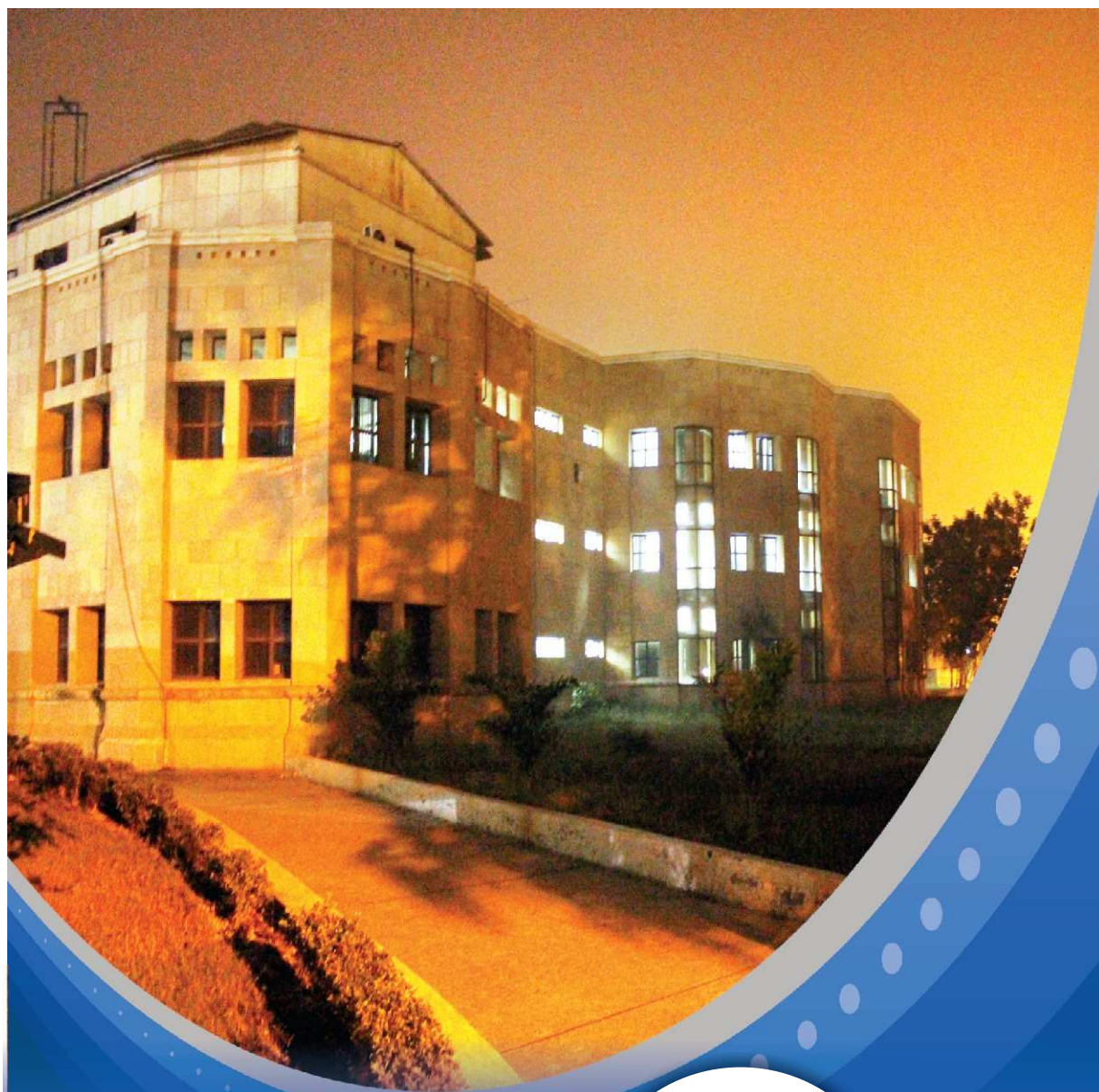




INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, ALLAHABAD

ANNUAL REPORT

For the year 2015-16



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





Patron : **PROF. SOMENATH BISWAS**
Director

Advisory Board : **Prof. G.C. Nandi**
Prof. U.S. Tiwary
Prof. Sudeep Sanyal
Prof. O. P. Vyas
Dr. Vijay Chaurasiya

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ANNUAL REPORT 2015-16





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Introduction



1. Introductory

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.



1.2 THE DIRECTOR'S REPORT 2015-16

Hon'ble Chief Guest Mr. F C Kohli, recipient of our country's third highest civilian award Padma Bhushan for his pioneering contribution in the Indian Software industry; Hon'ble Mr. Ravi Kant, Chairman, Board of Governors; all members of the Board of Governors, Academic Senate, and other Governing Body members; invited dignitaries, guests, member of the press and electronic media, all graduating and post graduating students and their family members; all members of faculty, staff and students, I warmly welcome you all on this auspicious occasion of the eleventh convocation of the institute.

We feel privileged and honoured to have Mr. F C Kohli with us the chief guest today. He is considered to be the father of Indian Software industry due to his tremendous contributions in this area. To be frank enough there was very little recognition of Indian software industry before him. He worked tirelessly through TATA groups to establish the Indian software brand especially in the service sector; you and our alumni are a direct beneficiary of that brand. As a brilliant student, as a genius professional leader and as an excellent human being with amicable nature, he has achieved several laurels. We were specially fortunate to have him as our Chairman, BOG from 2004-2009. During this period many world class infrastructural facilities were created in our IIIT-A campus and many International outreach programs were organized which helped to establish IIIT-A brand globally. In 2007, IIIT-Allahabad was ranked among the top ten (ranked 8th) engineering institutions in our country by India Today ranking.

Starting from a very humble beginning with 60 students for B. Tech (IT) degree course in 1999, in a somewhat make shift arrangement in Nehru Science Centre of Allahabad University, the institute has witnessed a tremendous all round growth. At present we are spread over 92.05 acres of land with 1923 students on roll. We have two flagship undergraduate programs B. Tech (IT) and B. Tech (ECE) with 1211 students, several 5-year long B. Tech-M. Tech dual degree programs with 352 students on roll with specialization in software engineering, robotics, human computer interaction, cyber law and information security, bio informatics, biomedical engineering, intelligent systems, microelectronics and wireless communication engineering. All our undergraduate and B. Tech-M. Tech dual degree admission is through All India JEE main examination. We are happy to see that year after year opening and closing ranks are improving. We also have two year-long M. Tech program with 219 students on roll and MBA program with 15 students. We have introduced a minimum 4 year-long M. Tech-Ph. D. dual degree program and Ph. D. program in all the above mentioned specializations with 126 students on roll. Admission to all our postgraduate programs (M. Tech and M. Tech-Ph. D.) are based on All India GATE score and through national counselling process of CCMT and MBA admission is through the institution conducted admission process considering the All India CAT score.

Since January 2015, we exist under the act of the parliament and our institution together with other Govt. of India funded IITs have been declared as the institutions of national importance. Additionally, since last one year the Institute is also mentoring 89 students of IIIT Lucknow, an IT institution established under the PPP model.



The institute has 109 sanctioned posts of faculty members and 85 non teaching officers and staff. Among them at present we have 09 professors, 09 Associate professors, 46 Assistant professors, 4 Deputy Registrar, 4 Assistant Registrars and other staff. All our regular faculty members have doctoral degrees as the minimum qualification from reputed institutions in India and abroad. We follow 4-tier flexible faculty structure as mandated by MHRD.

Research, Development and outreach activities

In spite of fewer in number resulting in a comparatively heavier-teaching load, our faculty members are doing exceedingly well in research and in conducting outreach activities. I was invited by the Microsoft Research India to join a selected group of academicians in representing our country at the global faculty summit consisting of delegates from 17 countries at Redmond, USA which was organized during July 13-16, 2016 by Microsoft Research. Renowned personalities in the various fields of information technology presented exciting technologies being developed very recently in the area of high performance computing, machine learning and internet of Things which is about to make a second revolution in IT in the coming years.

At IIIT - A two GIAN (Global Initiative of Academic Network) courses were successfully conducted during July-August, 2016 by our former director Prof. Somenath Biswas & Dr. Nishit Vishnoi of EPFL University, Switzerland in the area of theoretical computer science and machine learning; and Prof U. S. Tiwari & Prof Mriganka Sur of MIT in the area of cognitive science. Prof Anupam Agrawal is executing a dST funded Indo-UK BURD project on "*Distributing Industrial Optimization Task to Rural Worker*". Under this project he organized an International workshop on "*Improving Supply Chain Efficiency through Packing Technologies*" on June 16th, 2016 in Glasgow (UK).

One of our young faculty members Dr. Rahul Kala was successful in bringing project funding to the tune of Rs. 39 lacs under the Early Career Research Award by the Department of Science and Technology for project entitled "*Mission Planning using Sampling Based Techniques*". He visited Vancouver, Canada last July, 2016 and presented a paper and co chaired a session in the flagship *IEEE Congress on Evolutionary Computations*. Dr. Rekha Verma has received *Young Scientist Scheme Award* by the Department of Science and Technology, Govt. of India for the project titled "*Silicon Nanowires : Professional Compact Model of Scale Thermoelectric Figure of Merit for Energy Harvesting*" during 2015-2018. Dr. Sitangshu Bhattacharya has received *Young Scientist Scheme Award* by the Department of Science and Technology, Govt of India for the project titled "*Graphene Transistors on Different High-k Dielectrics as Performance Boosters and Role of Self Heating : A Physics based Theoretical Approach*". Dr. Somak Bhattacharyya has received *Young Scientist Award* in 2016 *URSI Asia Pacific Radio Science, Conference* organized by International Union of Radio Science (URSI) during 21-25 August, 2016 in Seoul, South Korea. He was also a finalist in the best Ph. D. thesis award in the Ph. D. Symposium in IEEE UPCON 2015 during 4-6 December, 2015 at IIT Allahabad, India.



Our placement record

IIT-Allahabad has excellent campus placement records and placement wise our institute's rank is consistently among top five of all the institutions in our country. I congratulate all my graduating students and Dr. Shirshu Verma, Associate Professor of the institute, who is the training and placement officer for the last six consecutive years for their spectacular performance and now I present to you some facts from Dr. Verma's report. During 2015-2016 the total number of students who got placed from the campus was 362 out of a total strength of 370. The number of students placed in the dream round companies (i.e. having CTC of Rs. 5.5 lacs per annum and above) was 310. The number of students placed in the first round companies was 52 with overall minimum salary of Rs. 3.2 LPA and maximum salary of Rs. 27LPA. Total number of companies that visited our campus was 66. This year our placement season is on and so far the total number of students placed is 123 out of which 112 have been placed in the dream round companies and 11 have been placed in the first round companies with an average pay package of 13.94 LPA.

We put special emphasis on developing competitive coding skills among the students where senior coders impart coding skills to the first year students outside the normal class hours under the paid TA ship program and the results are already visible. Last year our team secured 1st position among all the Indian teams and 57th position worldwide at the prestigious ACM ICPC World Finals at Phuket, Thailand. The team consisted of Manmohan Mishra, Mettu Shiva Reddy and Aditya Sharma, guided by Dr. Sanjai Singh.

Our students continuously contribute towards open source software by bagging accolades in leading ventures. Saptak and Vivek completed Google Summer of Code 2016 successfully. Vishnu KS got an opportunity to work with Dropbox for open source development. Supriti secured an international Rank of 15 in the Finale of the International Women's Hackathon. There are many more such success stories of our students.

We are proud of our Alumni

Our alumnus, a B. Tech. (IT) student, late Harsha Suryanarayana popularly known as Humble Fool, who graduated in 2006 was known to be the best coder India has ever produced. He was one of the first red coders from the country and continued to dominate until his last SRM (Single Round Match) at Top coder. He was the Top Coder Open (TCO) world finalist twice, and Google Code Jam (GCJ) world finalist once. He worked on to make DP his strongest area (for the non-programming people, DP is Dynamic Programming the global Topcoder forum for several years. He gave birth to 13 companies before he died in a road accident in Bangalore. We have dedicated our first year programming laboratory in his name so that many more talented students can get inspiration from him. Pratyush Kumar, of the first batch is now the director of business strategy and planning at Microsoft Corporation, USA, Alankrit Nishadis VP with 1mg. Abhipsita Singh is VP at JP Morgan Chase, Rohit Bishtis VP at Customfinish.com. Our gold medalist alumni Dr. Alok Parlikar is now speech scientist with cobaltspeech.dot, Dr. Abhimanyu Lad is engineering manager in LinkedIn, Tarun Gupta is CEO of carworkz.com and there are many such illustrious alumni this institute has produced.



We need to put our best effort to make Alumni meet a yearly event. Let us start from this year.

While we have achieved so many recognition over a short span of time, we need to acknowledge our future challenges as well. So far our reputation is largely for producing world class undergraduate IT specialists. However, in the long run our reputation and ranking will largely depend on how successfully we are able to establish our research and product development brand in the frontier information technology areas. We need to choose some areas where we already have expertise and national and international visibility like Robotics and Artificial Intelligence, wireless sensors and machine learning. In addition we will have to encourage our young minds towards entrepreneurship. They need to be encouraged to build companies and create jobs rather than seeking jobs. I hope next time in the director's report we should be able to include the number of companies IIIT-Allahabad has been able to incubate/nurture. This is not an easy job. We need real smart faculty who has vision and understand the challenges in working with the students in this area. We also need to attract more and more young and bright faculty members. This is the most challenging task the institute needs to face in the coming future, especially in the area of core Information Technology. We need to remember that if we fall in this front we will never be able to succeed in other fronts. In this competitive world to attract and retain good faculty we need to be proactive. We should be able to provide them more compared to our competitors in terms of physical, mental and infrastructural resources. For that we should plan in terms of attaining financial self sufficiency in the coming future and spend extra money from our extra earnings. In this regard I would like to mention that the steps like rolling advertisement, which I took in 2014 and which my predecessor Prof Biswas continued, has already produced good results. We need to pursue this process more vigorously. Confluence of world class infrastructure, really smart students and high quality faculty will create a new SANGAM and every student coming out of it will be a real gem who will serve our nation and the world towards economic prosperity and peace.

We in our institute are very much conscious that a sizable number of students come from financially and educationally poor background and they need adequate support for their studies here. For undergraduate SC and ST students we have completely waived their fees. For others, the institute is planning to introduce work study scheme. For various IT infrastructure development and maintenance, secretarial jobs we can engage students for a limited hour and pay them hourly basis. They can also help the laboratory and tutorial classes. In this way needy and brilliant students can earn while learning. This is a win-situation both for the students and for the institute.

On this auspicious occasion of the XI Convocation my heart goes out to our graduating students and their parents who sacrificed a lot for making this wonderful event to happen in the lives of their children. Dear students, we tried our best to provide you a home away from home. Our love and affection will remain with you forever. This is also time to bless you and give you advice one last time for your final journey towards the professional world.

The become a developed nation our country needs many professional leaders. Try to be a professional leader!



How to achieve good health? You need to give one hour daily for health. Practice Yoga or do any kind of physical exercise regularly. IT professional's job is hazardous. For most of your working time your body sits idle in front of computers. Unless you take care, it will take revenge after forties.

How to achieve success in life? Follow Swami Vivekananda's teaching - "Take risk in your life" if you win you can lead if you lose you can guide!

How to achieve peace in life? My advice to you would be to always show your positive attitude and spirit in your work place and follow the teaching of a famous Sanskrit Shloka :

विद्या ददाति विनयं विनयाद्याति पात्रताम्।

पात्रात्वाद्धनमाप्नोति धनाद्धर्मं ततः सुखम्।।

It means with gaining more knowledge, be more and more humble. This humbleness will help you in making friends around you. This networking of friends will help you to accumulate wealth. Then this wealth when spent in pursuing spirituality can only give you peace in life.

Last but not the least do not ever forget your Alma Mater. You would be the alumni of this great institution. The relationship with this institution for everybody else who work here will come to an end when they retire from the job, but for you the relationship will last forever.

GOD BLESS YOU ALL!

JAI HIND

G. C. Nandi



1.3 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.



1.4 The Governance

GOVERNING BODIES OF THE INSTITUTE

The Governing Bodies of the Institute comprise the following:

- ◆ IIT Act
- ◆ The Board of Governors
- ◆ The Senate
- ◆ The Finance Committee
- ◆ The Building & Works Committee

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

IIT Act 2014

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

The Board of Governors (B.O.G.)

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.

The Senate

The Senate 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 the Senate during the period is given as **Annexure - .**

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 -.**

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 –**



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The Administration



2. The Administration

(As in March 2016)

2.1 Academic Departments

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

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, Associate 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. S. Venkateshan (Warden Boys Hostel-V)
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



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. B.S. Sanjeev, Faculty In-Charge (Exam Cell)
Dr. Manish Kumar, Faculty In-charge (Maintenance)
Dr. K. P. Singh (International Relations)
Dr. Asheesh Kumaar, Public Information Officer & In-Charge, Legal Cell

2.6 Officers

Dr. Asheesh Kumaar, Deputy Registrar (Admin.)
Dr. Seema Shah, Deputy Registrar (S&P)
Dr Pavan Kumar Saini (E&A)
Mr. O.P. Srivastava (F&A)
Dr. K.K. Tiwari, Assistant Registrar (F)
Mr. R. Banerjee, Assistant Registrar (Exam)
Mr Niranjan Kumar, Assistant Registrar (Stores)
Mr. Vivek Nagar, Assistant Registrar (A & CDN)
Mr. L.N. Sharma, Security Officer
Mr. Mithilesh Mishra, System Analyst
Mr. Pankaj Mishra, Public Relation Officer / Hindi Officer
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



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The Academics



3. The Academics

3.1 Academic Programme and Intake of the students

	Program	Total Seat Including DASA	Total Admission Including DASA
	(Academic Session 2015 - 2016)		
1	B.Tech. (Information Technology)	140 +5	136+5
2	B.Tech. (Electronics & Communication Engineering)	81 +5	78+4
3	B.Tech. (Information Technology) RGIIT Amethi	92	88
4	B.Tech. (Information Technology), IITL	50	47
5	5 Yrs Dual Degree B.Tech. (ECE) and M.Tech. (Bio-Medical Engineering)	7	6
6	5 Yrs. Dual degree B.Tech. (ECE) & M.Tech. (ECE) Spl. (Micro Electronics)	7	6
7	5 Yrs. Dual degree B.Tech. (IT) & M.Tech. (IT) Spl. (Bioinformatics)	7	6
8	5 Yrs. Dual degree B.Tech. (IT) & M.Tech. (IT) Spl. (Cyber Law & Information Security)	7	7
9	5 Yrs. Dual degree B.Tech. (IT) & M.Tech. (IT) Spl. (Human Computer Interaction)	7	5
10	5 Yrs. Dual degree B.Tech. (IT) & M.Tech. (IT) Spl. (Intelligent Systems)	7	7
11	5 Yrs. Dual degree B.Tech. (IT) & M.Tech. (IT) Spl. (Robotics)	7	6
12	5 Yrs. Dual degree B.Tech. (IT) & M.Tech. (IT) Spl. (Software Engineering)	7	7
13	5 Yrs. Dual degree B.Tech. (IT) & M.Tech. (IT) Spl. (Wireless Communication Engineering)	7	6
14	5 Yrs. Dual degree B.Tech. (IT) & MBA(IT)	9	7
15	5 Yrs. Dual degree B.Tech. (ECE) & MBA(IT)	4	4
16	2 Yrs. M.Tech.(IT) with Specialisation in Software Engineering (SE)	17	14
17	2 Yrs. M.Tech.(IT) with Specialisation in Wireless Communication Engineering (WCE)	15	14
18	2 Yrs. M.Tech.(IT) with Specialisation in Intelligent Systems (IS)	10	10
19	2 Yrs. M.Tech.(IT) with Specialisation in Robotics (RO)	10	9
20	2 Yrs. M.Tech.(IT) with Specialisation in Human Computer Interaction (HCI)	12	8
21	2 Yrs. M.Tech.(IT) with Specialisation in Cyber Law and Information Security (CLIS)	17	14
22	2 Yrs. M.Tech.(IT) with Specialisation in Bioinformatics (BI)	10	6
23	2 Yrs. M.Tech.(EE) with Specialisation in Microelectronics (MI)	12	12
24	Integrated M.Tech.(IT)-Ph.D. (with Specialisation in Software Engineering (SE))	6	6
25	Integrated M.Tech.(IT)-Ph.D. (with Specialisation in Wireless Communication Engineering (WCE))	5	4
26	Integrated M.Tech.(IT)-Ph.D. (with Specialisation in Intelligent Systems (IS))	4	2
27	Integrated M.Tech.(IT)-Ph.D. (with Specialisation in Robotics (RO))	4	4
28	Integrated M.Tech.(IT)-Ph.D. (with Specialisation in Human Computer Interaction (HCI))	4	2
29	Integrated M.Tech.(IT)-Ph.D. (with Specialisation in Cyber Law and Information Security (CLIS))	6	6
30	Integrated M.Tech.(IT)-Ph.D. (with Specialisation in Bioinformatics (BI))	3	2
31	Integrated M.Tech.(EE)-Ph.D. (with Specialisation in Microelectronics (MI))	4	4
32	MBA	36	8
33	Dual Degree MBA-Ph.D	5	2
34	PhD**	--	9

** total seats and total admission calculated on the basis of fresh admission.



4 The Faculty Update



4. The Faculty Update

Prof. G.C. Nandi

Professor (Dean of Academic Affairs)
Director (Offg)



4.1 Faculty Profile

Specialization : Robotics & Machine learning.

Publications

SCI Journals (7)

IEEE(3):

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 .
2. Vijay BhaskarSemwaland G.C. Nandi, “Generation of Joints Trajectories for Bipedal locomotion using Hybrid automata model: A Rocking block based Approach” IEEE sensor Journals. Vol.16 no.12.
3. Vijay BhaskarSemwal and G.C. Nandi, “Design of Vector Field for Different Subphases of Gait And Regeneration of GaitPattern” IEEE Transactions on Automation Science and Engineering.

Elsevier (3):

4. Vijay BhaskarSemwal, 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.
5. Vijay BhaskarSemwal and G.C. Nandi, Biometric gait identification based on a multilayer perceptron, Robotics and Autonomous Systems, Volume 65, March 2015, Pages 65-75.
6. Vijay BhaskarSemwal 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.

Springer (1):

7. Vijay BhaskarSemwal and G.C. Nandi, Robust and more accurate feature and classification using deep neural network, Neural Computing and Application, Springer.
8. Vijay BhaskarSemwaland G.C. Nandi, Optimized feature selection technique based on incremental feature selection for gait data collection , Multimedia Tool and Applications .(Submitted).

IEEE International Conferences:

9. Vijay BhaskarSemwal and G.C. Nandi., "Study of humanoid Push recovery based on experiments," IEEE International Conference on Control, Automation, Robotics and Embedded Systems (CARE), 2013.,1.6, 16-18 Dec. 2013, Organized by IIIT Jabalpur
10. Vijay BhaskarSemwal, Pavan Chakraborty and G.C. Nandi., "Biped model based on human Gait pattern parameters for sagittal plane movement," IEEE International Conference on Control, Automation, Robotics and Embedded Systems (CARE), 2013 , 1.5, 16-18 Dec. 2013,Organized by IIIT Jabalpur.
11. VijayBhaskarSemwaland G.C. Nandi, "Study of humanoid Push recovery based on experiments," IEEE International Conference Tencon 2016 (Accepted)

Out reach activities:

- ✧ Took active part in deliberation of lecture on ICRA-2015 Workshop of IEEE RAS Chairpersons, May 26-30, 2015, Seattle, Washington, USA.
- ✧ Delivered Key note address on “Challenges of bringing Humanoid Robots in a real world environment” in the UPCON-2015, December 4-6, 2015, IIIT-Allahabad.
- ✧ Invited by Microsoft Research India to join a select group of academicians in representing India at the Faculty Summit at Redmond, WA USA, July 13-16, 2016.



Prof. U. S. Tiwari

Dean (IRP)



1. Name, Department & Designation:

Prof. Uma Shanker Tiwari

Dean (Infrastructure and Resource Planning),

Professor (Higher Academic Grade), Department of Information Technology

2. Teaching/Research/Industry Experience:

Teaching/Research: 28 years

Total: 28 Years

- (i) Professor (Higher Academic Grade), Indian Institute of Information Technology, Allahabad, India, since 1 August, 2015.
- (ii) Professor, Indian Institute of Information Technology, Allahabad, India, 23 Dec 2006 - 31 July 2015.
- (iii) Associate Professor, Indian Institute of Information Technology, Allahabad, India, from July 2002 to 22 Dec 2006.
- (iv) Visiting Scientist in the department of Computer Science and Engg. at IIT Kanpur from Dec. 1995 to July 1996.
- (v) Reader in Computer Science at J. K. Institute of Applied Physics & Technology, University of Allahabad from March 1992 to June 2002.
- (vi) Lecturer in the department of Electronics & Communication, J. K. Institute of Applied Physics & Technology, University of Allahabad from Sept. 1988 to March 1992.
- (vii) Senior Research Fellow at the department of Electronics Engg. Institute of Technology, B.H.U., Varanasi from Sept. 1984 to February, 1988.

3. New courses developed

Title, course number

4. Books and book-chapters published

(Order : Title, Publishers and Place, Year, All authors)

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

5. Research papers published in journals

Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)

- a. Gyanendra K Verma, Uma Shanker Tiwari, 'Affect representation and recognition in 3D continuous valence-arousal-dominance space', Multimedia Tools and Applications (2016), pp.1-25, First Online : 08 January 2016, DOI: 10.1007/s11042-015-3119-y, Springer, USA.

6. Research papers published in conference proceedings (as a full paper)

Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).

- a. N Srivastava, U Agrawal, SK Roy, US Tiwari, ' Human Identification using Linear Multiclass SVM and Eye Movement Biometrics', Proceedings of Eighth International Conference on Contemporary Computing (IC3), 2015, pp. 365-369, Pub: IEEE Xplore Digital Library (URL: ieeexplore.ieee.org/document/7346708/?arnumber=7346708)
- b. Brijraj Singh, Sudhakar Mishra, Uma Shanker Tiwari, ' EEG based biometric identification with reduced number of channels', Proceedings of 17th International Conference on Advanced Communication Technology (ICACT), 2015, pp.687-691, Pub: IEEE Xplore Digital Library (URL: ieeexplore.ieee.org/document/7224883/?arnumber=7224883).



- c. Utkarsh Agrawal, U.S. Tiwary, Soumava Kumar Roy, D.S. Prashanth, 'K-means clustering for adaptive wavelet based image denoising', Proceedings of International Conference on Advances in Computer Engineering and Applications (ICACEA), 2015, pp. 134-137, Pub: IEEE Xplore Digital Library (URL ieeexplore.ieee.org/document/7164681/?arnumber=7164681).
- d. Shrikant Malviya, Uma Shanker Tiwary, 'Knowledge Based Summarization and Document Generation using Bayesian Network', Procedia Computer Science, 2016, Vol. 89, pp. 333-340, Elsevier.
- e. Uma Shanker Tiwary (Edited Journal), Procedia Computer Science, Volume 84, Pages 1-208 (2016) Proceeding of the Seventh International Conference on Intelligent Human Computer Interaction (IHCI 2015), Elsevier, URL: www.sciencedirect.com/science/journal/18770509/84.

7. Seminars and invited talks presented:

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

8. Conferences attended outside IIT Allahabad

Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)

9. Work done in project 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.

10. Training Programme organized:



11. Other Activities

(a) *Technology Developed*

Name of the technology/product

(b) *Software Developed*

Name of the software

(c) *Industry visited and visits to other Institutes for research*

Name, Purpose, Period.

(d) *Patents*

(Title, Patent number, granting agency)

(e) *Awards and Honors*

(i) Chairman, IEEE Joint Chapter of Computer Society & Signal Processing Society, UP Section

(ii) Senior Member, IEEE

(iii) Fellow IETE

(iv) Member CSI

(f) *Continuing Education Activities*

Name and type of the course organized (Self-financing, Industry), Place, Dates, and profile of participants (university/industry)

(g) *Participation in the High Level Industry Academia Interaction Program during summer*

Name of the organization, Period

(h) *Any other important activity not specified above*

Conferences Organized-

(i) 7th International Conference on Intelligent Human Computer Interaction (IHCI 2015) during December 14-16, 2015 at IIT-Allahabad.

GIAN Course Organized-

(i) Modeling Cerebral Cortex and Plasticity, during August 7-16, 2016 at IIT-Allahabad, Foreign Faculty: Prof. Mriganka Sur.



Prof. B. R. Singh
Chief Vigilance Officer



1. Name, Department & Designation:
B.R. Singh
Department of Electronics and Communication
Professor
2. Experience Teaching: **09** Research/R&D: **35** : - Total: **44**
3. New courses developed: **NIL**
4. Books and book-chapters published: **NIL**
5. Research papers published in journals
 - 1) “Ionizing radiation effect on electrical and reliability characteristics of sputtered Ta₂O₅/Si interface,” Radiation effects & Defects in Solids, Taylor & Francis, volume 170, No 6, (2015). pp: 510-518, Ashwath Rao, Ankita Verma and B.R. Singh.
 - 2) “First principles of calculations of bonding and charges at the Al₂O₃ interface in a c-Si/SiO₂/am-Al₂O₃ structure applicable for the surface passivation of silicon-Based Solar cells,” IEEE Transactions on electron devices, Volume 63, No 2, 2016, pp: 544-550, Akansha bansal, Himani Mishra, Sitangshu Bhattacharya, Babu Ram Singh.
 - 3) “Effect of process parameters on the passivation properties of anodic Aluminium Oxide/ Silicon interface,” IEEE Journal of Photovoltaics, Volume 6, No. 5, 2016, Akansha Bansal and B.R. Singh.
 - 4) “ Lead-Zirconate-Titanate based Metal/Ferroelectric/High-K/Semiconductor (M/Fe/High-k/S) Gate Stack for Non-Volatile Memory Applications,” Ferroelectrics, Taylor & Francis, Volume 504, 2016, pp: 1-10, Prashant Singh, Aditya Nath Bhatt, Akansha Bansal, Rajat kumar Singh and B.R. Singh.
6. Research papers published in conference proceedings: **NIL**
7. Seminars and invited talks presented: **NIL**
8. Conferences attended outside IIIT Allahabad: **NIL**
9. Work done in project undertaken in the Institute:
Project Title : Development and Application of Atomic Layer deposition for high Efficiency c-Si Photovoltaic cells, (Sponsored by DST, GOI, New Delhi).
Work done:
 1. Atomic layer deposition system has been successfully installed with all its supporting facilities such as clean air work station, electropolished gas line connections, ultra high purity process gases, chiller unit, wet scrubber unit etc. and is fully operational.
 2. Process optimization for Al₂O₃ deposition using ALD for achieving high minority carrier lifetime and negative charges at the interface mainly responsible for passivation is complete. The dependence of deposition temperature, number of cycles on thickness, and annealing temperature etc. has been optimized. The experimental results obtained indicates the presence of large negative charges at the Al₂O₃/Si interface, which results in the improvement in minority carrier lifetime from 2 μsec (for bare sample) to 400 μsec.
 3. To support the R&D activities under this sponsored project, **SENTECH SE400adv** multiple angle ellipsometer system and **SINTON Lifetime TESTER** has been installed for thickness measurement and minority carrier lifetime measurement respectively.
 4. Different solar cell structures have been simulated using **Silvaco TCAD** software to observe the effect of passivation on solar cell efficiency. Al-BSF and PERC solar cell structures were investigated. Passivation layer parameters are optimized to obtain the maximum efficiency.



5. Surface passivation properties of RF sputtered & electrochemically anodized Al₂O₃ on c-silicon substrate were also studied.
6. In view to investigate the passivation properties of Silicon/Al₂O₃ interface at atomic level, First principle study of bulk crystalline and amorphous Al₂O₃ has been carried out using **Quantum wise atomistic tool kit**. The passivation behavior has been theoretically explained on the basis of charge transfer and bonding between Al-Si-O.
10. Training Programme organized: **NIL**
11. Other Activities

(a) Technology Developed:

Atomic Layer Deposition Technology: An Atomic Layer Deposition process technology has been established for the deposition of thin dielectric films. The technique has been optimized for the conformal deposition of Alumina, a high dielectric film using plasma and thermal mode. Different process parameters such as substrate temperature, plasma cycle time, RF power, number of cycles, etc. have been optimized for high minority carrier lifetime and large negative charges at the interface.

(b) Software Developed: NIL

(c) Industry visited and visits to other Institutes for research:

1. **ASSCP, BHEL-Gurgaon:** Collaboration between ASSCP (BHEL) and IIIT-Allahabad has been established during the reporting period for implementation of surface passivation technology developed at IIIT-Allahabad on solar cell manufacturing process for improvement in the efficiency.
2. **IEST-Shibpur, Kolkata, West Bengal:** Memorandum of understanding has been signed between IEST-Shibpur and IIIT-Allahabad for implementation of surface passivation technology developed at IIIT-Allahabad.

(d) Patents: NIL

(e) Awards and Honors: NIL

(f) Continuing Education Activities: NIL



Prof. Shekhar Verma Professor



1. Name, Department & Designation:

Shekhar Verma
Department of Information Technology
Professor

2. Teaching/Research/Industry Experience:

Teaching/Research: __24yrs__ Industry __nil__ Total: __24yrs__

3. New courses developed

Currently running
? Introduction to Cryptography ICIS140C
? Cryptography and Information Security ICRP730E
? Machine Learning: Tools and Techniques IMLE630E

4. Books and book-chapters published

NIL
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.

5. Research papers published in journals

List Attached
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note: Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016**.
Underline the name of the author for correspondence.

6. Research papers published in conference proceedings (as a full paper)

List Attached
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.

7. Seminars and invited talks presented:

NIL
Title, Organization, Date

8. Conferences attended outside IIIT Allahabad

Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
6th International Conference on Communication Systems and Network Technologies (CSNT)
05 Mar - 07 Mar 2016
Location



Chandigarh, India

(As session Chair)

9. Work done in project undertaken in the Institute:

NIL

10. Training Programme organized:

NIL

11. Other Activities

(a) Technology Developed

NIL

Name of the technology/product

(b) Software Developed

NIL

Name of the software

(c) Industry visited and visits to other Institutes for research

NIL

Name, Purpose, Period.

(d) Patents

NIL

(Title, Patent number, granting agency)

(e) Awards and Honors

NIL

Title, Awarded by

(f) Continuing Education Activities

NIL

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

(g) Participation in the High Level Industry Academia Interaction Program during summer

NIL

Name of the organization, Period

(h) Any other important activity not specified above

NIL

List of Publications

7. Privacy Preserving In-network Aggregation in Wireless Sensor Networks; VK Singh, S Verma, M Kumar, Procedia Computer Science 94, 216-223, 2016
8. A compact MIMO antenna of meander-line structure for Wi-Fi application, P Gupta, GS Tripathi, S Verma; Emerging Trends in Electrical Electronics & Sustainable Energy Systems; 2016
9. Clique-based Network Coding Technique; PS Pandey, N Purohit, S Verma; IETE Journal of Research, 1-12; 2016
10. Layer Based Query Dissemination & Reliable Data Acquisition Mechanism for Wireless Sensor & Actuator Networks; S Gupta, S Verma, RK Abrol; International Journal of Database Theory and Application; 9 (2), 227-250; 2016
11. Secure Linear Feedback Shift Register based IPv6 in VANET; S Verma, GS Tomar ; International Journal of Security and Its Applications 10 (2), 423-436 ; 2016
12. Secure Linear Feedback Shift Register based IPv6 in VANET A Singh, S Verma, GS Tomar INTERNATIONAL JOURNAL OF SECURITY AND ITS APPLICATIONS 10 (2), 423-436, 2016



13. Token Based Trust Computation in VANET K Sharma, BK Chaurasia, S Verma, GS Tomar International Journal of Grid and Distributed Computing 9 (5), 313-320, 2016
14. An Aggregation Based Approach with Pareto Ranking in Multiobjective Genetic Algorithm M Ojha, KP Singh, P Chakraborty, S Verma Proceedings of Fifth International Conference on Soft Computing for Problem, 2016
15. A guided multiobjective genetic algorithm for decision making problems M Ojha, KP Singh, P Chakraborty, S Verma 2015 IEEE UP Section Conference on Electrical Computer and Electronics, 2015
16. Kalman filter for trust estimation in VANETs A Bhargava, S Verma, BK Chaurasia 2015 IEEE UP Section Conference on Electrical Computer and Electronics, 2015
17. Locally Linear Embedding for Node Localization in Wireless Sensor Networks N Jain, S Verma, M Kumar Computational Intelligence and Communication Networks (CICN), 2015
18. Challenges in wireless sensor networks with different performance metrics in routing protocols RB Agnihotri, AV Singh, S Verma Reliability, Infocom Technologies and Optimization (ICRITO), 2015
19. Wireless Networks using Matroid along with Network Coding PS Pandey, N Purohit, S Verma Journal of Internet Technology 18 (4) 2015
20. Secure data aggregation in wireless sensor networks using homomorphic encryption M Kumar, S Verma, K Lata International Journal of Electronics 102 (4), 690-702, 2015
21. VANET Optimized IP Address Allocation BK Chaurasia, S Verma, H Parveen, GS Tomar International Journal of Future Generation Communication and Networking 8 (3), 2015
22. Towards Achieving Reliability in Wireless Sensor Networks—A Survey S Gupta, S Verma, RK Abrol International Journal of Control and Automation 8 (5), 417-440, 2015
23. Privacy Preservation in Information Systems D Sadhya, S Verma, 2015
24. Using trust for lightweight communication in VANETs BK Chaurasia, RS Tomar, S Verma International Journal of Artificial Intelligence and Soft Computing 5 (2), 2015



Prof. T. Lahiri

Professor



1. Name, Department & Designation: Tapobrata Lahiri, Department of Applied Science, Professor

2. Teaching/Research/Industry Experience:

Teaching/Research: 26 years (approx) Industry: Nil Total: 26 years (approx)

3. New courses developed

Title, course number

After reviewing (both internal and external) of Both M.Tech. in IT (Spln. In Bioinformatics) and M.Tech. in Biomedical Engineering title and syllabuses of all the subjects are newly designed and submitted for launching through senate under my coordinator-ship as Head of Department of Applied Science (the details may be taken from the brochure launched in Examcell-Website)

4. **Books and book-chapters published: Nil**

(Order: Title, Publishers and Place, Year, All authors)

In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.

5. **Research papers published in journals**

Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)

"PCV: An Alignment Free Method for Finding Homologous Nucleotide Sequences and its Application in Phylogenetic Study", "Interdisciplinary Sciences: Computational Life Sciences, Springer, (2016), 1-11, 2016, R Kumar, BK Mishra, T Lahiri, G Kumar, N Kumar, R Gupta, MK Pal

Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**

Underline the name of the author for correspondence.

6. **Research papers published in conference proceedings (as a full paper)**

Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).

Theoretical model of circular RNA prediction and classification, 2016 International Conference on Bioinformatics and Systems Biology (BSB), 2016, Pages: 1 - 5, DOI: 10.1109/BSB.2016.7552122, Rajnish Kumar; Tapobrata Lahiri; Gautam Kumar

Models of circular RNA biogenesis, IEEE UP Section Conference on Electrical Computer and Electronics (UPCON), 2015, Pages: 1 - 6, DOI: 10.1109/UPCON.2015.7456750, Rajnish Kumar; Tapobrata Lahiri

Statistical discrimination of breast cancer microarray data, International Conference on Bioinformatics and Systems Biology (BSB), 2016, Pages: 1 - 4, DOI: 10.1109/BSB.2016.7552136, Gautam Kumar; Tapobarata Lahiri; Rajnish Kumar

Prediction of catalytic site of proteins based on amino acid triads approach using non parametric function, International Conference on Bioinformatics and Systems Biology (BSB), 2016, Pages: 1 - 4, DOI: 10.1109/BSB.2016.7552137, Shweta Srivastava; Gautam Kumar; Tapobarata Lahiri; Rajnish Kumar; Manoj Kumar Pal; Pragya Gupta; Rahul Gupta

Underline the name of the author for correspondence.

Please do not list conferences where only abstracts are published.

7. **Seminars and invited talks presented :**

Title, Organization, Date

Coordinator and main teacher: Workshop on Systems Biology (WSB-2016), 4th to 6th March 2016 at IIIT-Allahabad

Invited Speaker, Self Financed Short term Course on "Computer Aided Drug Designing", held during May 27 to June 2, 2016, organized by Department of Biotechnology, MNNIT, Allahabad

Invited Speaker for Expert Lecture in Short Term workshop on "DNA Sequencing: Applications in Diagnostics and



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Health Care Innovation” at Centre of Medical Diagnostic and Research (CMDR), MNNIT Allahabad (U.P.), India during 08-14 Dec., 2015.

Keynote Speaker : "National Conference on Bioinformatics Panaroma in Agriculture and Health" held on 5-6 October, 2015 at Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad

8. Conferences attended outside IIIT Allahabad

Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)

Keynote Speaker : "National Conference on Bioinformatics Panaroma in Agriculture and Health" held on 5-6 October, 2015 at Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad

9. Work done in project undertaken in the Institute: Not Applicable

10. Training Programme organized:

Coordinator and main teacher: Workshop on Systems Biology (WSB-2016), 4th to 6th March 2016 at IIIT-Allahabad

Member, Advisory Committee and Keynote Speaker: "National Conference on Bioinformatics Panaroma in Agriculture and Health" held on 5-6 October, 2015 at Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad

11. Other Activities

(a) **Technology Developed**

Name of the technology/product: Semi-empirical method for faster derivation of protein structure

(b) **Software Developed**

Name of the software: All-atom optimization of protein structure using knowledge-based scoring function

(c) **Industry visited and visits to other Institutes for research: Not applicable**

Name, Purpose, Period.

(d) **Patents: Not applicable**

(Title, Patent number, granting agency)

(e) **Awards and Honors**

Title, Awarded by

Invited Speaker, Self Financed Short term Course on "Computer Aided Drug Designing", held during May 27 to June 2, 2016, organized by Department of Biotechnology, MNNIT, Allahabad

Invited Speaker for Expert Lecture in Short Term workshop on “DNA Sequencing: Applications in Diagnostics and Health Care Innovation” at Centre of Medical Diagnostic and Research (CMDR), MNNIT Allahabad (U.P.), India during 08-14 Dec., 2015.

Member, Advisory Committee and Keynote Speaker: "National Conference on Bioinformatics Panaroma in Agriculture and Health" held on 5-6 October, 2015 at Sam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad

Track Chair : IEEE UP Section Conference on Electrical, Computer and Electronics to be held on 4-6 December, 2015

(f) **Continuing Education Activities**

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

Invited Speaker, Self Financed Short term Course on "Computer Aided Drug Designing", held during May 27 to June 2, 2016, organized by Department of Biotechnology, MNNIT, Allahabad

(g) **Participation in the High Level Industry Academia Interaction Program during summer:**

Not Applicable

Name of the organization, Period



(h) Any other important activity not specified above

Ph.D. Thesis entitled "Study on Application Potential of Cognition Inspired Models in Biometrics and Biomedical Science", has been awarded to Upendra Kumar under Gautam Buddh Technical University, Lucknow (final viva-voce date: Dec, 27, 2015).

Taken first initiative for internal and external expert evaluation of courses under Department of Applied Science as its Head.

Helped in recruitment process of the Department of Applied Science for the subject areas, Bioinformatics, Biomedical Engineering, Physics and Mathematics.

Coordinated in Submission of DST-FIST project of Level – I from the Department of Applied Science (Decision from DST is pending)

Maintaining all activities of Department of Applied Science in spite of no support staff provided by the administration for the department.

Helped in Ph.D. Scholar admission

Couple of agendas submitted to Senate are successfully got accepted

Got offer for reviewing papers by SCI journals.



Prof. (Mrs.) Krishna Mishra

Professor

1. Name, Department & Designation: Prof (Mrs) Krishna Misra, Department of Applied Sciences, Honorary Professor
2. **Teaching/Research/Industry Experience:**
Teaching/Research: 51/58 years _____ Industry 8 years _____ Total: 58 years _____
3. **New courses developed**
None
Title, course number _____
4. **Books and book-chapters published**
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
Ajay Kumar Singh and Krishna Misra; Next Generation Sequencing Developments in Cancer Research by Bioinformatics Approaches ; Nova Science Publishers, Inc. 400 Oser Avenue, Suite 1600 Hauppauge, NY 11788-3619, USA (2015)
5. **Research papers published in journals**
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note : Please avoid duplication from last year's report. In Press papers will be deleted if they have not actually appeared by 31st March, 2016.
Underline the name of the author for correspondence.
 1. Nitya Singh, Mitali Aggarwal & Krishna Misra; 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
 2. Anushree Tripathi, Durg Vijay Singh, Rajesh Kumar Kesharwani & Krishna Misra; 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. DOI 10.1007/s40011-014-0405-9 (2015)
 3. Anushree Tripathi & Krishna Misra; Role of tetracycline and c-AMP analogues in pancreatic β stem cell differentiation proliferation process via modulation of epac-2 protein: Indian J of Biotechnology, 2015, vol 14, 172-78.
 4. Rajesh Kesharwani, Prabhakar Singh , Syed Ibrahim Rizvi , K. 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-3 β); Applied Biochemistry and Biotechnology · June 2015
 5. Modulation of erythrocyte plasma membrane redox system (PMRS) activity by curcumin," by Prabhakar Singh, Rajesh Kumar Kesharwani, Krishna Misra and Syed Ibrahim Rizvi, Biochemistry Research International (no. 702039) . Volume 2016 (2016), Article ID 6025245, 8 pages
 6. Anushree Tripathi and Krishna Misra. 3D-QSAR and Docking Simulation Studies of Some Benzopyrone Derivatives as Inhibitors for Breast Cancer Stem Cell Growth via P-glycoprotein Mediated Efflux. Current Bioinformatics, 2016, 11(3): 340-345.
 7. Anushree Tripathi, Krishna Misra and Rajesh Kumar Kesharwani. Study of some piperine analogues on drugs efflux by targeting P-glycoprotein, an in silico approach. Letters in Drug Design & Discovery, 2016, 13, 952-961.
 8. Prabhakar Singh, Rajesh Kumar Kesharwani, Krishna Misra, and Syed Ibrahim Rizvi, The modulation of erythrocyte Na⁺/K⁺-ATPase activity by curcumin ; J Adv Res. 2015 Nov; 6(6): 1023–1030. Published online 2015 Jan 22. doi: 10.1016/j.jare.2014.12.007
 9. Prabhakar Singh, Rajesh Kumar Kesharwani, Krishna Misra and Syed Ibrahim Rizvi, Modulation of erythrocyte plasma membrane redox system (PMRS) activity by curcumin," Biochemistry Research International (no. 702039) . Volume 2016 (2016), Article ID 6025245, 8 pages
 10. Anushree Tripathi, Krishna Misra. Inhibition of P-glycoprotein Mediated Efflux of Paclitaxel by Coumarin Derivatives in Cancer Stem Cells: An in silico Approach; Combinatorial Chemistry & High Throughput Screening (CCHTS) May 2016, vol. 19, no. 6 497-506; DOI: 10.2174/1386207319666160517115158
 11. Manish Kumar Gupta · Krishna Misra , A holistic approach for integration of biological systems and usage in drug discovery, Netw Model Anal Health Inform Bioinforma (2016) 5:4 DOI.10. 1007/s 13721-015-0111-4



12. M.D. Pandareesh; K.M. Shrivash; H.N. Naveen Kumar; K Misra; Srinivas Bharath "Curcumin monoglucoside shows improved bioavailability and mitigates Rotenone induced neurotoxicity in cell and drosophila models of Parkinson's disease" Neurochemical Research, (2016) 41: 3113-3128, DOI 10.1007/s 11064-016-2034-6 ;
13. Sonali Mishra, Abhishek Kumar, Pritish K. Varadwaj, Krishna Misra; Structure based drug designing and simulation studies for finding novel inhibitors of Heat Shock Protein (HSP70) as suppressors for psoriasis" Journal of Interdisciplinary Sciences:Computational Life Sciences, (INSC-S-16-00079) Sci (2016). doi:10.1007/s12539-016-0188-1.
14. Anushree Tripathi, Krishna Misra. Designing and Development of Novel Curcumin Analogues/Congeners as Inhibitors of Breast Cancer Stem Cells Growth. Chemical Engineering Transactions, 2016, 49:79-84.

6. Research papers published in conference proceedings (as a full paper)

Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).

Anushree Tripathi & Krishna Misra "Stilbene analogues as inhibitors of breast cancer stem cells through P-glycoprotein efflux; a 3D quantitative structure activity relationship study" in international conference on Bioinformatics and Systems Biology-2016 at Indian Institute of Information Technology, Allahabad on March 4th-6th, 2016.

Underline the name of the author for correspondence.

Please do not list conferences where only abstracts are published.

7. Seminars and invited talks presented:

Invited talk at Delhi University for all College Science teachers regarding how to conduct innovative research (organized by DST); Invited talk at Motilal Nehru Medical College, Allahabad at a National conference of Gynecologists of India, invited talk at 6th international conference on translational cancer research at Hyatt Regency, Ahmedabad on February 04-07, 2016.

Title, Organization, Date

8. Conferences attended outside IIT Allahabad

Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)

1. paper presented by my Ph.D. student, Anushree Tripathi entitled, "Designing and Development of Novel Curcumin Analogues/Congeners as Inhibitors of Breast Cancer Stem Cells Growth" in the international conference on industrial biotechnology at Bologna, Italy, April 10th-13th, 2016.
2. Chaired a session at 6th international conference on translational cancer research at Hyatt Regency, Ahmedabad

9. Work done in project undertaken in the Institute: None

10. Training Programme organized : None

11. Other Activities

- (a) Technology Developed
Name of the technology/product None
- (b) Software Developed
Name of the software None
- (c) Industry visited and visits to other Institutes for research
Name, Purpose, Period. None
- (d) Patents
(Title, Patent number, granting agency) None
- (e) Awards and Honors Nominated president of Society for Biological Sciences and rural Development
Title, Awarded by
- (f) Continuing Education Activities
Name and type of the course organized (Self-financing, Industry), None
Place, Dates, and profile of participants (university/industry)
- (g) Participation in the High Level Industry Academia Interaction Program during summer
Name of the organization, Period None
- (h) Any other important activity not specified above : Delivered no. of lectures under Science Communication program of National Academy of Science s India, in Allahabad and outside and also under "INSPIRE" program of DST. Chaired the STEM program of DST at Bhuvaneshwar, chaired a meeting at Biotech Park, Lucknow for starting a National Forum in Bioinformatics.



Dr. Anurika Vaish

Professor



1. Name, Department & Designation: **Prof. Anurika Vaish; Department of Management Studies; IIT-Allahabad**
2. Teaching/Research/Industry Experience: Total: **15yrs, 01month & 23 days approximately as on 31st March 2016.**
3. New courses developed : **NIL**
Title, course number
4. Books and book-chapters published:
 - a. Book Chapter-Title of chapter: **“Increasing the market share by the influence of Celebrity Endorsement over sales turnover for a branded product” Rahul Gupta & Prof. Anurika Vaish**
Title of the Book: **Economic Environment of Business, Issue and Policy**
Publisher: **Bharti Publications**; Place: **New Delhi**; Year: **2016**
Edited Book Authors: **Dr.Omber Singh & Dr. K.S Prasad.**
5. Research papers published in journals:
 - a. Title of the article: **Perceived Barriers, Collection models, Incentives& Consumer Preferences: An exploratory study for effective implementation of reverse logistics**
Journal: **International Journal of Logistics Systems & Management**
Volume: **21**, Number: **03**; Year: **2015**, Page numbers: **304 – 318**
All authors: **Saumya Dixit & Anurika Vaish**
 - b. Title of the article: **Exploring the impact of need to evaluate on advertisements: a study of small city Indian consumers**
Journal: **International Journal of Indian Culture & Business Management**
Volume: **10**, Number: **01**; Year: **2015**, Page numbers: **110 – 121**
All authors: **Varisha Rehman & Anurika Vaish**
6. Research papers published in conference proceedings (as a full paper)
 - a. Title of the article: **Analysing price strategies and its relationship on market presence by an e-seller in an e-market**
Details of the Conference: **18th International Conference on “Sustainable Growth & Innovation in the New Millennium – Frontier Global Issues and Challenges**
Paper no : **Room B; Paper S. no: 03** Year: **2016** Page No: **65**
All authors: **Sonam Sharma & Dr. Anurika Vaish**
7. Seminars and invited talks presented:
 - a. Seminar Title: **Career Orientation Seminar**;
Organization: **St. Joseph's College, Allahabad**
Date: **9th October, 2015.**
8. Conferences attended outside IIT Allahabad: -
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)



9. Work done in project undertaken in the Institute: **NIL**

10. Training Programme organized: **NIL**

11. Other Activities

(a) **Technology Developed: NIL**

Name of the technology/product

(b) **Software Developed: NIL**

Name of the software

(c) **Industry visited and visits to other Institutes for research:**

Name: **Barkatullah University**; Purpose: **External Examiner for Ph.D Viva Voce**

(d) **Patents: NIL**

(Title, Patent number, granting agency)

(e) **Awards and Honors: NIL**

Title, Awarded by

(f) **Continuing Education Activities: NIL**

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

(g) **Participation in the High Level Industry Academia Interaction Program during summer**

Name of the organization, Period

(h) **Any other important activity not specified above:**

- a. Delivered talk at a FDP Program on “Innovative Methods in Teaching”, 27th -31st May, 2015 at TIT-MBA, Technocrat Institute of Technology, Bhopal.
- b. Delivered talk at a FDP Program on “Paradigm Shift in Management Education”, 19th January, 2015. IPER, Bhopal.



Dr. Prithish Kumar Varadwaj



1. **Name, Department & Designation :** PRITISH KUMAR VARADWAJ,
2. ASSOCIATE PROFESSOR, APPLIED SCIENCES
3. Teaching/Research/Industry Experience: Teaching/Research: _____ 12 years 3 months _____ Industry _____
0 _____ Total: _____ 12 years 3 months
4. **New courses developed**
Title, course number
Systems Biology SSB332
Cheminformatics CIF332
5. Books and book-chapters published / Research papers published in journals / conference proceedings
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
DeepLNC, a long non-coding RNA prediction tool using deep neural network
R Tripathi, S Patel, V Kumari, P Chakraborty, PK Varadwaj
Network Modeling Analysis in Health Informatics and Bioinformatics 5 (1), 1-14
2016
Effect of STAT3 inhibitor in chronic myeloid leukemia associated signaling pathway: a mathematical modeling, simulation and systems biology study
H Kumar, S Tichkule, U Raj, S Gupta, S Srivastava, PK Varadwaj
3 Biotech 6 (1), 1-12
2016
Structure-Based Drug Designing and Simulation Studies for Finding Novel Inhibitors of Heat Shock Protein (HSP70) as Suppressors for Psoriasis
S Mishra, A Kumar, PK Varadwaj, K Misra
Interdisciplinary Sciences: Computational Life Sciences, 1-11 2016
Integrated analysis of dysregulated lncRNA expression in breast cancer cell identified by RNA-seq study
R Tripathi, A Soni, PK Varadwaj
Non-coding RNA Research
2016
Recent Trends in In-silico Drug Discovery
S Rai, U Raj, S Tichkule, H Kumar, S Mishra, N Sharma, R Buddhram, ...
International Journal for Computational Biology (IJCB) 5 (1), 54-76
2016
Novel Potent Plasmepsin-I (PMI) Inhibitors: An In-Silico Approach
K Kumar Chaudhary, U Raj, P Kumar Varadwaj, N Mishra
Current Proteomics 13 (3), 196-205
2016
Molecular docking and dynamics simulation study of flavonoids as BET bromodomain inhibitors
U Raj, H Kumar, PK Varadwaj
Journal of Biomolecular Structure and Dynamics, 1-12
2016



Identification of Novel Abiotic Stress Proteins in *Triticum aestivum* Through Functional Annotation of Hypothetical Proteins

S Gupta, Y Singh, H Kumar, U Raj, AR Rao, PK Varadwaj

Interdisciplinary Sciences: Computational Life Sciences, 1-16

2016

Erratum to: Flavonoids as Multi-Target Inhibitors for Proteins Associated with Ebola Virus: In Silico Discovery Using Virtual Screening and Molecular Docking Studies

U Raj, PK Varadwaj

Interdisciplinary Sciences: Computational Life Sciences 8 (2), 142-142

2016

Next-generation sequencing revolution through big data analytics

R Tripathi, P Sharma, P Chakraborty, PK Varadwaj

Frontiers in Life Science, 1-31

2016

Estimating percentage epigenetic modifications in human genome using NGS data

A Lawrence, R Shukla, U Raj, PK Varadwaj

Bioinformatics and Systems Biology (BSB), International Conference on, 1-4

2016

Count-based transcriptome analysis to identify differentially expressed genes for breast cancer

R Tripathi, P Sharma, P Chakraborty, P Varadwaj

Bioinformatics and Systems Biology (BSB), International Conference on, 1-5

2016

Embryo and endosperm specific comparative transcriptome analysis of *triticum aestivum* in response to ABA and H₂O₂ stress

S Gupta, U Raj, H Kumar, PK Varadwaj, A Gupta

Bioinformatics and Systems Biology (BSB), International Conference on, 1-4

2016

In silico identification of novel virulent protein of *phytophthora infestans* related to late blight disease

R Tripathi, P Sharma, P Chakraborty, P Varadwaj

Bioinformatics and Systems Biology (BSB), International Conference on, 1-5

2016

Antiviral therapy with nucleotide/nucleoside analogues in chronic hepatitis B: A meta-analysis of prospective randomized trials

RH Bedre, U Raj, SP Misra, PK Varadwaj

Indian Journal of Gastroenterology, 1-8

2016

In-silico identification of inhibitors against mutated BCR-ABL protein of chronic myeloid leukemia: a virtual screening and molecular dynamics simulation study

H Kumar, U Raj, S Gupta, PK Varadwaj

Journal of Biomolecular Structure and Dynamics, 1-13

2016

Efficacy of Sucralfate in Reflux Disease in comparison to H

R Bedre, U Raj, P Varadwaj

2016

Efficacy of Sucralfate in Reflux Disease in comparison to H₂-Receptor Antagonist: A Meta-Analysis of Randomized Trials

R Bedre, U Raj, P Varadwaj

Biology, Engineering, Medicine and Science Reports 2 (1)

2016

Structural insights into conformational stability of both wild-type and mutant EZH2 receptor



IAier, PK Varadwaj, U Raj

Scientific Reports 6

2016

In Silico Identification of Novel Glucagon Receptor Antagonist for the Treatment of Type 2 Diabetes Mellitus

U Raj, Y Jain, H Kumar, S Gupta, R Tripathi, PK Varadwaj

Enzyme Engineering 2015

2015

Exploring dual inhibitors for STAT1 and STAT5 receptors utilizing virtual screening and dynamics simulation validation

U Raj, H Kumar, S Gupta, PK Varadwaj

Journal of Biomolecular Structure and Dynamics, 1-15

2015

Exploration of new drug-like inhibitors for serine/threonine protein phosphatase 5 of Plasmodium falciparum: a docking and simulation study

S Gupta, A Jadaun, H Kumar, U Raj, PK Varadwaj, AR Rao

Journal of Biomolecular Structure and Dynamics 33 (11), 2421-2441

2015

Extrapolation of Inter Domain Communications and Substrate Binding Cavity of Camel HSP70 1A: A Molecular Modeling and Dynamics Simulation Study

S Gupta, AR Rao, PK Varadwaj, S De, T Mohapatra

PloS one 10 (8), e0136630

2015

Identification of dual natural inhibitors for chronic myeloid leukemia by virtual screening, molecular dynamics simulation and ADMET analysis

H Kumar, U Raj, S Srivastava, S Gupta, PK Varadwaj

Interdisciplinary Sciences: Computational Life Sciences, 1-12

2015

Flavonoids as multi-target inhibitors for proteins associated with Ebola virus: in silico discovery using virtual screening and molecular docking studies

U Raj, PK Varadwaj

Interdisciplinary Sciences: Computational Life Sciences, 1-10

2015

DPAAR: a Database of Perfect Amino Acid Repeat

H Kumar, S Srivastava, PK Varadwaj

International Journal for Computational Biology (IJCB) 4 (1), 62-66

2015

Systemic Review on Chronic Myeloid Leukemia: Therapeutic Targets, Pathways and Inhibitors

H Kumar, U Raj, S Gupta, R Tripathi, PK Varadwaj

Journal of Nuclear Medicine & Radiation Therapy 6 (6), 1

2015

Novel DOT1L Receptor Natural Inhibitors Involved in Mixed Lineage Leukemia: a Virtual Screening, Molecular Docking and Dynamics Simulation Study

PKV Utkarsh Raj, Himansu Kumar, Saurabh Gupta

Asian Pacific journal of Cancer Prevention 16 (9), 3817-25

2015

Parameters Involved in Autophosphorylation in Chronic Myeloid Leukemia: a Systems Biology Approach

H Kumar, S Tichkule, U Raj, S Gupta, S Srivastava, PK Varadwaj

Asian Pacific Journal of Cancer Prevention 16 (13), 5273-5278

2015

Prediction of lncRNA using Deep Learning Approach



R Tripathi, V Kumari, S Patel, Y Singh, P Varadwaj

International Conference on Advances in Biotechnology (BioTech). Proceedings ...

2015

Prediction of Blood Brain Barrier Permeability of Ligands Using Sequential Floating Forward Selection and Support Vector Machine

P Gupta, U Raj, PK Varadwaj

Computational Intelligence in Data Mining-Volume 1, 447-458

Note: Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**

Underline the name of the author for correspondence.

6. Research papers published in conference proceedings (as a full paper)

Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).

Underline the name of the author for correspondence.

Please do not list conferences where only abstracts are published.

7. Seminars and invited talks presented: **NIL**

Title, Organization, Date

8. Conferences attended outside IIIT Allahabad: **NIL**

Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)

9. Work done in project undertaken in the Institute: **NIL**

10. Training Programme organized: **NIL**

11. Other Activities **NIL**

(a) **Technology Developed**

Name of the technology/product

(b) **Software Developed**

Name of the software

(c) **Industry visited and visits to other Institutes for research**

Name, Purpose, Period.

(d) **Patents**

(Title, Patent number, granting agency)

(e) **Awards and Honors**

Title, Awarded by

(f) **Continuing Education Activities**

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

(g) **Participation in the High Level Industry Academia Interaction Program during summer**

Name of the organization, Period

(h) **Any other important activity not specified above**



Dr. Neetesh Purohit



1. Name, Department & Designation :
**Dr. Neetesh Purohit, Associate Professor & Head,
Department of Electronics and Communication Engineering**
2. Teaching/Research/Industry Experience:
Teaching/Research: **13 years** Industry: 00 Total: **13 years**
3. New courses developed
4. Books and book-chapters published
5. Research papers published in journals
Mahendra Kumar Shukla, Suneel Yadav, and Neetesh Purohit, "Ergodic Sum Rate Evaluation of Cellular Multiuser Two-Way Relaying with Beamforming and Antenna Selection over Nakagami-m Fading ," *Springer Wireless Personal Communications*, DOI: 10.1007/s11277-016-3795-6, online published 2016.
Mahendra Shukla, Suneel Yadav, Neetesh Purohit, 'Performance Evaluation and Optimization of Traffic-Aware Cellular Multiuser Two-Way Relay Networks over Nakagami-m Fading', Online published in IEEE Systems Journal, 2016.
Purnendu Pandey, Neetesh Purohit, "Clique based Network Coding Technique" IETE Journal of Research, 2015.
Purnendu Pandey, S. Verma, Neetesh Purohit, "Wireless Networks using Matroid along with Network Coding", Journal of Internet Technologies, National Ilan University Yilan, Taiwan. 2015
6. Research papers published in conference proceedings (as a full paper)
Mahendra K. Shukla, Suneel Yadav, and Neetesh Purohit, "Antenna Selection with User Scheduling in Traffic-Aware Cellular Two-Way Relaying Networks," IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC), 5-8 August 2016, Hong Kong, China
A. Bhowal, T. Paradkar and N. Purohit, "Evaluation of extended CP and ultra-extended CP in MBSFN", **IEEE** International Conference UPCON 2015, IIIT Allahabad, Dec 4-6, 2015.
7. Seminars and invited talks presented:
'Applications of 'Advance Computing' in Wireless Sensor Networks', IEEE International Conference ICACSE 2016 KNIT Sultanpur Oct 15th 2016
'An Innovative Design of WSN Node', WSCSD-2016, SIET Allahabad on April 10, 2016
'A comparative study of Infrastructural and Adhoc wireless networks: From Research perspective', Gujarat Technological University, Ahmedabad (Gujrat), on April 18, 2015.
8. Conferences attended outside IIIT Allahabad
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
 - (b) **Software Developed**
 - (c) **Industry visited and visits to other Institutes for research**
 - (d) **Patents**
 - (e) **Awards and Honors**
 - (f) **Continuing Education Activities**
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
 - (h) **Any other important activity not specified above**



Dr. Shirshu Varma



1. Name, Department & Designation: Dr. Shirshu Varma, IT-Dept, Associate Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: _____ Industry _____ Total: ____ 20 yrs ____
3. New courses developed NO
Title, course number
4. Books and book-chapters published: Details as below:
Shirshu Varma 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
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
 1. Shirshu Varama et.al. , "A Novel Computational Geometry Based Node Deployment Scheme in 3-D Wireless Sensor Network," accepted for publication in International Journal of Sensor Network, Inderscience-2016.
 2. Shirshu Varma et. al., "Challenges and implementation on cross layer design for wireless sensor networks." Wireless Personal Communications, Springer, 86.2 1037-1060, (2016).
 3. Divya Lohani and Shirshu Varma, \Energy e_cient data dissemination in wireless sensor networks using mobile agents," Wireless Personal Communications, Springer, vol. 89, no. 4, pp. 1165-1176, 2016.
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note: Please avoid duplication from last year's report. In Press papers will be deleted if they have not actually appeared by 31st March, 2016.
Underline the name of the author for correspondence.
6. Research papers published in conference proceedings (as a full paper)
Shirshu Varma et al Radio Irregularity Model Based on Received Signal Strength for Three Dimensional Wireless Sensor Network. Accepted In IEEE TENCON 2016.
7. Seminars and invited talks presented:
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed** *NIL*
Name of the technology/product
 - (b) **Software Developed** *NIL*
Name of the software
 - (c) **Industry visited and visits to other Institutes for research** *NIL*
Name, Purpose, Period.
 - (d) **Patents** *NIL*
(Title, Patent number, granting agency)
 - (e) **Awards and Honors** *NIL*
Title, Awarded by
 - (f) **Continuing Education Activities** *NIL*
Name and type of the course organized (Self-financing, Industry), Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer** *NIL*
 - (h) **Any other important activity not specified above** *NIL*



Dr. Vrijendra Singh



1. Name, Department & Designation: Dr. Vrijendra Singh, Associate Professor, Dept. of IT
2. Teaching/Research/Industry Experience:
Teaching/Research: 14.5 Years, Industry: --, Total: 14.5 Years
3. New courses developed
Title, course number Simulation and Modeling Lab, ISIM732C
4. Books and book-chapters published: NIL
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
 - a. "SDL, CLASP & TOUCHPOINTS: A Comparison and Alignment of CLASP with Waterfall Model", International Journal of Computer and Communication System Engineering (IJCCSE), Vol. 2 (3), 2015, 365-376, N Sankhwar, A Tewari, V Singh.
 - b. "Legitimising Bitcoins in India", Computer and Telecommunications Law Review, Thomson Reuters (Professional) UK Ltd., 21(6), 2015, 162-172, Manchanda, Sanchi, Kumari, Sweta, Abhishek, Kishore, Singh, Dr. Vrijendra.
 - c. "AN EXPLORATORY STUDY ON FACTORS AFFECTING RETENTION OF TALENTED PROFESSIONALS IN INDIAN IT INDUSTRY". International Journal of Global Management . Feb-Jul2015, Vol. 5 Issue 2, p36-48. 13p., Gupta, Arti, Vaish, Anurika; Singh, Vrijendra.
 - d. "Selection of appropriate electronic banking channel alternative: Critical analysis using analytical hierarchy process", International Journal of Bank Marketing, Emerald Group Publishing Limited, 33(3), 2015, 223 – 242, Vaibhav Mishra, Vrijendra Singh.
 - e. "Keyword Based Search and its Limitations in the Patent Document to Secure the Idea from its Infringement", Procedia Computer Science, Elsevier, 78, 439 -446, 2016, Ranjeet Kumar, RC Tripathi, Vrijendra Singh.
6. Research papers published in conference proceedings (as a full paper)
 - a. "Identification of trespasser from the signatures of buried single mode fiber optic sensor cable", 2015 Annual IEEE India Conference (INDICON)2015, 1-6, Preetam Suman, Pallavi Gupta, Philip B Kassey, Neera Saxena, Yogesh Choudhary, Vrijendra Singh, M Radhakrishna.
 - b. "The Relationship between Human Resource Practices and Employee Retention", 68th All India commerce conference at Vinoba Bhave University, Hazaribag, Jharkhand, 6-9th November, 2015, Arti Gupta, Vrijendra Singh.
7. Seminars and invited talks presented:
 - a. "Human- Robot Interaction", Uttarakhand State Council for Science and Technology(UCOST), Fe. 10- 12, 2016
 - b. "Make in India & Skill Development", MP. Bhoj Open University Bhopal, Oct. 30- 31, 2015
8. Conferences attended outside IIIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
 - a. 10th Uttarakhand State Science and Technology Congress (USSTC) 2015-16 from 10th -12th February, 2016 at Vigyan Dham, Jhajra, Dehradun organized by Uttarakhand State Council for Science and Technology(UCOST).
9. Work done in project undertaken in the Institute: NIL



10. Training Programme organized: NIL
11. Other Activities
 - (a) Technology DevelopedNIL
Name of the technology/product
 - (b) Software DevelopedNIL
Name of the software
 - (c) Industry visited and visits to other Institutes for research NIL
Name, Purpose, Period.
 - (d) Patents NIL
(Title, Patent number, granting agency)
 - (e) Awards and Honors NIL
Title, Awarded by
 - (f) Continuing Education Activities NIL
Name and type of the course organized (Self-financing, Industry), Place, Dates, and profile of participants (university/industry)
 - (g) Participation in the High Level Industry Academia Interaction Program during summer
Name of the organization, Period NIL
 - (h) Any other important activity not specified above NIL



Dr. Rajat Kumar Singh



1. Name, Department & Designation:
Dr. Rajat Kumar Singh, Associate Professor, ECE Department
2. Teaching/Research/Industry Experience:
Teaching/Research: **10 Years** Industry: **Zero** Total: **10 Years**
3. New courses developed: **No**
4. Books and book-chapters published: **No**
5. Research papers published in journals: **8**
 - i. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "Multichannel Decoded Local Binary Patterns for Content Based Image Retrieval," *IEEE Transactions on Image Processing*, Vol. 25, No. 9, pp. 4018-4032, Sept'2016.
 - ii. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "A Novel Local Bit-plane Dissimilarity Pattern for CT Image Retrieval," *IET Electronics Letters*, Vol. 52, No. 15, pp. 1290-1292, July'2016.
 - iii. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "Local Bit-plane Decoded Pattern: A Novel Feature Descriptor for Biomedical Image Retrieval," *IEEE Journal of Biomedical and Health Informatics*, Vol. 20, No. 4, pp. 1139-1147, July'2016.
 - iv. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "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, Dec'2015.
 - v. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "A Multi-Channel based Illumination Compensation Mechanism for Brightness Invariant Image Retrieval," *Multimed Tools Appl* (Springer), Vol. 74, No. 24, pp. 11223-11253, Dec'2015.
 - vi. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "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, Sept'2015.
 - vii. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "Rotation and scale invariant hybrid image descriptor and retrieval," *Computers and Electrical Engineering*, (Elsevier), Vol. 46, No. 8, pp. 288-302, Aug'2015.
 - viii. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "Local Neighborhood Based Robust Colour Occurrence Descriptor for Colour Image Retrieval," *IET Image Processing*, (IEEE), Vol. 9, No. 7, pp. 578-586, July 2015.
6. Research papers published in conference proceedings (as a full paper): **7**
 - i. Kshitiza Singh and **Rajat Kumar Singh**, "An Energy Efficient Fuzzy based Adaptive Routing Protocol for Wireless Body Area Network" *IEEE UPCON 2015*, IIIT-Allahabad, Dec, 2015.
 - ii. Ojaswi Chandrakar, Utpal Pandey and **Rajat Kumar Singh**, "Reduction of the Nonlinearities by decreasing Peak to Average Power Ratio (PAPR) for Coherent Optical OFDM-WDM system using Exponential Companding," *IEEE UPCON 2015*, IIIT-Allahabad, Dec, 2015.
 - iii. Utpal Pandey, Sharad Kumar, Abhishek Bajpai and **Rajat Kumar Singh**, "Channel Selection Algorithm for MIMO in Multipath Environment," *IEEE UPCON 2015*, IIIT-Allahabad, Dec, 2015.
 - iv. Sharad Kumar, Utpal Pandey, Abhishek Bajpai and **Rajat Kumar Singh**, "MIMO Signal Detection in Multipath Environment," *IEEE UPCON 2015*, IIIT-Allahabad, Dec, 2015.
 - v. Sonam Srivastava, Pooja Mishra and **Rajat Kumar Singh**, "Design of a Reconfigurable Antenna with Fractal Geometry," *IEEE UPCON 2015*, IIIT-Allahabad, Dec, 2015.
 - vi. Shiv Ram Dubey, Satish Kumar Singh and **Rajat Kumar Singh**, "Boosting Local Binary Pattern with Bag-of-Filters for Content Based Image Retrieval," *IEEE UPCON 2015*, IIIT-Allahabad, Dec, 2015.
 - vii. Anirban Bhowal, Nidhi Verma and **Rajat Kumar Singh**, "Design and Evaluation of a New Compact CPW Fed Slot Textile Antenna for UWB Applications" *IEEE ICCSP 2015*, pp. 0314-0317, Tamilnadu, India, April, 2015.
7. Seminars and invited talks presented: **No**
8. Conferences attended outside IIIT Allahabad: **No**
9. Work done in project undertaken in the Institute: **No**
10. Training Programme organized: **No**
11. Other Activities: **Organized the Conference IEEE UPCON 2015 in Dec'15**



Dr. Ashutosh Mishra



1. Name, Department & Designation:
Dr. Ashutosh Mishra, Applied Science (BME), Associate Professor
2. Teaching/Research/Industry Experience : Teaching/Research: _8_ Industry 02 Total: 10
3. New courses developed
Title, course number: Bioelectrics – SBEL 930E
4. Books and book-chapters published
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
 1. “In-Silico based Prediction Of Deleterious Non-synonymous Single Nucleotide Polymorphism in The Huan CDK1 Gene.”, S. Suman, G.P. Tiwari, A. Mishra, A. Kulshreshtha; Int. J. of Adv. Res. 4 (8). 1360-1366; Aug. 2016.
 2. “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
 3. “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
 4. “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

Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**
Underline the name of the author for correspondence.
6. Research papers published in conference proceedings (as a full paper)
Integrated analysis of microRNA regulation of genes in HSIL, IEEE CIBCB 2016, Chiang Mai, Thailand, Oct. 5-7, 2016, S. Suman, A. Mishra, A. Kulshretha
Underline the name of the author for correspondence.
7. Seminars and invited talks presented:
“Electrically Modulated Nerve AP Block” – at the First International Craniofacial Dental Summit, 28th-31st march 2016, KGMU. (Invited talk)
8. Conferences attended outside IIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



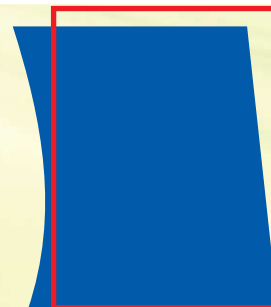
Dr. Madhvendra Misra



1. Name, Department & Designation :
Dr Madhvendra Misra, Department of Management Studies, Associate Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: 16yrs 2 months Industry _____ Total: 16yrs 2months
3. Books and book-chapters published N/A
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
4. Research papers published in journals
Shagun Srivastava & Madhvendra Misra Assessing and forecasting technology dynamics in smartphones: a TFDEA approach Pages 783-797 | Received 30 Mar 2015, Accepted 07 Jan 2016, Published online: 12 Feb 2016
<http://dx.doi.org/10.1080/09537325.2016.1143094>
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. DOI: [10.1504/IJITM.2015.068499](https://doi.org/10.1504/IJITM.2015.068499)
5. Research papers published in conference proceedings (as a full paper)
Ila Srivastava, Jaya, M Misra "Current trends of computational advertising in India" International Conference (IC-SGINM-2016) Volume 18, RDA & R Chambers of Commerce ,2016/3 **published in: citation** Ila Srivastava, Jaya, M Misra,2016. Current trends of computational advertising in India. *Journal of Management Outlook*, 6, 49-60
6. Seminars and invited talks presented: N/A
Title, Organization, Date
7. Conferences attended outside IIIT Allahabad N/A
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
8. Work done in project undertaken in the Institute:
9. Training Programme organized:
10. Other Activities N/A
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. Akhilesh Tiwari



1. Name, Designation & Department:
Dr Akhilesh Tiwari, Assistant Professor, Department of Applied Sciences
2. Teaching/Research/Industry Experience:
Teaching/ Research: **12/17 Years** Industry **One Year** Total: **18 Years**
3. New courses developed
Title, course number
4. Books and book-chapters published
5. Research papers published in journals
6. Research papers published in conference proceedings (as a full paper)
7. Seminars and invited talks presented:
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
 1. **Akhilesh Tiwari**, “Characterization and Optimization of Bioprocess Technology Using Digital Image Processing Tools” at the International Conference on Advances in Bioprocess Technology (Biospectrum 2015) organized by School of Biosciences, **MACFAST, Tiruvalla, Kerla, India** from 26-28 November 2015 (**Invited Speaker**).
 2. **Akhilesh Tiwari**, International Conference on New Horizons in Biotechnology (NHBT-2015) and XII Convention of the Biotech Research Society, India (BRSI), at CSIR-NIIST, **Trivandrum, Kerla, India** from 22-25 November 2015 (**Invited Speaker and also Chaired a Session**).
 3. Bhagyashree Tiwari, N Manickam, Smita Kumara and **Akhilesh Tiwari**, Isolation and Characterization of megaplasmid from degradative bacteria, localization of atabolic genes and biodegradation studies of polyaromatic hydrocarbons, at the International Conference on New Horizons in Biotechnology (NHBT-2015) and XII Convection of the Biotech Research Society, India (BRSI), at CSIR-NIIST, **Trivandrum, Kerla, India** from 22-25 November 2015.
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
 - (b) **Software Developed**
 - (c) **Industry visited and visits to other Institutes for research**
 - (d) **Patents**
 - (e) **Awards and Honors**
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. S. Venkatesan



1. Name, Department & Designation: S.Venkatesan
2. Teaching/Research/Industry Experience:
Teaching/Research: 9 years Industry: 0 Total: 9 years
3. New courses developed
Nil
4. Books and book-chapters published
Nil
5. Research papers published in journals
Venkatesan S., Vladimir A. Oleshchuk, Chellappan C., and Sourabh Prakash (2016), "Analysis of Key Management Protocols for Social Networks", International Journal of Social Network Analysis and Mining, Vol.6, No.1, Article.3.Springer.
6. Research papers published in conference proceedings (as a full paper)
Akانشa Pandey, Ezhil Kalaimannan, S. Venkatesan, "An Information Diffusion Model to Analyze the Behavior of Online Social Network Based Malwares", 2015 International Conference on Computational Science and Computational Intelligence, vol. 00, no. , pp. 867-868, 2015, doi:10.1109/CSCI.2015.57
7. Seminars and invited talks presented:
Nil
8. Conferences attended outside IIIT Allahabad
Nil
9. Work done in project undertaken in the Institute: Nil
10. Training Programme organized: Nil
11. Other Activities
 - (a) **Technology Developed**
Nil
 - (b) **Software Developed**
Project registration portal for IIIT-A students
 - (c) **Industry visited and visits to other Institutes for research**
Nil
 - (d) **Patents**
Nil
 - (e) **Awards and Honors**
Nil
 - (f) **Continuing Education Activities**
Nil
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Nil
 - (h) **Any other important activity not specified above**



Dr. Sanjai Singh

1. Name, Department & Designation: Dr.Sanjai Singh, Applied Sciences, Asst. Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: ____ 11 years ____ Industry ____ 0.0 ____ Total: ____ 11 years
3. New courses developed -None-
Title, course number
4. Books and book-chapters published
(Order: Title, Publishers and Place, Year, All authors) -NONE-
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals -None-
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**
Underline the name of the author for correspondence.
6. Research papers published in conference proceedings (as a full paper) -None-
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented: – None-
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad -None-
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute: -None-
10. Training Programme organized: -None-
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**
Working as Faculty In-charge of IIIT-A, Amethi campus.



Dr. Pramod Kumar



1. Name, Department & Designation: **Dr. Pramod Kumar, Assistant Prof.**
2. Teaching/Research/Industry Experience:
Teaching/Research: 4/8 Industry _____ Total: 4/8
3. New courses developed
 Title, course number
4. Books and book-chapters published
Preparation of Graphene Oxide from Tattered Graphite and Applications by Pramod Kumar and Rachana Kumar: ISBN 978-3- 330-00286-9 (2016)(LAP LAMBERT Academic Publishing GmbH & Co., Germany)
5. Research papers published in journals
 1. *Fullerene grafted graphene oxide with effective charge transfer interactions, Kumar et. al. Carbon 2016 [doi:10.1016/j.carbon.2016.06.034] (I.F. 6.2).*
 2. *Ultrafast dynamics in topological nanocrystals of Bi₂Se₃, Bi₂Te₃ and Bi₂Te₂Se, Faizan et. al. Adv. Mat. Letters. 2016 [DOI: 10.5185/amlett.2016.6898] [I.F. 1.9].*
 3. *Structural, negative magnetization and heat capacity properties in pseudo-two-dimensional; M₂Fe₂O(AsO₄)₂ [M=K, CsK and Rb] compounds, Kumar et. al. Adv. Mat. Letters. 2016 [DOI: 10.5185/amlett.2016.6450] [I.F. 1.9].*
 4. *Synthesis and ultrafast spectroscopic study of new [6,6]methanofullerenes, Kumar et. al. RSC Adv.2016 [DOI: 10.1039/C6RA01189F] [I.F. 3.8].*
 5. *Spin Glass behavior in TbRu₂Ge₂ compound, Rashmi Singh, Rachana Kumar and Pramod Kumar Adv. Mat. Letters. 2016 [DOI: 10.5185/amlett.2016.6309] [I.F. 1.9].*
 6. *Pressure dependent Magnetic, AC Susceptibility and Electrical Properties of Nd₇Pd₃, Pramod Kumar, Puneet Jain and Rachana Kumar, 2015, RSC Adv. 5(2015)58928.*
 7. *Magnetocaloric effect and refrigeration cooling power in amorphous Gd₇Ru₃ alloys, Pramod Kumar and Rachana Kumar, 2015, AIP advances 5(2015)077125.*
 8. *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 Bharadwaj and Suresh Chand, RSC Adv. (2015) 5, 35893.*
6. Research papers published in conference proceedings (as a full paper)
 1. *Comparative study of Co₂MnSi structural and surface morphological thin films on Si/SiO₂, Rashmi et. al. Adv. Mat. Letters, 2016 (Article in Press) [I.F. 1.9].*
 2. *Anomalous magnetoresistance in topological insulator Bi₂Te₃, Kumar et. al. Adv. Mat. Letters. 1(2016)21 [I.F. 1.9].*
7. Seminars and invited talks presented:
 1. *Magnetocaloric effect in rare earth based intermetallics, First International Conference on Advanced Materials for Power Engineering (ICAMPE-2015): Invited talk and session chair*
 2. *Anomalous magnetoresistance in topological insulator Bi₂Te₃, International Conference on Materials Science & Technology (ICMTech -2016), Delhi University: Invited talk*
8. Work done in project undertaken in the Institute:
 1. *We have procured a DC/RF sputtering unit as all the thin films have to be deposited by sputtering. We have purchased targets for thin film deposition. We have deposited Co₂MnSi thin films on Si and SiO₂ wafer by varying the deposition temperature and deposition time. XRD and AFM of the deposited films have been done along with ellipsometry to check the thickness of the deposited films. The AFM and XRD of some of the deposited films are shown below:*

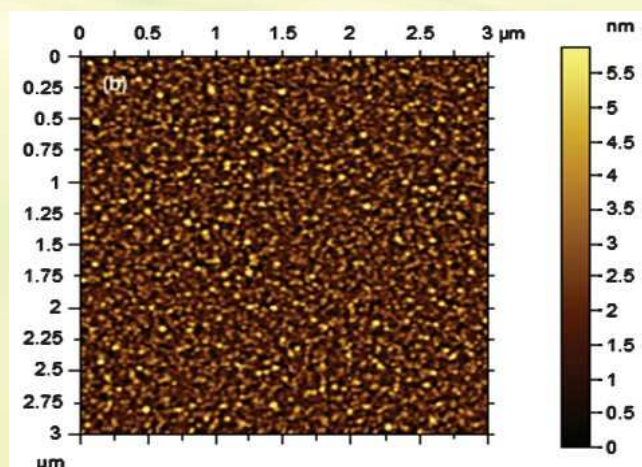
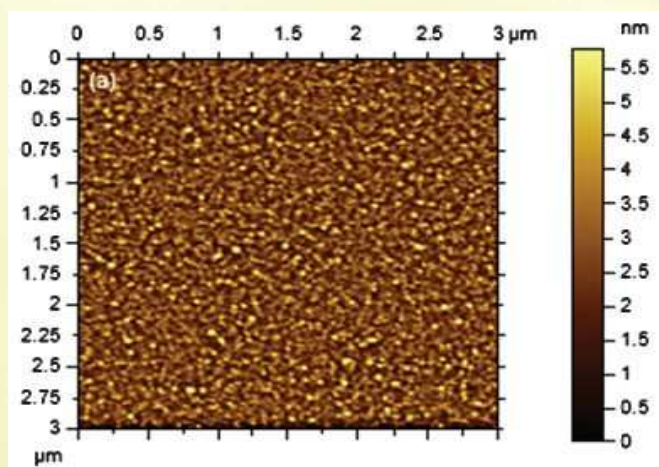


Figure :SEM: Co_2MnSi on a) SiO_2 , b) Si deposited for 10 minutes

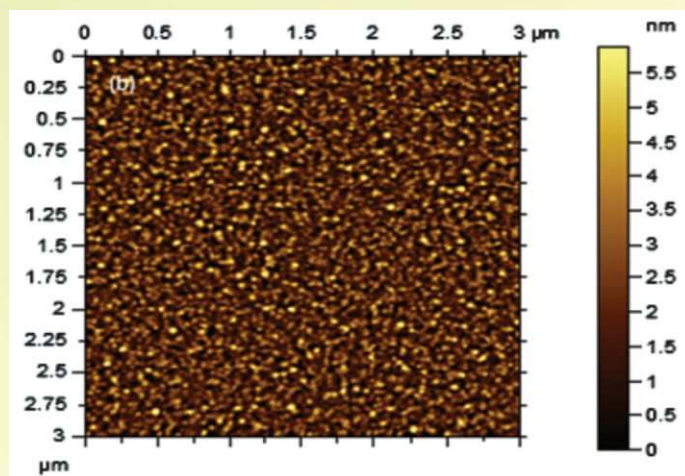
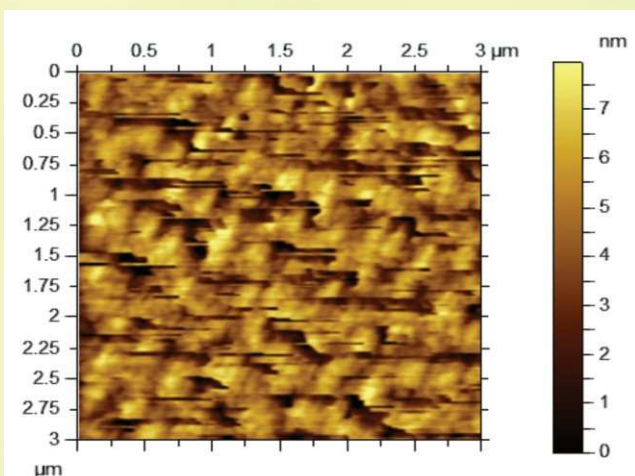
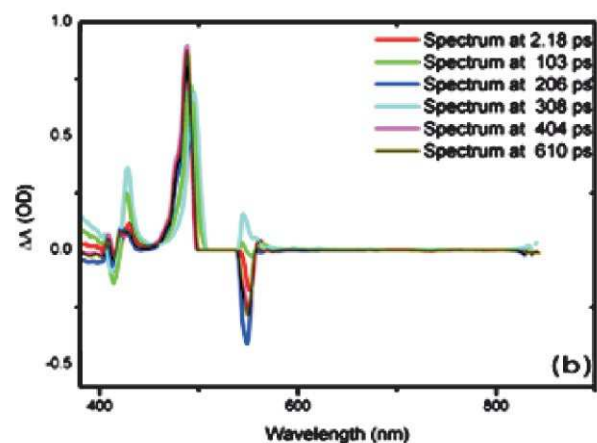
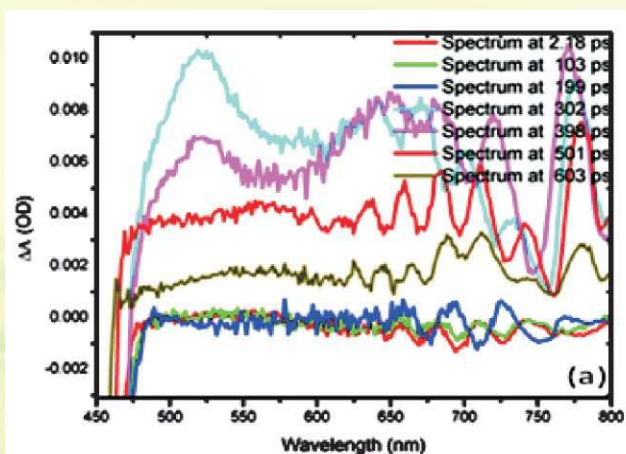


Figure 2:AFM: Co_2MnSi on Si wafer (a) for 1 hour (b) for 10 minutes deposition

- Single nano size crystal of Bi_2Se_3 , Bi_2Te_3 and $\text{Bi}_2\text{Te}_2\text{Se}$ were grown by self flux method in the furnace and single phase was confirmed by XRD. To perform ultrafast optical pump-probe spectroscopy, a train of optical pulses from a Ti:Sapphire laser amplifier (35 fs, 4 mJ/pulse, 1 KHz, 800 nm) was splitted into two beams with a beam splitter. Important results about the molecular vibration are obtained by studying the frequency dependent graph of reflectivity of the probe laser.





ANNUAL REPORT 2015-16

9. Training Programme organized:
2nd Workshop on Advanced Materials and Instrumentation in Biomedical Engineering (AMIBE-2015), 09-13 May 2015.
10. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Best poster Award by ACS in MACRO2015 conference on “Facile graphene synthesis as Alternate HTL layer in OPV devices”
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
FP School 2016 which was held at Institute Laue-Langevin in Grenoble, France between 9-14 May 2016..
 - (h) **Any other important activity not specified above**



Dr. Nidhi Mishra



1. Name, Department & Designation: Dr Nidhi Mishra, Applied Sciences, Assistant Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: 8 years Industry Total 8 years
3. New courses developed
Title, course number **Health care systems**
4. Books and book-chapters published

Sl. No.	Title of Chapter (s)	Title of the Book(s)	Authors	Name of Publisher (with city/ country)	Month & year of Publication	Refereed or Non-refereed	ISBN/ ISSN No.
1.	Chalcones as antimalarials: In silico and synthetic approach	The Battle Against Microbial Pathogens: Basic Science, Technological Advances and Educational Programs	Kamal Kumar Chaudhary, Pooja Kannoja, Nidhi Mishra	Formatex Research Center, Spain	October 2015	Refereed	<u>Volume 1 ISBN (13): 978-84-942134-6-5</u>
2.	Liquid Crystal Systems in Drug Delivery	Handbook of Research on Novel Approaches for Drug Delivery	Kamal Kumar Chaudhary, Pooja Kannoja, Nidhi Mishra	IGI Global. Main Office 701 E. Chocolate Ave. Hershey, PA 17033, USA	Nov 2015	Refereed	Under Review
3.	Bioinformatics and its therapeutic applications	Handbook of Research on Novel Approaches for Drug Delivery	Sarvesh Kumar Gupta, Kamal Kumar Chaudhary, Nidhi Mishra	IGI Global. Main Office 701 E. Chocolate Ave. Hershey, PA 17033, USA	Jan 2016	Refereed	Under Review

(Order: Title, Publishers and Place, Year, All authors)

In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.

5. Research papers published in journals
 1. **Nidhi Mishra, Prerna Pant, Ankit Porwal, Juhi Jaiswal, Mohd. Aquib Samad, Suraj Tiwari. "Targeted Drug Delivery: A Review" *American Journal of PharmTech Research*. 2016, 6(1)[IF: 0.9832].**
 2. Apurva Srivatava, Soumya Sharma, Tejaswita Yadav, Anjali Nayak, Akanksha Kumari, Kamal Chaudhary, **Nidhi Mishra**. "Polymers in Drug Delivery" *Journal of Biosciences and Medicines (JBM)*, 2016, 4, 69-84



3. Ekta Pandey, Keerti Srivastava, Saurabh Gupta, Suravi Srivastava and Nidhi Mishra ,” **SOME BIOCOMPATIBLE MATERIALS USED IN MEDICAL PRACTICES- A REVIEW**” *IJPSR* (2016), Vol. 7, Issue 7, 2748-2755
4. Sarvesh Kumar Gupta, **Kamal Kumar Chaudhary**, Utkarsh Raj, Nidhi Mishra, “**Computational Identification of Inhibitors against DPP-IV for checking types-2 diabetes**” *Letters in Drug Design & Discovery, Bentham Science, Letters in Drug Design & Discovery*, 2016, 13, 1-8
5. Kamal Kumar Chaudhary, Sarvesh Kumar Gupta, Nidhi Mishra “**Flavanoids as potential NEDD-4 inhibitors: in-Silico Discovery Using Molecular Docking and ADME studies**”. *Interdisciplinary Sciences: Computational Life Sciences, Springer, Published online 30 march 2016*
6. Research papers published in conference proceedings (as a full paper)
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented:
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. Manish Goswami

1. Name, Department & Designation:
Dr. Manish Goswami, Assistant Professor, Electronics and Communication Engg, IIIT-A
2. Teaching/Research/Industry Experience:
Teaching: 7.9 _____ Industry 1.3 _____ Total: 9 _____
(Excluding period while pursuing PhD)
3. New courses developed
Title, course number -NIL
4. Books and book-chapters published
(Order: Title, Publishers and Place, Year, All authors)- NIL
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
P. Joshi, Manish Goswami and D Pal, "Design of Quadrature Amplitude Modulation based DC offset cancellation circuit," Int. J. Electronics Letters -Taylor Francis., 2015.
Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**
Underline the name of the author for correspondence.
6. Research papers published in conference proceedings (as a full paper)
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
 1. Apoorva Pathak, Harish Peta, Divyesh Sachan and Manish Goswami, "A Modified SRAM BASED Low Power Memory Design", accepted for publication in **29th IEEE VLSI Design Conf.**, Jan 2-4, Kolkata, India, VLSID.
 2. **Anush, Rohit Joshi, Manish Goswami, B. R. Singh and A Srivastava**, "An Improved Dynamic Latch Based Comparator for 8-bit Asynchronous SAR ADC" **IEEE ISVLSI, France 2015.**
 Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented:
Title, Organization, Date- NIL
8. Conferences attended outside IIIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
IEEE SYMPOSIUM ON VLSI, Montpellier, France...8/07/2015 to 10/07/2015-paper presentation
9. Work done in project undertaken in the Institute: working in SMDPC2SD project of GOI.
10. Training Programme organized: NIL
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product- NIL
 - (b) **Software Developed**
Name of the software- NIL
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.-NIL
 - (d) **Patents**
(Title, Patent number, granting agency) NIL
 - (e) **Awards and Honors**
Title, Awarded by-NIL
 - (f) **Continuing Education Activities- NIL**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period- NIL
 - (h) **Any other important activity not specified above-NIL**



Dr. Pooja Mishra



1. Name, Department & Designation:
Dr. Pooja Mishra, Assistant Professor,
Department of Electronics and Communication Engineering.
2. Teaching/Research/Industry Experience:
Teaching/Research: 2.5 years _____ Industry _____ 0 Years _____
Total: 2.5 years
3. New courses developed - No
4. Books and book-chapters published - No
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals - No
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, pp. 30-38, **2015**.
6. Research papers published in conference proceedings (as a full paper)
 1. Sonam Srivastava, **Pooja Mishra**, and Rajat Kumar Singh, "Design of a Reconfigurable Antenna with Fractal Geometry," UPCON, 2015.
 2. **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.
7. Seminars and invited talks presented: NO
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad: No
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) *Industry visited and visits to other Institutes for research*
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. Pragya Singh



1. Name, Department & Designation: Dr. Pragya Singh, Department of Management Studies, Assistant Professor.
2. Teaching/Research/Industry Experience:
Teaching/Research: _10+ years_ Industry __ Total: 10+ years __
3. New courses developed
Developed Course curriculum of B. Tech (IT) Ist -semester (in consultation with Head of Department) Lab for Communication Skills.
MPCN (120C)
4. Books and book-chapters published
Research papers published in journals

1.	DR. PRAGYA SINGH	INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING. VOLUME 5, ISSUE 4, 2015 ISSN: 2277 128X Impact Factor: 2.5	THE COMPARISON OF EXPOSURE TO INFORMATION SECURITY RISK OF WEB USERS BY ANALYSING THEIR WEB BROWSING HISTORY	2015 INDEXED IN UNIVERSITY OF CAMBRIDGE, STANFORD UNIVERSITY LIBRARIES & GOOGLE SCHOLAR
2.	DR. PRAGYA SINGH	INTERNATIONAL JOURNAL OF COMPUTER TECHNIQUES ISSN : 2394 - 2231	DOMINO'S PIZZA AND PIZZA HUT IN ALLAHABAD: A COMPARATIVE STUDY	2015 INDEXED IN GOOGLE SCHOLAR SCRIBD WORLD'S DIGITAL LIBRARY <u>DIRECTORY OF SCIENCE SCORE- 24.64 , OAJI- INDEX</u>

5. Research papers published in conference proceedings (as a full paper)
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.



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Please do not list conferences where only abstracts are published.

6. Seminars and invited talks presented:

Title, Organization, Date

7. Conferences attended outside IIIT Allahabad

Participated in Harmony workshop in October 2015 organized by IIT-BHU, Varanasi.

8. Work done in project undertaken in the Institute:

9. Training Programme organized:

Organized PRE-EUREKA Workshop on 2nd October, 2015 in coordination with E-cell IIT Bombay in IIIT-Allahabad.

10. Other Activities

(a) **Technology Developed**

Name of the technology/product

(b) **Software Developed**

Name of the software

(c) **Industry visited and visits to other Institutes for research**

Name, Purpose, Period.

(d) **Patents**

(Title, Patent number, granting agency)

(e) **Awards and Honors**

✧ **Won first Prize in Poster Presentation held at IIIT-Allahabad in Vigilance Awareness Week in October 2015.**

✧ **Faculty Coordinator of Eureka! (2015) - Asia's largest B-Model Competition Workshop held on 2nd October 2015 organized by E-cell of IIT-Bombay wherein the participation of our students in the IIT Bombay event was a follow up and won first prize in the TNSD (Technology and sustainable development) segment with a Cash Prize of 1.5 Lac INR.**

(f) **Continuing Education Activities**

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

(g) **Participation in the High Level Industry Academia Interaction Program during summer**

Name of the organization, Period

(h) **Any other important activity not specified above**



Dr. Bibhas Ghoshal

Assistant Professor



1. Name, Department & Designation:
Name : Dr. Bibhas Ghoshal
Department : Information Technology
Designation : Assistant Professor (on contract)
2. Teaching/Research/Industry Experience:
Teaching/Research: Post- PhD : 1 year 10 months; Pre- PhD : 3 years
3. New courses developed
Course Title: **Design, Modeling and Analysis of Embedded Systems**
Course Code : **IEMB730E**
4. Books and book-chapters published
Improved Test Techniques for Network-on-Chip Based Memory Systems, by Bibhas Ghoshal
Publisher: LAP LAMBERT Academic Publishing (July 30, 2016)
ISBN-10: 3659928976
ISBN-13: 978-3659928970
5. Research papers published in journals
Bibhas Ghoshal, Kanchan Manna, Santanu Chattopadhyay, Indranil Sengupta: *In-Field Test for Permanent Faults in FIFO Buffers of NoC Routers*. IEEE Transactions on VLSI Systems, 24(1): 393-397 (2016)
[Citation count : 3]
6. Research papers published in conference proceedings (as a full paper)
B. Ghoshal, I Sengupta : *A Distributed BIST Scheme for NoC-Based Memory Cores*. Euromicro Conference on Digital System Design (DSD), 2013, 567-574
B Ghoshal, C Mandal, I Sengupta: *Re-using Refresh for Self-Testing DRAMs*, International Symposium on Electronic System Design (ISED), 2013, 118-122
B Ghoshal, S Kundu, I Sengupta, S Chattopadhyay : *Particle swarm optimization based BIST design for memory cores in mesh based network-on-chip*, Progress in VLSI Design and Test, 343-349
7. Seminars and invited talks presented:
Advanced Computer Architecture and Verilog Prototyping, Dept. of Computer Science and Engg., IIT Kharagpur, 20th-25th June, 2016
Role : Lectures delivered as instructor and conducted lab sessions
8. Conferences attended outside IIIT Allahabad
9. Work done in project undertaken in the Institute:
On 28th of September, the Apex committee of the IMPRINT (A Govt. Of India initiative) has approved my submitted proposal titled “ Power Aware Compiler for Embedded Processors ” for funding after three rounds of selection for over a period of six months. The initial proposal had been submitted during March 2016 and was among the 259 proposals selected among 2612 submitted proposals.
10. Training Program organized: *Conducted a two day workshop on “ Internet of Things and Analytics ” under the IEEE RAS society at IIIT Allahabad, jointly conducted with IISc Bangalore and Intel India from 11-12th August, 2016.*



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11. Other Activities

(a) **Technology Developed**

Name of the technology/product

(b) **Software Developed**

Name of the software

(c) **Industry visited and visits to other Institutes for research**

Name, Purpose, Period.

(d) **Patents**

(Title, Patent number, granting agency)

(e) **Awards and Honors**

Title, Awarded by

(f) **Continuing Education Activities**

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

(g) **Participation in the High Level Industry Academia Interaction Program during summer**

Microsoft Research Academic Summit held at Infosys Campus, Pune, organized by Microsoft Research India and ACM India in association with Infosys, during 29th-30th January, 2016

(h) **Any other important activity not specified above**



Dr. Sitangshu Bhattacharya

Assistant Professor



1. Name, Department & Designation:

Dr. Sitangshu Bhattacharya,

Department of Electronics and Communication Engineering, Assistant Professor (PhD)

2. Teaching/Research/Industry Experience:

Teaching : 2013-2016 (3 years)

Research : Post-doc duration 2008-2013 (5 years) Industry:0 year Total: 8 years

3. New courses developed

None

4. Books and book-chapters published

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

5. Research papers published in journals

- (i) A. Bansal, H. Mishra, **S. BHATTACHARYA**, and B. R. Singh, "First Principles Calculations of Bonding and Charges at the Al₂O₃ Interface in a c-Si/SiO₂/am-Al₂O₃ Structure Applicable for the Surface Passivation of Silicon-Based Solar Cells", IEEE TRANSACTIONS ON ELECTRON DEVICES, VOL. 63, NO. 2, FEBRUARY 2016, pp. 544-550

6. Research papers published in conference proceedings (as a full paper)

None.



7. Seminars and invited talks presented:
 - (i) Indo French Workshop on Emerging Trends in Electron Device Modeling, jointly organised by IISc Bangalore and ISEP Paris, Mar 30-Apr 1, 2015.
 - (ii) 18th International Workshop on Electron Devices, Indian Institute of Science Bangalore, December 7-10, 2015
8. Conferences attended outside IIIT Allahabad
None
9. Work done in project undertaken in the Institute:
Current Projects
 1. "Graphene Transistors on Different High-k Dielectrics as Performance Boosters and Role of Self Heating: A Physics Based Theoretical Approach", **Principle Investigator: Dr. Sitangshu Bhattacharya**, funded by Young Scientist Scheme, DST, Govt. of India, (Duration: 2015-2018), Grant sanctioned: INR, 27 Lacs. **Status: Ongoing.**
 2. "Power Scaling in Next-Generation Nanoelectronics Materials and Devices", **Principle Investigator: Dr. Sitangshu Bhattacharya**, funded by INSPIRE FACULTY PROGRAMME, DST, Govt. of India, (Duration: 2013-2018), Grant sanctioned: INR, 35 Lacs. **Status: Ongoing.**
10. Training Programme organized:
Co-organizer in IEEE Workshop on Electron Devices 2016 (WED'16) is the first workshop being organized by the newly formed IEEE EDS UP chapter meant to promote students, young professionals and women in science and technology. The focus of this workshop is to discuss the recent advancements in electron devices with their well-recognized and promising applications. It will cover the topics range from device modeling to basics of emerging electron devices and their potential applications as per the current requirements. The workshop WED'16 will consist of invited talks in the related areas by experts from IITs and other premier institutes and research centres of the country as well as representatives from industry. Duration: 19th November 2016.
11. Other Activities
 - (a) **Technology Developed**
None
 - (b) **Software Developed**
None
 - (c) **Industry visited and visits to other Institutes for research**
None.
 - (d) **Patents**
None
 - (e) **Awards and Honors**
None
 - (f) **Continuing Education Activities**
None
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
None
 - (h) **Any other important activity not specified above**
None



Dr. Rekha Verma

Assistant Professor



1. Name, Department & Designation: Dr.Rekha Verma, Department of ECE, Assistant Professor
2. Teaching/Research/Industry Experience:
08 yrs (Teaching) 06yrs (Research) 10 months (Industry) Total: 14yrs and 10 months
3. New courses developed :
None
4. Books and book-chapters published:
None
5. Research papers published in journals:
None
6. Research papers published in conference proceedings (as a full paper):
None
7. Seminars and invited talks presented:
None
8. Conferences attended outside IIIT Allahabad:
 - I. Indo French Workshop on Emerging Trends in Electron Device Modeling, jointly organised by IISc Bangalore and ISEP Paris, Mar 30-Apr 1, 2015.
 - II. 18th International Workshop on Electron Devices, Indian Institute of Science Bangalore, December 7-10, 2015
9. Work done in project undertaken in the Institute:
Silicon Nanowires: Professional Compact Model of Scale Thermoelectric Figure of Merit for Energy Harvesting", Principle Investigator: Dr. Rekha Verma, funded by Young Scientist Scheme, DST, Govt. of India, (Duration: 2015-2018), Grant sanctioned: INR, 23 Lacs (appx). Status: Ongoing
10. Training Programme organized:
Organizer, First Workshop on Electron Devices 2016 (WED'16) under IEEE Electron Devices Society-UP Chapter, being held on November 19, 2016 at IIIT Allahabad. This workshop is meant to promote students, young professionals and women in science and technology. The focus of this workshop is to discuss the recent advancements in electron devices with their well-recognized and promising applications. It will cover the topics range from device modeling to basics of emerging electron devices and their potential applications as per the current requirements. The workshop WED'16 will consist of invited talks in the related areas by experts from IITs and other premier institutes and research centres of the country as well as representatives from industry. It will provide an opportunity for participants to discuss various aspects of emerging electron devices, disseminate work in progress, and promote new ideas in the field.
11. Other Activities
 - (a) **Technology Developed**
None
 - (b) **Software Developed**
None
 - (c) **Industry visited and visits to other Institutes for research**
None
 - (d) **Patents**
None
 - (e) **Awards and Honors**
Selected as Vice-Chair, IEEE Electron Devices Society, UP Chapter
 - (f) **Continuing Education Activities**
None
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
None
 - (h) **Any other important activity not specified above**
None



Dr. Prasanna Kumar Misra

Assistant Professor



1. Name, Department & Designation: Dr. Prasanna Kumar Misra
Assistant Professor (On Contract)
Electronics and Communication Engineering
2. Teaching/Research/Industry Experience:
Teaching/Research: 2 Years, Industry: NIL Total: 2 Years
3. New courses developed:
Low Power System Design (ELPD730E)
4. Books and book-chapters published:
NIL
5. Research papers published in journals
NIL
6. Research papers published in conference proceedings (as a full paper)
NIL
7. Seminars and invited talks presented:
NIL
8. Conferences attended outside IIIT Allahabad
NIL
9. Work done in project undertaken in the Institute:
Working as Co-Investigator of the project titled "Special Manpower Development Programme from chips to System Design (SMDP-C2SD)"
10. Training Programme organized: NIL
11. Other Activities
 - (a) **Technology Developed**
NIL
 - (b) **Software Developed**
NIL
 - (c) **Industry visited and visits to other Institutes for research**
Visited MNIT Jaipur and NIT Kurukshetra for thesis Evaluation
 - (d) **Patents**
NIL
 - (e) **Awards and Honors**
NIL
 - (f) **Continuing Education Activities**
NIL
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
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.
 - (h) **Any other important activity not specified above**
Worked as Reviewer and Track Chair in IEEE UPCON 2015 Conference



Dr. Abdulla Bin Abu Baker



1. Name, Department & Designation: Dr. Abdullah Bin Abu Baker,
Applied Sciences (Mathematics), Assistant Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: 3 years NA Industry NA Total: 3 years
3. New courses developed NA
4. Books and book-chapters published NA
5. Research papers published in journals
Generalized 3-circular projections for unitary congruence invariant norms, Banach J. Math. Anal. 10 (2016), no. 3, 451-465, Abdullah Bin Abu Baker.
6. Research papers published in conference proceedings (as a full paper) NA
7. Seminars and invited talks presented: NA
8. Conferences attended outside IIIT Allahabad
 - a) Presented a poster titled “Generalized Bi-circular and 3-circular Projections on Banach Spaces and Related Topics” in the Workshop on Problems and Recent Methods in Operator Theory held at the University of Memphis, Memphis, USA during October 15 - 16, 2015.
 - b) Presented a paper titled “Generalized 3-circular Projections for Unitary Congruence Invariant Norms” in the American Mathematical Society Meeting held at the University of Memphis, Memphis, USA during October 17 - 18, 2015.
9. Work done in project undertaken in the Institute: NA
10. Training Programme organized: NA
11. Other Activities
 - (a) **Technology Developed** NA
 - (b) **Software Developed** NA
 - (c) **Industry visited and visits to other Institutes for research**
Visited The University of Memphis, USA during 13-24 October, 2015 for collaborative research with Professor Fernanda Botelho, Department of Mathematical Sciences, The University of Memphis, USA.
 - (d) **Patents** NA
 - (e) **Awards and Honors** NA
 - (f) **Continuing Education Activities** NA
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer** NA
 - (h) **Any other important activity not specified above** NA



Dr. Vineet Tiwari



1. Name, Department & Designation: Dr. VINEET TIWARI
2. Teaching/Research/Industry Experience:
Teaching/Research: 05 Years 06 Months (As on 30th October 2016) Industry: 01 Year
Total: 06 Years 06 Months
3. New courses developed
.....NIL.....
4. Books and book-chapters published
.....NIL.....
5. Research papers published in journals
.....NIL.....
6. Research papers published in conference proceedings (as a full paper)
.....NIL.....
 1. Seminars and invited talks presented:
.....NIL.....
 2. Conferences attended outside IIIT Allahabad
.....NIL.....
3. Work done in project undertaken in the Institute:
Collaboration with IIM-A for the project title “Comprehensive, Whole-of-Government Strategies on Coal Transition in Major Coal Using Countries” funded by KR foundation and Sub-Grantee IDDRI during the period 1st June 2016 to 31st May 2018, where I have been engaged as an external expert.
First stakeholder meeting was held on 19th September 2016, where we presented a Report on national frameworks to address the social, human and economic analysis of coal transition.
4. Training Programme organized: **NIL**
5. Other Activities
 - (a) **Technology Developed** **NIL**
 - (b) **Software Developed** **NIL**
 - (c) **Industry visited and visits to other Institutes for research**
Name: Indian Institute of Management Ahmedabad
Purpose: For scheduled ongoing projects related meetings
Period: 07th Oct, 2016 to 12th Oct, 2016
 - (d) **Patents** **NIL**
 - (e) **Awards and Honors** **NIL**
 - (f) **Continuing Education Activities** **NIL**
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
NIL
 - (h) **Any other important activity not specified above**
NIL



Dr. Utkarsh Goel



1. Name, Department & Designation: Dr. Utkarsh Goel
2. Teaching/Research/Industry Experience:
Teaching/Research: 4 years, Industry 1 year, Total: 5 year
3. New courses developed **NIL**
Title, course number
4. Books and book-chapters published **NIL**
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**
Underline the name of the author for correspondence.
✧ Goel, U., & Sharma, A. K. (2015). Analysing Efficiency Change in Working Capital Management using Malmquist Productivity Index. *Journal of Information and Optimization Sciences*, 36(6), 595-616.
6. Research papers published in conference proceedings (as a full paper)
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published
✧ “Payment Banks: Sustainable Game Changer or a Passing Fad”, NIDA International Business Conference 2016, NIDA Business School, Bangkok, Thailand, March 12, 2016, pp 302-309, Goel, U., & Manrai, R.
7. Seminars and invited talks presented: **NIL**
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
✧ NIDA International Business Conference 2016, NIDA Business School, Bangkok, Thailand, March 12, 2016,
9. Work done in project undertaken in the Institute: **NIL**
10. Training Programme organized: **NIL**
11. Other Activities: **NIL**
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. Suneel Yadav



1. Name, Department & Designation: Dr. Suneel Yadav,
Electronics and Communication Engineering, Assistant Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: 1.3 Yrs Industry: 1.3 Yrs Total: 2.6 Yrs
3. New courses developed
Detection and Estimation Theory- EDET630E/EDET240E
4. Books and book-chapters published
NIL
5. Research papers published in journals
NIL
6. Research papers published in conference proceedings (as a full paper)
NIL
7. Seminars and invited talks presented:
NIL
8. Conferences attended outside IIIT Allahabad
NIL
9. Work done in project undertaken in the Institute: NIL
10. Training Programme organized:
 - i) One day training programme on **Software Defined Radio (SDR) and Communication Suite** by **NATIONAL INSTRUMENTS**
 - ii) Two days training programme on **SOFTWARE DEFINED RADIO** by **AMITECH Ltd.**
11. Other Activities
 - (a) **Technology Developed**
NIL
 - (b) **Software Developed**
NIL
 - (c) **Industry visited and visits to other Institutes for research**
Indian Institute of Technology Kanpur, Research Collebroton, 11 June, 2016-21 June, 2016.
 - (d) **Patents**
NIL
 - (e) **Awards and Honors**
NIL
 - (f) **Continuing Education Activities**
NIL
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
NIL
 - (h) **Any other important activity not specified above**



Dr. Sumit Kumar Upadhyay



1. Name, Department & Designation: Dr. Sumit Kumar Upadhyay
Assistant Professor (Mathematics)
Department of Applied Sciences, IIIT, Allahabad
2. Teaching/Research Experience: 02years 06 months
3. New courses developed: NA
4. Books and book-chapters published: NIL
5. Research papers published in journals:
On completable unimodular row over a polynomial ring, The Journal of the Indian Math. Soc. Vol. 82, Nos. 1 - 2, January - June, (2015), pp. 185 - 195.
6. Research papers published in conference proceedings (as a full paper): NIL
7. Seminars and invited talks presented:
Delivered a talk ``**Freeness of a projective module over kernel of a locally nilpotent derivation**'' in ``Motilal Nehru National Institute of Technology, Allahabad, on December 21, 2015.
8. Conferences attended outside IIIT Allahabad: NIL
9. Work done in project undertaken in the Institute: NA
10. Training Programme organized: NA
11. Other Activities: NIL



Dr. Sudipta Das



1. Name, Department & Designation: Dr. Sudipta Das,
Department of Management Studies, Assistant Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: ___ 1 yr ___ Industry ___ 11 yr ___ Total: ___ 12 yr
3. New courses developed : No
Title, course number
4. Books and book-chapters published: No
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals: No
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)



Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**

Underline the name of the author for correspondence.

6. Research papers published in conference proceedings (as a full paper): No
 Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
 Underline the name of the author for correspondence.
 Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented: No
 Title, Organization, Date
8. Conferences attended outside IIIT Allahabad: No
 Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute: No
10. Training Programme organized: No
11. Other Activities
 - (a) **Technology Developed:NA**
 Name of the technology/product
 - (b) **Software Developed:NA**
 Name of the software
 - (c) **Industry visited and visits to other Institutes for research :No**
 Name, Purpose, Period.
 - (d) **Patents:NA**
 (Title, Patent number, granting agency)
 - (e) **Awards and Honors:No**
 Title, Awarded by
 - (f) **Continuing Education Activities:No**
 Name and type of the course organized (Self-financing, Industry),
 Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer:No**
 Name of the organization, Period
 - (h) **Any other important activity not specified above:No**



Dr. Sonali Agarwal



1. Name, Department & Designation: Dr. Sonali Agarwal, Information Technology, Assistant Professor
2. Teaching/Research/Industry Experience:
Teaching/Research :15 Years Industry: 1 Year Total: 16 Years
3. New courses developed: Big Data Analytics
4. Books and book-chapters published: NIL
5. Research papers published in journals
 - i. Divya Tomar, Sonali Agarwal, "Prediction of Defective Software Modules Using Class Imbalance Learning" Published in Applied Computational Intelligence and Soft Computing, Hindawai, Volume 2016, Article ID 7658207, 12 pages, <http://dx.doi.org/10.1155/2016/7658207>
 - ii. Harshal Singh, Divya Tomar and Sonali Agarwal, "Link Prediction for Authorship Association in Heterogeneous Network Using Streaming Classification", International Journal of Grid and Distributed Computing Vol. 9, No. 4(2016), pp.135-150.
 - iii. Geetanjali Chaurasia, **Sonali Agarwal** "A Hybrid Approach of Clustering and Time-Aware Based Novel Test Case Prioritization Technique", published in International Journal of Database Theory and Application Vol.9, No.4 (2016), pp.23-44 <http://dx.doi.org/10.14257/ijdta.2016.9.4.02>
 - iv. Bakshi Rohit Prasad, Sonali Agarwal, "Comparative Study of Big Data Computing and Storage Tools: A Review", published in International Journal of Data Base and Application (IJDTA) Vol.9, No.1 (2016), pp. 45-66 <http://dx.doi.org/10.14257/ijdta.2016.9.1.05>
 - v. Divya Tomar, Sonali Agarwal "published in International Journal of Data Base and Application (IJDTA) Volume 8, Issue 6 Pages pp.285-302 <http://dx.doi.org/10.14257/ijdta.2015.8.6.26>.
 - vi. Anushree Priyadarshini, Sonali Agarwal "A Map Reduce based Support Vector Machine for Big Data Classification" published in International Journal of Data Base and Application (IJDTA) Volume 8 Issue 5 Pages pp. 77 - 98.
 - vii. Divya Tomar, Sonali Agarwal "**An effective Weighted Multi-class Least Squares Twin Support Vector Machine" for Imbalanced data classification**" published in International Journal of Computational Intelligence Systems, Taylor & Francis, Vol. 8, issue 4, July 2015, Pages 761–771. *SCI Journal, Impact Factor=0.574*
 - viii. Divya Tomar, Sonali Agarwal "**A comparison on multi-class classification methods based on least squares twin support vector machine**" published in Knowledge-Based Systems, Elsevier, Vol. 81, June 2015, Pages 131–147. *SCI Journal, Scopus indexed, Impact Factor=3.011*
6. Research papers published in conference proceedings (as a full paper)
 - i) Ayushi Thatola, Parul Prasad, Sonali Agarwal, "Growth and opportunities in E-commerce using social media text analytics: an exclusive study on twitter" is presented in the RDA's 18th International Conference on "Sustainable Growth & Innovations" at JAIPUR (India) during 26th & 27th March, 2016.
 - ii) Divya Tomar, Sonali Agarwal, "A Multilabel approach using Binary Relevance and One-versus-Rest Least Squares Twin Support Vector Machine for Scene Classification" is presented in the International Conference on Computational intelligence and communication technology (ICICT-2016), Ghaziabad, February 12-13.
 - iii) Sonali Agarwal, Bakhshi Rohit Prasad, "High Speed Streaming Data Analysis of Web Generated Log Streams" presented in 10th IEEE international Conference on Industrial and Information System 2015 (ICIIS-2015) at Faculty of Engineering, University of Peradeniya, Srilanka, 17-21 December 2015



- iv) Anubha Sharma, Manoj Kumar, Sonali Agarwal, "A Complete Survey on Software Architectural Styles and Patterns" presented in Fourth International Conference on Eco-friendly Computing and Communication Systems (ICECCS-2015) at National Institute of Technology, Kurukshetra, India, 7-8 December 2015 .
 - v) Geetanjali Chaurasia, Sonali Agarwal and Swarnima Singh Gautam, "Clustering Based Novel Test Case Prioritization Technique " presented in 4th Students' Conference on Engineering and Systems 2015 (SCES-2015) at MNNIT, Allahabad, India, November 6-8, 2015
 - vi) Shwet Ketu, Bakshi Rohit Prasad, Sonali Agarwal, "Effect of Corpus Size Selection on Performance of Map-Reduce Based Distributed K-Means for Big Textual Data Clustering" accepted in Sixth International Conference on Computer and Communication Technology (ICCCT-2015) at MNNIT, Allahabad, India, 25 - 27 September 2015. Acceptance Rate : 33%
 - vii) Shwet Ketu, Sonali Agarwal, "Performance Enhancement of Distributed K-Means Clustering for Big Data Analytics Through In-memory Computation" accepted in Eighth International Conference on Contemporary Computing, (IC3 – 2015) at JP Institute of Information Technology (JIIT), Noida, India, 20 - 22 August 2015. Acceptance Rate : 25%
 - viii) Divya Tomar, Sonali Agarwal, "Multi-class Twin Support Vector Machine for Pattern Classification " presented in 3rd International Conference on Advanced Computing, Networking, and Informatics (ICACNI – 2015) at School of Computer Engineering, Kalinga Institute of Industrial Technology, (KIIT University), Orissa, India 23 - 25 June 2015. Acceptance Rate : 25%, Scopus indexed
 - ix) Divya Tomar, Sonali Agarwal, "Multi-label Classifier for Emotion Recognition from Music "presented in 3rd International Conference on Advanced Computing, Networking, and Informatics (ICACNI – 2015) at School of Computer Engineering, Kalinga Institute of Industrial Technology, (KIIT University), Orissa, India 23 - 25 June 2015. Acceptance Rate : 25%, Scopus indexed
7. Seminars and invited talks presented: NIL
 8. Conferences attended outside IIIT Allahabad
 - i) ICACNI 2015, Kalinga Institute of Information Technology,
 - ii) ICIIS 2015, Faculty of Engineering, University of Peradeniya, Srilanka
 - iii) ICICT-2016, JP Institute of Information Technology (JIIT), Noida, India
 - iv) ICECCS-2015, National Institute of Technology, Kurukshetra, India
 9. Work done in project undertaken in the Institute: NIL
 10. Training Programme organized: NIL
 11. Other Activities
 - (a) **Technology Developed : NIL**
 - (b) **Software Developed : NIL**
 - (c) **Industry visited and visits to other Institutes for research: NIL**
 - (d) **Patents: NIL**
 - (e) **Awards and Honors: NIL**
 - (f) **Continuing Education Activities: NIL**
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer: NIL**
 - (h) **Any other important activity not specified above: NIL**



Dr. Somak Bhattacharyya



1. Name, Department & Designation:
Dr. Somak Bhattacharyya
Assistant Professor (On Contract)
Electronics & Communication Engineering Department
Indian Institute of Information Technology Allahabad
Deoghat, Jhalwa, Uttar Pradesh - 211012
2. Teaching/Research/Industry Experience:
Teaching/Research: 2 Years Industry Nil Total: 2 Years
3. New courses developed
Nil
4. Books and book-chapters published
Nil
5. Research papers published in journals
 - i. **Somak Bhattacharyya**, "A Broadband Microwave Metamaterial Absorber with Octave Bandwidth," accepted for publication in *Springer MAPAN Journal of Metrology Society of India*.
 - ii. Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "Design, Characterization and Fabrication of a Broadband Polarization-Insensitive Multi-Layer Circuit Analog Absorber," *IET Microwaves, Antennas and Propagation*, Vol. 10, Issue 8, pp. 850-855, 2016.
 - iii. Praneeth Munaga, Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "A Fractal based Compact Broadband Polarization Insensitive Metamaterial Absorber using Lumped Resistors," *Microwave and Optical Technology Letters*, Vol. 58, No. 2, pp. 343-347, February 2016.
 - iv. Devkinandan Chaurasiya, Saptarshi Ghosh, **Somak Bhattacharyya**, Anamiya Bhattacharya, and Kumar Vaibhav Srivastava, "A Compact Multi-Band Polarization-Insensitive Metamaterial Absorber," *IET Microwaves, Antennas and Propagation*, Vol. 10, Issue 1, pp. 94-101, 2016.
 - v. Saptarshi Ghosh, **Somak Bhattacharyya**, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "Polarization-insensitive and wide-angle multilayer metamaterial absorber with variable bandwidths," *IET Electronics Letters*, Vol. 51, Issue 14, pp. 1050-1052, 2015.
 - vi. Anamiya Bhattacharya, **Somak Bhattacharyya**, Saptarshi Ghosh, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "An Ultra-thin Penta-Band Polarization-Insensitive Compact Metamaterial Absorber for Airborne Radar Application," *Microwave and Optical Technology Letters*, Vol. 57, No. 11, pp. 2519-2524, 2015.
 - vii. **Somak Bhattacharyya**, Saptarshi Ghosh, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "A Wide-Angle Broadband Microwave Metamaterial Absorber with Octave Bandwidth," *IET Microwaves, Antennas and Propagation*, Vol. 9, Issue 11, pp. 1160-1166, 2015.
6. Research papers published in conference proceedings (as a full paper)
 - i. Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "Design and Analysis of a Broadband Single Layer Circuit Analog Absorber," accepted for presentation in *IEEE European Microwave Conference 2016 (EuMW 2016)*, Excel London, UK, 3-7 October, 2016.
 - ii. **Somak Bhattacharyya**, Saptarshi Ghosh, and Kumar Vaibhav Srivastava, "A Microwave Metamaterial Absorber with Wide Bandwidth," accepted for presentation in *2016 URSI Asia Pacific Radio Science Conference (AP-RASC 2016)*, Seoul, South Korea, 21-25 August, 2016.



- iii. Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "A Miniaturized-Element Frequency Selective Surface with High Angular Stability," accepted for presentation in *2016 URSI Asia Pacific Radio Science Conference (AP-RASC 2016)*, Seoul, South Korea, 21-25 August, 2016.
- iv. **Somak Bhattacharyya**, Saptarshi Ghosh, Anamiya Bhattacharya, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "An Ultra-thin Polarization Independent Compact Fractal Shaped Metamaterial Absorber," presented in *IEEE Applied Electromagnetics Conference 2015 (AEMC 2015)*, IIT Guwahati, India, 18-21 December, 2015.
- v. Saptarshi Ghosh, **Somak Bhattacharyya**, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "A Broadband Polarization-Insensitive Circuit Analog Absorber using Lumped Resistors," presented in *IEEE Applied Electromagnetics Conference 2015 (AEMC 2015)*, IIT Guwahati, India, 18-21 December, 2015.
- vi. Devkinandan Chaurasiya, Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "Design of a Wideband Absorber using Resistively Loaded Frequency Selective Surface," presented in *IEEE Applied Electromagnetics Conference 2015 (AEMC 2015)*, IIT Guwahati, India, 18-21 December, 2015.
- vii. Mondeep Saikia, Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "Broadband Polarization Rotator using Multilayer Metasurfaces," presented in *IEEE Applied Electromagnetics Conference 2015 (AEMC 2015)*, IIT Guwahati, India, 18-21 December, 2015.
- viii. Varuna A B, Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "Design of a Dual-Band Polarization-Insensitive and Angular-Stable Frequency Selective Surface," presented in *IEEE Applied Electromagnetics Conference 2015 (AEMC 2015)*, IIT Guwahati, India, 18-21 December, 2015.
- ix. **Somak Bhattacharyya**, "A Broadband Microwave Metamaterial Absorber with Octave Bandwidth," presented in *Second Regional Conference on Radio Science (RCRS) 2015*, Jawaharlal Nehru University, New Delhi, India, 16-19 November, 2015.
- x. **Somak Bhattacharyya**, Saptarshi Ghosh, and Kumar Vaibhav Srivastava, "Polarization Insensitive Metamaterial Absorber with Enhanced Bandwidth," presented in *IEEE International Workshop on Antenna Innovation and Modern Technologies 2015 (iAIM 2015)*, Hotel Pride, Ahmedabad, India, 26-27 December, 2015.
- xi. Saptarshi Ghosh, **Somak Bhattacharyya**, Yadunath Kaiprath, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "Triple-band Polarization-Independent Metamaterial Absorber using Destructive Interference," in *IEEE European Microwave Conference (EuMW 2015)*, pp. 335-338, Paris, France, 7-10 September, 2015.
- xii. Praneeth Munaga, Saptarshi Ghosh, **Somak Bhattacharyya**, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "An Ultra-thin Dual-band Polarization-Independent Metamaterial Absorber for EMI/ EMC Applications," in *IEEE European Conference on Antennas and Propagation (EuCAP 2015)*, pp. 1-4, Lisbon, Portugal, 12-17 April, 2015.

7. Seminars and invited talks presented:

A. Seminars:

- i. **Somak Bhattacharyya**, Saptarshi Ghosh, and Kumar Vaibhav Srivastava, "A Microwave Metamaterial Absorber with Wide Bandwidth," accepted for presentation in *2016 URSI Asia Pacific Radio Science Conference (AP-RASC 2016)*, Seoul, South Korea, 21-25 August, 2016.
- ii. Saptarshi Ghosh, **Somak Bhattacharyya**, and Kumar Vaibhav Srivastava, "A Miniaturized-Element Frequency Selective Surface with High Angular Stability," accepted for presentation in *2016 URSI Asia Pacific Radio Science Conference (AP-RASC 2016)*, Seoul, South Korea, 21-25 August, 2016.
- iii. **Somak Bhattacharyya**, "A Broadband Microwave Metamaterial Absorber with Octave Bandwidth," presented in *Second Regional Conference on Radio Science (RCRS) 2015*, Jawaharlal Nehru University, New Delhi, India, 16-19 November, 2015.
- iv. Praneeth Munaga, Saptarshi Ghosh, **Somak Bhattacharyya**, Devkinandan Chaurasiya, and Kumar Vaibhav Srivastava, "An Ultra-thin Dual-band Polarization-Independent Metamaterial Absorber for EMI/ EMC Applications," in *IEEE European Conference on Antennas and Propagation (EuCAP 2015)*, pp. 1-4, Lisbon, Portugal, 12-17 April, 2015.



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B. Invited Talks:

- i. Department of Electrical Engineering, University of Cambridge, UK, 3 October, 2016.
- ii. Department of Radiophysics & Electronics, University of Calcutta, Kolkata, India on 15 July, 2016.
- iii. Faculty Development Program, RCCIIT, Kolkata, India on 13 July, 2016.
- iv. Giant Meterwave Radio Telescope (GMRT) Observatory, Tata Institute of Fundamental Research, Pune, India on 16 June, 2016.
- v. Department of Electrical Engineering, IIT Bombay, India, 13 June, 2016.

8. Conferences attended outside IIIT Allahabad

- i. “**European Conference on Antennas and Propagation (EuCAP 2015)**” organized by *IEEE held at Lisbon, Portugal* during 12-17 April, 2015.
- ii. “**URSI Regional Conference on Radio Science (RCRS 2015)**” organized by *International Union of Radio Science (URSI), Indian National Science Academy (INSA) and School of Environmental Studies, Jawaharlal Nehru University held at New Delhi, India* during 16-19 November, 2016.
- iii. “**Asia Pacific Radio Science Conference 2016 (AP-RASC 2016)**” organized by *International Union of Radio Science (URSI) held at Seoul, Portugal* during 21-25 August, 2015.

9. Work done in project undertaken in the Institute:

Nil

10. Training Programme organized:

Nil

11. Other Activities

(a) **Technology Developed** Nil

(b) **Software Developed** Nil

(c) **Industry visited and visits to other Institutes for research**

Giant Meterwave Radio Telescope (GMRT) Observatory, Tata Institute of Fundamental Research, Pune, India during 15-17 June, 2016.

(d) **Patents** Nil

(e) **Awards and Honors**

i. Recipient of **Young Scientist Award** in **2016 URSI Asia Pacific Radio Science Conference (URSI AP-RASC 2016)** organized by International Union of Radio Sciences (URSI) during 21-25 August, 2016 in Seoul, South Korea.

ii. Finalist of best PhD thesis award in **PhD Symposium in IEEE UPCON 2015** during 4-6 December, 2015 in IIIT Allahabad, India.

iii. Recipient of First Position of **Young Scientist Award** in **Second Regional Conference on Radio Science (RCRS) 2015** organized by International Union of Radio Sciences (URSI), Indian National Science Academy (INSA) and School of Environmental Studies, Jawaharlal Nehru University during 16-19 November, 2015 in New Delhi, India.

iv. Received **International travel grant** under the **DST International Travel Support (ITS) Scheme, Science and Engineering Research Board (SERB), India** (SB/ITS/0070/2015-16) for presenting a paper in 2015 European Conference on Antennas and Propagation (EuCAP), 2015 in Lisbon, Portugal.

(f) **Continuing Education Activities**

Nil

(g) **Participation in the High Level Industry Academia Interaction Program during summer**

Nil

(h) **Any other important activity not specified above**

Nil



Dr. Sintu Kumar Samanta



1. Name, Department & Designation: Dr. SINTU KUMAR SAMANTA,
Dept. of Applied Sciences, Assistant Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: Four years, Industry: NA Total: Four years
3. New courses developed: NA
Title, course number
4. Books and book-chapters published: NA
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals: NA
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**
Underline the name of the author for correspondence.
6. Research papers published in conference proceedings (as a full paper) : NA
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented: NA
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad: NA
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute: NA
10. Training Programme organized: : NA
11. Other Activities
 - (a) **Technology Developed:** NA
Name of the technology/product
 - (b) **Software Developed:** NA
Name of the software
 - (c) **Industry visited and visits to other Institutes for research :** NA
Name, Purpose, Period.
 - (d) **Patents:** NA
(Title, Patent number, granting agency)
 - (e) **Awards and Honors:** NA
Title, Awarded by
 - (f) **Continuing Education Activities:** NA
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer:** NA
Name of the organization, Period
 - (h) **Any other important activity not specified above:** NA



Dr. Shailendra Kumar



1. Name, Department & Designation: **Dr. Shailendra Kumar, Assistant Professor, Department of Management Studies.**
2. Teaching/Research/Industry Experience:
Teaching/Research: 13 Year & 5 Months Industry: Nil Total: **13 Year & 5 Months**
3. New courses developed
Title, course number
4. Books and book-chapters published
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
 1. Kumar, S., Ahmed, A., Giri, K. S., & Narayan, S. (June 2015). "Impact of Oil Price and Exchange Rate fluctuations on Inflation in India: An Empirical Study", *Global Journal of Accounting & Management*, Vol. 4, No. 1, pp. 1-12.
 2. Parikh, P., Kumar, S. and Kumar, M. (September 2015). "Information Diffusion in Stock Markets- A Soft Computing Perspective", *Advances in Computer Science and Information Technology (ACSIT)*, Vol. 2, No. 13, pp. 104-107.
 3. Kumar, S., Johri, A., (March 2016). "Governance of the Venture Capital Investment: Factors Influencing selection of an IT Firm", *Risk Governance & Control: Financial Markets & Institutions (SCOPUS INDEXED)*, Vol. 6, No. 2, pp. 52-57.

Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**

Underline the name of the author for correspondence.
6. Research papers published in conference proceedings (as a full paper)
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented:
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad
 1. Malik, A., Srivastava, A., Kumar, S., Prajapati, A., (2015). "Factors Affecting Consumer Preference for Brands over Generic Brands in Online versus Offline shopping for Apparel Segment: An Empirical Study", 10th International Conference on "Innovative Management Practices in Business, Banking, Economics, Public Administration, Marketing and Tourism (BEPAMT-2015)" 18-19th April, 2015, organized by Krishi Sanskriti, at Jawahar Lal Nehru University, New Delhi.
 2. Mishra, S., Sahu, P., Kumar, S., (2015). "Beta Anomaly: Does it Exist in Indian Stock Market (An Empirical Analysis)", 16th International Conference on "Contemporary Issues & Innovations in Global Business, Management, Economics, Tourism and Information & Communication Technology", 30th -31st May, 2015, organized by The Research Development Association, Jaipur (Rajasthan).
 3. Jaiswal, A., Pandey, N., Kumar, S., (2015). "Factors Affecting the sale of Private Label Brands in FMCG Sector (An Empirical Study at Allahabad)", 16th International Conference on "Contemporary Issues & Innovations in Global Business, Management, Economics, Tourism and Information & Communication Technology", 30th -31st May, 2015, organized by The Research Development Association, Jaipur (Rajasthan).



4. Agarwal, S., Kumar, S., (2016). "Commodity Future as an Asset for Diversification in a Traditional Portfolio: An Empirical Study", 18th International Conference on "Sustainable Growth & Innovation in the New Millennium-Frontier Global Issues & Challenges", 26th -27th March, 2016, organized by The Research Development Association, Jaipur (Rajasthan) & Research Development Research Foundation, Jaipur in collaboration with Rajasthan Chamber of Commerce & Industry, Jaipur.

Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)

9. Work done in project undertaken in the Institute:

10. Training Programme organized:

11. Other Activities

(a) Technology Developed

Name of the technology/product

(b) Software Developed

Name of the software

(c) Industry visited and visits to other Institutes for research

Name, Purpose, Period.

(d) Patents

(Title, Patent number, granting agency)

(e) Awards and Honors

Title, Awarded by

(f) Continuing Education Activities

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

(g) Participation in the High Level Industry Academia Interaction Program during summer

Name of the organization, Period

(h) Any other important activity not specified above



Dr. Seema Awasthi



1. Name, Department & Designation: **Dr. Seema Awasthi**, Assistant Professor
Department of Electronics and Communication Engineering.
2. Teaching/Research/Industry Experience:
Teaching/Research: **1 yr , 5months**
3. New courses developed -NO
4. Books and book-chapters published: NO
5. Research papers published in journals: NO
6. Research papers published in conference proceedings (as a full paper)-YES
 - a) Debdeep Sarkar, KushmandaSaurav, Kumar VaibhavSrivastava and SeemaAwasthi, "A Compact Penta-band CPW-fed Monopole Antenna using LC Resonator and Interdigital Capacitor," accepted for presentation in IEEE Applied Electromagnetics Conference 2015 (AEMC-2015) at Guwahati, India, Dec.2015.
 - b) KushmandaSaurav, DebdeepSarkar, Kumar VaibhavSrivastava and SeemaAwasthi, " Triple Band Circularly Polarized Cavity Backed Crossed Dipole Antenna," accepted for presentation in IEEE Applied Electromagnetics Conference 2015 (AEMC-2015) at Guwahati, India, Dec 2015.
7. Seminars and invited talks presented: NO
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad: YES
 - a) **Applied Electromagnetics Conference 2015 (AEMC-2015) at Guwahati, India, Dec 2015.**
9. Work done in project undertaken in the Institute: Not Applicable
10. Training Programme organized: YES,
There is a lecture on Virtual Lab. on "RF and Microwave Characterization Lab." which will be conducted by **Dr. Kumar Vaibhav Srivastava** (Associate Professor in IIT KANPUR) ON 15TH NOV 2016.
11. Other Activities
 - (a) **Technology Developed-** Not Applicable
Name of the technology/product: Semi-empirical method for faster derivation of protein structure
 - (b) **Software Developed-** Not Applicable
Name of the software: All-atom optimization of protein structure using knowledge-based scoring function
 - (c) **Industry visited and visits to other Institutes for research: Not applicable**
Name, Purpose, Period.
 - (d) **Patents: Not applicable-** Not Applicable
(Title, Patent number, granting agency)
 - (e) **Awards and Honors-** Not Applicable
Title, Awarded by
 - (f) **Continuing Education Activities-** Not Applicable
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer: Not Applicable**
Name of the organization, Period
 - (h) **Any other important activity not specified above: YES**
Visit of the students of B. Tech. (ECE) in oct, 2015 to **AIR (ALL INDIA RADIO STATION)** (FM Transmitter, The Studio, MW Transmitter) and expose them to the operations of the center and its equipments.



Dr. Satish Kumar Singh



1. Name, Department & Designation: Dr. SATISH KUAMR SINGH,
INFORMATION TCHNOLOGY, ASSISTANT PROFESSOR
2. Teaching/Research/Industry Experience (Till 31st March 2016):
Teaching/Research: 10 Years 8 Months Industry 2 Months Total: 10 Years 10 Months
3. New courses developed: DATA COMPRESSION IDCO730E/IDCO340E
4. Books and book-chapters published: NIL
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
 1. Shiv Ram Dubey, Satish Kumar Singh, Rajat Kumar Singh, "Multichannel Decoded Local Binary Patterns for Content Based Image Retrieval,," IEEE Transactions on Image Processing, vol.25, no.09, pp.4018-4032, 2016. (IEEE)
 2. Soumendu Chakraborty, Satish Kumar Singh, Pavan Chakraborty, "Local Directional Gradient Pattern: A Local Descriptor for Face Recognition," Multimedia Tools and Applications, 2016. D.O.I. 10.1007/s11042-015-3111-6 (Springer)
 3. Shiv Ram Dubey, Satish Kumar Singh, Rajat Kumar Singh, "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)
 4. Shiv Ram Dubey, Satish Kumar Singh, Rajat Kumar Singh, "Local Bit-plane Decoded Pattern: A Novel Feature Descriptor for Biomedical Image Retrieval," IEEE Journal of Biomedical and Health Informatics, 2015. (IEEE)
 5. Shiv Ram Dubey, Satish Kumar Singh, Rajat Kumar Singh, "Rotation and scale invariant hybrid image descriptor and retrieval," Computers & Electrical Engineering, , vol.46, pp.288-302, 2015. (Elsevier)
 6. Shiv Ram Dubey, Satish Kumar Singh, Rajat Kumar Singh, "Local neighbourhood-based robust colour occurrence descriptor for colour image retrieval," IET Image Processing, vol. 9, no. 7, pp. 578-586, 2015. (IET)
 7. Shiv Ram Dubey, Satish Kumar Singh, Rajat Kumar Singh, "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)
6. Research papers published in conference proceedings (as a full paper)
 1. Soumendu Chakraborty, Satish Kumar Singh, Pavan Chakraborty, "Performance Enhancement of Local Vector Pattern with Generalized Distance Local Binary Pattern for Face Recognition", In Proc. of the IEEE UP Section Conference on Electrical, Computer and Electronics (UPCON), December 2015.
 2. Shiv Ram Dubey, Satish Kumar Singh, Rajat Kumar Singh, "Boosting Local Binary Pattern with Bag-of-Filters for Content Based Image Retrieval", In Proc. of the IEEE UP Section Conference on Electrical, Computer and Electronics (UPCON), December 2015.
7. Seminars and invited talks presented: NIL
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad: NIL
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)



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9. Work done in project undertaken in the Institute:

1. 300KWp Grid-Connected Rooftop Solar PV Power Project, by Ministry of New and Renewable Energy, Government of India, 2015-17.
 - ✧ Amount: Rs. 2,40,00,000/-Only
 - ✧ Status: Ongoing
2. Global Initiative of Academic Network (GIAN), by Ministry of Human Resource and Development (MHRD), Government of India, 2015-16.
 - ✧ Amount: Rs. 32,00,000/-Only
 - ✧ Status: Ongoing

10. Training Programme organized:

- [1] SP/C Joint Chapter and IEEE StB IIIT Allahabad Sponsored Workshop, Indian Institute of Information Technology Allahabad-211012-INDIA
 - ✧ Aug 20-21, 2016
 - ✧ Topic: LATEX
 - ✧ Role: Coordinator
- [2] IEEE UP Section Conference on Electrical. Computer and Electronics, Indian Institute of Information Technology Allahabad-211012-INDIA
 - ✧ Dec 4-6, 2015
 - ✧ Topic: IEEE UPCON 2015
 - ✧ Role: Organizing Committee Chair

11. Other Activities

(a) **Technology Developed: NIL**

Name of the technology/product

(b) **Software Developed: NIL**

Name of the software

(c) **Industry visited and visits to other Institutes for research: NIL**

Name, Purpose, Period.

(d) **Patents: NIL**

(Title, Patent number, granting agency)

(e) **Awards and Honors: NIL**

Title, Awarded by

(f) **Continuing Education Activities: NIL**

Name and type of the course organized (Self-financing, Industry),

Place, Dates, and profile of participants (university/industry)

(g) **Participation in the High Level Industry Academia Interaction Program during summer: NIL**

Name of the organization, Period

(h) **Any other important activity not specified above: NIL**



Dr. Rishi Ranjan Singh



1. Name, Department & Designation: **Dr. Rishi Ranjan Singh,**
Department of Information Technology, Assistant Professor (on Contract)
2. Teaching/Research/Industry Experience:
Teaching/Research: **6 Months** Industry _____ Total: **6 Months**
3. New courses developed
4. Books and book-chapters published
5. Research papers published in journals
6. Research papers published in conference proceedings (as a full paper)
Approximation Algorithms for Cumulative VRP with Stochastic Demands, Second International Conference on Algorithms and Discrete Applied Mathematics (CALDAM, paper number 15, 2016, page number 176-189, Daya Ram Gaur, Apurva Mudgal, Rishi Ranjan Singh
7. Seminars and invited talks presented:
Approximation Algorithms for Cumulative VRP with Stochastic Demands in the Optimization Seminar Series, University of Lethbridge, Canada, February 12, 2016. (invited talk through video conference)
8. Conferences attended outside IIT Allahabad
International Conference on Algorithms and Discrete Applied Mathematics (CALDAM), Kerala University, India, 18 - 20 February 2016, Contributed and presented a paper.
International Workshop on Networks and Games (NAG 2015), IIT Ropar, India, 7 - 9 December 2015, Organized the workshop, Contributed and presented a paper.
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - a) Technology Developed
 - b) Software Developed
 - c) Industry visited and visits to other Institutes for research
 - d) Patents
 - e) Awards and Honors
Best paper Award and Springer Coupon worth 250 EUOs at International Conference on Algorithms and Discrete Applied Mathematics (CALDAM) 2016.
 - f) Continuing Education Activities
 - g) Participation in the High Level Industry Academia Interaction Program during summer
 - h) Any other important activity not specified above



Dr. Ratan Kumar Saha



1. Name, Department & Designation:
Dr. Ratan Kumar Saha
Assistant Professor
Department of Applied Sciences
Indian Institute of Information Technology Allahabad
Deoghat, Jhalwa, Uttar Pradesh 211012
2. Teaching/Research/Industry Experience:
Teaching/Research: 8 Years, Industry Nil Years Total: 8 Years
3. New courses developed
Nil
4. Books and book-chapters published
Nil
5. Research papers published in journals
Nil
6. Research papers published in conference proceedings (as a full paper)
Nil
7. Seminars and invited talks presented:
Nil
8. Conferences attended outside IIIT Allahabad
Nil
9. Work done in project undertaken in the Institute:
Nil
10. Training programme organized:
Nil
11. Other Activities
 - (a) *Technology Developed* : Nil
 - (b) *Software Developed* : Nil
 - (c) *Industry visited and visits to other Institutes for research* : Nil
 - (d) *Patents* : Nil
 - (e) *Awards and Honors* : Nil
 - (f) *Continuing Education Activities* : Nil
 - (g) *Participation in the High Level Industry Academia Interaction Program during summer*
Nil
 - (h) *Any other important activity not specified above*
Nil



Dr. Rahul Kala



1. Name, Department & Designation: Dr.Rahul Kala, IT, Asst. Prof.
2. Teaching/Research/Industry Experience:
Teaching/Research: 2 years 6 months Industry: 0 Total: 2 years 6 months
3. New courses developed
NIL
4. Books and book-chapters published
(Order: Title, Publishers and Place, Year, All authors)
5. Research papers published in journals
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note: Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not **actually appeared by 31st March, 2016.**
Underline the name of the author for correspondence.
R. Kala (2016) Reaching destination on time with cooperative intelligent transportation systems, Journal of Advanced Transportation 50(2): 214–227.
R. Kala, K. Warwick (2015) Congestion Avoidance in City Traffic. Journal of Advanced Transportation, 49(4): 581–595.
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) Reactive Planning of Autonomous Vehicles for Traffic Scenarios, Electronics, 4(4), 739-762.
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.
6. Research papers published in conference proceedings (as a full paper)
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
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.
P. Mohan, S. Srivastava, G. Tiwari, R. Kala (2015) Background and skin colour independent hand region extraction and static gesture recognition. In Proceedings of the 2015 Eighth International Conference on Contemporary Computing, Noida, India, pp.144-149.
A. Kumar, R. Kala (2015) Geometric shape drawing using a 3 link planar manipulator. In Proceedings of the 2015 Eighth International Conference on Contemporary Computing, Noida, India, pp. 404-409.
A. Sharma, I. Wadhwa and R. Kala (2015) Monocular camera based object recognition and 3D-localization for robotic grasping. In Proceedings of the 2015 International Conference on Signal Processing, Computing and Control, Wanknaghat, pp. 225-229.
A. Kumar, R. Agarwal, R. Kala (2015) Temporal Logic based Motion Planning in Unstructured Environments, In Proceedings of the International Conference on Computing in Mechanical Engineering, Kochi, India, pp. 14-22.
7. Seminars and invited talks presented:
Talk on “Towards Apocalypse of Human Driving and Re-Shaping Futuristic Transportation Systems” at TEDxIIITA, IIIT Allahabad, 31st January, 2016.



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8. Conferences attended outside IIIT Allahabad
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. Manish Kumar



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 (Research Papers and Books):
 Singh, Vishal K., Ajit Singh, and Manish Kumar. "Data aggregation based link loss inference in wireless sensor networks." In 2015 IEEE UP Section Conference on Electrical Computer and Electronics (UPCON), pp. 1-5. IEEE, 4-6 Dec. 2015.
 "Analysis of stock volatility clustering using ANN", Information Resources Management Journal (IRMJ) Vol. 28, No. 2, pp. 32-45, 2015.
 "Locally linear Embedding for Node Localization in Wireless Sensor Networks" In 7th International Conference on Computational Intelligence and Communication Networks (CICN 2015). 12-14 December, GGITS Jabalpur, 2015.
 Singh, Vishal Krishna and Manish Kumar. "Hierarchical Compressed Sensing for Cluster Based Wireless Sensor Networks" in International Journal of Advanced Computer Science and Applications, (IJACSA), Vol. 7, No. 2, 2016.
 "Monitoring Deforestation using Acoustic Signals", International Conference on Bioinformatics and Systems Biology (BSB-2016), 4-6 March, 2016.
 Books
 "Applied Big Data Analytics in Operational Management" [accepted and to be published in August 2016]
 Book Chapters
 "Collaborative Filtering based Data Mining for large data" in "Collaborative Filtering Using Data Mining and Analysis" by IGI publications. (Accepted for publication)
 Jain, Harsh, Pal, Amrit, and Manish Kumar. "Predictive Analytics in Operations Management" Applied Big Data Analytics in Operations Management IGI publication (Accepted for publication).
4. Invited talks in Seminars/ Workshops/Conferences/ Symposiums etc.
 Keynote speaker in "International workshop on Role of technological advances, incubation themes and engineering skills (TAITES-2016)", at CIT Kokarajhar, Assam, 21-23 January, 2016.
 Keynote speaker in "National workshop on Creation and Establishment of Virtual Classroom and e-Learning", at SHIATS Allahabad, 5-6 May, 2015.
5. Lab & Curriculum Development
 Developed an elective course for B.Tech-IT "Advanced Data Mining"
6. Extra - Curricular activities
 Faculty Advisor(Sports), Conducted Annual Sports meet in IIIT
7. Any other important activity not specified above
 Faculty In-charge, M.Cell (Computers & Labs)



Dr. Krishna Pratap Singh



1. Name, Department & Designation: Dr. KRISHNA PRATAP SINGH,
Assistant Professor, Department of Information Technology
2. Teaching/Research/Industry Experience:
Teaching/Research: __ 7 Years ____
3. New courses developed
Machine Learning (IMCL630E), Mathematics for Information Technology (IMIT140C)
4. Books and book-chapters published
5. Research papers published in journals
6. Research papers published in conference proceedings (as a full paper)
 1. An Aggregation Based Approach with Pareto Ranking in Multiobjective Genetic Algorithm, (Ojha, M., Singh, K. P, Chakravorty, P. , and Verma, S.), Proceedings of Fifth International Conference on Soft Computing for Problem Solving, 2015, pp. 261-271
 2. A guided multiobjective genetic algorithm for decision making problems, (Ojha, M., Singh, K. P, Chakravorty, P., and Verma, S.), IEEE UP Section Conference on Electrical Computer and Electronics (UPCON), 2015, pp. 1-6.
7. Seminars and invited talks presented:
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad
Fifth International Conference on Soft Computing for Problem Solving, 2015, IIT Roorkee. (Chaired Session)
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. Amrita Chaturvedi



1. Name, Department & Designation: Dr. Amrita Chaturvedi, Assistant Professor, Department of Information Technology, IIIT Allahabad.
2. Teaching/Research/Industry Experience:
Teaching/Research: 9 years 6 months approximately (including PhD research experience) Industry: 1 month Total: 9 years 7 months approximately.
3. New courses developed: Social Web and Media Analytics, ISWA322C
4. Books and book-chapters published
Book Chapter
Ontology - driven mvc: A variant of mvc architectural style. Book chapter in Business Intelligence and Mobile Technology Research: An Information Engineering Perspective, ed. by Sean Eom (Cambridge Scholars Publishing), 2014, Amrita Chaturvedi, Prabhakar T.V.
5. Research papers published in journals
Ontology driven creational design patterns as reusable components. In: ACM Applied Computing Review Journal, ACM Press, 14(1), 2014, pp. 6 – 19, Amrita Chaturvedi, Prabhakar T.V.
6. Research papers published in conference proceedings (as a full paper)
 1. Ontology - driven mvc: A variant of mvc architectural style. In: Proceedings of the International Conference on Software Engineering and New Technologies (ICSSENT'2012), Hammamet, Tunisia, December 2012, pp. 158 – 174, Amrita Chaturvedi, Prabhakar T.V. (Best Paper Award).
 2. Ontological visitor pattern. In: Proceedings of Indian Conference on Patterns and Pattern Languages of Programs (GuruPLoP 2013), Bangalore, India, March 2013, Amrita Chaturvedi, Prabhakar T.V.
 3. Ontology driven observer pattern. In: International Workshop on Ontologies meet Advanced Information Systems (OASIS 2013) in conjunction with 17th East-European Conference on Advances in Databases and Information Systems (ADBIS 2013), Springer International Publishing Switzerland, Genova, Italy, September 2013, pp. 307 – 316, Amrita Chaturvedi, Prabhakar T.V.
 4. Ontology driven creational design pattern – creating objects on the fly. In: Proceedings of International Conference on Reliable and Convergent Systems (ACM RACS 2013), ACM Press, Montreal, Canada, October 2013, pp. 312 – 321, Amrita Chaturvedi, Prabhakar T.V.
 5. Ontology driven builder pattern – a plug and play component. In: The 29th ACM Symposium on Applied Computing (ACM SAC 2014), ACM Press, Gyeongju, Korea, March 2014, Amrita Chaturvedi, Prabhakar T.V.
 6. Class Partition Approach for Software effort Estimation using Support Vector Machine. In: IEEE UPCon – 2016, IIT BHU, Varanasi, India, December 2016, Anurag Tiwari, Amrita Chaturvedi (accepted).
7. Seminars and invited talks presented:
 - ✧ “Ontology Driven Patterns for Software Architecture” in Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur, India on 23 July 2014.
 - ✧ “Ontology Driven Builder Pattern – A Plug and Play Component” in 29th ACM Symposium on Applied Computing (ACM SAC 2014), Gyeongju, Korea on 27 March 2014.
 - ✧ “Design Patterns” for CS455 Course (Introduction to Software Engineering) in Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur, India on 12 November 2013.
 - ✧ "Ontology Driven Creational Design Patterns – Creating Objects on the Fly" in International Conference on Reliable and Convergent Systems, Montreal, Canada on 3 October, 2013.



- ✧ "Ontology - Driven Observer Pattern" in International Workshop on Ontologies meet Advanced Information Systems, Genoa, Italy on 2 September 2013.
- ✧ "Effect of Ontology in Patterns for Software Architecture" for CS654 Course (Software Architecture) in Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur, India on 12 March 2013.
- ✧ "Ontological Visitor Pattern" in Indian Conference on Patterns and Pattern Languages of Programs, Bangalore, India on 3 March 2013.
- ✧ "Ontology - Driven MVC: A Variant of MVC Architectural Style" in International Conference on Software Engineering and New Technologies, Hammamet, Tunisia on 15 December 2012.
- ✧ Welcome note speaker in International Conference on Software Engineering and New Technologies, Hammamet, Tunisia on 15 December 2012.
- ✧ "Semantic Technologies and Software Architecture" in Indian Institute of Technology, Kanpur on 27 November 2009.
- ✧ "Roles of Semantic Components in Software Engineering" in Software Architecture meeting held under the supervision of Dr. Hans Van Vliet and Dr. Patricia Lago, Professors, Department of Information Management and Software Engineering (IMSE), Vrije University, Amsterdam, The Netherlands on 06 October 2009.
- ✧ "Roles of Semantic Components in Software Engineering" in semantic web meeting held under the supervision of Dr. Frank Van Harmelen, Professor, CS Department, Vrije University, Amsterdam, The Netherlands on 28 September 2009 (URL: http://tripletalk.cs.vu.nl/index.php/Semantic_Web_Meetings_schedule).

8. Conferences attended outside IIIT Allahabad

Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)

- ✧ Attended the workshop for computer science teachers under the Knowledge Incubation for TEQIP (Technical Education Quality Improvement Program) organized by MHRD (Ministry of Human Resource and Development, Government of India) held at Indian Institute of Technology, Kanpur, India in July 2014.
- ✧ Attended and presented my research paper in the 29th ACM Symposium on Applied Computing (ACM SAC 2014), held at Dongguk University, Gyeongju, Korea. (March 2014).
- ✧ Attended and presented my research paper in the International Conference on Reliable and Convergent Systems (ACM RACS 2013) held at Concordia University, Montreal, Canada in October 2013. Also acted as the session chair.
- ✧ Attended and presented my research paper in the International Workshop on Ontologies meet Advanced Information Systems (OAIS 2013) in conjunction with 17th East-European Conference on Advances in Databases and Information Systems (ADBIS 2013) held at Villa Cambiaso Giustiniani, Genoa, Italy in September 2013.
- ✧ Attended and presented my research paper in the Indian Conference on Patterns and Pattern Languages of Programs (GuruPLoP'2013) held at Sheraton Hotel, Bangalore, India in March 2013.
- ✧ Attended and presented my research paper in the International Conference on Software Engineering and New Technologies (ICSENT'2012) held at El Mouradi El Menzah Hotel, Hammamet, Tunisia, 1-3 December 2012.
- ✧ Attended the India Software Engineering Conference 2012 (ISEC'2012) held at Indian Institute of Technology, Kanpur, 22-25 February 2012.
- ✧ Attended the semantic web meetings and WAI (weekly artificial intelligence) meetings held under the supervision of Dr. Frank Van Harmelen, Professor, CS Department, Vrije University, Amsterdam, The Netherlands from June 2009 to October 2009.
- ✧ Attended Seventh joint meeting of the European Software Engineering Conference (ESEC'09) and the ACM SIGSOFT symposium on the Foundations of Software Engineering (FSE'09) held at Vrije University, Amsterdam, The Netherlands, 24 – 28 August 2009.
- ✧ Attended International Conference on Distributed Computing and Internet Technologies (ICDCIT-2008) held at



Indian Institute Technology, Delhi in December, 2008.

- ✧ Attended IBM Asia Pacific University Relations Summit held at Taj Residency, Bangalore in November, 2008.
- ✧ Attended IBM Technology Day held at Indian Institute of Technology, Kanpur, Uttar Pradesh, India in September, 2008.
- ✧ Attended Embedded Software Workshop by NVIDIA held at Indian Institute of Technology, Kanpur, Uttar Pradesh, India in March, 2008.

· Attended IBM eclipse workshop held at Indian Institute of Technology, Kanpur, Uttar Pradesh, India in September, 2007.

9. Work done in project undertaken in the Institute: None

10. Training Programme organized: None

11. Other Activities

(a) Technology Developed

Ontology Driven Technique of Implementing Design Patterns (as part of my PhD research work)

(b) Software Developed

Ontology Driven Tool to Improve Software Quality

(c) Industry visited and visits to other Institutes for research

I went to the Department of Information Management and Software Engineering (IMSE), Vrije University, Amsterdam, The Netherlands after being selected by the EURECA (European Research and Educational Collaboration with Asia) project for the award of a mobility grant of Euros 1500.00 per month for a period of 6 months. This grant was funded by European Commission and the mobility period started on 15 April 2009 and ended on 15 October 2009. During this period I was working with the research group of Prof. Hans Van Vliet on the architectural aspect of semantic components. I also participated in several meetings and group discussions of Prof. Frank Van Harmelen on semantic web and ontologies.

(d) Patents

None

(e) Awards and Honors

Title, Awarded by

- ✧ ACM SIGAPP Award 2014.
- ✧ Best Paper Award for my research paper with Dr. T. V. Prabhakar (Professor, Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur) titled as "Ontology – Driven MVC: A Variant of MVC Architectural Style" published in the proceedings of International Conference on Software Engineering and New Technologies (ICSSENT 2012) held in December 2012 in Hammamet, Tunisia.
- ✧ Selected as the first female student from Asia under EURECA (European Research and Educational Collaboration with Asia) project 2009 (funded by European Commission) to conduct research at Vrije University, Amsterdam, The Netherlands for 6 months.
- ✧ Qualified GATE (Graduate Aptitude Test in Engineering) 2005.
- ✧ Selected in Physics Olympiad conducted by Indian Association of Physics Teachers, 1999.

(f) Continuing Education Activities

None

(g) Participation in the High Level Industry Academia Interaction Program during summer

None

(h) Any other important activity not specified above

a. Services

- i. Research paper reviewer, Springer journal of CSI Transactions on ICT, 2016.



- ii. Research paper reviewer, **International Conference on Reliable and Convergent Systems 2016 (ACM RACS 2016), Odense, Denmark.**
- iii. Research paper reviewer, **International Conference on Reliable and Convergent Systems 2015 (ACM RACS 2015), Prague, Czech Republic.**
- iv. Book reviewer, Mastering JavaScript Design Patterns by Simon Timms, Packt Publishing Ltd., Birmingham, UK, published in November 2014 (URL: <https://www.packtpub.com/web-development/mastering-javascript-design-patterns>).
- v. Research paper reviewer, International Symposium on Networks, Computers and Communications 2014 (ISNCC 2014), Hammamet, Tunisia.
- vi. Research paper reviewer, International Conference on Advanced Information Technologies and Applications 2014 (ICAITA 2014), Dubai, UAE.
- vii. Research paper reviewer, International Conference on Reliable and Convergent Systems 2014 (ACM RACS 2014), Towson, MD, USA.
- viii. Webmaster, Website of Workshop on Knowledge Representation in Software Engineering in Practice (KRSEP'14) co-located with Seventh India Software Engineering Conference (ISEC'14), February 19–21, 2014, Chennai, India. (URL: <https://sites.google.com/site/krsep2014/>)
- ix. Research paper reviewer, International Conference on Cloud Computing and Big Data 2013 (CloudCom–Asia), FuZhou, China.
- x. Session chair of Security track, International Conference on Reliable and Convergent Systems 2013 (ACM RACS 2013), Montreal, Canada.
- xi. Research paper reviewer, International Conference on Reliable and Convergent Systems 2013 (ACM RACS 2013), Montreal, Canada.
- xii. Research paper reviewer, International Conference on Information Systems and Technologies 2013 (ICIST 2013), Tangier, Morocco.
- xiii. Volunteer, India Software Engineering Conference 2012 (ISEC'2012) held at Indian Institute of Technology, Kanpur in 22-25 February 2012.

b. Memberships

- i. Member of Association for Computing Machinery (ACM) and Special Interest Group on Applied Computing (SIGAPP).
- ii. Member of ACM's Committee on Women in Computing (ACM - W).
- iii. Life member of Indian Science Congress Association.
- iv. Program committee member of International Conference on Reliable and Convergent Systems 2016 (ACM RACS 2016), Odense, Denmark.
- v. Program committee member of International Conference on Reliable and Convergent Systems 2015 (ACM RACS 2015), Prague, Czech Republic.
- vi. Program committee member of International Conference on Reliable and Convergent Systems 2014 (ACM RACS 2014), Towson, MD, USA.
- vii. Program committee member of International Conference on Software Engineering and New Technologies 2014 (ICSENT 2014), Hammamet, Tunisia.
- viii. Program committee member of International Conference on Software Engineering and New Technologies 2013 (ICSENT 2013), Hammamet, Tunisia.
- ix. Program committee member of International Conference on Information Systems and Technologies 2013 (ICIST 2013), Tangier, Morocco.

Program committee member of International Conference on Reliable and Convergent Systems 2013 (ACM RACS 2013), Montreal, Canada.



Dr. Amit Kumar Dhar

1. Name, Department & Designation:
Dr. Amit Kumar Dhar, Assistant Professor (on contract), Department of IT
2. Teaching/Research/Industry Experience:
Teaching/Research : 2 years Industry : 0 year Total : 2 years
3. New courses developed
Design, Modelling and Analysis of Embedded System, IEMB730E
4. Books and book-chapters published
None
5. Research papers published in journals
Taming Past LTL with Flat Counter Systems, Information and Computation,
Volume 242, 2015, 306-339, Stéphane Demri, Amit Kumar Dhar, Arnaud
Sangnier
6. Research papers published in conference proceedings (as a full paper)
Efficient Energy Distribution in a Smart Grid using Multi-Player Games,
Proceedings of Casting/SynCoP - Eindhoven, The Netherlands, 2016, 1-12,
Thomas Brihaye, Amit Kumar Dhar, Gilles Geeraerts, Axel Haddad,
Benjamin Monmege
7. Seminars and invited talks presented:
None
8. Conferences attended outside IIIT Allahabad
None
9. Work done in project undertaken in the Institute:
None
10. Training Programme organized:
None
11. Other Activities
None



Dr. Amaresh Kumar Sahoo



1. Name, Department & Designation: Dr. AMARESH KUMAR SAHOO,
Dept. of Applied Sciences, Assistant Professor (on contract)
2. Teaching/Research/Industry Experience:
Teaching/Research: 1.3 years, Industry: NA Total: 1.3 years
3. New courses developed: NA
Title, course number
4. Books and book-chapters published: NA
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals: NA
Title of the article, Journal, Volume (number), Year, Page numbers (inclusive), all authors (initials first)
Note : Please avoid duplication from last year's report. *In Press* papers will be deleted if they have not actually appeared by 31st March, 2016.
Underline the name of the author for correspondence.
6. Research papers published in conference proceedings (as a full paper) : NA
Title of the article, details of the conference, paper number, Year, Page numbers (inclusive), all authors (initials first).
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented: NA
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad: NA
Conference, Venue, Dates, Type of participations, e.g. Chairing Session, presenting invited or contributed paper, panelist in discussion, any other)
9. Work done in project undertaken in the Institute: NA
10. Training Programme organized: : NA
11. Other Activities
 - (a) **Technology Developed:** NA
Name of the technology/product
 - (b) **Software Developed:** NA
Name of the software
 - (c) **Industry visited and visits to other Institutes for research :** NA
Name, Purpose, Period.
 - (d) **Patents:** NA
(Title, Patent number, granting agency)
 - (e) **Awards and Honors:** NA
Title, Awarded by
 - (f) **Continuing Education Activities:** NA
Name and type of the course organized (Self-financing, Industry),
Place, Dates, and profile of participants (university/industry)
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer:** NA
Name of the organization, Period
 - (h) **Any other important activity not specified above:** NA



Dr. Sunny Sharma



1. Name: Dr, Sunny Sharma
Department: ECE
Designation: Assistant Professor
2. Teaching/Research/Industry Experience:
Teaching/Research: **:10 months (Upto 31 march 2016)** _Industry__ Total: **10 months (Upto 31 march 2016)**
3. New courses developed
Title, course number
4. Books and book-chapters published
(Order: Title, Publishers and Place, Year, All authors)
In case of chapters, title of the chapter, title of the book, publisher & place, year, all authors.
5. Research papers published in journals
6. Research papers published in conference proceedings (as a full paper)
Sunny, V. N. Mishra, R. R. Das and R. Dwivedi, "Gases/Odors Classification Using K-means, Hierarchical Clustering and Self Organizing Map" The 4th International Conference on Electronics, Communications and Networks, Beijing, China, Dec.12th-15th, 2014. Published in : Electronics, Communications and Networks IV, Chapter 293, pp. 1647-1652, © 2015 Taylor & Francis Group, London, ISBN: 978-1-138-02830-2
Praveen Kumar Sahu, Sunny, Yogesh Kumar, and V. N. Mishra, "Design and Simulation of Low Leakage SRAM CELL," Third International Conference on Devices, Circuits and Systems (ICDCS'16), IEEE Sponsored, March 2-5, 2016, Karunya University, Coimbatore, Tamil Nadu India. **10.1109/ICDCSyst.2016.7570628, IEEE Explore** (Paper presented by Dr. Sunny)
Underline the name of the author for correspondence.
Please do not list conferences where only abstracts are published.
7. Seminars and invited talks presented:
Title, Organization, Date
8. Conferences attended outside IIIT Allahabad
Third International Conference on Devices, Circuits and Systems (ICDCS'16), IEEE Sponsored, March 2-5, 2016, Karunya University, Coimbatore, Tamil Nadu India. **10.1109/ICDCSyst.2016.7570628, IEEE Explore** (Paper presented by Dr. Sunny)
9. Work done in project undertaken in the Institute:
10. Training Programme organized:
11. Other Activities
 - (a) **Technology Developed**
Name of the technology/product
 - (b) **Software Developed**
Name of the software
 - (c) **Industry visited and visits to other Institutes for research**
Name, Purpose, Period.
 - (d) **Patents**
(Title, Patent number, granting agency)
 - (e) **Awards and Honors**
Title, Awarded by
 - (f) **Continuing Education Activities**
 - (g) **Participation in the High Level Industry Academia Interaction Program during summer**
Name of the organization, Period
 - (h) **Any other important activity not specified above**



Dr. Anand Kumar Tiwari



1. Name, Department & Designation: Dr Anand Kumar Tiwari
Assistant Professor
Department of Applied Sciences
2. Teaching/Research Experience: 02 Years 11 Months
3. New Course developed: NA
4. Books and book-chapters published: NIL
5. Research papers published in journals: NIL
6. Research papers published in conference proceedings (as a full paper): NIL
7. Seminars and invited talks presented: NIL
8. Conferences attended outside IIIT Allahabad: NIL
9. Work done in project undertaken in the Institute: NA
10. Training Programme organized: NIL
11. Other Activities
Industry visited and visits to other Institutes for research
Name, Purpose, Period: IIT Patna,
For collaborative research work
4 June 2016 to 10 June 2016



Brief Summary of the department's activities during the year 2015-16



5. Brief Summary of the department's activities during the year 2015-16

5.1 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 2015 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 (2015-16) 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 2015 and in the session 2015-16, four new faculty members have joined the department.

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 the 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.

5.2 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 2015-16 are summarized hereunder:

Faculty Recruitment

At the start of the year 2015 the department had just 4 faculty members which have now been increased to 15. At the same time this is a pleasure to report that no compromise with the quality has 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, IIT Rooraki 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 based on the criterion of overall best performance in academics & extra-curricular activities.
- ◆ Best Project Award from 5th semester - 7th 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 Commination lab, 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 nano scale.



- ◆ 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 2015-16 was conducted. There were a total of 90 students from BTech (ECE) final year registered for campus placements in 2015-16. Student registration for campus placements opened in August 2015 with the customary introduction to the placement process by the institute's TPO and student placement team. Companies were invited from July 2015 onwards to fill up online "Job Notification Forms" which opened to students registered for placements from early August. Pre-placement talks by some companies, provided an avenue for interaction and familiarization of students with recruiting organizations and their work profile as 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.

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

5.3 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)

5.4 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 reviewers 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



RESEARCH AND PROJECTS



6. RESEARCH AND PROJECTS

6.1 PROJECTS OF THE INSTITUTE

Sr. No.	Name of Project	Coordinator	Funding Agency	Project Cost	Amount Released
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	20,70,860	12,27,930
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/ Dr. Prithish Varadwaj	DST	53,97,620	42,26,119
3	Disaster management system for large scale deployment of sensor network using a fault tollerant mechanism	Dr. Shirshu Verma	DST	1,58,47,800	73,08,000
4	Universal Digital Library- Content creation in Tibetan, Sanskrit and English	Director/ Dr. Ratna Sanyal	MCIT	1,05,00,000	88,11,008
5	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	26,83,391	23,44,570
6	TDIL -(English-Indian Language machine Translation System)- Phase 2nd	Dr. Ratna Sanyal	MCIT	93,96,000	83,92,676
7	TDIL-(Indian Language-Indian Language Machine Translation System) 2 nd Phase	Dr. Ratna Sanyal	MCIT	29,56,000	15,28,700



8	TDIL-Development of Robust document analysis and recognition system for printed Indian Scripts-(OCR) -2 nd Phase	Prof. Sudip Sanyal	MCIT	71,70,500	24,80,344
9	Technology incubation and Development of Entrepreneurs(Tide) Scheme	Prof. Sudip Sanyal	DEITY	1,65,00,000	68,36,000
10	Setting up of an ASEAN-India Science & Technology Library	Director	M E Affairs ASEAN	3,17,57,033	3,17,57,033
11	Allahabad High Court Digitilization Project	Director/ Dr. Ratna Sanyal	Alld High Court	5,11,00,000	4,39,90,000
12	ATB Netwok simulation Tastbed at MCTE,MHOW (MP)	Prof. M.Radhakrishna	CDA Jabalpur	1,44,40,000	1,17,49,623
13	Distributing Industrial Optimization tasks to Rural Worker- INDO UK BURD Project	Prof. Anupam	DST	60,88,130	42,55,024
14	Topological Materials and Application Science and Research Board	Dr. Pramod Kumar	DST-SERB	23,30,000	10,75,000
15	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	16,83,908	8,65,610
16	Development & Application of atomic layer Deposition for High efficiency c-Si Photovoltaic Solar cells	Prof. B.R.Singh	DST	2,16,62,000	2,08,62,000
17	Spintronic material and its applications	Dr. Pramod Kumar	DST-SERB	38,08,025	34,99,000
18	Inspire Faculty Award	Dr. Sitangshu Bhattacharya	DST	35,00,000	14,99,746



6.2 PROJECTS BY RESEARCH SCHOLARS

Title of the Thesis: Study of Rate Conversion Filtering for Cognitive Radio

BRIEF NOTE ON THE RESEARCH & ITS OUTCOME

Cognitive radio technology involves reliable data transmission over dynamically available spectrum bands of different bandwidths. It requires spurious transient free rate conversion filters which should have lower computational complexity too. Development of a novel rate conversion filter which should meet the aforesaid requirements of cognitive radio is the primary aim of this research work. Its scope includes the exploration of spectrum blind sampling and other relevant techniques which contribute in improving the overall performance of the cognitive radio technology. The outcome of this research can enhance the commercial viability of the cognitive radio technology.

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.

PAPERS PRESENTED IN CONFERENCES/ SEMINARS/ JOURNALS

Manuscript is under preparation.



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

Name of Research Scholar: **Abhishek Kumar**

Roll No.: **RSE-2016003**

Name of Division where worked :

Electronics and Communication Engineering.

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS

None



Title of the Thesis / Research Project = Biometrics

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

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PROGRESS / CURRENT STATUS OF PROJECT

Reviewing papers

PAPERS PRESENTED IN CONFERENCES/SEMINARS, IF ANY

.....

APPRECIATION / AWARDS RECEIVED, IF ANY

.....



Name of Supervisor: Dr. Satish Kumar Singh
Name of Co Supervisor: Dr. K.P. Singh
Name of Research Scholar: Anamika Jain
Roll No.: RSI2016005
Name of Division where working: IT

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.



Title of the Thesis / Research Project = “Effect of some small molecules on specific stem cells ”

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

The present research work is carried out to find the efficacy of some small molecules on stem cells to regulate the growth and development of cancer cells.

PROGRESS / CURRENT STATUS OF PROJECT

Computational work has been done for finding the efficacy of small molecules on specific stem cells.

PAPERS PRESENTED IN CONFERENCES/SEMINARS, IF ANY

1. Paper presented in the 83rd Annual session of NASI, 2014, Goa
2. Poster presented in the International conference on emerging trends in Biotechnology-2014, JNU, New Delhi
3. Participated in oral in international conference on Bioinformatics and Systems Biology-2016 at Indian Institute of Information Technology, Allahabad on March 4th-6th, 2016.
4. Participated Oral presentation in 6th international conference on translational cancer research at Hyatt Regency, Ahmedabad on February 04-07, 2016.
5. in the international conference on industrial biotechnology at Bologna, Italy, April 10th-13th, 2016.



Name of Supervisor: Prof. Krishna Misra

Name of Co Supervisor:

Name of Research Scholar: Anushree Tripathi

Roll No.: _RS143

Name of Division where working:
Applied Science

APPRECIATION / AWARDS RECEIVED, IF ANY

Best paper presentation award (Swarn Jayanti Puraskar) by National Academy of Sciences, India in 2014



Title of the Thesis / Research Project = Impact of organizational justice, job satisfaction and affective commitment on intention to stay of software professionals (Tentative).

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

Despite numerous studies on information technology (IT) employee's intention to stay and recommendation to the organization on how to retain them, the problem to retain IT professionals remains high. The need for further research on this topic has been called by many researchers but much of literature continues to conduct similar studies using the same construct and the studies find similar results. In this research, we advocate that employee's intention to stay is the outcome of organizational justice employee's job satisfaction and organizational commitment. To address the objectives, we proposed an innovative model for boosting employee's intention to stay which is inspired by the previous studies on organizational justice, job satisfaction and organizational commitment.



Name of Supervisor: Dr. Vrijendra Singh

Name of Co Supervisor: _Nil

Name of Research Scholar: Arti Gupta

Roll No.: _RS-147

Name of Division where working:

Department of Management Studies

PROGRESS / CURRENT STATUS OF PROJECT

Successfully completed course work of 24 credits.
Thorough review of literature completed.
Research Gap and problem identified.
Questionnaire prepared.
Pilot study done.
Population & Sampling done.
Data collection ongoing.

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.
Nil

APPRECIATION / AWARDS RECEIVED, IF ANY
Nil

PAPERS PRESENTED IN

CONFERENCES/SEMINARS, IF ANY

1. Arti Gupta & Vrijendra Singh (2014) "*An exploratory study on Factors affecting Retention of Talented Professionals in Indian IT Industry*", 8th doctoral conference, IBS Hyderabad.
2. Arti Gupta & Vrijendra Singh, "*The Relationship between Human Resource Practices and Employee Retention*" presented on 68th All India commerce conference at Vinoba Bhave University, Hazaribag, Jharkhand, 6-9th November, 2015.
2. Arti Gupta, Vrijendra Singh, "Employer Branding a strategic tool to Employee Retention: A study on IT Industry in India", Conference on Brand Management, IIT Delhi. 16-17 April 2016.



Title of the Thesis: Employer Branding: A study of antecedents capable of attracting the prospective employees by the employers.

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

Proposed outcome- Trying to discover the relative worth of the factors and their interrelationships in employer branding.



PROGRESS/ CURRENT STATUS OF THE PROJECT

The literature review is complete. Questionnaire has been prepared and validated by corporate and academicians. Population and sampling have been finalized. Data Collection is in progress.

Name of Supervisor: Dr. Vijayshri Tewari

Name of Co-Supervisor: -NA-

Name of Research Scholar: Bhartrihari Pandiya

Roll No.: RS 178

Name of Division where worked: Management

PAPERS PRESENTED IN CONFERENCES/SEMINARS

CBM 2016 conference proceedings is published by Emerald India, ISBN : 9781786354112 in Conference on Brand Management, IIT Delhi on 16-17 April 2016 as "A review of antecedents capable of alluring the prospective employees". Publication yet to be notified by the publisher.

APPRECIATION/AWARDS IF ANY

Not yet

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS etc.



Title of the Thesis: Performance Evaluation and Optimization of ANC based Two-way Relaying with Spatial Diversity.

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.

Name of Supervisor: **Dr. Neetesh Purohit**
 Name of Co-Supervisor: **Dr. Suneel Yadav**
 Name of Research Scholar:
Mahendra Kumar Shukla
 Roll No.: **RS-177**
 Name of Division where worked: Electronics and Communication Engineering.

APPRECIATION/AWARDS IF ANY

Not yet

PAPERS PRESENTED IN CONFERENCES/ SEMINARS/ JOURNALS/

Mahendra Kumar Shukla, Suneel Yadav, and Neetesh Purohit, "Ergodic Sum Rate Evaluation of Cellular Multiuser Two-Way Relaying with Beamforming and Antenna Selection over Nakagami-m Fading," *Springer Wireless Personal Communications*, DOI: 10.1007/s11277-016-3795-6, online published 2016.

Mahendra Shukla, Suneel Yadav, Neetesh Purohit, 'Performance Evaluation and Optimization of Traffic-Aware Cellular Multiuser Two-Way Relay Networks over Nakagami-m Fading', Online published in IEEE Systems Journal, 2016.

Mahendra K. Shukla, Suneel Yadav, and Neetesh Purohit, "Antenna Selection with User Scheduling in Traffic-Aware Cellular Two-Way Relaying Networks," IEEE International Conference on Signal Processing, Communications and Computing (ICSPCC), 5-8 August 2016, Hong Kong, China

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS

None



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.



PROGRESS/CURRENT STATUS OF THE PROJECT

Literature survey and exploration of tools and techniques are being carried out.

Course work: It is over.

Comprehensive Examination: Passed

Name of Supervisor:

Prof. 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

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: Application of optimization and simulation techniques to solve the problem of medical informatics.

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

The polarimetric information obtained from SAR data is useful in characterizing various land covers. However, it is still a very challenging task to characterize land covers using minimum '*a priori*' information. The aim of this research work is to develop various algorithms requiring minimum '*a priori*' information using hybrid polarimetric SAR data. Polarimetric SAR observables extracted from SAR data would be helpful in interpreting scattering response of different land covers. Thus, classification and surface characterization of those sites could be possible where sufficient '*a priori*' information is not available. The whole research work will be include following tasks; (1) Development of land cover classification technique using hybrid polarimetric RISAT data. (2) Development of change detection technique (3) Application of fusion method for improved SAR data classification, (4) Development of surface parameter retrieval e.g. soil moisture, surface roughness etc., algorithm using minimum '*a priori*' information.



PROGRESS/ CURRENT STATUS OF THE PROJECT

Currently, feature extraction of MiniSAR lunar data to identify the water-ice deposits on lunar surface has been completed. For this purpose, we have selected significant physical and electrical parameters. The physical properties include surface roughness information based on fractal dimension whereas electrical properties include dielectric constant, loss tangent, and bulk density. Both properties compliment each other and essential for better distinction as compared to considering single properties.

Name of Supervisor:

Dr. Pooja Mishra

Name of Co-Supervisor:

Dr. Neetesh Purohit

Name of Research Scholar:

Nidhi Verma

Roll No.: **RSE2016005**

Name of Division where worked:
Electronics and Communication Engineering.

PAPERS PRESENTED IN CONFERENCES/SEMINARS/JOURNALS/

One manuscripts has been accepted in IEEE conference (2016): ICTECT

"Explicating MiniSAR Data to Underline Significant Properties of Lunar Surface"

Authors: Nidhi Verma, Dr. Pooja Mishra, Dr. Neetesh Purohit

Dr. Dharmendra Singh (IIT Roorkee)

APPRECIATION/AWARDS IF ANY

Not yet

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS

None



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: Mobile Assisted Efficient Data Delivery Schemes using Network Coding for Wireless Networks

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

The applications like live streaming of television, news, sports etc. over wireless networks require delivering exactly same data to several mobile stations (MSs). This feature underlines the inefficiency of standard 'dedicated channel scheme' for delivering data from an access point (AP) to each MS. The alternatives as available in the literature are also found to be either impracticable or inefficient, thus, in this research work we aimed to develop efficient data delivery schemes for aforesaid applications. The principles of graph theory, Network Coding (NC) theory and assistance of MSs are used in developing novel schemes for delivering data to the MSs which belongs to the AP. In particular, a 'Matroid based approach' and a 'Clique based approach' are developed. Accordingly, suitable NC strategies are determined and the data packets as available at AP are distributed among the nodes with instructions of local level sharing in the graph such that all packets should become available at all MSs.



Name of Supervisor:

Dr. Neetesh Purohit

Name of Research Scholar:

Purnendu Shekhar Pandey

Roll No.: **RS-141**

Name of Division where worked: IT

PROGRESS/CURRENT STATUS OF THE PROJECT

It is observed that the proposed schemes are more effective for larger graphs, but in practical wireless networks the coverage of APs is very small which limits the number of interested MSs thus the size of the graphs. Hence, a scheme has been developed such that the neighbor APs may coordinate to build a single graph for all MSs which are attached to any of these APs and workout a combined NC for local sharing of the data. The performance of the proposed data delivery schemes has been tested using NS-3 simulator. Significant improvements over the competitive approaches have been observed and reported in the thesis which is at the verge of completion.

APPRECIATION/AWARDS IF ANY

Not yet

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS

None

PAPERS PRESENTED IN CONFERENCES/ SEMINARS/ JOURNALS

- 1) A Scheme for Improving the Performance of Network Coding Technique, 8th IEEE International Conference on Advanced Networks and Telecommunications Systems IEEE ANTS 2014.
- 2) Efficient Utilization of Various Network Coding Techniques in Different Wireless Scenarios, 15th International Conference on Computational Science and its Applications (ICCSA 2015). LNCS, Springer 2015.
- 3) **Wireless Network using Matroid along with Network Coding, Journal of Internet Technology 2015 (SCI, Impact Factor: 0.44)**
- 4) **Clique based Network Coding Technique, IETE Journal of Research, Taylor and Francis 2016 (SCI, Impact Factor: 0.185)**
- 5) Improving Multicasting Approach in UMTS network, IEEE International Conference on Green Computing, Communication and Electrical Engineering, March 2014.



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.



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: Completed.

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 Sciences

PAPERS PRESENTED IN CONFERENCES/SEMINARS

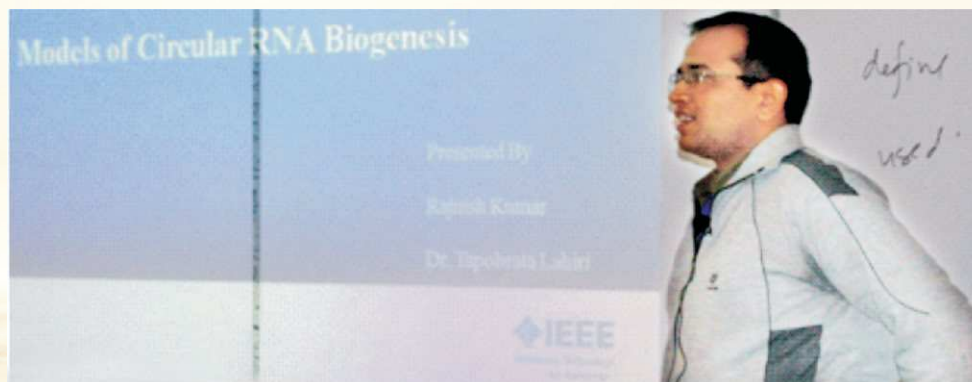
PCV: An alignment free method for finding homologous nucleotide sequence and its application in phylogenetic study - Interdisciplinary Sciences, SCI Journal (Published).

Theoretical Model of Circular RNA Prediction and Classification (**BSB-2016**)

Models of circular RNA biogenesis (IEEE UPCON 2015)

APPRECIATION/AWARDS IF ANY : **--NA--**

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS





Title of the Thesis / Research Project

Structural, Magnetic And Transport Studies Of Half Heusler Alloys/DMS Thin FILMS

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

Half-Heusler alloys –

1. The Co_2MnSi thin films are deposited on Si and SiO_2 . These films are crystalline which is supported by XRD.
2. The grains are round in the thin films deposited for 10 minutes and these grains are more consistently interconnected in the films deposited for 1 hour. This is supported by the surface roughness data from AFM

Dilute Magnetic Semi-conductor –

1. Thin films of MoO_3 are grown by chemical route and characterization of films by XRD for structural property is discussed. As the solution was very dilute, thin films were not of good thickness and uniformity.
2. Optimization of deposition parameters for thin films of MoO_3 being deposited by thermal coating unit is being done.



Name of Supervisor:

Dr Pramod Kumar

Name of Co Supervisor: -

Name of Research Scholar:

Rashmi Singh

Roll No.: RSS2015001

Name of Division where working:

Applied Sciences

PROGRESS / CURRENT STATUS OF PROJECT

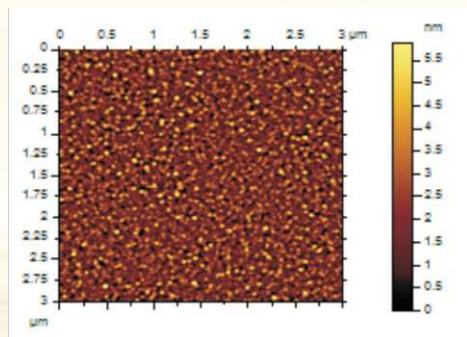
1. Experimental work
 - (i) Deposition of thin films of Co_2CrAl with RF Sputtering.
 - (ii) Deposition of thin films of MoO_3 powder/ palette with spin coater and thermal coating unit.
 - (iii) Characterization of films by XRD and Ellipsometry for structure, thickness and transmittance.
2. Papers accepted
 - (i) Heat capacity, magnetic and lattice dynamic properties of pseudo-two dimensional: $\text{M}_2\text{Fe}_2\text{O}(\text{AsO}_4)_2$ [$\text{M}=\text{K}, \text{K}_{0.79}\text{Cs}_{0.21}$ and Rb] Compounds
Pramod Kumar, Rashmi Singh, L.D.Sanjeewa, Rachana Kumar
 - (ii) Unusual Magnetism in TbRu_2Ge_2 compound
Rashmi Singh, Puneet Jain, Rachana Kumar and Pramod Kumar

PAPERS PRESENTED IN

CONFERENCES/SEMINARS, IF ANY

1. Large Magneto-Thermal Effect in R_3Co
Rashmi Singh, Puneet Jain, Faizan Ahmad, Akhilesh Tiwari, N. Kumar and Pramod Kumar.
International Conference on Materials Science & Technology University of Delhi, New Delhi (March 2016) Oral Paper presented
2. 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.
International Conference on Magnetic Materials And Applications (ICMAGMA) VIT, Vellore, TN (December 2015)
Poster paper presentation

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.



AFM of Co_2MnSi on Si for 10 minutes



Title of the Thesis / Research Project : Soft skill gap in IT professionals

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

The research is about soft skill gap in novice IT professional (fresh graduates) and the perception of industry about soft skill that should be present in new joinees practisionars



PAPERS PRESENTED IN CONFERENCES/SEMINARS, IF ANY

- (1) One paper in 8th International conference of education :
EDULEARN 16 Barcelona, Spain
A SYSTEMATIC REVIEW ON RELEVANT SOFT
SKILLS IN SOFTWARE ENGINEERING CURRICULA
- (2) Attended short term training on Qualitative Research
Methods at MNNIT Allahabad

Name of Supervisor: Vijayshri Tewari

Name of Co Supervisor:

Name of Research Scholar:

Richa Singh Dubey

Roll No.: RS134

Name of Division where working:
Management

APPRECIATION / AWARDS RECEIVED, IF ANY

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IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.

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

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.

PAPERS PRESENTED IN CONFERENCES/ SEMINARS, IF ANY

Not yet

APPRECIATION/ AWARDS RECEIVED, IF ANY

Not yet



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

Name of Co-Supervisor: **NA**

Name of Research Scholar:

Santosh Kumar Barnwal

Roll No.: **RS128**

Name of Division where working: **IT**

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS





Title of the Thesis: “Systems Biology and Computational Proteomics approaches to Study Abiotic Stress Tolerance in Crop Plants”

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

The expected outcome of the work is to provide identification of important coding/non-coding gens, transcription factors and proteins, which plays role in different abiotic stress. Further, we elucidate the molecular mechanisms and their actions using different molecular pathways.

PROGRESS/CURRENT STATUS OF THE PROJECT

- Functional annotation of wheat Hypothetical proteins and their role in abiotic stress has been finished.
- Genome-wide and Transcriptomic analysis of coding and non-coding genes has been identified in response to nutrient deficiency as well as abiotic stress.
- Genome-wide and Transcriptomic analysis of Transcription factors in response to drought and heat stress in progress.

PAPERS PRESENTED IN CONFERENCES/ SEMINARS/ JOURNALS

- **Saurabh Gupta**, Yashbir Singh & Pritish Kumar Varadwaj (2016); Identification of novel abiotic stress proteins in *Triticum aestivum* through functional annotation of Hypothetical proteins, Journal of interdisciplinary and computer life science.
- **Saurabh Gupta**, Utkarsh Raj & Pritish Kumar Varadwaj "Embryo and Endosperm Specific Comparative Transcriptome Analysis of *Triticum aestivum* in Response to ABA and H₂O₂ Stress" in International conference on Bioinformatics and Systems Biology organized by IIIT-Allahabad, India.(Published in IEEE Xplore, 978-1-5090-2261-8/16/\$31.00 ©2016 IEEE).

APPRECIATION/AWARDS IF ANY

Awarded DST-SERB International travel grant to present Ph. D research work at 10th International Multi-conference on Bioinformatics of Genome Regulation and Structure/Systems Biology (BGRS/SB-2016) held during 29 September to 2 August 2016 at Novosibirsk Russia.



Name of Supervisor: **Dr. Pritish Kumar Varadwaj**

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

Name of Research Scholar: **Saurabh Gupta**

Roll No.: **RS-159**

Name of Division where worked: **Applied Sciences**

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS etc.

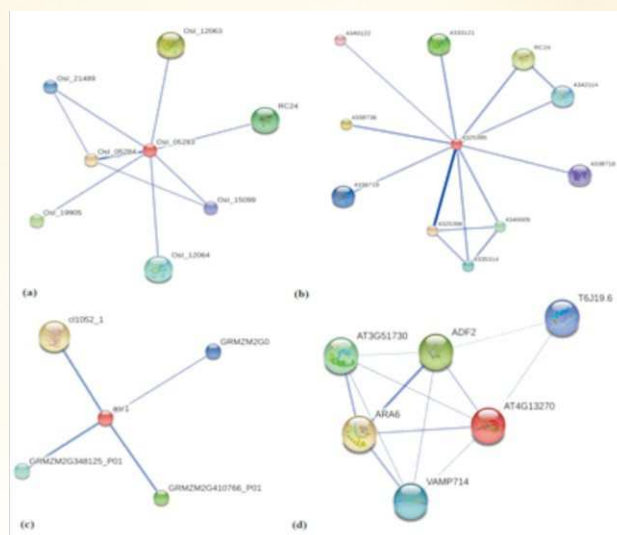


Figure: Confidence view functional protein association networks of different proteins



Title of the Thesis: Elucidation of genes for the early detection of cervical cancer. (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 cervical intraepithelial neoplasia 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 for cervical intraepithelial neoplasia 1, 2 and 3.
Biomarker validations is being applied.

PAPERS PRESENTED IN CONFERENCES / SEMINARS/JOURNALS/

1. Integrated analysis of microRNA regulation of genes in HSIL. The annual IEEE International Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB 2016), Chiang Mai, Thailand.
2. In-silico based prediction of deleterious non-synonymous single nucleotide polymorphisms in the human cdk1 gene. International journal of advanced research, 2016.



Title of the Thesis / Research Project : A Comparative Study of HR Strategies & Models in Indian E-Commerce Sector

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

The research topic is aimed to do a comparative study of HR models and strategies in Indian E-commerce sector and develop a model of employee value proposition for this party vendor.



PROGRESS/ CURRENT STATUS OF THE PROJECT

Literature review is ongoing

Name of Supervisor: **Dr. Vijayshri Tiwari**

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

Name of Research Scholar: **Shruti Mishra**

Roll No.: **RSM-2016501**

Name of Division where worked: Management

PAPERS PRESENTED IN CONFERENCES/ SEMINARS

Nil

APPRECIATION / AWARDS RECEIVED, IF ANY

Nil

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.

Nil



Title of the Thesis / Research Project : To automate the generation of the UML diagrams from the software requirement documents using NLP

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

To automate the generation of the UML diagram from the requirement documents using NLP. We have developed a rule based methodology for automatic extraction. This proposed system is different from other existing works as it does not require human intervention. Good agreement was observed between the results generated by the proposed method and those given by the human experts. We have also compared our proposed method with earlier work and have achieved higher accuracy.



PROGRESS / CURRENT STATUS OF PROJECT

The class diagram is extracted from the unstructured format of requirement documents. The corresponding research paper is **SUBMITTED** in **ACM Transaction on Software engineering and technology**. Currently I'm working on the extraction of Class diagram from the semi-structured requirement document.

Name of Supervisor: Dr. Ratna Sanyal

Name of Co Supervisor: _____

Name of Research Scholar: Shweta

Roll No.: PSE2014001

Name of Division where working: IT
(Software engineering)

APPRECIATION / AWARDS RECEIVED, IF ANY

PAPERS PRESENTED IN CONFERENCES/SEMINARS, IF ANY

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.



Title of the Thesis / Research Project = Software Development Effort Estimation (Tentative)

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

Man- power is the foremost important factor that contributes to software development cost and it is measured in terms of man-months/ man- hours/ man- days. In Software Engineering the estimation of man- power has always been one of the crucial problem. The software development effort estimation is the process of most efficiently and accurately estimating the likely man- power required to develop the software with the use of minimal information available with software project during its early stage.



Name of Supervisor: Dr. Vrijendra Singh

Name of Co Supervisor: _____

Name of Research Scholar:

Swarnima Singh Gautam

Roll No.: PSE2014003

Name of Division where working: I.T.
Department (Software Engineering)

PROGRESS / CURRENT STATUS OF PROJECT

Literature survey has been done. Models given in the literature survey have been tested on data collected from college software iCure and LibSite as well as on benchmark datasets COCOMO 81, NASA 93. GUI for the existing effort estimation models have been prepared.

PAPERS PRESENTED IN CONFERENCES/SEMINARS, IF ANY

APPRECIATION / AWARDS RECEIVED, IF ANY

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.



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.



Name of Supervisor: Dr. Vrijendra Singh

Name of Research Scholar:

Vinod Kumar Jatav

Roll No.: RS 142

Name of Division where working: IT

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

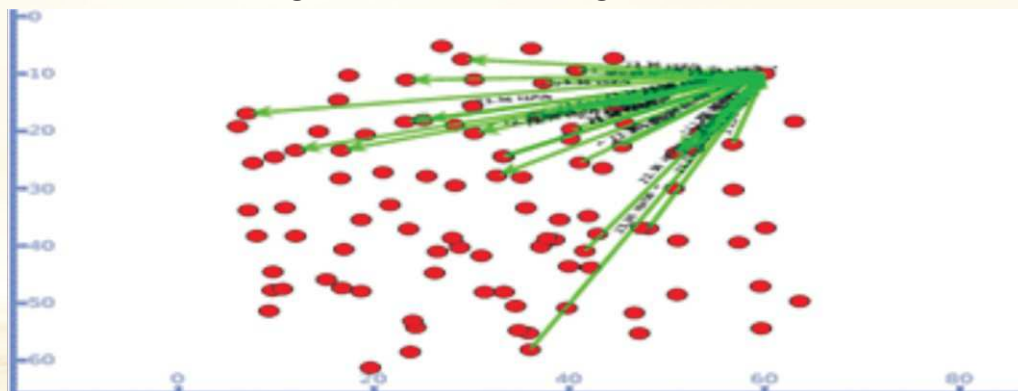
- ◆ Jatav, Vinod Kumar, and Vrijendra Singh. "Collaborative Attack Model at Physical Layer of Mobile WiMAX Network." *In International Conference on Computational Intelligence and Communication Networks (CICN)*, 2014, pp. 787-792. IEEE, 2014.
- ◆ Jatav, Vinod Kumar, and Vrijendra Singh. "Mobile WiMAX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

APPRECIATION / AWARDS RECEIVED,

IF ANY

Nil

Images of active Research being done / Labs etc.





Title of the Thesis: Targeting 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. Structural insights of these epigenetic regulators with the existing inhibitors have also been studied.
2. Structural biology studies and exploration of novel natural inhibitors for reported receptor targets by *in silico* screening, docking, dynamics, ADMET & statistical studies is completed.
3. NGS Data analysis of the cancer epigenome data is completed.
4. Database of cancer epigenetic markers is in process and will complete soon.

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 & BIOINFORMATICS**

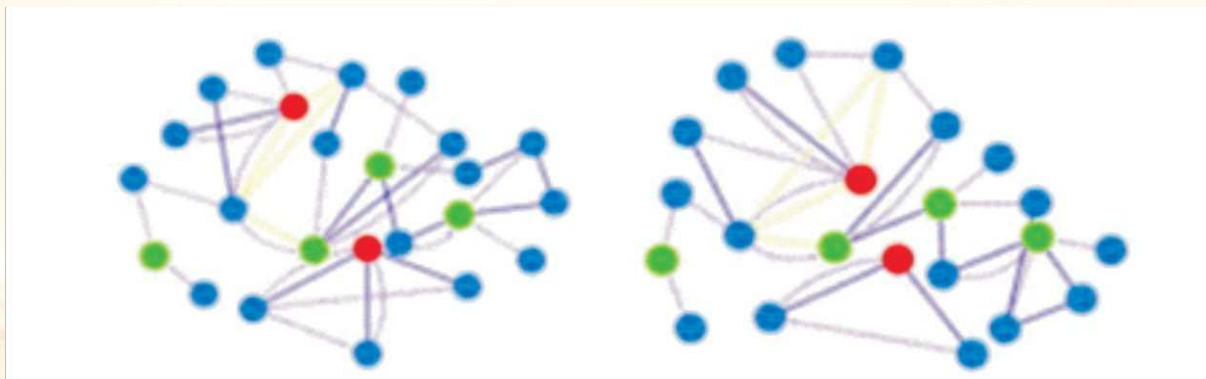
PAPERS PRESENTED IN CONFERENCES/ SEMINARS/ JOURNALS

1. Structural insights into conformational stability of both wild-type and mutant type EZH2 receptor. Nature Scientific Reports (2016)
2. Molecular docking and dynamics simulation study of flavonoids as BET bromodomain inhibitors. Journal of Biomolecular Structure and Dynamics (2016)
3. Epigenetics and Its application in Human Cancer. Translational Bioinformatics and Its Application (Book Chapter-Springer)~Accepted (2016)
4. 3D Structure Generation, Molecular Dynamics and Docking Studies of IRHOM2 Protein involved in Cancer & Rheumatoid Arthritis. Current Computer-Aided Drug Design (2016)
5. Exploring dual inhibitors for STAT1 and STAT5 receptors utilizing Virtual Screening and Dynamics Simulation Validation. Journal of Biomolecular Structure and Dynamics (2016)

APPRECIATION/AWARDS IF ANY

- Paper got accepted in the reputed journal of the best publishing house "Nature".
- Become Senior Research Fellow at the start of this year (Feb, 2016) .

IMAGES OF ACTIVE RESEARCH BEING DONE/LABS etc.





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.



PROGRESS/CURRENT STATUS OF THE PROJECT

- ◆ A detailed analysis of the related work has been completed.
- ◆ Two research papers have been communicated
- ◆ One research paper has been accepted in an SCI Journal

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**

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

Paper Title: Privacy preserving in-network aggregation in wireless sensor networks.

Conference: Future Networks and Communications FNC – 2016

Date: 15 August 2016 to 18 August 2016

APPRECIATION / AWARDS RECEIVED, IF ANY

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.



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 based on the structural and electrical study of three different perovskite oxide ferroelectric materials (PZT, SBN and SBT) with different buffer layer to be used as the gate stack in Field Effect Transistor. The outcome will be the combination of thermodynamically and electrically stable materials with optimized thickness and annealing parameters for high data retention capacity and time.



Progress/Current status of project: During the reporting period, two ferroelectric materials PZT and SBN has been selected for the study. The Structural and electrical characteristics of these materials along with their thermal compatibility with the buffer layers (HfO_2 , Al_2O_3 , TiO_2 and their stack) has been studied. Thin ferroelectric films has been deposited with RF Magnetron sputtering system with optimized processing parameters. Buffer layers were deposited using sputtering as well as Atomic Layer Deposition Technique and the thickness measurement is done using SENTECH Multiple angle Laser Ellipsometer. Metal/Insulator/Semiconductor (MIS) and Metal/Ferroelectric/Insulator/Semiconductor (MFIS) structures has been fabricated for the electrical characterization (C-V, I-V, Flat Band Voltage measurement, etc.). Result shows that the introduction of buffer layer improves the leakage and data retention behavior of the structures.

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**

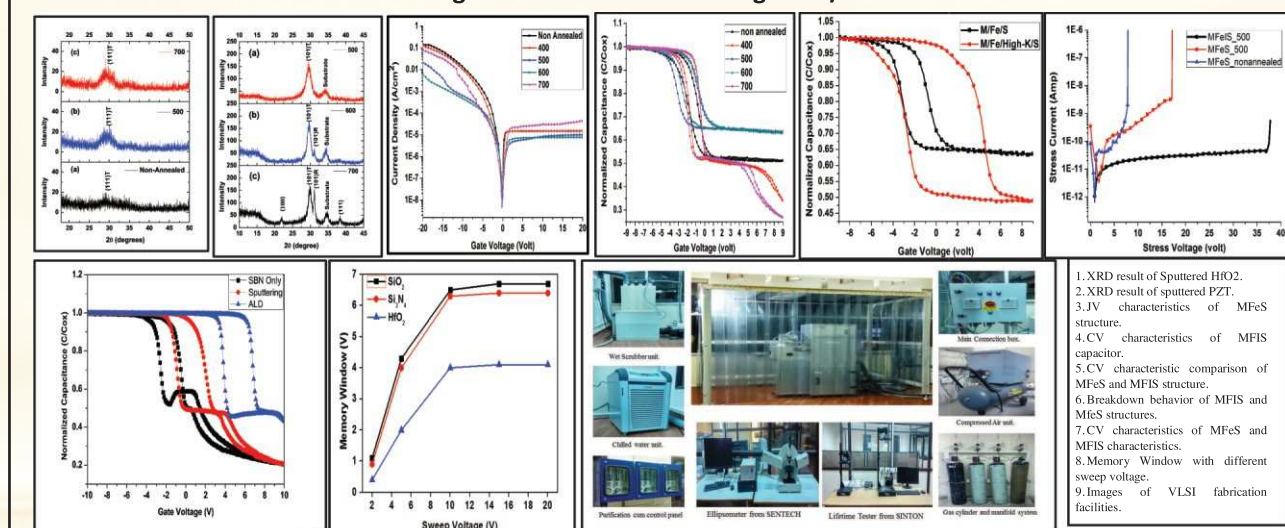
Name of division where working:

Electronics and Communication Engineering.

Papers presented in Journals and Conference:

1. Prashant Singh, Aditya Nath Bhatt, Akansha Bansal, Rajat kumar Singh and B.R. Singh, "Lead-Zirconate-Titanate based Metal/ Ferroelectric/ High-K/Semiconductor (M/Fe/ High-k/S) Gate Stack for Non-Volatile Memory Applications," Ferroelectrics, Taylor & Francis, Volume 504, pp: 1-10, 2016.
2. Prashant Singh, Rajat Kumar Singh and B.R. Singh, "An Approach to Enhance Memory Retention Capacity in MFIS Structures Using Different Insulating Buffer Layer", International Conference on Technologically Advanced Materials and Asian Meeting on Ferroelectricity (ICTAM-AMF10), University of Delhi, 2016.

Images of active research being done/Labs etc.





Title of the Thesis / Research Project = Study on correlation network between cancer and various pathophysiological processes in reference to various factors involved to trigger them

BRIEF NOTE ON THE PROJECT AND 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.



PROGRESS / CURRENT STATUS OF PROJECT

Literature Survey: Literature survey has been done and being continued.

Data Collection: Some part is over and remaining is being continued.

Pilot Work: Some part is over and remaining is being continued.

Course Work: done.

Name of Supervisor:

Prof Tapobrata Lahiri

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

Name of Research Scholar:

Gautam Kumar

Roll No.: Rs 161

Name of Division where working:

Department of Applied Sciences

PAPERS PRESENTED IN CONFERENCES/SEMINARS, IF ANY

1. PCV: An alignment free method for finding homologous nucleotide sequence and its application in phylogenetic study. Interdiscip Sci Comput Life Sci (Springer), DOI 10.1007/s12539-015-0136-5.
2. Statistical discrimination of breast cancer microarray data. IEEE conference on "International Conference on Bioinformatics and Systems Biology (BSB-2016)" at IIITA.
3. Theoretical Model of Circular RNA Prediction and Classification. IEEE conference on "International Conference on Bioinformatics and Systems Biology (BSB-2016)" at IIITA.
4. Short Term Course on "Computer Aided Drug Designing" organized by Department of Biotechnology, Motilal Nehru National Institute of Technology Allahabad
5. IEEE Sponsored Workshop on LaTeX Typesetting

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.





Title of the Thesis / Research Project = Power estimation and optimization techniques for Bluetooth MODEM

BRIEF NOTE ON THE PROJECT AND ITS OUTCOME

Bluetooth module is an important element in the system so that data can be exchanged via tolerate process variations without requiring calibration wireless communication. An efficient modulation technique for Bluetooth MODEM will be determined and along with its design technique.



PROGRESS / CURRENT STATUS OF PROJECT

Most energy efficient modulation technique has been determined using model. Power analysis of Bluetooth MODEM is being performed at block level.

Name of Supervisor: Dr. Prasanna Misra

Name of Co Supervisor: Dr. Manish Goswami

Name of Research Scholar: Divyesh Sachan

Roll No.: RS168

Name of Division where working:

MI DIVISION

ECE DEPARTMENT

PAPERS PRESENTED IN CONFERENCES/SEMINARS, IF ANY

APPRECIATION / AWARDS RECEIVED, IF ANY

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.



Title of the Thesis: **Localization in Wireless Networks**

BRIEF NOTE ON THE PROJECT & ITS OUTCOME

The proposed scheme will aim to accurately localize the sensor node through local information of the node. The relative map of the nodes constructed through the local information of the node. The relative map is transformed into global embedding using anchor node (GPS enables nodes) and transformation algorithm.

The sensor nodes can obtain their global coordinate using global embedding.



PROGRESS/CURRENT STATUS OF THE PROJECT

- Literature survey completed.
- An algorithm has been developed to localize sensor node in wireless networks.

Name of Supervisor: Prof. Shekhar Verma

Name of Co-Supervisor: Dr. Manish Kumar

Name of Research Scholar: Neeraj Jain

Roll No.: **RS-150**

Name of Division where worked: IT

PAPERS PRESENTED IN CONFERENCES/SEMINARS

One paper titled "Locally Linear Embedding for Node Localization in Wireless Sensor Networks" is published in conference.

APPRECIATION / AWARDS RECEIVED, IF ANY

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC.



Title of the Thesis: Navigation With Cooperative Social Robot

Brief note on the Project & its outcome: Motion planning research has been very active for the past 15 years in robotics, artificial intelligence and computational geometry. The basic motion planning problem is to move a robot from a start location to a goal location, while avoiding collisions with obstacles and minimizing the path length. With the development of the field of social robot research in recent years, a strong need has developed for a social interaction between robots (whether real or virtual) and between robots and humans. Robot can understand human interaction by emotion, eye-contact, touch, facial expression, speech, personality posture, movements. In the recent years, research interest in the interaction between robots and humans has increased rapidly. Within the area of social and cooperative robots, the nature of interactions between a group of people and a set of accompanying robots has become a primary point of interest. In general robots cannot accelerate or go faster than people in a safe way. This means our robots cannot usually follow people's behavioural reactions. I propose to study about the representation of people motion. We needed to model people's motion by using the concepts from the study of the dynamics of pedestrian crowds from the 'social force model' point of view. We have to also detect conflict area (obstacle). Robot configuration is also important factor for motion planning. Now robot tasks that have to be delegated are as follows:

- Leader task: The leader robot plans a path and moves to the next point.
- Robot acting as a barrier task: It is more likely for people to become dispersed within certain areas on the map, therefore, in those areas where the density of obstacles is low, one or more robots should be sent to prevent people from straying.
- Looking for a person who goes away task.

Robot work Motion: Working with autonomous mobile robots, the robot i work motion is expressed as

$$F_i^{mot} = m_i a_i$$

$$W_i^{mot} = F_i^{mot} \Delta x_i$$

Where m_i is the mass of the i th robot, a_i its acceleration and Δx_i the space traversed by the robot to achieve its goal.

Here a new model has presented, called the Prediction and Anticipation Model, which was developed to guide people using multiple robots that work cooperatively. This method can handle realistic situations such as dealing with large environments with obstacles, or regrouping people who have left the group. For that reason, this work can be applied to certain specific real robot applications, for instance, guiding tourists, accompanying professional visitors or acting as a robot companion.

Application of robots has given bellow:

- It can provide security
- Entertainment, transmission of information.
- Performs given task.
- Industrial robot, Professional service robot, Personal service robot.
- Threat detection.
- Robot can guide a people for any location or way. One of the robots is the 'leader', it works as a human tour-guide.



Name of Supervisor: Dr. Rahul Kala

Name of Research Scholar: Vaibhav Malviya

Roll No.: RSI2016001

Name of Division where working: I.T.

Progress / Current status of project: We have studied a paper on motion tracking. For motion tracking we are using Gaussian Mixture Model and optical flow. Initially we have a dataset of people motion in a video form. We extract frames from a video. Convert these frames from RGB to Gray. Then we do a Mean Calculation and optical flow estimation. After that we apply a median filter and morphological close operation. We also perform Blob analysis. Blob detection methods are aimed at detecting regions in a digital image that differ in properties, such as brightness or colour, compared to surrounding regions. Now we have tracked detected objects. In advanced we have applied Gaussian Mixture Model and Blob analysis for object tracking. In future we shall track the object using optical flow.

PAPERS PRESENTED IN CONFERENCES/ SEMINARS, IF ANY : Null

APPRECIATION / AWARDS RECEIVED, IF ANY : Null

IMAGES OF ACTIVE RESEARCH BEING DONE / LABS ETC. : Null

ANNUAL REPORT 2015-16





ANNUAL REPORT 2015-16





The Infrastructural development



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

- o Fully furnished separate Hostels for Boys & Girls is available
- o 24 Hours Internet Connectivity through 1 GBPS Leased Line
- o Normally each student allotted P4 and above computers
- o All computer points backed by 100% Uninterrupted Power Supply
- o 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.
- o Academic Regulations as being practiced at other IIT's are broadly followed at the Institute **mutatis mutandis**
- o All courses are envisaged to be delivered by experts
- o State- of- the- art facilities for all labs
- o All academic and administrative areas are fully air conditioned
- o Unique opportunity to participate and contribute in leading National and internationally sponsored projects
- o 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

- o Different sport facilities like volleyball court, basketball court, football court, snooker, cricket ground, swimming pool, GYM facilities, etc are available for all the students
- o Banking & ATM facilities available in the Institute premises itself
- o Medical facilities available on the Campus at any hour of the day and night. However, selected students must have Insurance before taking admission
- o 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
- o Messes in the Hostels are fully air conditioned
- o Institute is having canteen providing hygienic foods / snacks
- o 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
- o IIIT-Allahabad is the first academic campus in the country to implement.
- o (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

Item of Expenditure	Particulars		
	Sl. No	Detail	Occupancy
Hostels (no. of seats created) (1280 – Ann-01)	IIIT-A Jhalwa & RGIIT-A Campus		
	1.	Girls' Hostel – I	52
	2.	Girls' Hostel – II	88
	3.	Girls' Hostel – III	248
	4.	Boys' Hostel – I	264
	5.	Boys' Hostel – II	264
	6.	Boys' Hostel – III	264
	7.	Boys' Hostel – IV	352
	8..	Married Scholar Apartments	50
	9.	Boys' Hostel(Amethi)	218
	10	Girls' Hostel (Amethi)	60
	8.	TOTAL	1780
Faculty housing (no. of units by type created)	Type		Sqm.
	A		55
	B		85
	D		120
	E		165
	F		200
	Total		71
Laboratory facilities (no./type)	Name of Building		No. of Labs
(Names & Particulars of Labs given in Ann - __)	Computer Centre – 3		30 Labs, 12 Lecture Halls & 35 Faculty Rooms
	Computer Centre – 1 (Top Floor)		02
	Computer Centre – 2 (Top Floor)		02
	Lecture Theatre		02



	(Top Floor)	
Library facilities	CD-ROMs, Online databases, audio-video cassettes, books, e-journals, patents, e-standards, theses, project reports and Newspapers etc.	
Technology infrastructure and facilities	Swimming Pool	
	Auditorium	
	1) Pavilion 2) Volleyball Court 3) Lawn Tennis Court 4) Athletic Track	
	Squash Court	
	Cafeteria	
	1) Health Centre 2) Bank & Post Office 3) Telephone Exchange 4) Shops, Dormitory 5) Student Activity Centre	
	(RGIIT-Amethi)	
	1) Auditorium 2) Canteen	
Others	A. Computer Centre – 3 1) Lecture Halls 2) Faculty Rooms 3) Meeting Rooms 4) Laboratories 5) Essential Services Rooms	
	B. Director's Residence & Camp Office	
	C. HVAC & associated 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 10 th Plan	
	I. Expenditure towards Ongoing Constructions 1) Boys' Hostel – V	
	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.) [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 (+ 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



Sl. No.	Existing Accommodation	No. of Rooms
1.	Number of Faculty houses (F type, 200 Sqm.) (E type, 165 Sqm.) (D type, 130 Sqm.) (C type, 110 Sqm.) (B type, 85 Sqm.)	65 05 14 28 02 16
2.	1. Visitors' Hostel I*: AC Room suites (Refrigerators, TV, computer facilities in six suits), all double beds) AC Rooms (TV, All Double beds) Non-Ac Rooms (*Dining Hall, cyber café-3 computers, gym facilities) 2. Visitor Hostel II: (For VIP / International Visitors mainly with all essential facilities) 3. Visitor Hostel III: AC Suites, AC single	10 20 10 - 28 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 Computer Centre CC1 Computer Centre CC2 Lecture Theatre LT Nehru Science Centre NSC C.V. Raman Bhawan (CC-III)	05 05 10 03 12
3	Number of Faculty cabins - 108 Computer Centre CC1 Computer Centre CC2 Lecture Theatre LT Nehru Science Centre NSC C.V. Raman Bhawan (CC-3)	22 22 10 05 54
4	Number of laboratories - 72 Computer Centre CC1 Computer Centre CC2 Lecture Theatre LT Nehru Science Centre NSC C.V. Raman Bhawan (CC-3)	16 16 05 05 01 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.



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.

The centre has developed e- content in twelve designated areas ranging from computer science and e- services.

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.

These are the general purpose programming labs meant for programming and research for the students enrolled in MBA (IT) and MSCSIS Program.

This is a specialized research lab wherein research scholars are working.

Many databases are subscribed for Research & Development eg. Capitalline, india stat, Systat etc.

- ❖ A full-fledged Information Security Laboratory is set up for manpower training.
- ❖ A number of useful software's have been managed and installed.

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 shelves 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:

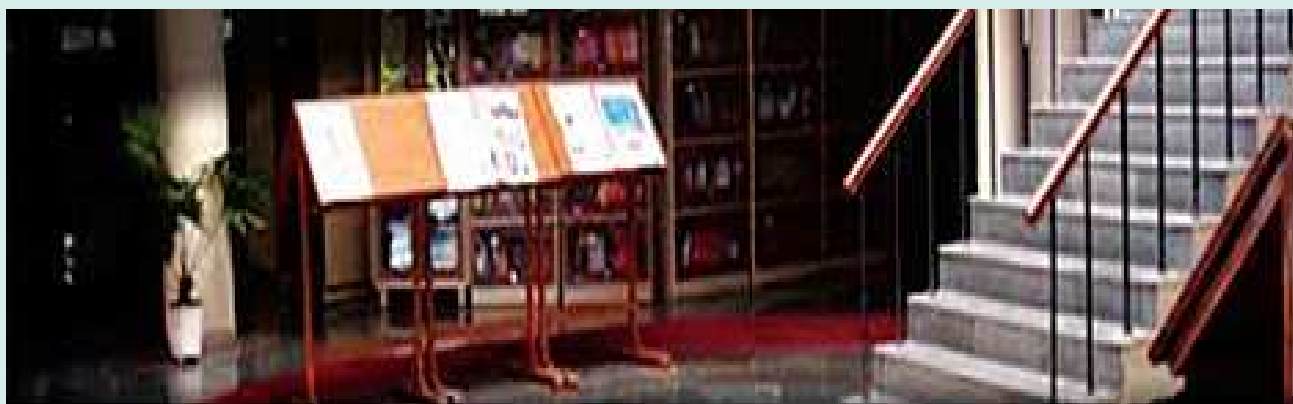
Sl. No.	Collection				
	Books	Online Journals	Magazine	CDs / Softwares	Lectures / Video Couses
1.	57034	12927	52	2775	1005

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





Scholarship /Fellowship /Assistantships



8. Scholarship/Fellowship/Assistantship

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): For SC/ST Category – Rs. 2.0 Lakhs For General Category – Rs. 2.0 Lakhs (applicable only for students of U.P. origin) 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) For Minority Category (U.P. State Scheme) – Rs. 2.0 Lakhs For Minority Category (Central Scheme) – Rs. 2.0 Lakhs	For SC/ST Category – Full Fee + Maintenance Charges = 1200/- p.m. x 10 months For OBC / General / Minority Category U.P. Govt. Rates Plus Maintenance Charges = 1200/- p.m. x 10 months For Other States (OBC/Minority) – Reimbursement on respective State Govt. Rates	



2.	INSTITUTE MERIT SCHOLARSHIP (Performance Award)				
	B.TECH / MBA / MSCLIS	Paid by Institute (IIIT-Allahabad)	A.IIIT-A 1. B.Tech (IT) - <u>10</u> 2. B.Tech (EC) - <u>06</u> 3. MBA (IT) - <u>04</u> 4. MS(CLIS) - <u>04</u> TOTAL - <u>24</u> B. RGIT-Amethi 1. B.Tech (IT) - <u>06</u> GRAND TOTAL - <u>30</u> Eligibility: Merit of 1st Year Renewal: Based on Merit	Rs. 3,000/- p.m. for 12 months of the year (Rs. 36,000/- per year)	
3.	INSTITUTE MERIT-INCENTIVE AWARD (MERIT-BASED)				
	B.Tech	Paid by Institute (IIIT-Allahabad)	1. Merit of qualifying exam 2. 10% from each State Board 3. Minimum 80% attendance in a Semester 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) (Six monthly RENEWAL)	
4.	INSTITUTE MERIT-CUM-MEANS AWARD (INCOME-BASED)				
	B.Tech	Paid by Institute (IIIT-Allahabad)	1. Annual Parental Income below Rs. 2.0 Lakh per annum 2. Minimum 80% attendance in a Semester 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) (Six monthly RENEWAL)	



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5.	MERIT-CUM-MEANS MINORITY SCHOLARSHIP				
	Undergraduate & Postgraduate Students	Ministry of Minority Affairs, GoI	Eligible UG Students (Annual Income of Parents should be below Rs. 2.5 Lakhs)	Rs. 30,000/- for Hostellers Rs. 25,000/- for Day Scholars FULL FEE REIMBURSEMENT FOR GOVT. INSTITUTIONS	1. Muslim s, Christians , Sikhs, Buddhists , Jains 2. 50% Marks 3. 30% for Girls 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 2). 60 No. for MBA on All India Basis ELIGIBILITY 1. On All India Basis 2. 50% for SC/ST/OBC + 60% marks 3. 25% for Girls – 60% marks 4. 10% for PHs – 50% marks 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 <u>Andhra Pradesh State</u> Only 1. SC/ST/Gen/OBC 2. Min. 60% marks in Intermediate/12 th Class or CGPA of	Rs. 20,000/- per year	



			06 per semester 3. Native of Andhra Pradesh 4. Non-recipient of any other Scholarship 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 1). Parents Income Rs. 1.00 Lakh p.a. 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: Class VIII (appearing) 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 Top 10 SC Top 05 ST (AIEEE Merit Ranking) <u>ELIGIBILITY</u> 1. AIEEE Merit Ranking 2. Non-recipient of	1. Full Refundable/Non-refundable Fee for year 2. Lodging 3. Boarding 4. Contingency/Book Exp. =3,000/- 5. Cost of Computer =45,000/-	



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			other Scholarship 3. Successful performance in Annual Exam 4. Parents Annual Income Rs. 4.5 Lakh p.a.		
11.	SCHOLARSHIPS FOR PHYSICALLY HANDICAPPED				
	Post Matric professional /technical Courses	Govt. of India	500 new scholarships, Post Matric professional /technical Courses 1. 40% or more disability 2. Pursuing Professional/Tech nical Courses 3. Parents Income = Rs. 15,000 per month (Rs. 1,80,000/year)	Day Scholars = 700 per month Hostellers = 1,000 per month + Reimbursement of Course Fee = 10,000 per year (Financial Assistance for computer with editing software for blind/deaf students)	
12.	EARN-WHILE-YOU-LEARN				
	Poor meritorious students	Paid by Institute	<u>Nature of Work:</u> 1. Some Administrative, Academic and Project work in spare time to finance their studies 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 + Contingency @ 10,000 per annum	



			<u>Eligibility</u> 1. For GATE Scorers only 2. Teaching Assistantship under a Faculty is necessary 3. Not for sponsored/MBBS candidates 4. Teaching for 8 hours per month, if reqd.		
14.	SINGLE GIRL CHILD SCHOLARSHIP				
	M.Tech Girl Students	Govt. of India	Only for Girls SC/ST/ General Category (Based on eligibility) <u>Eligibility</u> 1). Single Girl Child in family (should not have any other brother or sister) 2). Age upto 30 years 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 i) The candidate must have obtained Graduate degree in the relevant subject and obtained	5,000 per month No. of slots available = 1000 per year 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. 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. 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 Scholarship: @ Rs.5,000/- p.m. for M.Tech @Rs.3,000/- p.m. for other courses. Contingency: @Rs.15,000/- p.a. for M.Tech @Rs.10,000/- p.a. for other courses	
16.	DLF SCHOLARSHIPS				
		DLF Foundation, Gurgaon	Eligibility: parental annual income upto Rs. 1,80,000/- No. of scholarships = 4 selected by Selection Committee of the Institute 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	



The Statistics



9.1 Financial Statistics for the Year 2015-16

NON-PLAN

Resource mobilization of the Institute on the **Non-Plan** side during the year **2015-16** was to the tune of **Rs. 3654.13 lakh**, out of which **Grant-in-aid** accounted for **Rs. 1625.42 lakh** and the **rest of Rs. 2028.71 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. 1625.42 lakh** was released by the MHRD, GoI in the following **03rd** installments:-

1. F.No. 45-2/2015-TS-1 Dated **15.05.15** = Rs. 270.00 lakh
2. F.No. 45-2/2015-TS-1 Dated **15.07.15** = Rs. 980.42 lakh
3. F.No. 45-2/2015-TS-1 Dated **01.03.16** = Rs. 375.00 lakh

Total = Rs. 1625.42 lakh

The **Non-Plan** Expenditure was to the tune of **Rs. 2965.51 lakh** resulting in excess of **Rs. 1340.09 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 **Plan Grant** of **Rs. 3694.005 lakh** during the year **2015-16** in the following **04th** installments:-

1. F.No. 45-1/2015-TS-1 Dated **28.05.15** = Rs. 667.00 lakh
2. F.No. 45-1/2015-TS-1 Dated **15.07.15** = Rs. 1027.00 lakh
3. F.No. 45-1/2015-TS-1 Dated **29.02.16** = Rs. 1500.005 lakh
4. F.No. 45-1/2015-TS-1 Dated **21.03.16** = Rs. 500.00 lakh

Total = Rs. 3694.005 lakh

Apart from above Plan Grant, **Ministry of Social Justice and Empowerment, New Delhi** released Grant of **Rs. 243.00 lakh** towards **Construction of Hostel for OBC Boy's** as **11th** installment during the year **2015-16** vide their **Letter F.No.11015/16/2014-BC-1 dt. 30.07.15**. Against total grant of **Rs. 3937.005 lakh**, a sum of **Rs. 3776.26 lakh** was utilized for the purpose for which the Grant was sanctioned leaving an unspent balance of **Plan Grant (General)** amounting to **Rs. 487.39 lakh** as on **31.03.16**.



9.2 Placement

S.No	Name of Company	No. of Students placed
1.	Accenture	61
2.	Accolite	3
3	Adobe	2
4	Amazon	6
5.	American Express	1
6.	Arista	6
7	Axtria	4
8	Barkley	1
9	Cisco Systems India Pvt. Ltd.	2
10.	Citi Corp	9
11.	Click Lab	2
12.	Coupon Dunia	1
13.	D.E.Shaw	3
14.	Digital Green	1
15.	Direct I	9
16.	EXL	4
17.	Expedia	4
18.	Flipkart	5
19.	Freescall	2
20.	Google	1
21.	Goldman Sachs	4
22.	Grey Orange	3
23.	Grofers	7
24.	Hashedin	3
25.	Hike	5
26.	Housing	2
27.	HT Media	5
28.	IBM	7
29.	Icon Resources	1
30.	Incture Technology	5
31.	Infosys	15
32.	Infurnia Furnishings Pvt. Ltd.	6
33	Inmobi	2
43	KMPG	4
35.	Kritikal	2
36.	Kronos	5
73	Kuliza	3
83	Linkedin	1
93	Mahindra Comviva	8
40.	Microsoft	7
41.	Morgan Stanley	6
42.	Nagaro	3



34	Naukri.com	7
44	Niki.ai (Techbins)	1
45.	OFSS	7
46.	OkuTech	1
74	Online Tyari	4
84	Pay U	5
94	Paytm	1
50.	Polaris	4
51.	Power2SME	3
52.	Practo	9
53.	Qualcom	2
54.	RBS	2
55.	Routofy	5
56.	Samsung	13
57.	SAP Labs	6
58.	Sapient Nitro	5
59.	Sigmoid	2
60.	TCS	7
61.	Tiny Owl	2
62.	Urbanrestro	1
63.	Verizon	3
64.	Walmart	15
65.	Zopnow	8
66.	Z	4



9.3 Medals and Awards

Chairman's Gold Medal

Chairman's Gold Medal for the year 2016



Shubham Khatri
IEC2012018

On the initiative of Senate of IIIT-Allahabad, it was decided to institute a Chairman's Gold Medal from the year 2009. The main objective while instituting this award has been to recognize and reward the best student for his/her academic excellence, discipline and his/her overall achievements amongst all the academic programmes currently running in the Institute. This award motivates the young minds of IIITA family to aspire not only for academic excellence but also towards developing leadership quality and discipline to face the international challenges in the areas of Information Technology and Management.

Institute Medals

M. Tech. (IT)

Academic Batch July 2014-June 2016



GOLD
Mundendra Pandey
ICL2014009



GOLD
Priyanshu Goyal
IWC2014002



SILVER
Unmesh Shukla
IHC2014001



BRONZE
Harsh Jain
ISE2014007



Institute Medals

M. Tech. (EE)

Academic Batch July 2014-June 2016



GOLD
Mathyarasa Bharathi Devi
IMI2014002



SILVER
Dusa Rajender
IMI2014007



BRONZE
Bancha Dutta
IMI2014006

Institute Medals

M. Tech. (IT)

Academic Batch July 2014-June 2016



GOLD
Jaya Anil
IMB2014006



SILVER
Ila Srivastava
IMB2014024



BRONZE
Snehil Srivastava
IMB2014022

Institute Medals

M. Tech. (IT)

Academic Batch July 2012-June 2016



GOLD
Mansi Awasthi
IIT2012027



SILVER
Anirban Indranath Ghosh
IIT2012060



BRONZE
Abhiruchi Gupta
IIT2012208



Institute Medals

M. Tech. (ECE)

Academic Batch July 2012-June 2016



GOLD
Shubham Khatri
IEC201218



SILVER
Shubham Gupta
IEC2012017



BRONZE
Vinit Verma
IEC2012084





9.4 Events of the Year

01 April, 2015 to 31 March, 2016

Date	Events
12 April, 2015	A day long workshop on Robotics was organized on April 12, addressed by IIIT-A Director Prof Somenath Biswas and the keynote speaker Prof. Sudipto Mukherjee of IIT-Delhi. The intricacies of functioning of the robot provide a platform to budding technocrats to showcase their talent.
9-13 May, 2015	The second workshop on Advanced Materials And Instrumentation in Bio Medical Engineering (AMIBE-2015) was held from 9-13 th May, 2015 under the aegis of Department of Applied Sciences, IIIT Allahabad. Dharendra Bahadur, a scientist at Department of Metallurgical Engineering and Materials Science, IIT-Bombay, spoke on work of magnetic materials helping in developing a cancer drug of nonmaterial size.
13 October, 2015	Indian Institute of Information Technology, Allahabad has secured first place at ACMICPC Asia Amritapuri Site Online Round Competition held on Sunday. The IIIT-A team comprising Man Mohan Mishra, Mettu Shiva Reddy, Aditya Sharma and Sanjai Singh (coach) secured the first position at the ACM ICPC Asia Amritapuri site online round. They solved all the five challenging problems much before the close time. "We are among very few leading IIT's and IIT-H to record three or more teams in top 50 along with other teams from the institute, they will now compete at the on-sight round at Amritapuri. We hope to achieve similar success at the Kolkata and Chennai online rounds as well," said Rahul Kala, faculty of IIIT-A.
15-18 October, 2015	The Four-day annual cultural-cum-technical festival of IIIT-A-Effervescence-got off to a blazing start here on Thursday. The event aims to take both education and entertainment to new heights. The programme got underway with the puzzle competition perplexuz. Like each year, this year too participants in large numbers from across the country have come to the IIIT-A. Participants were seen trying to solve the puzzles in perplexuz. Neha Kakkar, noted singer leaves audience spellbound in the Celebrity Night
31 October, 2015	Vigilance awareness week ends at IIIT-A : Several programmes were organized during the vigilance awareness week at Indian Institute of Information Technology, Allahabad from October 26 to 31. The Director IIIT-A distributed prizes to winners of different events held during the week.
9 November, 2015	The tenth convocation of Indian Institute of Information Technology, Allahabad (IIIT-A) was organized. A total of 1,228 students were awarded degrees in B.Tech. M.Tech, MBA-IT and MSCLIS besides 14 PhD degrees



	were awarded to students on the occasion. Director, NIIT Technologies and Co-Founder, NIIT group Vijay Kumar Thadani in his address as chief guest said that Make in India was determined move to realize India vast manufacturing potential and that that Skill India was mission by high volume jobs would be provided to 500 million youth in India. He said Digital India is intended to ensure that all citizens had access to government services online as the initiatives would not only propel the country forward.
23 November 2015	IIIT-A's department of management studies will set up a dedicated 'management clinic' which will be an outreach initiative to support small enterprises. Experts will transform small establishments into efficient and effective enterprises through consultation and process management. They will also introduce methods for improved business. IT will also help local businessmen as they will get highest quality professional services. Traders of neighboring places also stand to be benefited by the step.
26 November, 2015	The Constitution day of India was celebrated at IIIT-A. Speaking on the occasion, Prof. Somenath Biswas, Director, IIIT-A said the with a perspective of spreading the importance of the Indian Constitution the day was being observed today as the Constitution day of India. The day has also been declared as the constitution day to spread awareness about its architect Dr. B.R. Ambedkar. The constitution was adopted on November 26, 1949, while it came into force on January 26, 1950.
4-6 December, 2015	Future Wireless systems discussed : A three-day conference on electrical, computer and electronics 'UPCON-2015' began at Indian Institute of Information Technology, Allahabad on Friday. Head of division, Bioinformatics, Lee Hwee Kuan, spoke on 'Automated prominent nucleoli detection. He said that changes in cancer cells are important for pathologist in assessment of tissues during biopsies.
14-16 December, 2015	Seventh International Conference on HCI kicks off at IIIT-A: The basic goal of Human Computer Interaction (HCI) is to improve the interactions between users and computers by making computers more usable and receptive to the user's needs. Prof. U.S. Tiwary chairpersons of IHCI-2015 said that the conference has started from IIIT-A in 2009 and has been organized by many prestigious institutes around the globe. Prof. Kim, Yong Hoon from Gwang Ju Institute of Science and Technology (GIST) South Korea said that a new approach must be put together with other driving forces that are changing and changing the future so that its concepts are not quickly out of date.
07 January, 2016	नए शैक्षिक सत्र में भी इलाहाबाद में पढ़ेंगे लखनऊ के छात्र: ट्रिपलआईटी चलाएंगीलखनऊ के कमजोर छात्रों के लिए स्पेशल क्लासेज।
29 January, 2016	अब नौकरी देने वाले बनेंगे टेक्नोक्रैट्स: मोदी का मुहिमा आया काम, ट्रिपलआईटी ने शुरू की एंटरप्रेयोरशिप प्रोग्राम, छात्रों के लिए बनाया गया इनोवेशन, लैब दिए गए सभी संस्थान, प्रधानमंत्री नरेन्द्र मोदी की मुहिम काम आने लगी है। अब अधिकतर युवा नौकरी पाने वाले नहीं बल्कि नौकरी देने वाले बनेंगे। उनको इस लायक बनाने का जिम्मा उठाया है भारतीय सूचना एवं प्रौद्योगिकी संस्थान (ट्रिपलआईटी) ने। ट्रिपलआईटी में खास इसके लिए एंटरप्रेन्योरशिप यानी उद्यमिता प्रोग्राम की शुरुआत की गई है। इसमें प्रोफेसर करने हैं मदद।



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07 February, 2016	New office bearers for third Student Gymkhana, IIIT-A were elected in an election held on Feb 7, 2016.
10 February, 2016	अब लाखों में खेलेंगे अपने 'लाल' ट्रिपलआईटी के कैपस प्लेसमेंट में 98 फीसद आईआईटीयंस को जॉब: यह पहली दफा है जब संस्थान में बड़ी-बड़ी कंपनियां आई है. रिकार्ड तोड़ कैपस सेलेक्शन हुए हैं। इससे छात्रों का उत्साह बढ़ा है।
19 February, 2016	Third Annual sports event of the Indian Institute of Information Technology, Allahabad (IIIT-A) ASMITA began at the institute stadium. Marathon, tug of war, long jumps, shot put and relay race among other events were organized during the three day event.
4-6 March, 2016	Experts discussed advancements in bioinformatics at an international conference on bioinformatics and systems biology (BSB)-2016 organized by department of applied sciences of IIIT-A . The aim of the conference is to provide a platform to researchers, engineers, academicians and industry professionals to share their research in computational systems biology, especially in generations sequencing and big data analytics.
7 March, 2016	रिसर्च की भूख बढ़ाएगा ट्रिपलआईटी का 'सिरप' भारतीय सूचना प्रौद्योगिकी संस्थान (ट्रिपलआईटी) ने समर रिसर्च इंटरनशिप प्रोग्राम (सिरप) शुरू किया है। इसमें देश के किसी भी तकनीकी संस्थान के बीटेक कर रहे छात्र शामिल हो सकेंगे। इन छात्रों को ट्रिपलआईटी की लैब में यहां के वैज्ञानिकों के साथ काम करने और पढ़ने का मौका मिलेगा। आठ सप्ताह का यह प्रोग्राम तकनीकी स्नातक छात्रों की रिसर्च के प्रति ललक को बढ़ाने के उद्देश्य से शुरू किया गया है।

9.5 Examination Results

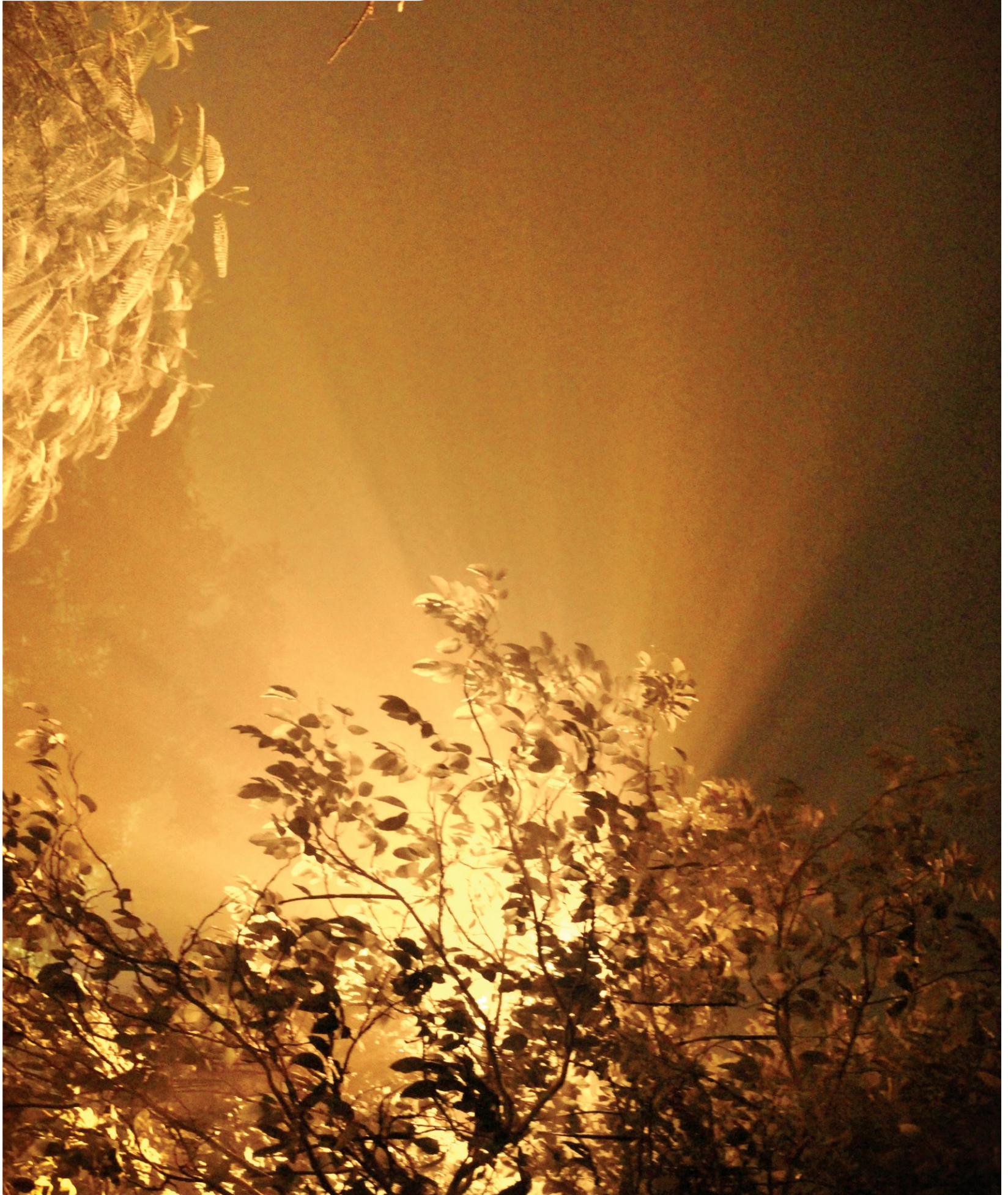
Sl. No.	Convocation	Convocation Date	Academic Session	Name of Course	No. of Students Passed				
					Boys		Girls		Total
					With Honors	Without Honor s	With Honors	Without Honors	
1	First	09.09.2003	Jul 1999- Jun 2003	B.Tech. (IT)	31	20	0	0	51
2	Second	21.10.2005	Jul 2000- Jun 2004	B.Tech.(IT)	26	31	0	3	60
			Jan 2001 - Dec 2004	B.Tech.(IT)	13	14	2	0	29
			Jul 2001 - Jun 2005	B.Tech.(IT)	48	66	2	1	117
3	Third	12.08.2006	Jul 2002 - Jun 2006	B.Tech.(IT)	29	30	5	2	66
4	Fourth	12.08.2008	Jan 2003 - Dec 2006	B.Tech.(IT)	15	20	7	1	43
			Jul 2003 - Jun 2007	B.Tech.(IT)	40	61	4	3	108
			Jul 2004 - Jun 2008	B.Tech.(IT)	32	73	2	6	113



5	Fifth	19.08.2009	Jul 2004 - Jun 2008	B.Tech.(IT)	1	7	0	0	8
			Jul 2005 - Jun 2009	B.Tech.(IT)	39	94	5	5	143
6	Sixth	12.08.2011	Jul 2004 - Jun 2008	B.Tech.(IT)	0	2	0	0	2
			Jul 2006 - Jun 2010	B.Tech.(IT)	49	113	6	6	174
			Jul 2006 - Jun 2010	B.Tech.(IT)	0	3	0	0	3
			Jul 2007 - Jun 2011	B.Tech.(IT)	42	101	7	3	153
			Jul 2006 - Jun 2010	B.Tech.(ECE)	17	29	4	3	53
			Jul 2007 - Jun 2011	B.Tech.(ECE)	15	31	5	4	55
7	Seventh	21.09.2012	Jul 2007 - Jun 2011	B.Tech.(IT)	8	13	0	0	21
			Jul 2008 - Jun 2012	B.Tech.(IT)	45	107	10	8	170
			Jul 2007 - Jun 2011	B.Tech.(ECE)	2	2	0	0	4
			Jul 2008 - Jun 2012	B.Tech.(ECE)	13	42	4	4	63
8	Eighth	18.12.2012	Special Convocation						
9	Ninth	10.03.2014	Jul 2009 - Jun 2013	B.Tech.(IT)	42	160	7	14	223
			Previous Batch	B.Tech.(IT)	0	3	0	0	3
			Jul 2007 - Jun 2011	B.Tech.(ECE)	0	1	0	0	1
			Jul 2008 - Jun 2012	B.Tech.(ECE)	0	3	0	0	3
			Jul 2009 - Jun 2013	B.Tech.(ECE)	23	53	3	6	85
10	Tenth	09.11.2015	Jul 2010 - Jun 2014	B.Tech.(IT)	54	161	22	15	252
			Jul 2011 - Jun 2015	B.Tech.(IT)	57	165	17	24	263
			Previous Batch	B.Tech.(IT)	0	1	0	0	1
			Jul 2010 - Jun 2014	B.Tech.(ECE)	22	60	8	6	96
			Jul 2011 - Jun 2015	B.Tech.(ECE)	17	58	6	5	86
			Previous Batch	B.Tech.(ECE)	0	5	0	0	5
11	Eleventh	24.09.2016	Jul 2012 - Jun 2016	B.Tech.(IT)	74	163	19	25	281
			Previous Batch	B.Tech.(IT)	0	1	0	0	1
			Jul 2012 - Jun 2016	B.Tech.(ECE)	19	56	8	3	86
			Previous Batch	B.Tech.(ECE)	0	1	0	0	1



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10

Preventive and Redressal Measures by the Institute



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. IIIT-A/DIR/1446(2012 dated July 23, 2012. the Grievance Redressal Committee of IIIT-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 as 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. IIIT-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. Ranjana Vyas (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



Students' Gymkhana 2015-16



11. Students' Gymkhana 2015-16

11.1 Presidential Council

Name	Enrollment Number	Designation
Utkarsh Raj	RS156	Speaker
Jai Prakash	IIT2013068	President
Rakesh Kumar Yadav	PCL2014003	Vice President
Kshitij Tripathi	ISM2014501	General Secretary
Adarsh Prasad	PWC2015004	Member
Anurag Sonkar	ICL2015006	Member

Student's Welfare Council

Ravi Shankar	IIT2014087	Secretary
Lakshmi Likhitha	IMM2014004	Member
Indresh Attri	IIT2015121	Member
Vikas Shukla	IEC2015047	Member

Cultural Council

Sarthak Sharma	IIT2014160	Secretary
Ankush Jangid	IIT2014119	Member
Prankur Agarwal	LIT2015040	Member
Shobhit Upadhyay	IIT2014049	Member
Manasi Mohandas	IHM2015001	Member

Sports Council

Ujjain Bana	IIT2014127	Secretary
Ashish Reddy	IIT2014116	Member
Umang Narwal	IIT2015070	Member
Anmol Chawla	IEC2015061	Member

Technical Council

Abhishek Deora	IIT2014141	Secretary
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Pruthvi Avnesh	ITM2014012	Member
Vipul Agarwal	IIT2014146	Member
Sadvi Ramana	IIT2015140	Member
Nikunj Patel	IMI2015006	Member

Academic Council

Ankit Gupta	PSE2014002	Secretary
Priyamvada Singh	PIS20140	Member
Parth Parakh	IEC2014088	Member

Amethi Council

Varun	RIT2014067	Secretary
Kumar Kalita	RIT2014005	Member
Brian Silas	RIT2013011	Member
Aditi	RIT2013045	Member
Aseem Shrey	RIT2015044	Member
Devraj Sen	RIT2015056	Member

11.2 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 activities 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 IITA 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 wrecking 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. Foot Loose (Group Dance)

The main stage event on 17th 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 on 17th 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

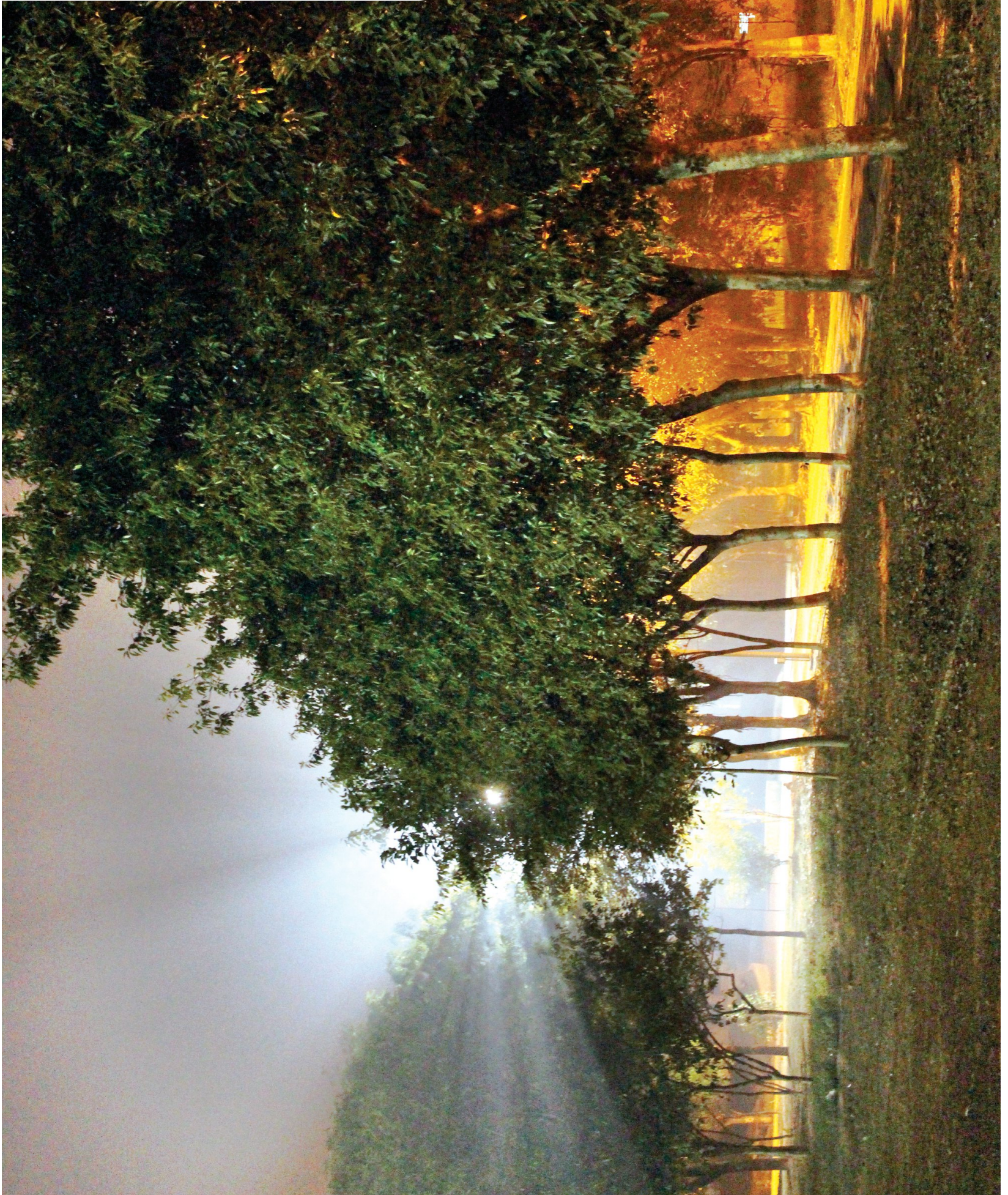
The Fine Arts Society endeavors all of its members to pull of something unique, creative and out of the box each time. It is for the art lovers of the institute. All the creative work and art in and around the campus you see may very likely be a part of their work and creativity.

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.



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Annexures



Annexures

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12. Board of Governors

Sl. No.	Composition	Members
1	Director – Chairperson	Prof. Somenath Biswas Director, IIIT-A
2	Deputy Director (wherever applicable)	-----
3	Deans of Faculties not exceeding two (by rotation based on seniority)	1) Prof. G C Nandi Dean (Academic), IIIT-A Mobile: 09415235176 E-mail: gcnandi@iiita.ac.in, gcnandi@gmail.com 2) Prof. O.P. Vyas Dean (R&D), IIIT-A Mobile: 9425501450 E-mail: opvyas@iiita.ac.in, dropvyas@gmail.com
4	Three eminent academicians as nominated by the Chancellor	1) Prof. Ganesh Pandey FNA, FNASc, FASc Director Centre for Biomedical Magnetic Resonance (CBMR) Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGIMS) Raebareli Road, Lucknow – 226014, Mobile: 09970171802 Tel (0): 0522-2668985; Fax: 0522-2668995, 2668215



		E-mail: gp.pandey@cbmr.res.in 2) Prof. Manindra Agarwal Dean, Faculty Affairs & N Rama Rao Chair Professor Dept. of CSE, IIT Kanpur – 208016 Tel: +91-512-2597338 (Office), 2597638 (CSE Dept. Office) Res- 0512-2598363 Fax: +91-512-2590725 / 7586 Mobile: 09935062605 E-mail: manindra@iitk.ac.in, agrawalmanindra@gmail.com, manindra@cse.iitk.ac.in
5	One eminent academic to be nominated by the Central Government in consultation with UGC Revised BoM Composition w.e.f. 1.5.2014 approved Page – 1/2	1) Professor R.K. Shyamasundar FIEEE, FACM Senior Professor & JC Bose National Fellow Faculty of Technology & Computer Science Tata Institute of Fundamental Research Homi Bhabha Road, Colaba, Mumbai – 400005, India Tel: +91-22-2280, 4545-2288; Mobile: 09987130188, 09818320188 Fax: +91-22-2280-4610, 2280-4611 Secretary, John Barretto (X 2531) E-mail: shyam@tcs.tifr.res.in, shyam@tifr.res.in, shyam@acm.org
6	Two teachers (from Professors, Associate Professor) by rotation based on seniority	1) Prof. S. Sanyal Professor, IIIT-A Mobile: 09415235180 E-mail: ssanyal@iiita.ac.in, sanyalsudip@gmail.com 2) Prof. U.S. Tiwary



		Professor, IIIT-A Mobile: <u>09415235826</u> E-mail: <u>ust@iiita.ac.in</u>, <u>ustiwary@gmail.com</u>
7	One nominee of the sponsoring Society	Prof. R.K. Sharma Director Senior Professor & Head Department of Nephrology Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGIMS) Raebareli Road, Lucknow – 226014 Tel: 0522-2668112 Fax: 0522-2668129 E-mail: <u>director@sgpgi.ac.in</u>, <u>santoshnephro@yahoo.com</u>, <u>cmpandey@sgpgi.ac.in</u> Mobile: <u>09415026762</u> <u>0522-2494120 (Santosh Verma)</u>
8	The Registrar, who shall be the Secretary	Prof. B.R. Singh Professor, IIIT-A Member Secretary Mobile: <u>09651699148</u> E-mail: <u>brs@iiita.ac.in</u>, <u>brs2747@yahoo.co.in</u>



Senate

(Composition of First Senate (w.e.f. 4/3/2015) after IIITs Act 2014 coming into force)

1	2	3	4	5	6
S.No	Provision as per IIITs Act 2014	Under Section of IIIT Act 2014	Composition	Position in Inst.	Status in Senate as per IIIT Act 2014
1.	Director of the Institute, (Ex-officio)	16 (1) (a)	Prof. Somenath Biswas	Director	Chairperson
2.	Deputy Director, Ex-officio	16 (1) (b)	NIL	NIL	Member
3.	Deans, (Ex-officio)	16 (1) (c)	1) Prof. G.C.Nandi	Dean (Acad.)	Member
4.			2) Prof. U.S.Tiwary	Dean (IRP)	
5.			3) Prof. Sudip Sanyal	Dean (FA)	
6.			4) Prof. O.P.Vyas	Dean (R&D)	
7.	Heads of Dept. of the Institute (Ex-officio)	16 (1) (d)	1) Dr. Shekhar Verma	HoD (IT)	Member
8.			2) Dr. Tapobrata Lahiri	HoD (AS)	
9.			3) Dr. Neetesh Purohit	HoD (EC)	
10.			4) Dr.Madhvendra Misra	HoD (Mgmt.)	
11.	All Prof. other than the Deans or HoDs	16 (1) (e)	Prof. Anupam Agarwal	Professor (IT)	Member
12.	Three persons from amongst educationists of repute or persons from another field related to the activities of the Inst. Who are not in service of the Inst. nominated by the BOG	16 (1) (f)	Nomination from BoG Awaited	-	Member
13.					
14.					
15.	Three persons who are not members of teaching staff co-opted by the Senate for their specialized knowledge	16 (1) (g)	Prof. P.Chakrabarti,	Director, MNNIT, Allahabad	Member (For two years w.e.f. 4.3.2015)
16.			Prof. J. Bhattacharjee	Director, HRI, Jhansi, Allahabad	
17.			Prof. Harish Karnick	Professor, CSE Department, IIT, Kanpur	
18.	Registrar of the Institute, Ex-officio	16 (1) (h)	Dr. Asheesh Kumar	Deputy Registrar (A)	Secretary

**Co- option by Senate:**

1.	Two members with no voting rights of Students Gymkhana nominated by the President, Gymkhana. 1 UG & 1 PG for a period of one year w.e.f 4.3.2015 or till the nominee continues to be the members of Students Gymkhana.	Vide resolution in resp. of Agenda Item No. 4 of the Meeting of Senate held on 4.3.2015	Nominations awaited	Student	Observer, Non-Member with no voting rights
2.				Student	

Finance Committee

Sl. No.	Composition	Members
1	Director – Chairperson	Prof. Somenath Biswas Director, IIIT-A
2	Deputy Director	-----
3	A Person nominated by the Society or Trust	Mr. Subodh Nath Jha, IAS (Retd.) Former Secretary Government of India 65, Greenwood, Phase – II Near Pari Crossing, Greater Noida Gautam Budh Nagar, Uttar Pradesh



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Sl. No.	Composition	Members
		REGRET – ANOTHER MEMBER TO BE NOMINATED
4	Two nominees of the Board of Management, one of whom shall be a member of the Board	(1). Prof. G.C. Nandi Dean (Academic), IIIT-Allahabad Mobile: 09415235176 E-mail: dean.a@iiita.ac.in (2). Dr. S.P. Mathur Registrar IIT – BHU, Varanasi – 221005 (FOR THIS FC MEETING)
5	A representative of the Central Government	JS & FA, MHRD Represented by: Mr. Rajesh Singh Director (Finance) Ministry of Human Resource Development (MHRD) Department of Higher Education, IF.I Section Shastri Bhawan, New Delhi REPRESENTED IN THIS FC MEETING BY <u>Sri Brijendra Kashyap</u> MHRD



Sl. No.	Composition	Members
6	A representative of the State Government, in case the Institution deemed to be University is receiving grant from the State Government	Not Applicable
7	Finance Officer – Secretary	Dr. Asheesh Kumar Deputy Registrar (Admn) IIIT-Allahabad

Building & Works Committee

S.No.	Name of Member
1.	Prof. Somenath Biswas Director, IIIT-Allahabad director@iiita.ac.in
2.	Prof. G. C. Nandi Dean (Academic) IIIT-Allahabad gcnandi@iiita.ac.in
3.	Shri S. K. Khanna Retd. Chief Engineer CPWD, New Delhi & Advisor (Technical), IIIT-Allahabad skvkkhanna@yahoo.com
4.	Shri S. C. Singhal Retd. Superintending Engineer (UPPWD) & Advisor (Technical), IIIT-Allahabad
5.	Prof. S. K. Srivastava Emeritus Fellow (AICTE), Member, Executive Council West Bengal Technical University Varanasi
6.	Dr. Asheesh Kumar Deputy Registrar (A) IIIT-Allahabad dr@iiita.ac.in



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Institute of Placements 2015-2016

	<u>Name</u>	<u>Company Name</u>
1.	Jitendra Mohan Prasad	Samsung
2.	Abhishek Kumar	Accenture
3.	Akansha Gupta	Accenture
4.	Akash Kumar Pal	Accenture
5.	Amitabh Songara	Accenture
6.	Anupam Kumar Singh	Accenture
7.	Ashish Lakra	Accenture
8.	Ashish Mishra	Urbanrestro
9.	Atul Kumar	Samsung
10.	Baidyanath Prasad	Accenture
11.	Bonthagorla Bhanu Prakash	Accenture
12.	Deepak Choudhary	Accenture
13.	Deepanshu Rawat	Polaris
14.	Gagan Sharma	Accenture
15.	Gaurav Satish	Accenture
16.	Gaurav Kumar Gupta	Accenture
17.	Gaurav	Urbanrestro
18.	Kailash Patel	Accenture
19.	Kamal Chandra	Nvidia
20.	Karne Cyril Santhosh	Accenture
21.	Kiran Samayam	Accenture
22.	Kunal Eapen	Polaris
23.	Manish Bhatt	Accenture
24.	Mohit Purbey	Accenture
25.	Pawan Kumar Gupta	Accenture
26.	Pratap Singh Chauhan	Accenture
27.	Rajat Rajpoot	Accenture
28.	Salil Kumar	Accenture
29.	Sameer Kumar Sangvaiya	Accenture



30.	Saroj Kumar	Accenture
31.	Saurabh Chand	Accenture
32.	Saurabh Meena	Accenture
33.	Saurabh Singh	Accenture
34.	Shailaja Murmu	Accenture
35.	Shreya Pal	Accenture
36.	Shubham Telgote	Accenture
37.	Soniya Kathaith	Accenture
38.	Sunil Kumar	Accenture
39.	Tarang Bharti	Accenture
40.	Vamshikrishna Enjapuri	Polaris
41.	Vamsi Krishna	Accenture
42.	Yagnesh Ghonge	Accenture
43.	Yatendra Kumar	Accenture
44.	Yogesh Charak	Accenture
45.	Rahul Manas	Accenture
46.	Anu Porwal	KPMG
47.	Ramit Singh	Samsung
48.	Harshita Ande	Verizon
49.	Manisha .	Verizon
50.	Anant Raj	Mahindra Comviva
51.	Ankit Singh	Nagarro
52.	Jonnalagadda Krishna Chaitanya	Mahindra Comviva
53.	Abhijeet Prakash .	Mahindra Comviva
54.	Yash Awasthi	Juniper
55.	Bongu Chandini	Axtria
56.	Mano Teja Nayudi	Axtria
57.	Deepak Kalwani	SAP Labs
58.	Kulshreshtha Singh	Zopnow
59.	Samarth Khare	Accenture
60.	Akash Yadav	Accolite



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61.	Sumeet Kumar Kandhway	Accolite
62.	Pawan Satyarthi	Accolite
63.	Abhiruchi Gupta	Adobe
64.	Divashree Agarwal	Adobe
65.	Amit Kumar	Amazon
66.	Mohammad Anas	Amazon
67.	Aditya Bahuguna	Amazon
68.	Ankur Mishra	Walmart
69.	Vivek Rai	Amazon
70.	Agam Gupta	Amazon
71.	Chaitanya Agrawal	Amazon
72.	Tej Pratap Singh	American Express
73.	Aniket Kumar	Arista
74.	Anirban Ghosh	Arista
75.	Gaurav Chandel	Arista
76.	Ritesh Sinha	Arista
77.	Ronish Kalia	Arista
78.	Nakshatra Maheshwari	Arista
79.	Anusha Chimmili	Axtria
80.	Prathma Rastogi	Axtria
81.	Subhash Godara	Axtria
82.	Siddhant Jain	Axtria
83.	Abhinav Gupta	Barclays
84.	Pooja Singh	Cisco
85.	Rajat Kumar	Cisco
86.	Kiranjot Kaur	Citi
87.	Kushagra Agarwal	Citi
88.	Sachin Chopra	Citi
89.	Shikhar Krishna	Citi
90.	Shubham Mehrorta	Citi
91.	Parul Maheshwari	Citi



92.	Agrim Khanna	Citi
93.	Aarti Tyagi	Citi
94.	Shreya Pal	Citi
95.	Nidhi Mishra	Click Labs
96.	Akash Pal	Click Labs
97.	Avni Chouksey	Coupon Dunia
98.	Dhruv Kumar	D.E. Shaw
99.	Nithin Srikar Karnala	D.E. Shaw
100.	Vishal Singh	D.E. Shaw
101.	Sujit Chaurasia	Digital Green
102.	Anmol Jagetia	Direct-I
103.	Abhishek Gupta	Direct-I
104.	Man Mohan Mishra	Direct-I
105.	Pankaj Wadhwani	Direct-I
106.	Priyanka Tanvani	Direct-I
107.	Rohit Agrawal	Direct-I
108.	Shiva Reddy	Direct-I
109.	Vatsalya	Direct-I
110.	Ankit Kumar Sinha	Amazon
111.	Aadhithiya Ajaykumar	EXL
112.	Aastha Priya	EXL
113.	Akanksha Saxena	EXL
114.	Nikhil Handa	EXL
115.	Ekansh Kanodia	Expedia
116.	Pareesh Choudhary	Expedia
117.	Srishti Modi	Expedia
118.	Shivani Khanduja	Expedia
119.	Vishal Srivastava	Flipkart
120.	Vidhi Gupta	Flipkart
121.	Niraj Kumar Gupta	Flipkart
122.	Nitin Verma	Flipkart



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123.	Vaibhav Aggarwal	Flipkart
124.	Vinit Verma	Freescall
125.	Harshit Dubey	Freescall
126.	Harish Sharma	Goldman Sachs
127.	Vishal Daga	Goldman Sachs
128.	Shubham Kela	Walmart
129.	Medhavi Agarwal	Goldman Sachs
130.	Prakhar Mohan Agarwal	Grey Orange
131.	Ashoka Chandra Wardhan	Grey Orange
132.	Shalaka Sinha	Grofers
133.	Aditya Bharadwaj	Grofers
134.	Zeeshan Ahmed	Grofers
135.	Avinash Singh	Zopnow
136.	Shubham Sharma	Hike
137.	Mohit Gupta	Hike
138.	Paras Kumar Meena	Housing
139.	Shiv Prasad Chabarval	Housing
140.	Amarnath Kumar	HT Media
141.	Ankush Raghuvanshi	HT Media
142.	Tarun Agarwal	HT Media
143.	Aman Babu Gautam	HT Media
144.	Sonam Nigam	HT Media
145.	Udit Kumar	Hashedin
146.	Rahul Raj	Hashedin
147.	Anmol Aggarwal	OFSS
148.	Pranjul Dubey	Walmart
149.	Harivansh Kumar	IBM
150.	M. Sai Pranay Reddy	IBM
151.	Hariom	IBM
152.	Swati Munda	IBM
153.	Mohammad Ashadulla	Mahindra Comviva



154.	Satyaprakash Kumawat	Hashedin
155.	Ravi Gupta	Kuliza
156.	Aadharsh Nair	Icon Resources
157.	Yatharth Sharma	Infurnia Furnishings Pvt. Ltd.
158.	Harsh Sharma	Incture
159.	Nishita Singh	EXL
160.	Jagrati Tomar	Zopnow
161.	Ved Prakash	Citi
162.	Akhil Anand	SAP Labs
163.	Deepa Bharti	HT Media
164.	Saurabh Mishra	HT Media
165.	Ankit Gupta	Juniper
166.	Bhargav Veepuri	Elucidata
167.	Rudraksh Singh Bhati	Infosys
168.	Shailesh Kumar Diwakar	Infosys
169.	Shiva Sharma	Infosys
170.	Siddarth Rajan	Samsung
171.	Virendra Pratap Singh	Infosys
172.	Yog Praksh Negi	Infosys
173.	Sandeep Sharma	Inmobi
174.	Anurag Yadav	InMobi
175.	Amol Rajeev Dave	KPMG
176.	Anu Porwal	KPMG
177.	Ramit Singh	Samsung
178.	Raghvendra Tolia	KPMG
179.	Pushpanjali Mehta	Kritikal
180.	Ekant Yadav	Kritikal
181.	Aviral Johri	Kronos
182.	Gaurav Ahirwar	Kronos
183.	Diwas Sharma	Kronos



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184.	Ravi Gupta	IBM / Kuliza
185.	Manish Bhatt	Kuliza
186.	Rakesh Kumar Meena	Kuliza
187.	Anuj Srivastava	Linkedin
188.	Jonnalagadda Krishna Chaitanya	Accenture / Mahindra Comviva
189.	Akash Kumar	Mahindra Comviva
190.	Jitendra Yadav	Mahindra Comviva
191.	Aman Chaudhary	Mahindra Comviva
192.	Ravikant Kumar	Mahindra Comviva
193.	Disha Srivastava	Microsoft
194.	Mansi Awasthi	Microsoft
195.	Shweta Chaudhary	Microsoft
196.	Shubham Sharma	Microsoft
197.	Arijit Das	Microsoft
198.	Pritam Prakash	Microsoft
199.	Aaditya Srivastava	Microsoft
200.	Shaleen Chauhan	Morgan Stanley
201.	Ankur Tyagi	Morgan Stanley
202.	Soumyarka Mondal	Morgan Stanley
203.	Rohitash Jain	Morgan Stanley
204.	Plash Batra	Housing / Morgan Stanley
205.	Anirudh Bhargava	Morgan Stanley
206.	Gurkirat Singh	Nagarro
207.	Shashank Sharma	Nagarro
208.	Vatsal Mishra	Axtria
209.	Deep Prakash	Naukri.com
210.	Akshendra Garg	Naukri.com
211.	Aman Kumar Sinha	Naukri.com
212.	Aman Verma	Naukri.com



213.	R K Saurabh	Naukri.com
214.	Karan	Nearfox
215.	Arjun Singh	Nearfox
216.	Bhartendu Singh	OFSS
217.	Anupam Chaudhary	OFSS
218.	Aishwarya Jalli	OFSS
219.	Armaan Jain	Axtria
220.	Deeksha Bhagat	SAP Labs
221.	Anmol Parikh	Citi
222.	Anmol Aggarwal	Hike
223.	Akash Verma	OkuTech
224.	Tarun Sharma	OkuTech
225.	Vishal Kumar	Online Tyari
226.	Prashant Jain	Online Tyari
227.	Sushant Saurabh	Online Tyari
228.	Piyush Tiwari	Online Tyari
229.	Arvind Panwar	PayU
230.	Pawan Burnwal	PayU
231.	Amit Kumar	PayU
232.	Kamal Soni	PayU
233.	Arpit Jain	Walmart
234.	Vidhu Shekhar	Paytm
235.	Kumar Saurav	Juniper
236.	Dipanshu Sehgal	Polaris
237.	Kumar Saurav	Juniper
238.	Dinesh Jangid	Power2SME
239.	Harshit Gupta	Power2SME



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240.	Aditya Sharma	Housing / Practo
241.	Anmol Agarwal	Practo
242.	Himanshu Saluja	Practo
243.	Prashant Kumar	Practo
244.	Pratul Tiwari	Practo
245.	Pratyush Vashisht	Practo
246.	Sushil Kumar Rathore	Practo
247.	Vaibhav Chaudhary	Practo
248.	Apoorva Srivastava	Qualcomm
249.	Sumit Shubham	Qualcomm
250.	Gaurang Gupta	RBS
251.	M. Sowmith Reddy	RBS
252.	Satvika Gupta	Routofy
253.	Kumar Pallav	Routofy
254.	Piyush Jindal	Routofy
255.	Mohammad Anas	Amazon
256.	Samarth Khare	Accenture
257.	Ritick Bajpai	Samsung
258.	Deepika Saini	Samsung
259.	Krishan Kant Sharma	Samsung
260.	Prince Gupta	Samsung
261.	Phani Krishna	Samsung
262.	Pulkit Kumar	Samsung
263.	Oshin Gupta	Samsung
264.	Ramit Singh	Samsung
265.	Atul Kumar	Samsung
266.	Raj Vardhan Singh	Samsung



267.	Abhishek Kumar	Samsung
268.	Siddarth Rajan	Samsung
269.	Nancy Sihmar	SAP Labs
270.	Sagar Sahni	SAP Labs
271.	Rishabh Pandey	SAP Labs
272.	Deepak Kalwani	SAP Labs
273.	Deeksha Bhagat	SAP Labs
274.	Sahil Attri	Click Labs
275.	Shishir Jain	Juniper
276.	Latika Vashishtha	Sigmoid
277.	Varsheindra Gautam	TCS
278.	Rishabh Jaiswal	TCS
279.	Ankur Kumar	TCS
280.	Naveen	TCS
281.	Paras Asati	TCS
282.	Sourabh Singh	Digital Green
283.	Komal Singh	Freescall
284.	Shiva Bhalla	Tiny Owl
285.	Siddharth Verma	Tiny Owl
286.	Harshita Ande	Verizon
287.	Manisha .	Verizon
288.	Shubham Anand	HT Media
289.	Aditya Goel	Walmart
290.	Atul Kumar Verma	Walmart
291.	Daljeet Singh	Walmart
292.	Darshnik Swamy	Walmart
293.	Dev Kumar	Walmart



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294.	Himanshu Sahu	Walmart
295.	Mayank Gupta	Walmart
296.	Nishtha Mehrotra	Walmart
297.	Saurabh Tyagi	Walmart
298.	Shubham Gupta	Walmart
299.	Shubham Khatri	Walmart
300.	Gaurav Gupta	Cisco
301.	Abhishek Kumar	Walmart
302.	Arpit Jain	Walmart
303.	Vipul Pandey	Walmart
304.	Raman Sharma	Zopnow
305.	Shishir Dwivedi	Zopnow
306.	Vibhor Kumar	Zopnow
307.	Bharat Bharadwaj	Zopnow
308.	Avinash Singh	Zopnow
309.	Jagrati Tomar	Zopnow
310.	Kulshreshtha Singh	Zopnow
311.	Shubham Chaurasia	Zopnow
312.	Aishwarya Jalli	OFSS
313.	Ashar Ali	ZS
314.	Umang Paliwal	ZS
315.	K. Sai Sankalp	ZS



Academic Staff 2015-2016

Sr. No.	Name of Faculty	Designation
1	Prof. G. C. Nandi	Professor
2	Prof. U. S. Tiwary	Professor
3	Prof. Sudip Sanyal	Professor
4	Prof. Om Prakash Vyas	Professor
5	Prof. Krishna Mishra	Professor
6	Prof. B. R. Singh	Professor
7	Dr. Anupam	Professor
8	Dr. Shekhar Verma	Professor
9	Dr. Tapobrata Lahiri	Professor
10	Dr. Anurika Vaish	Associate Professor
11	Dr. Shirshu Varma	Associate Professor
12	Dr. Pavan Chakraborty	Associate Professor
13	Dr. Vrijendra Singh	Associate Professor
14	Dr. Pritish Kr. Varadwaj	Associate Professor
15	Dr. Neetesh Purohit	Associate Professor
16	Dr. Rajat Kumar Singh	Associate Professor
17	Dr. Ashutosh Mishra	Associate Professor
18	Dr. Madhvendra Misra	Assistant Professor
19	Dr. Vijaishri Tewari	Assistant Professor
20	Dr. Sanjeev B. S	Assistant Professor
21	Dr. Vijay Kr. Chaurasia	Assistant Professor
22	Dr. Abhishek Vaish	Assistant Professor
23	Dr. Manish Kumar	Assistant Professor
24	Dr. Sanjai Singh	Assistant Professor
25	Dr. Sonali Agarwal	Assistant Professor
26	Dr. Manish Goswami	Assistant Professor
27	Dr. S. Venkatesan	Assistant Professor
28	Dr. Akhilesh Tiwari	Assistant Professor
29	Dr. Pramod Kumar	Assistant Professor
30	Dr. Pragya Singh	Assistant Professor



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31	Dr. Nidhi Mishra	Assistant Professor
32	Dr. Amit Prabhakar	Assistant Professor
33	Dr. Sangeeta Singh	Assistant Professor
34	Dr. Satyavani Guttula	Assistant Professor
35	Dr. Shailendra Kumar	Assistant Professor
36	Dr. Satish Kumar Singh	Assistant Professor
37	Dr. Abdulla Abu Baker	Assistant Professor
38	Dr. Ratan Kumar Saha	Assistant Professor
39	Dr. Krishna Pratap Singh	Assistant Professor
40	Dr. Singhtanshu Bhattacharya	Assistant Professor
41	Dr. Rajesh Kumar	Assistant Professor
42	Dr. Deepak Joshi	Assistant Professor
43	Dr. Bibhas Ghosal	Assistant Professor (contract)
44	Dr. Rekha Verma	Assistant Professor (contract)
45	Dr. Pooja Mishra	Assistant Professor (contract)
46	Dr. Suneel Yadav	Assistant Professor (contract)
47	Dr. Sunny Sharma	Assistant Professor (Contract)
48	Dr. Seema Awasthi	Assistant Professor (Contract)
49	Dr. Pooja Jain	Assistant Professor (Contract)
50	Dr. Prassana Kumar Mishra	Assistant Professor (Contract)
51	Dr. Somak Bhattacharya	Assistant Professor (Contract)
52	Dr. Sumit Kumar Upadhyay	Assistant Professor (Contract)
53	Dr. Amit Kumar Dhar	Assistant Professor (Contract)
54	Dr. Amaresh Kumar Sahoo	Assistant Professor (Contract)
55	Dr. Anand Kumar Tiwari	Assistant Professor (Contract)
56	Dr. Rahul Kala	Assistant Professor (contract)
57	Dr. Amrita Chaturvedi	Assistant Professor (contract)
58	Dr. Utkarsh Goel	Assistant Professor (contract)
59	Dr. Vineet Tiwari	Assistant Professor (contract)
60	Dr. Jagpreet Singh	Assistant Professor (contract)
61	Dr. Srijit Bhattacharya	Assistant Professor (contract)
62	Dr. Sudipta Das	Assistant Professor (contract)
63	Sh. Rishi Ranjan Singh	Adhoc Visiting Faculty
64	Sh. Arun Kant Singh	Adhoc Visiting Faculty
65	Dr. Ranjana Vyas	Adhoc Visiting Faculty



Non-Teaching Staff (2015-16)

Sl. No.	Name of Non-Teaching Staff	Designation
1	Dr. Asheesh Kumaar	Dy. Registrar (Administration & Coordination)
2	Dr. Seema Shah	Dy. Registrar (Store & Purchase)
3	Sh. O P Srivastava	Dy. Registrar (Finance & Accounts)
4	Dr. Pavan Kumar Saini	Dy. Registrar (Establishment & Academic)
5	Sh. Pradeep Kumar Jain	Chief Executive Secretary/Senior Private Secretary (On Deputation)
6	Sh. Mithilesh Kr. Mishra	System Analyst
7	Sh. Kanchan Kr. Tiwari	Assistant Registrar (Finance)
8	Sh. Ranjeet Banerjee	Assistant Registrar (Exam)
9	Sh. Vivek Nagar	Assistant Registrar (Administration & Coordination)
10	Sh. Niranjana Kumar	Assistant Registrar (Stores & Maintenance)
11	Sh. Lok Nath Sharma	Assistant Registrar (Security Officer)
12	Sh. Mukesh Rawat	Personal Secretary
13	Sh. Prashant Kumar Srivastava	Programmer
14	Sh. Pankaj Mishra	Senior Information Assistant / Public Relation Officer
15	Sh. Yogesh Kardam	Computer Operator
16	Sh. Vivekanand Sinha	Computer / Data Processor
17	Sh. Durgesh Kumar	Data Processor/Data Operator
18	Sh. Santosh	Data Processor/Data Operator
19	Sh. Gaj Raj Singh	Junior Engineer



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Sl. No.	Name of Non-Teaching Staff	Designation
20	Sh. Akhilesh Kumar	Junior Engineer
21	Sh. Siva Kant Tripathi	Junior Engineer
22	Sh. Rajeev Kr. Bhatia	Accountant
23	Sh. Sanjay Kumar	Accountant
24	Sh. Sunil Kashyap	Accountant
25	Sh. K. S. Aeron	Accountant
26	Ms. Shweta Gupta	Accountant
27	Ms. Ankita Jaiswal	Accountant
28	Sh. Brijesh Kr. Pandey	Multi Functional Asstt.
29	Sh. Rajendra Singh Bisht	Multi Functional Asstt.
30	Sh. Sandeep Kumar Keserwani	Multi Functional Asstt.
31	Mohd. Saleem Ansari	Multi Functional Asstt.
32	Ms. Asha Shukla	Multi Functional Asstt.
33	Sh. Shailendra Singh	Technical Asstt / Data Processor
34	Sh. Kaushal Kr. Singh	Technical Asstt / Data Processor
35	Sh. Ashutosh Shukla	Technical Asstt / Data Processor
36	Sh. Rajit Ram Yadav	Technical Asstt / Data Processor
37	Sh. Himanshu Pandey	Technical Asstt / Data Processor
38	Sh. Sanjiv Kumar	Technical Asstt / Data Processor
39	Sh. Santosh Kumar Mishra	Technical Asstt / Data Processor
40	Sh. Sarvesh Kumar Mishra	Library Information Assistant
41	Sh. Atul Tripathi	Library Information Assistant



Sl. No.	Name of Non-Teaching Staff	Designation
42	Ms. Jagriti Bajaj	Senior Steno
43	Ms. Archita Rai	Personal Assistant
44	Sh. Neeraj Srivastava	Personal Assistant
45	Mrs. Priya Pal	Nurse
46	Mrs. Blessy Anie Shaiju	Nurse
47	Sh. Subhash	Care Taker
48	Sh. Vinod Narayan Tripathi	Compounder
49	Mohd. Izhar	Compounder
50	Sh. Pankaj Srivastava	Lab Assistant
51	Sh. Girish Kumar Dixit	Lab Assistant
52	Sh. Kapil Srivastava	Executive Asstt.
53	Sh. Pramod Narayan Tripathi	Technical Asstt.
54	Sh. Abhishek Pandey	Dy. Accounts Assistant
55	Sh. Sumit Kr. Shukla	UDC
56	Sh. D N Shukla	Junior Assistant
57	Sh. Prakhar Srivastava	Junior Steno
58	Sh. Santosh Kr. Yadav	Lab Assistant
59	Mrs. Pratibha Verma	Lab Assistant
60	Sh. Nilendra K. Tripathi	Junior Assistant
61	Sh. Abhishek Kumar	Junior Assistant
62	Mrs. Prabha Verma	Junior Assistant
63	Mrs. Ritu Srivastava	Junior Assistant



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Sl. No.	Name of Non-Teaching Staff	Designation
64	Sh. Manoj Kumar Upadhyay	Caretaker-Cum-Manager
65	Sh. Deep Narayan Das	Caretaker-Cum-Manager
66	Sh. Raj Kumar Rawat	Driver
67	Sh. Satish Kumar	Driver

Consultants

S No	Consultant	Designation
1.	Dr. Ratna Sanyal	Consultant
2.	Sri S. K. Khanna	Advisor (Technical)
3.	Sri S. C. Singhal	Advisor (Technical)
4.	Dr. R. Dayal	Chief Medical Officer
5.	Dr. M. D. Mishra	Medical Officer
6.	Dr. Sonia Agrawal	Medical Officer
7.	Dr. K. S. Pandey	Homoeopath
8.	Dr. Kaushlesh Dwivedi	Medical Officer
9.	Dr. Veer Vikram Singh	Medical Officer (RGIIT-A)
10.	Sri U.N. Sharma	Sr. Counsel, High Court, Allahabad
11.	Sri Vaibhavv Kaushik	Legal Counsel, High Court, Allahabad
12.	Sri Subedar Singh	Legal Counsel, District Court, Allahabad
13.		