistant Professor |
| 42. | Dr. Nidhi Mishra | Assistant Professor |
| 43. | Dr. Rahul Kala | Assistant Professor |
| 44. | Dr. Pooja Mishra | Assistant Professor |
| 45. | Dr. Bibhas Ghosal | Assistant Professor |
| 46. | Dr. Rekha Verma | Assistant Professor |
| 47. | Dr. Krishna Pratap Singh | Faculty on Contract |
| 48. | Dr. Ranjit Singh | Faculty on Contract |
| 49. | Dr. Pravin Kumar | Faculty on Contract |
| 50. | Dr. Ranjana Vyas | Faculty on Contract |
| 51. | Dr. Lokendra Kumar Tiwari | Faculty on Contract |
| 52. | Dr. Sitangshu Bhattacharya | Assistant Professor on Tenure Track Model |
| 53. | Dr. Prasanna Kumar Misra | Ad-hoc Faculty |
| 54. | Dr. Ayon Ganguly | Ad-hoc Visiting Faculty |
| 55. | Sri. Arun Kant Singh | Ad-hoc Visiting Faculty |
| 56. | Shri. Jagpreet Singh | Ad-hoc Visiting Faculty |

## Non-Teaching Staff (2014-15)

| S.No | Name | Designation |
|---|---|---|
| 1. | Dr. Asheesh Kumaar | Deputy Registrar (Administration) |
| 2. | Dr. Seema Shah | Deputy Registrar (Establishment) |
| 3. | Mr. Pradeep Kumar Jain | Chief Executive Secretary |
| 4. | Mr. Mithilesh Mishra | System Analyst |
| 5. | Dr. K. K. Tiwari | Assistant Registrar (Finance) |
| 6. | Mr. Ranjeet Banerjee | Assistant Registrar (Exam) |
| 7. | Mr. Lok Nath Sharma | Security Officer |

| | | |
|---|---|---|
| 8. | Mr. Pankaj Mishra | Senior Information Assistant |
| 9. | Mr. Prashant Srivastava | Programmer |
| 10. | Mr. Mukesh Rawat | Personal Secretary |
| 11. | Mr. Vivek Nagar | Personal Secretary |
| 12. | Mr. Gaj Raj Singh | Junior Engineer |
| 13. | Mr. Akhilesh Kumar | Junior Engineer |
| 14. | Mr. Sivakant Tripathi | Junior Engineer |
| 15. | Mr. Yogesh Kardam | Computer Operator |
| 16. | Mr. Vivekanand Sinha | Computer/ Data Processer |
| 17. | Mr. Durgesh Kumar | Data Processor/Data Operator |
| 18. | Mr. Santosh | Data Processor/Data Operator |
| 19. | Mr. Shailendra Singh | Technical Assistant/Data Processor |
| 20. | Mr. Kaushal Kumar Singh | Technical Assistant/Data Processor |
| 21. | Mr. Sanjiv Kumar | Technical Assistant/Data Processor |
| 22. | Mr. Santosh Kumar Mishra | Technical Assistant/Data Processor |
| 23. | Mr. Ashutosh Shukla | Technical Assistant/Data Processor |
| 24. | Mr. Himanshu Pandey | Technical Assistant/Data Processor |
| 25. | Mr. Rajit Ram Yadav | Technical Assistant/Data Processor |
| 26. | Mr. K. S. Aeron | Accountant |
| 27. | Mr. Rajeev Kumar Bhatia | Accountant |
| 28. | Ms. Shweta Gupta | Accountant |
| 29. | Mr. Sanjay Kumar | Accountant |
| 30. | Mr. Sunil Kashyap | Accountant |
| 31. | Mr. Brijesh Kumar Pandey | Multifunctional Assistant |
| 32. | Mr. Rajendra Singh Bisht | Multifunctional Assistant |
| 33. | Mr. Sandeep Kumar Kesarwani | Multifunctional Assistant |
| 34. | Ms. Asha Shukla | Multifunctional Assistant |
| 35. | Mohd. Saleem Ansari | Multifunctional Assistant |
| 36. | Mr. Sarvesh Kr. Mishra | Library Information Assistant |
| 37. | Mr. Kapil Srivastava | Executive Assistant |
| 38. | Mr. Abhishek Pandey | Deputy Accounts Assistant |
| 39. | Mr. Sumit Kumar Shukla | UDC |
| 40. | Mr. Pramod N. Tripathi | Technical Assistant |
| 41. | Mr. Pankaj Srivastava | Lab Assistant |
| 42. | Mr. Girish Kumar Dixit | Lab Assistant |
| 43. | Mr. Santosh Kumar Yadav | Lab Assistant |
| 44. | Mrs. Pratibha Verma | Lab Assistant |
| 45. | Mohd. Izhar | Compounder |
| 46. | Mr. Vinod N. Tripathi | Compounder |
| 47. | Mrs. Priya Pal | Nurse |
| 48. | Mrs. Blessy Annie Shaiju | Nurse |
| 49. | Mr. D. N. Shukla | Junior Assistant |
| 50. | Mr. N. K. Tripathi | Junior Assistant |
| 51. | Ms. Ritu Srivastava | Junior Assistant |
| 52. | Mrs. Prabha Verma | Junior Assistant |
| 53. | Mr. Abhishek Kumar | Junior Assistant |
| 54. | Mr. Subhash Kumar | Caretaker |
| 55. | Mr. Manoj Kumar Upadhyay | Caretaker-cum-manager |
| 56. | Mr. Raj Kumar | Driver |
| 57. | Mr. Satish Kumar | Driver |

**Annexures -09**

# Consultants

| S.No | Consultants | Designation |
|---|---|---|
| 1. | Dr. Ratna Sanyal | Consultant |
| 2. | Sri H.D. Tiwari | Advisor (Finance) |
| 3. | Sri S. C. Khare | Accounts Officer |
| 4. | Sri S. K. Khanna | Advisor (Technical) |
| 5. | Sri S. C. Singhal | Advisor (Technical) |
| 6. | Dr. R. Dayal | Chief Medical Officer |
| 7. | Dr. M. D. Mishra | Medical Officer |
| 8. | Dr. Sonia Agrawal | Medical Officer |
| 9. | Dr. K. S. Pandey | Homoeopath |
| 10. | Dr. Kaushlesh Dwivedi | Medical Officer |
| 11. | Dr. Praveen Singh | Medical Officer |
| 12. | Dr. Veer Vikram Singh | Medical Officer (RGIIT-A) |
| 13. | Sri U.N. Sharma | Sr. Counsel, High Court, Allahabad |
| 14. | Sri Vaibhavv Kaushik | Legal Counsel, High Court, Allahabad |
| 15. | Sri Subedar Singh | Legal Counsel, District Court, Allahabad |

## Constitution of Student Gymkhana

| Si. No. | Designation | Enroll. No. | Name | Mobile No. |
|---|---|---|---|---|
| 1. | President | IIT2012022 | Mr. Atul Kumar | +91-8445960000 |
| 2. | Vice-President | IMP2014001 | Mr. Himadri Shah | +91- |

| | | | | |
|---|---|---|---|---|
| | | | | 8604049153 |
| 3. | Gen. Secretory | IIT2013068 | Mr. Yanamadala JaiPrakash | +91-9000876307 |
| 4. | Speaker | RS-138 | Mr. Dheeraj Chitara | +91-9936462177 |
| 5. | Executive Member (PG Program) | PCL2014004 | Mr. Nitish Andola | +91-7571080817 |
| 6. | Executive Member (UG Program) | IIT2012073 | Mr. Nitesh Kumar | - |