October, 2016

Vol. 1 Issue-1

# Anunaad Newsletter





Jaypee Institute Of Information Technology (Declared Deemed to be University under Section 3 of UGC Act) NAAC accredited and NIRF (MHRD) Ranked Deemed University

# Inside Newsletter..



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### From the Desk of Founder Chairman

### JAIPRAKASH GAUR



1<sup>st</sup> October, 2016



### Message

I strongly believe that Knowledge through education empowers individuals in such a manner that they can become instrumental in building the character and moral fabric of a learned society. Taking forward this thought, Jaypee Education System has developed JIIT, which provides our students a holistic centre for learning and enables them to evolve as distinguished individuals, carving a niche for themselves in the technically competitive world of today.

It gives me great pleasure to see the launch of the first issue of Institute News Letter "Anunaad", which would serve as a fitting platform that voices the achievements, accomplishments and the innovative work being done at JIIT, I wish them success in this endeavour.

With best compliments!

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Jaiprakash Gaur Founder Chairman Jaypee Group



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# From the Desk of Chairman

MANOJ GAUR Executive Chairman



29<sup>th</sup> September, 2016



### Message

I am happy to know that the faculty and students of JIIT are bringing out the first issue of their News Letter, "Anunaad". It is a worthy initiative and I appreciate the same. I understand that the magazine will contain details of all significant academic and non-academic activities carried out on the campus of JIIT. The News Letter would also provide an opportune platform for all those enthusiasts who would like to pen their experiences on campus life.

I congratulate all the members of the dedicated team for their initiative and wish them all success in unveiling an excellent issue of "Anunaad". I am very certain that its wider circulation amongst all stakeholders of education community will further strengthen the positive perception about Jaypee Education System and most importantly, the Institute.

With best Compliments!

Manoj Gaur

Executive Chairman Jaypee Group



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# From the Desk of Vice-Chancellor



Vice-Chancellor

Jaypee Institute of Information Technology (Declared Deemed to be University u/s 3 of the UGC Act)

1<sup>st</sup> October, 2016



### Message

I am indeed very happy to see the inaugural issue of the Institute News Letter "Anunaad". It is an extremely important initiative for every JIITian, as it would record all significant developments of the institute from time-to-time. Human brain has limited capability of retention and at best - 10% in the long term. Recording the events, achievements, various happenings and also some of the thoughts as articles by both faculty and students, would not only enrich the content of the magazine but would also serve as a prestigious archive that would stay forever in the history of the Institute.

I congratulate the team behind the magazine: Prof. Krishna Gopal, Prof. D K Rai, Dr. S Krishna Sundari, Dr. Mukesh Saraswat, Ms. Puneet Pannu and all student members of the team for working hard and committing themselves to bring out such a good quality magazine for the Institute. I also appreciate the efforts of all those who have directly or indirectly helped in creating this magazine.

With best wishes!

xen. Prof. S C Saxena )

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Editorial

It's a moment of both pleasure and pride for all of us at JIIT, to witness the first and foremost issue of the Institute Newsletter "Anunaad". Anunaad echoes the strengths of JIIT both in letter and spirit. Anunaad is an attempt to introduce every accomplishment of JIITians to the wider world, be it in the field of education, research, technology, entrepreneurship or response towards society and respecting the ethos of Indian culture.

JIIT encourages a healthy amalgamation of curricular requirements with extracurricular initiatives in creating an optimal niche for all-rounded development of thestudents. Motivated by the complimentary wishes of our Hon'ble Founder Chairman, Shri Jaiprakash Gaur, Hon'ble Chairman, Shri Manoj Gaur and Hon'ble Vice Chancellor, Prof. S C Saxena, the Newsletter starts on a most auspicious note, receiving accreditation by NAAC and in being given a premier ranking by NIRF (MHRD), Govt. Of India.

"ৰ বাইয়ে समो दन्यु" honouring our dedication to the scholarship of education & research, Anunaad presents commitment of various departments at JIIT, their vision and approach in grooming our students to catapult into the fast paced world with élan. It is deeply engraved in every JIITian, the notion,'आ-राज्यदायेते विदया', underlining the significance of industry and practice to hone one's knowledge and skills. This is realised through the multiple International and National conferences, training workshops, seminars, faculty development programs, expert lectures and dialogue with distinguished personnel organised in the campus periodically. Dedicated efforts of our faculty have proved the maxim ' उद्यमेन हि सिधनित कार्यापि ' in securing research projects worth more than 6.5 croresfrom premier funding agencies and has culminated in more than 2000, peer · reviewed research publications in international and national scientific journals and conferences.

JIIT faculty, scholars and alumni are an evidence to 'विद्वान सर्वत्र पूज्यते ', and find there place in the sections: medal winners, Laurels won and Global Glory. It is very true to say ' नासि विद्या सम देख ', as education gives insight into the realms of science and society that one starts visualising opportunities in seemingly closed spaces and our alumni turned entrepreneurs are an attestation to this fact. For an institution such as ours, which is home to more than 4000 students at any given point of time, it is a very important task to channelise their energies on the right path. The best way to achieve this is to keep them positively engaged. More than 20 student hubs instil the concept of ' उद्योग नर भूषण ', and conduct many events in the areas of technical, technocultural, cultural, literary and sports in the campus encouraging an all-rounded development of our students. The hub pages are a fun-filled, colourful and energetic walk through our culture and activities.

We sincerely wish that our efforts in conceptuating and creating 'Anunaad' are well received and we remain committed to sustain and elevate the noble vision of Jaypee Education System.

> Dr. S Krishna Sundari Associate Professor Dept. of Biotechnology Editor-In-Chief

# NAAC Accreditation



peer team from National Accreditation and Assessment Council (NAAC) visited the institute from Nov 2-5, 2015 with the objective of acquainting themselves with the strengths and weaknesses of the Institute, in context of Quality Assurance. The visit by NAAC team, comprising of experts from different universities across India, was undertaken to validate the "Self-study Report", shared voluntarily by the Institute. According to the Vice-Chancellor, Prof. S. C. Saxena, "The accreditation and assessment process gave the institute an opportunity to pause and look at itself objectively and apply corrective measures wherever needed."

The self-study report was a great learning experience for the faculty, staff and administration alike and the endless deliberations helped in realizing the vision and mission of the Institute in a more specific manner. It was indeed an energy charged three days when the team interacted with the faculty; saw the students in full vigour, whether in the classrooms, laboratories or the sports arena. The team was entertained with a great cultural extravaganza on the first day in the campus and also had the chance to interact with alumni and their parents. At the end of their sojourn, they left the place much happier and with tips on how to work at maintaining and enhancing quality.



### Memorandum of Understanding between Universities of Jaypee Higher education System, India and Zimbabwe Open University, Zimbabwe

An MOU has been signed by Hon'ble Vice Chancellor, Prof. S C Saxena, Jaypee Institute of Information Technology (JIIT), and Hon'ble Vice Chancellor, Prof. Primrose Kurasha. Zimbabwe Open University, Zimbabwe on September 12, 2016 at Harare, Zimbabwe. The MOU provides for establishment of collaboration between the universities, promoting development in academic and technical support areas. Both the institutes have, identified areas of mutual interest for specific fields of research, development, quality assurance, education, transfer of skills, dissemination of knowledge and promotion of international collaboration.

Memorandum Of Agreement

JIIT entered into MOA with National Research Devlopment Corporation (NRDC)on June 6, 2016. NRDC will assist JIIT in evaluating patentability of the ideas/concepts/products/ processes and also guide in drafting & filing patent applications. NRDC experts will visit JIIT from time to time to educate the faculty on patentand IPR related issues and facilitate patent data base search. Further, NRDC will assist in identifying the possible partners for Technology transfer and also guide in materialising the lab to industry path of JIIT derived innovations.

### All India Ranking-2016 National Institutional Ranking Framework (NIRF), MHRD, Government of India

MHRD released its first all India ranking of Universities, Engineering Institutions and Management prepared through its National Institutional Ranking Framework (NIRF), 2016. Amongst Engineering Institutions, JIIT is ranked as:

🗸 1<sup>st</sup> in NCR

 3<sup>rd</sup> in the Northern Region amongst all Private Institutions
 60<sup>th</sup> at the National level amongst all Government and Private Institutions

Indía's Best Engineering Colleges Careers 360, Apríl 2015 Issue

JIIT has been awarded AAAA in the Uttar Pradesh region in 2015 by Careers 360.

"We do not need magic to change the world; we carry all the power we need inside ourselves already: we have the power to imagine better." -JK Rowling

# Convocation

ressed in their academic robes with the mortarboard adorning their heads, sat thousands of students bubbling with excitement and anticipation of the day they had been waiting for, ever since they walked into the college for the first time. Jaypee Institute of Information Technology, NOIDA hosted its 8th Convocation ceremony on 4th of July, 2015 enveloping three consecutive years: 2013, 2014 and 2015 batches of graduate students.

The grand indoor auditorium (ABB-II) served as an apt venue for hosting the prestigious event and the grandeur was doubled my presence of Honourable Home Minister of India, Shri Rajnath Singh. The former Chief Minister of Uttar Pradesh was born in a small village to a family of agriculturists. This did not





Students who excelled in their respective branches were presented with Gold medals. The Chancellor's gold medal for the year 2013 was conferred on a student of B.Tech, ECE, for 2014 it was won by a student from B.Tech, CSE and for 2015, the medal was given to B.Tech, ECE student. The Vice Chancellor's gold medal was awarded to 11 students, for the years 2013 and 2014. 10 gold medals awarded to students from 2015 batch.

deter him from achieving his goal as he successfully completed his master's degree in Physics with first division from Gorakhpur University in Uttar Pradesh. He then worked at the K.B. Post Graduate College in Mirzapur, Uttar Pradesh, as a lecturer in Physics before starting on his political journey. Other important guests at the ceremony included the Members of Board of studies and the Academic Council.

In this convocation, a total of 3072 graduates were awarded degrees out of which 985 students belonged to the 2013 batch, 912 students to the 2014 and the remaining 1175 to the 2015 batch. Ph.D degrees were conferred to all the students who successfully completed their courses in doctoral studies. MBA, M.Tech, Dual Degree B.Tech-MBA, Dual Degree-B.Tech-M.Tech, B.Tech-Biotechnology, CSE, IT, ECE, and B.A(Honrs) degree werte confered on graduating students.



# Medal Winners

## Chancellor's Gold Medal (Highest Rank amongest all Branches)



Ms. Saloni Jain B.Tech (ECE) **2013** 

ONVOCATION



Ms. Chírag Bhalla B.Tech (CSE) **2014** 



Ms. Shreya Gautam B.Tech (ECE) 2015

### Vice-Chancellor's Gold Medal (Highest Rank in respective Branches - 2015)



Mr. Prateek Mathur B.Tech (ECE)



Ms. Sanjali Jain M.Tech (ECE)



Ms. Víshakha Tomar M.Tech (MAT.SC)



Ms. Samíksha Kukal Dual Degree B.Tech-M.Tech (Bíotech)



Ms. Prashí Khurana B.Tech (IT)



Mr. Dharmendra Singh M.Tech (CSE)



Ms. Amanpreet Kaur Chawla (MBA) Sh. Gopí Arora Memoríal Medal



Ms. Shefali Goyal B.Tech (Biotech)



Ms. Puja Agrawal Dual Degree B.Tech-M.Tech (CSE)





Department of Computer Science Engineering (CSE) and Information Technology (IT)

he department of CSE & IT at JIIT is committed in facilitating a deep learning amongst its students. CSE & IT department is amongst the largest departments of non-affiliating universities. Over the years, the department has grown into a well integrated community of learners led by more than 90 faculty members, thirty out of whom are PhDs and this number is likely to grow to 40 within the next year. Currently the department offers a doctoral program,

two

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six masters programs and undergraduate programs. About 4000 students have successfully

completed and 3000 approximately students are pursuing one of the degree programs offered by department. Faculty is engaged actively in research to push the boundaries of knowledge various in computing domains. This engagement has resulted in more than 500 SCOPUS

indexed papers and other publications. As most faculty members regularly develop and teach courses that are directly related to their research activity, a lot of research directly impacts the teaching.

The department now teaches 140 theory and laboratory courses in an academic year. These courses cover a wide spectrum of the knowledge areas within the discipline of computing. The curriculum of flexi-core courses allows to maximize the elective slots and the number of the elective choices offered for each slot. The number of compulsory courses has been significantly reduced to make more room for flexi-core and elective courses. Each semester, the elective list and the courses are continuously updated keeping in mind the evolving trends.

More than 50 graduates of the department have become entrepreneurs and have set up their own companies. Hundreds of graduates are working with top rated technology groups like Google, Amazon, Facebook, Twitter, Intel, Microsoft, Dreamworks, Xerox, Adobe, and others. A few others have pursued and are pursuing higher studies at world's top lvy League universities such as: Stanford, Oxford, CMU, Georgia Tech, Columbia, Purdue, and others.

The department regularly organises several other events including the International Conference on

Computing

vear.

Contemporary

Cyber-Srishti

workshops

Conference

organised by the department

in collaboration with the University

of Florida, Gainesville, USA, since 2008. IC3

has significantly helped to expand the computing research and publication activity in India. Nearly 800

peer reviewed and SCOPUS, DBLP indexed papers

presented at IC3 have been published either by Springer or the IEEE. The paper acceptance rate at

IC3 has been at a low of 14% only. So far, the highest

citation of an IC3 paper is 149 and the h5 index is 10.

About 90 eminent experts from internationally

leading organisations like MIT, Harward, CMU,

Georgia Tech, Columbia university, Google, Yahoo,

Adobe, CISCO, and others, have delivered their keynote lectures at IC3. These include more than 40

Fellows of IEEE and/or ACM.

flagship annual conference

many FDPs

International

Contemporary

(IC3),

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on

every

VISION

provides high quality education to develop education and entrepreneurship, contributes practically relevant and cutting edge research & catalyzes IT entrepreneurship"

• o be a centre of excellence that future leaders in all aspects of computing including Computing (IC3) is the



Computer Lab

### Department of Electronics & Communication Engineering



he Electronics Communication and Engineering Department which was founded in the year 2002 runs a UG program, two full time PG programs, and Ph.D. degree program besides running 5 year Integrated M. Tech. Program. The Laboratory work is given high importance and almost all core courses in the B. Tech. program have an associated lab course which a student has to pass separately. All the laboratories are equipped

Students get opportunity to work on cutting edge Industrial projects with latest industry level tools. A few projects have been successfully completed. Two students who worked under this plan have been employed by Cadence, Noida, this year and a total of 6 in last 3 years. (ii) Collaboration with Wipro Technologies Limited, Bangalore: In 2015 Wipro Technologies Ltd started a program in our Institute. Wipro engineers guided about 90 4th year B.Tech students of CSE, IT and ECE

with sufficient instruments and software tools to enable the students to perform design oriented experiments test their designs by computer tions or by actual measurements. This experience prepares a student to meet the challenges research development academia as well as in industry.

DEPARTMENTAL FOCUS

 $\mathcal{V}ISIO\mathcal{N}$ 

"To be recognized as a department offering quality education in Electronics and Communication Engineering with focus on innovative research and entrepreneurship keeping in view the present and future needs of the society"

Department for their major project. In this program the B. Tech (final year) students get an opportunity to work on topical industrially relevant projects.

(iii) Collaboration with Landis Gyr, Noida: Landis Gyr, a 1.5 billion dollar multinational company, approached the ECE department in 2016 for January а collaboration. possible After finalizing the modus operandi for collaborations they have selected three M. Tech.

students who are working on Landis Gyr projects this year.

**Creation of Research Facilities in the Emerging Areas:** The faculty conducts research in many areas of interest. In our effort to keep pace with the technological developments, continuous efforts are made to create facility in the emerging areas. In the year 2009, a MEMS centre was established. In the year 2016, an advanced research lab was setup in the Dept. for focussed research on distributed networks & big data analysis.



Opening Ceremony of ECE Dept, Advanced Researech Lab

and simulaof and in

A heavy emphasis is placed on project and practical work. This experience prepares a student to meet the challenges of research and development in academia as well as industry. A 100 year old saga of the development of the art of electronics by the hobbyists from the early days of soldering of discrete components, tubes and transistors to the present era of Raspberry-Pi computer and Arduino microcontroller is well known. Accordingly we have a CICE (Creativity and Innovation Cell), with a faculty advisor, where students work on their hobby projects and hone their skills.

University Industry Linkages: The university Industry linkages which are not very common in India add to the vibrancy of the Department. We are constantly working on creating and improving collaboration with the industry in Noida. We have the following linkages at present:

(i) Collaboration with Cadence Design Systems, Noida: Under this collaborative effort of the Deptt. M. Tech. dissertations are jointly guided by JIIT faculty and Cadence Engineers. Cadence provides hardware and software required for these projects.



# Department of Biotechnology

he Department of Biotechnology, offers B.Tech, M.Tech, Integrated M.Tech and Ph.D. courses in biotechnology. The department has well-equipped, bio-safety compliant laboratories with generous infrastructural and financial support from the University itself and from extramural grants ( 6.5 crores) from premier funding agencies of Govt. of India such as DST, DBT, ICMR, AICTE and AYUSH.

The R&D efforts of the department have been channelized through a Center for Emerging Diseases, and Plant & Microbial Biotechnology Research Group. 'Centre for Emerging Diseases' addresses the questions of molecular mechanism/pathogenesis/host pathogen interactions of emerging and re-emerging viral (Chikungunya & Chandipura) and bacterial pathogens (Mycobacterium and others) and life style diseases such as obesity, diabetes, cancer, cardiovascular and CNS disorders. Plant & Microbial Biotechnology group growing concern over environmental addresses pollution, solutions for sustainable agriculture, depleting natural resources, increasing demand for natural bio-products of therapeutic and industrial importance. The intense engagement of faculty members in research is reflected through high impact peer reviewed publications in National and International journals (250), books/book chapters (30) and a number of projects. The Department strongly believes in fostering collaborations as it provides expanded operational capacity and refinement of ideas. Faculty



### $\mathcal{V}ISIO\mathcal{N}$

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L o be a centre of excellence for developing highly skiled professionals, researchers, innovators and entrepreneurs in Biotechnology."

has developed interactions and collaborations with other academic and research institutes of repute such as UDSC/DU, TERI, AIIMS, JNU, NPL, IIT, NCCS, Jamia Hamdard, NII, ICGEB, INMAS, DIPAS and DRDO and industry partnerships (Trident GreenTEch Pvt Ltd.) through joint project grants and research activities.

In response to continuously evolving technology and industry needs, course curriculum is designed to impart skill sets enabling adaptation to academia, research, and industry. Interaction with scientists from academia and industry through invited lectures. workshops and conferences is encouraged for overall development of students and to expose them to emerging areas of research. Our students continue to secure positions in graduate schools for MS/Ph.D in universities of international/National repute such as Max Planck Institutes, John Hopkins, Georgia Tech, Keck Graduate Institute, Penn State, IITs, NIT's, CCMB, DRDO. Many students have been selected in core biotechnology firms like Panacea Biotech, Cadilla Biotech, Ranbaxy, Premas Biotech Ltd., and others. Technical hubs like RIBOSE and Eco-quence involve students in planning various activities/events and enhances awareness of technical fields. Institutional **Bio-Safety Committee (IBSC) and Institutional Ethical** Committee (IEC) are in place as per mandatory requirement of Govt. of India, to generate awareness and monitor bio-safety aspects and regulations.

# Department Of Physics and Materials Science & Engineering



Prof. D.K.Rai, Head

DEPARTMENTAL FOCUS

he department of PMSE is comitted to excellence in teaching and research. Currently there are 20 faculty members in the department with diverse areas of specializations. The research interest of the department covers different frontier areas including, but not limited to, Nanoscience and Nanomaterials, Green Energy Materials and Devices, MEMS, Quantum Computing, Quantum Communication, Atomic and Molecular Physics, Physics, Astrophysics, Plasma **Biophysics**, Photonics, Solid State Ionics, Magnetic Materials including Multiferroics, Spectroscopy. In the last one and half years, this domain has expanded to new interdisciplinary research areas through, newly established collaborations with various groups inside and outside India. PhD students graduated from the department have joined different institutes through prestigious Post-Doctoral fellowships and as faculty. Hard work of the faculty and students has brought several other recognitions also. The faculty are regularly invited to deliver talks institutes of repute such as IISc, IoP, Princeton University and at well-known national and international conferences. Currently three research projects funded by DRDO and DST worth Rs. 85 Lac are running in the department and 8 research projects worth Rs. 110 Lac have been completed. The department has published around 90 research papers in the last one and half years in reputed international journals having average h-index of ~77 and impact factor ~1.9. The average citation index of the publications has been around 7 with the maximum at 107. The department has organized several national/ international workshops and coferences with participation from across the globe. addition, the department organizes FDP In

every year and invites external experts for delivering talks regularly. The department offers M.Tech program in Materials Science and Engineering and PhD program in Physics and Science Engineering. Materials and The has teaching department and research laboratories consisting of modern and sophisticated equipment developed with the generous support from the university and granting agencies such as DRDO, AICTE. Currently, 21 full time PhD scholars are working the department. The department has produced 16 PhDs in the last four years. The department also offers core and elective courses in all UG engineering programs. Through science, open and value added elective courses UG students are exposed to the exciting science that is happening all over the world.

### Vísíon

**7**o be a center of excellence in teaching and research in Physics and Materials Science and Engineering





# Department of Mathematics

VISION

7o attain excellence in

teaching and research in

the field of mathematics

and it's applications.

Prof. Alka Tripathi, Head

he department of Mathematics continuously endeavors to improve its academic strength by publishing research papers, organizing workshops, faculty development programs, guest lectures and conferences. Since the start of 2015, the department has conducted two FDPs, one workshop and four guest lectures. One week 'Faculty Development Program on Functional Analysis and its Applications' was organized during July 13-18, 2015. Another FDP on'Continuum Mechanics and

Applications' was conducted during

July 18-23, 2016. Both FDPs were appreciated by the participants. A Two day workshop on 'Numerical Methods Using Scilab' was organized during April 8-9, 2016. Dr. S. Sampath from IIT Delhi delivered expert talk on the topic 'Introduction to Learning theory and its application to blood glucose prediction' on March 2, 2016. A

guest lecture by Mr. Gurpreet Singh,

Senior Scientist, Government of India was organized on May 09, 2016 on the topic 'Manipulation of Spatial Images using JAVA'. Prof. K. T. Arasu from Wright State University, Dayton, U.S.A. shared his specialized views on 'Algebraic Techniques for Constructing Sequences with Good Correlation Properties' on May 26, 2016. Recently, the department organized a talk on the topic 'Fractional Calculus' by Prof. S. K. Singh from NIT Patna on August 22, 2016. All faculty members are actively involved in research. Four students of the department were awarded Ph. D. degree last year. More than 30 research papers have been published in

various reputed indexed journals such as International Journal of Thermal

> Sciences (Elsevier), The European Physical

Journal Plus (Springer), Waves in Random and Complex Media (Taylor & Francis). Our faculty members are also invited by other National and International institutes to share their expertise

and knowledge. Dr. Puneet Rana visited Dept. of Mathematics,

Universiti Sains Malaysia, Penang, Malaysia from June 15 to July 14, 2015, delivered invited talk and did interaced session with faculty and students on FEM and stability analysis.



### Department of Humanities & Social Sciences



DEPARTMENTAL FOCUS

he Department of Humanities and Social Sciences has played a crucial role in nurturing human minds since its inception in the year 2001. The department has served to complement the existing and emerging educational programs by imparting behavioural and professional competency that unites the application of scientific principles with human, moral and social understanding, thereby, creating new-age leaders in their chosen professions. The structure of the course curriculum has continuously evolved and witnessed a pedagogical change from being a department offering electives in nine subjects of Management and Social Sciences to becoming a thriving centre for interdisciplinary studies and research. The Department has designed curriculum and imparts value-added education to sensitize the students to a broader social, cultural, economic, ethical and humane issues involved in social change and to inculcate the best of emotional and social quotient in them. The department offers three core courses of Life Skills, Economics and English apart from an array of 36 subjects from six elective areas of Humanities & Social Sciences. These courses emphasize the interdisciplinary aspects of knowledge balancing with the core disciplines of Psychology, Sociology, Economics, Finance, Marketing, Entrepreneurship, Literature, Culture and Knowledge Management. Also the department runs a Value-Added programme. The department has started language training programmes from this year in foreign languages English, French and German.

The Department also offers Ph.D. programme in Economics, English, Psychology, Sociology and other disciplines with an emphasis on inter-disciplinary research. This year the student is being awarded with the doctorate degree and ten others are enrolled as research scholars with two having submitted their thesis. The faculty at HSS is fully dedicated to the cause of the academia and society. With best of research publications in journals of national and international repute, this year has seen faculty publishing 22 research papers. The teachers are also involved in various outreach programs and collaborate with the NGOs for issues like gender sensitization, environmental causes and other aspects throughout the year.



VISION he Department of Humanities and Social Sciences seeks to maintain a commitment to the pursuit of excellence by advancing, promoting and propelling the social, cultural, economic, managerial and entrepreneurial development of our stakeholders through teaching, research, innovation, community and public service, and intellectual leadership"

Various forums of creativity, theatre, folk culture, fine arts and many more are run by the faculty. The department has conducted workshops, faculty development programs, organized talks and invited lectures for adding to the knowledge base and skill enhancement in the faculty and students alike.

The Department is organizing an International Conference on "Peaceful and Prosperous South Asia- Opportunities and Challenges" in March, 2017 and has partnered with three acclaimed scopus-indexed journals for publication of papers.

# Jaypee Business School

aypee Business School (JBS), a constituent of Jaypee Institute of Information Technology (JIIT), NOIDA, started in the year 2007. It holds a very good reputation amongst the new generation business schools in India. In a short span of 9 years, JBS has made an extremely good progress as a centre of excellence in management studies and research.

The two-year full time MBA is the flagship program of the business school and has a unique curriculum with functional and sectoral specializations. This program has an exceptional IT integration along with emphasis on employability skill courses (ESC), business ethics, corporate and social internships. It aims to develop business acumen, professional finesse, social sensitivity and entrepreneurial orientation among the students. JBS also offers full time and part time Ph.D. program in management. Full time research scholars are provided monthly assistantship to pursue this program.

JBS enjoys state-of-art infrastructure and experiences intellectual capital. It has organized, one international conference, two competency development programs, five workshops and one executive development program in the academic year 2015-16. These outreach academic programs organized by JBS are well received and attended by peers and professionals from the corporate realm. A forthcoming international

# Vísíon

"To become a centre of excellence in management education and research to develop globally competent management professionals."

conference of JBS in collaboration with International Academy of Information Technology and Quantitative Management (IAITQM) is scheduled for December 2017.

Graduating students from JBS have performed extremely well and created an indelible impression in their respective organizations. Consequently, organizations are keen to hire graduating students. JBS alumnus are working in reputed organizations such as McKinsey, SAP, E&Y, PwC, S&P, Nestle, HUL, Honda, Amex, ICRA, HCL and many others. Some students have started their entrepreneurial ventures which are creating ripples in the market.



# Sponsored Projects

he faculty members are involved in many research projects funded from premier government agencies like DST, DBT, DRDO, ICMR, ISRO, AYUSH, AICTE, and others. Currently, 17 different sponsored projects are in progress with a funding of more than 5.08 crores from different government agencies. In the past, 21 different projects worth Rs. 3.37 crores have been completed. At present collaboration with different institutions like University of Delhi, ICMR Virus Unit Kolkata, AIIMS New Delhi, IIP Dehradun, Jamia Hamdard New Delhi, TERI New Delhi exists. Following funded projects are currently in progress :

1. Studies on the phylogenomics and population genomics of Indian Drosophila, DST, Grant value: 34.10 Lakh, PI: Dr. Sujata Mohanty.

2. Development of reagents for simple immunochemical tests for the detection of Chikungunya infection, DBT, Collaborative project among UDSC, JIIT and ICMR Virus Unit Kolkatta. JIIT, Grant value: 18 Lakh, PI: Prof. Sanjay Gupta.

3. Development of a biocatalyst for the removal of nitrogen and sulphur from diesel, DST, Grant value: 24.9 Lakh, PI: Dr. Nidhi Gupta.

4. Study of mitochondrial DNA copy number variation, its possible genetics and their correlation with patho-physiological features of diabetes mellitus: A pilot study, ICMR, Grant value: 26.0 Lakh, Pl: Dr. Shalini Mani, Co-Pl: Dr. Pankaj Bansal/ Dr. Mohd. Rashid (Sharda University) (Project approved).

5. Entangled and other nonclassical states and their applications in the field of quantum computation and communication, DST, Grant Value: 39.51 Lakh, PI: Prof. A. Pathak.

6. Design and cryptanalysis of protocols of secure quantum communication, DRDO, Grant Value: 34.08 Lakh, PI: Prof. A. Pathak.

7. Nanoparticles based amper-ometric biosensor for detection of thyroid dys-functioning, DST, Grant Value: 37.30 Lakh, PI: Sudha Srivastava Co-PI: Vibha Gupta.

8. Development and evaluation of green tea catechins based Intravaginal nanoemulsion gel for the treatment of urinary tract infection, DBT, Grant Value: 28.6 Lakh, PI: Shweta Dang, Co-PI: Reema Gabrani, Javed Ali (Jamia Hamdard).

9. Purification of Chikungunya virus nsP3 Protein for peptide based inhibitor and structural studies, DBT, Grant Value: 71.4 Lakh, PI: Sanjay Gupta Co-PI: Sanjeev K Sharma, Vibha Gupta, V. K. Chaudhary (UDSC). 10. Development of inhibitors to target glyoxylate and methylcitrate cycles essential for persistence of *Mycobacterium tuberculosis*, ICMR, Grant value: 20 Lakh, PI: Dr. Chittaranjan Rout (JUIT, Waknaghat); Co-PI: Dr. Vibha Gupta.

11. Identification of cellular targets of Chikungunya virus non structural proteins, ICMR, Grant value: 34.1 Lakh, PI: Prof. Sanjay Gupta, Co-PI: Dr. Reema Gabrani/ Dr. Sanjeev K. Sharma (Project approved).

12. Stage specific microRNA profiling from developing chick heart, DBT, Grant Value: 41.65 Lakh, PI: Vibha Rani.

13. Rationalstructure-based development of potent inhibitor targeting mycobacterial cysteine biosynthetic pathway: in-silico and experimental drug design againstM. tuberculosis CysE, DST, Grant Value: 15.95 Lakh, PI: Sunita Gupta Mentor: Vibha Gupta.

14. Studies on production of therapeutically important saponins using in-vitro culture of *Bacopa monnieri*, DST, Grant Value: 19.62, PI: Pragya Bhardwaj Mentors: Ashwani Mathur, Chakresh Kumar Jain .

15. Differential expression pattern of miRNAs in rice root during Cr(VI) stress, DST, Grant Value: 32.6 Lakh, PI: Dr. Sonali Dubey, Mentor: Vibha Rani.

16. Biotechnological solution for attaining longer shelf life and portability of microbial inoculum, Trident Greentech Pvt. Ltd., Telangana, Grant Value: 23 Lakh, Pl: Dr. Krishna Sundari.

17. Design and Development of a Cognitive System for Leukocytes Identification in Hematoxylin and Eosin (H & E) Stained Rat Skin Images, DST, Grant value: ~30 Lakh, PI: Dr. Mukesh Saraswat, Co-PI: Dr. Harish Sharma (RTU, Kota), Mr. Himanshu Mittal, Mr. Raju Pal (Project approved).

# Publications

Students and faculty of the Institute have published about 2800 research papers so far, in peer reviewed journals/conferences. Some important journals in which publications have appeared in last one and a half years are listed below.





Peer reviewed research articles published by JIIT faculty and scholars.

# **Book Publication**

Vibha Rani, U. C. Singh (Eds.), "Free Radicals in Human Health and Disease", Springer, 2015, ISBN 978-81-322-2035-0.

The book is aimed at graduate students, researchers in academia, industry and clinicians with interest in redox biology. Special attention has been devoted to the topic of ROS signalling, oxidative stress induced human pathologies & antioxidative therapies. The book has four parts on specified topics, based on the current literature for the better understanding of the readers with respect to their subject related interests. The first section of the book provides an overview about the ROS production and their measuring tools and techniques followed by the mechanisms involved in the oxidative stress in the second section. The third section describes the involvement of oxidative stress in different human diseases and the last section focuses on the different strategies to ameliorate oxidative stress induced stress.

Vibha Rani - Umesh Yadav Editors Free Radicals in Human Health and Disease

D Springer



Vandana Ahuja, "Digital Marketing", Oxford University Press,1st Edition, 2015 ISBN 0-19-945544-9.

Digital Marketing is designed as a textbook for management students specializing in marketing. The book discusses various digital media and analyses how the field of marketing can benefit from them. This book is divided into four sections. The first section, Marketing in the Digital Era, starts with an overview of e-marketing followed by the online marketing mix in the digital framework. It then discusses the role of the online consumer followed by CRM strategies that organizations can use with the help of the digital medium to retain and grow customer relationship. The second section, Business Drivers in the Virtual World, deals with the realm of social media followed by online branding, building traffic, Web business models, and e-commerce. The third section, Online Tools for Marketing, deals with various Web tools for building consumer engag- ement, content management, campaign management, consumer seg- mentation, and building market influence. Finally, the fourth section, The Contemporary Digital Revolution, deals with the world of online cocreation communities.

# Distinguished Visitors

aypee Institute of Information Technology and its constituent Jaypee Business School are proud to host distinguished visitors from diverse fields associated with several leading universities and companies in India and overseas. The distinguished visitors share their knowledge and experience with our faculty and students. They together exchange ideas which are being used to develop strategies relevant for the contemperory world. These immense interactions with distinguished visitors from different fields, link the University globally and establishes a positive impact that university can make in everyday living.

- Mr. Osama Manzar, Founder & Director, Digital Empowerment Foundation (DEF), New Delhi, India, Nov 21, 2015.
- Prof. Matteo Montecchi, Programme Director, Glasgow Caledonian University, London, Nov 9, 2015.
- Jonathan Turney, a science writer, reviewer and editor, NESTA, Nov 7, 2015.
- Prof. Madhav Bhatia, University of Otago, Christchurch, New Zealand, Sept 22, 2015.
- Prof. M. R. N. Murthy, IISc, Bangalore, India, Aug 28, 2015.
- Prof. Sartaj Sahni, University of Florida, USA, Aug 19, 2015.
- Prof. Rajeev Sangal, Director IIT BHU and former Director IIIT Hyderabad, India, Aug 30, 2015.
- Prof. Debarata Goswami, IIT Kanpur, India, Aug 13, 2015.

- Prof. Y. Singh, Institute of Genomics and Integrative Biology, New Delhi, India, Jun 5, 2015.
- Prof. Arjun Ram, Institute of Genomics and Integrative Biology, New Delhi, India, Jun 5, 2015.
- Prof. P. K. Yadav, School of Life Sciences, JNU, Delhi, India, Jun 4, 2015.
- Prof. Saroj Mishra, IIT Delhi, India, May 21, 2015.
- Prof. Jeff Yeung, Director, CUHK Business School, Hong Kong, Apr 29, 2015.
- Dr. Arun Sehra, Director, Aeronautics and Space programs at NASA, Glenn Research Center, USA, Apr 3, 2015.
- Prof A. D. Amar, Seton Hall University, USA, Mar 11, 2015.
- Dr Javed Khan, Chairperson, Kent State University, Ohio, United States, Feb 2, 2015.



### Ninth International Conference on Contemporary Computing (IC3-2016)



epartment of Computer Science & Engineering and University of Florida, USA Gainesville, jointly organize Conference International on Contemporary Computing every year since 2008. IC3-2016 was the ninth conference in the series. The conference focused on issues of ontemporary interest in computing, spanning systems, algorithms and applications. The IC3 call for papers received a tremendous response, attracting 287 submissions. It featured world-class keynote speakers, exhibits, special sessions, tutorials, and paper presentations. The five keynote

speakers were Prof. Timothy A. Gonsalves, Director, IIT Mandi, India; Prof. P. J. Narayanan, Director IIIT Hyderabad, India; Prof. T. V. Prabhakar, IIT Kanpur, India; Prof. Manish Parashar, IEEE Fellow, Rutgers University, USA, and Prof. Sanjay Ranka, IEEE Fellow University of Florida, Gainesville, USA. A total of 76 papers accepted were presented in the Conference by registered authors and are now submitted for inclusion in IEEE Xplore. Previous IC3 proceedings are indexed by DBLP, SCOPUS, and Google Scholar. According to Google Scholar, IC3's h5 index is 10 and h5 median = 15.

### International Conference on Advances in Management and Technology (ICAMT-15)

he Jaypee Business School, organised it's First International Conference on Advances in Management and Technology in a Global World (ICAMT- 2015), in association with the University of Nebraska, Omaha, USA, on Dec 18-20, 2015. This Conference aimed at recognizing the importance of upcoming newage business practices and the changes technology has brought about in the way organizations function, and attempted at being a platform for fostering discussion on contemporary issues. The event was inaugurated by Prof. S.C. Saxena,



the Vice Chancellor of JIIT, NOIDA. The conference received participation from Corporate Delegates from SAIL, IMRB and the Jaypee Group. Academic Participation came in from University of Nebraska, Skema Business School, IMI, Delhi, IIT, Delhi, BIMTECH, Jindal Global Business School, Sharda University, VIT University, Jammu University, Chitkara University, Aligarh Muslim University and Galgotias Business School, amongst others. Dr. Deepak Khazanchi, Associate Dean for Academic Affairs, College of IS&T, University of Nebraska, USA, was the keynote speaker. He spoke about Building a "smart" world: how information technology is revolutionizing education, society and business. Prof. Phani Tej Adidam, Director, Prof. Phani College of Business Administration, University of Nebraska, delivered a keynote on Business Schools, Academia and Society where he laid emphasis on cohorts being the most vital source of knowledge amidst teachers, books and other traditional sources of knowledge in a B-School context.

### International Symposium on Emerging Trends & Technologies in Libraries & Information Services (ETTLIS- 2015)



JIT in collaboration with SALIS and other like minded partners took an initiative in 2008 to bring library professionals and other players in the industry under the aegis of the brand ETTLIS. Since then ETTLIS has successfully organized three symposiums in 2008, 2010 & 2012 at JIIT Noida, JUIT Solan (HP) and at JUET Guna (MP) respectively. The fourth in this series was organised in Jan 2015 with an aim at evaluating, educating & transforming libraries and information centres to adapt to the emerging technologies. ETTLIS, 2015 was organized in association with King's College London and IEEE, UP section. It was the first time where the

proceedings appeared over IEEE digital library. A total of 210 participants deliberated and 60 research papers were presented. Nineteen Key note speakers from various countries: USA, UK, Germany, Australia, Europe, Japan, Malaysia, Oman, Sri Lanka, Pakistan, Nigeria, Iran, Thailand, Belgium & Singapore shared their knowledge. The symposium achieved it's objective of bringing researchers, academicians, business communities, policy makers and research scholars on a common platform to share their experiences, ideas, research findings about emerging trends, technologies in the field of library and information services.

### International Conference on Signal Processing & Communication (ICSC - 2015)



his conference highlighted recent developments and identified emerging and future areas of growth in Signal Processing. It gave an impetus to the researchers towards bringing out newer and efficient techniques. Keynote speakers with their vast research experience in various fields encouraged the researchers for development of signal processing and communication engineering through their high level of academic talks. As keynote speakers, Prof. Banmali S. Rawat, University of Nevada, Reno; Prof. Surendra Prasad, Ex-Director, Indian Institute of Technology, Delhi; Prof. R. K. Shevgaonkar, IIT Bombay; Prof. Arun Kumar, IIT Delhi; Prof. Karmeshu, JNU, New Delhi; Prof. Vinod Kumar, IIT Roorkee; Prof. Sneh Anand, IIT Delhi; Prof. V. K. Jain, IIT Delhi and Prof. U. B. Desai, Director, IIT Hyderabad delivered their talks.

# Workshops/Seminars

The Institute organizes a series of seminars/ workshops where advanced learners and other students have opportunity to present papers and interact with experts from different areas. The Institute has made a policy of free registration for the interested students in these academic activities organized in and by the

1. Computational Intelligence: May 26-28, 2016.

Institute.

2. Numerical Methods Using Scilab: Apr 8-9, 2016.

3. 3G and 4G Systems-Working, Planning and Deployment Scenario in India: April 8-9, 2016.

4. Cybersrishti– An IT Symposium: Apr 30 - May 1, 2016.

5. National Workshop on Mobile Technology: Mar 17-18, 2016.

6. National Workshop on Information Security: Dec 22-24, 2015.

7. ISTE STTP on Engineering Physics: Dec 8 -18, 2015.

8. Data Analytics and It's Security Issues: Dec 4-5, 2015.

9. Light and LightBased Technologies: Nov 18, 2015.

10. Plagiarism and Reference Management Using Mendeley: Oct 16, 2015.

11. Reproducible Research using R: Oct 5, 2015.





12. RCDP on Advanced Research Methodology /Statistical Techniques: Sept 14-19, Sep 2015.

13. Digital Marketing: Sep 12, 2015.

14. Enhancing Job Employability: Sept 1, 2015.

15. Entrepreneurial Skill: Aug 15-27, 2015; Aug 19-21, 2015.

16. Intellectual Property & Innovation Management in University: Aug 08, 2015.

17. Sahaja Yoga Meditation Workshop: July 9-10, 2015.

18. Upcoming Opportunities in Mobile Games and Applications ESpark: July 9-10, 2015.

19. Workshop on Java Basics: Feb 10, 2015.

20. Autonomous Robotics Workshop: Feb 2-11, 2015.

21. Entrepreneurial Workshop: Jan 19, 2015.

22. International Workshop on Statistical and Numerical Trends in Sciences & Engineering: Jan 1, 2015.

# Faculty Development Programme

Academic development programmes, in the form of in-house FDPs, are organized regularly by the Institute. Moreover, JIIT is a remote centre of IIT Bombay initiative, under National Mission on Education through Information & Communication Technology (NMEICT) project of MHRD, GOI. Under this project, FDPs are conducted for professional development of faculty and non teaching staff. These FDPs are delivered by distinguished experts in their fields invited from academia and industry. A large number of external participants also attend these FDPs. The following are the list of FDPs that have been organized since January 2015 onwards:

1. "Physics: Industrial Applications", Expert lectures delivered by Dr. S. A. Hashmi, Associate Professor, Physics and Astrophysics Delhi University; Dr. Amita Tyagi, Head and R&D, Goldwyn LED Tech. India; Dr. Sanjay Srivastava, Scientist at National Physical Laboratory, New Delhi, Number of Participants: 29, July 19-25, 2016.

2. "Recent Advances in Diagnostics and Therapeutics", Experts lectures delivered by Prof. Vijay K. Chaudhary, Biochemistry Department, Delhi University, South Campus; Ms. Debjani Kundu, Field Application Scientist, Merck Life Science Pvt. Ltd.; Ms. Yukti Gambhir, Product Manager, Thermo Fisher Scientist India Pvt. Ltd.; Ms. Swati & Mr. Sachet, QPCR Application, Thermo Fisher Scientist India Pvt. Ltd; Mr. Brijesh Pandey & Dr. Faraz Rashid, SCIEX, Gurgaon; Dr. Arjun Roy, Head CDM/Biostatistic, Sun Pharmaceutical Indrustries Ltd; Dr. Anita Kamra, Associate Professor, KMC, North Campus, DU, Number of Participants: 23, July 19-25, 2016.

3. "State-Of-The-Art: Communications, Circuits and Intelligent Systems", Experts lectures delivered by Prof. S. D. Joshi, IIT, Delhi; Prof. B. K. Kanaujia, Ambedkar Institute of Advanced Communication Technologies and Research; Dr. Sujay Deb, IIIT, Delhi, Number of Participants: 12, July 18-23, 2016.

4. "Continum Mechanics and Applications", Experts lectures delivered by Prof. Bani Singh, Former Professor, IIT Roorkee and Former HOD Maths, JIIT, Noida; Dr. Vikas Sharma, Scientist D, DRDO; Dr. S. Pradyumna, Department of Applied Mechanics; Dr. Vivek Kr. Aggarwal, Department of Mathematics, Number of Participants: 19, July 18-23, 2016. 5. "Research, innpovation, and Engineering in Computer Science: Issue and Approach", Experts lectures delivered by Dheeraj Sanghi, IIIT, Delhi; Mr. Arvind Jha, Pariksha Labs; Mr. Subhas Verma, MD and VP (Engg), Agnity India; Mr. Mukul Jain, Founder and CEO, MTree; Dr. Naveen Kumar, Delhi University; Mr. Anoop G. Prabhu, Co-founder, Vehant Technologies; Mr. Devesh Bhatnagar, Entrepreneur, Number of Participants: 30, July 18-23, 2016.

6. "Enhancement of Research Abilities for Capacity Building of New Age Researchers", Experts lectures delivered by Prof. Sanjeev Mittal, Dean and Programme Coordinator of Enterpreneurship Devlopment Center(EDC), University School of Management Studies, Guru Gobind Singh Indraprastha University, Number of Participants: 33, July 16-21, 2016.

7. "Communication Engineering: Recent Trends", Experts lectures delivered by Dr. Prul Garg, Faculty, NSIT; Prof. P. C. Jain, Professor, JNU, Mr. Ishal Kumar, Head Research & Technology, Landisgyr, Number of Participants: 37, July 11-16, 2016.

8. "Intelligent Systems and Automation Technology", Experts lectures delivered by Mr. Mayank Malik, Adobe System, Noida; Prof. K. K. Viswas, IIT, Delhi; Prof. Vijayanta Agarwal, NSIT, Delhi; Mr. Ashish Gupta, KUKA Industrial Robotics Research Center, Ghaziabad, Number of Participants: 45, June 20-25, 2016.



# Faculty Development Programme

9. "Business Research and Analytics", Experts lectures delivered by Mr. A. V. Surya, CEO, South Asia, Kanter Public Affairs; Mr. Sumit Sharma, Big Data Manager WNS Global Services, Number of Participants: 18, June 20-25, 2016.

10. "Analog Signal Processing and VLSI", Expert lectures delivered by Prof. D. R. Bhaskar, Jamia Millia Islamia University, Delhi; Total number of participants: 10, July 13-18, 2015.

11. "Nanomaterials and It's Applications", Expert lectures delivered by Prof. Amulya K. Panda, Immunity and Infection, NII, Delhi; Prof. Vinay Gupta, Delhi University, Delhi; Prof. A. K. Dinda, AIIMS, Delhi; Prof. N. N. Sharma Director, School of Automobile, Manipal University, Jaipur; Prof. B. D. Malhotra, DTU, Delhi; Prof. P. K. Khanna, CEERI, Pilani; Prof. Dheer Singh NDRI, Karnal; Prof. A. K. Ghosh, IIT Delhi; Dr. Asad Niazi Jamia Milia Islamia, Delhi; Dr. Michael Caves, Malvern-Aimil Instruments; Dr. Anand Tadas, Malvern-Aimil Instruments; Mr. Santosh Kulkarni, Metrohm India Ltd; Total number of participants: 32, July 13-18, 2015.

12. "Mobile Technology", Expert lectures delivered by Mr.OoPpSs, I3 India Technologies; Mr. Bijender Singh, Sify Corporation; Ms. Tanu Jain, Entrepreneur; Mr. Vivek Dimri, Sharda University; Total number of participants: 35, July 13-18, 2015.

13. "Curriculum Development and Implementation of Humanities and Social Sciences in Technical Institutions: Opportunities and Challenges", Expert lectures delivered by Prof Minati Panda, JNU, Delhi; Prof Vaishna Narang, JNU, Delhi; Dr Garima Dalal, JNU, Delhi; Ms. Salonee Priya, JNU, Delhi; Total number of partcipants: 20, July 13-18, 2015.

14. "Functional Analysis and It's Application", Expert lectures delivered by Dr. Mani Mehra, Indian Institute of Technology, Delhi; Dr. Amit Priyadarshi, Indian Institute of Technology, Delhi; Total number of participants: 48, July 13-18, 2015.

15. "Light and Light Based Technologies", Expert lectures delivered by Prof. Anurag Sharma, Indian Institute of Technology, Delhi; Dr. Navneet Kumar Sharma, Asia Pacific Institute of Information Technology, Delhi; Dr Biswajit Sen, Vidya Sagar Teacher's Training College, Midnapure, West Bengal; Dr. A. K. Razdan, Laser Science & Technology Centre, Delhi; Total number of participants: 35, July 13-18, 2015.



Light and Light Based Technologies

16. "Emerging Trends in Computing Education", Expert lectures delivered by Prof. Rajneesh Prakash, PEC, Chandigarh; Dr Anubha Gupta, IIIT Delhi; Mr. Vishnu Dusad, Nucleus Software, Noida; Mr. Arvind Jha, Pariksha Labs, Noida; Mr. Vivek Pachauri, VP, Symphony Teleca, Gurgaon; Mr. Ajay Goel AVP, Aricent, Delhi; Mr. Mukul Jain, CEO, MTree, Noida; Mr. Anup Kalbalia, CodeChef, Mumbai; Dr. Kuldeep Yadav, Research Scientist, Xerox Research, Bangalore; Total number of participants: 41, July 6-11, 2015.

17. "VLSI CAD Tool", Expert lectures delivered by Mr. Sujit Kumar & Ms. Navneet Kaur, Application Engineer, Eigen Technologies Pvt. Ltd.; Mr. Ankur Sangal, Application Engineer, CoreEL Technologies (I) Pvt. Ltd.; Total number of participants: 22, June 15-20, 2015.



**Emerging Trends in Computing Education** 

# EXPERT LECTURE

# Industry/Academía Díalogue

Zxpert lectures on contemporary and upcoming topics are held regularly. Following expert talks were recently held.

- "Risks in IT Project", Mr Abhinav Garg, Senior Manager, Ericsson, Noida, May 6, 2016.
- "X-ray photoelectron spectroscopy: "the tool" for electronic structure", Dr. Chayabrita Biswas, Senior Scientist, Indian Association for the Cultivation of Sciences, India, Apr 26, 2016.
- "New perspective on the dominant mechanism associated with the high piezoelectric response in morphotropic phase boundary ferroelectrics", Dr. Rajeev Ranjan, Associate Professor, Department of Materials Engineering, IISc, Bangalore, Apr 11, 2016.
- "Career Options and Employability in Telecom Industry", Ms. Aakriti Bhatia, Ericsson, Noida, Mar 17, 2016.
- Pre-Launch Seminar for StockMind 4", Mr. Govind Kumar, ICICI Securities, Knowledge Management Incharge for North and East regions, Jan 29, 2016.
- "Heisenbergs original derivation of the uncertainty principle and its universally valid reformulations", Prof. M. Ozawa, Nagoya University, Japan, Nov 27 2015.
- "Mathematical Modeling using P-Spice", Mr. Alok Tripathi (Cadence Design Systems), Nov 20, 2015.
- "Marketing", Mr. Umang S. Bhatnagar, Vice President, SRF Limited, Gurugram, India, Nov 17, 2015.
- "Technology challenges in serial link design/ verification", Mr. Taranjit Kukal, an Engineering Architect at Cadence Design Systems, New Delhi, India, Oct 15, 2015.
- Customer relationship management and digital marketing initiatives at HCL Technologies Ltd", Mr. Apurva Chamaria, Head of Global Brand & Digital Marketing for HCL Technologies (HCLT), Noida, India, Oct 9, 2015.
- "Organizational Transformation and Change", Dr. Prachee Mishra, Ex. Faculty, JIM, Vasundhara, Ghaziabad, Oct 2015.
- First hand knowledge of management and business world", Mr. Amit Jain, CEO &Founder, cardekho.com and Mr. Ruchir Arora, CEO & Founder, collegedekho.com, India, Sep 30, 2015.

- "The future is in organizing the unorganised sectors of the economy", Mr. Amit Jain, Reliance Capital, India, Sep 22, 2015.
- "Excursion into the wonderland of Structural Biology", Prof. M.R.N. Murthy, IISc, Bangalore, Aug 28, 2015.
- Investing in India- some tips", Mr. Amit Jain, Business Head International and Domestic Remittance, Distribution Gold, Reliance Money, India, Aug 24, 2015.
- Sowing seeds of success", Ms Parul Bhargava and Ms Krittika Sharda, from Poddar Institute, Jaipur, Aug 20, 2015.
- \* "Experimental laser-based optical approaches of coherent control of molecular dynamics and its applications in quantum computing and biological imaging", Prof. Debrabata Goswami. Professor of Chemistry, IIT Kanpur, India, Aug 13, 2015.
- "Social and professional skills", Prof. Leslie Michael, University of Florida, USA, Jul 27-31, 2015.
- "CFOA (current feedback operational amplifier) and its applications in analog signal processing", Prof. (Dr.) D. R. Bhaskar (Jamia Millia Islamia University), July 16, 2015.
- "Research careers and PhD options", Prof. Pankaj Jalote, Director, IIIT Delhi, India, Mar 31, 2015.
- "Entrepreneurship Master Class", Mr. Kamal Seth, Human Circle, Mar 19, 2015.
- "Privacy and ecurity in Online Social Media", Prof. Ponnurangam Kumaraguru, IIIT Delhi, Mar 16, 2015.
- "Importance of Competitive Programming", Mr. Anup Kalbalia, Technical Lead at Directi, Feb 18, 2015.
- \* "Becoming a successful finance professional in today's global world", Mr. Shashank Gupta, Head Finance of Sterlite Grid Limited, India, Feb 13, 2015.
- "Entrepreneurship organized by E-Cell IIT Bombay & NIESBUD", Prof. H. P. Singh, NIESBUD, Jan 19, 2015.
- "India's competitiveness in International trade", Mr. Ajay Sahai's, DG & CEO of Federation of Indian Exporters Organization, India, Jan 17, 2015.

# Laurels Won

A number of faculty members and research scholars of the Institute have received national and international awards/recognitions/fellowship from reputed professional bodies and agencies in their respective areas of research. We congratulate the faculty members and research scholars who have won these laurels since January 2015.

FLAG BEARERS

Dr. Badri Bajaj: Selected for "The 100 Best Global Coaching Leaders Award", World HRD Congress and CHRO Asia, 2016.

*Mr. Rahul: DST* inspire fellowship, Fabrication of nanotechnology based Point-of-Care device for thyroid disease diagnosis, 2016

Dr. Pratik Varshney Dr. Subhash: National Post-Doctoral fellowship, 2016.

Kritika Singhal Mentor: Dr. Chakresh Kumar Jain : Internship by NNMCB Delhi,2016,

*Ms. Garima Agarwal:* DST inspire fellowship, under Fellowship Programme, 2016.

Dr. Chitra Shukla: Post-Doctoral fellowship of Japan Society for Promotion of Science (JSPS), 2015.

Dr. Prakash Chandra Sati Dr. Vijyeta Pal: DS Kothari fellowship, 2015. *Ms. Dibya Rani: DST* inspire fellowship, Nanoparticle based vaccine against Hepatitis E Virus, 2015.

Dr. Badri Bajaj: Research recognized and used by HayGroup (Global HR Consulting firm, USA) for promoting Emotional Intelligence for Leadership Effectiveness, 2015.

Dr. Sreejith Rajasekharan: DKFZ Post Doctoral Fellowship for German Cancer Research Center (DKFZ), Heidelberg, Germany, 2015.

*Dr. Jyoti Rana:* Arturo Falaschi Post Doctoral Fellowship, International Centre for Genetic Engineering and Biotechnology Campus, Trieste, Italy, 2015.

Dr. Shalini Mani: Endeavour Research fellowship, Australia, 2015.

*Dr. Nidhi Sinha*: First prize for the Paper Award in the 7<sup>th</sup> International Conference at Bharti Vidyapeeth Deemed University, New Delhi, 2015.

Vibha Rani: A. R. RAO Memorial Young Scientist Award, 2016

# JIITíans on Path of Global Glory

Ver the years, a good number of JIITians have gone abroad for higher studies in some renowned universities such as Stanford, Oxford, CMU, Cornell, Georgia Tech, Purdue, Florida, California, NUS Singapore and others. At the national level, students are getting admissions in IITs, IIMs, IISc for post-graduate studies. Besides this, students of JIIT/JBS show their capabilities globally by participating and winning different technical fest, sports and literary events.

Gaurav Shad (4<sup>th</sup> Year IT): Offered Admission in computer Science (MCS) program at Arizona State University, US, 2016.

Shubham Pahwa (3<sup>rd</sup> Year ECE): Secured II position in Annual Tech Fest, Indira Gandhi Delhi Technical University, India, 2016.

Shaurya Sanger: Won Best Speaker Prize at The Debating and Literary Festival of NSIT, India, 2015.

JIIT students won best team award at The annual Inter College Debate Competition, India, 2015 Gaurav Singhal (3<sup>rd</sup> Year CSE): Selected for a one-year fully paid Internship at Cisco, USA.

Chitra Shukla: JSPS Post Doctoral Fellowship, 2015.

JIIT students won Best Delegation Award at Deltech Model United Nations, India, 2015

JIIT students won second prize at IIT Bombay Techfest, India, 2015

# Student Spotlight



Alumni Startup Biotechnology Department



Akash Subramaniam Co-proprietor: Meramaali.com

The alumni of Biotechnology Department have excelled in various fields ranging from academics at one end to first generation entrepreneurs at the other. One such remarkable talent from the Department, Mr. Akash Subramanian, graduated in 2014 with a B.Tech (Biotechnology) nourishing dreams of making it big in the field of Biotechnology. Gaining an experience of almost an year in formulation and eventually manufacturing in the detergent sector (Advance Surfactants India Ltd), he came up with an idea to start his own business. The venture · MeraMaali.com, is run as a proprietorship where he is the coproprietor and the company is a sister concern of Udyam. His venture is towards Urban Gardening and green cover maintenance, providing service at customer's doorstep. Apart from this, he has also stepped into the emerging field of hydroponics, a technique of growing plants organically in flowing liquid solutions. Bringing such innovative ideas of Hydroponics into the lives of common man reduces the hassles of maintaining plants and gives a better yield in a quarter of area consumed.

Some of the services from the company's huge product line are society maintenance, house plants maintenance, shopping cart, one stop shop to all your gardening needs, school initiatives, corporate cover maintenance indoor/outdoor, hydroponic/aeroponic systems may it be commercial or personal setup, landscape and decor solutions, green walls and vertical wall solutions. The start-up is progressively expanding its arena in Delhi NCR with premier government and public clients.



Apoorv Singhal, Sarthak Arora, Sambhav jain Co-proprietor: Inmile.com

### Alumni Startup CSE & IT Department

Entrepreneurship is all about solving problems en mass. When faced with a broken vehicle and no access to a mechanic in the middle of the night, Sambhav Jain, along with two other passionate undergrads, Apoorv Singhal and Sarthak Arora from JIIT, Noida were inspired and encouraged to try and find a solution to odd vehicle related problems. Although the automobile industry in India is one of the largest in the world and has a huge market potential, 70 % of this industry still remains unorganized. At the same time, nothing has been done for the technical betterment of this industry for both the customer as well as the service centres. The aim of Inmile, an entrepreneurial venture initiated by them, was to simplify things at both ends by providing a one stop solution interface to customers with a single touch and empowering the service providers with an effective technology and transparency to create a win win situation. Inmile has launched their services in Indirapuram, Vaishali & Kaushambi region of Ghaziabad & are connected to around 12 service centres, properly verified and functioning according to the criteria set for world class maintenance. These centres include multi branded car workshops, exclusive car wash centres and even a roadside puncture shop for quick assistance.Inmile has numerous paying customers on their platform, who have nothing but positive feedback for them and their efforts at initiating such a personalised venture.

# Student Placement



Dtudents from CSE/IT/ECE who graduated in 2016 achieved 125% offers & students of Biotech received 70% offers, in companies that visited our campus. It was indeed a good year as 24 Companies offered CTC of 6 lac and above a against regular CTC of 3 lac+ to graduate Engineers offered by many IT companies.

The Campus 2017 recruitment drive started with a huge triumph where two students have been selected by Amazon at CTC Rs 27 lac, and 31 students by Deloitte already. Even though media is full of adverse news as regards job opportunities in the coming year 2016-17, the institute assures its students that ample opportunities will be provided to them to prove their mettle. It is a distinct advantage to the students to be in Jaypee where they will get at least 45 companies (notwithstanding the negative news) for B.Tech and 40 companies for MBA students.



### Jaypee Model United Nations

On March 28, 2010, 70 enterprising students representing 35 countries decided to participate in and experience a new concept called the Model United Nations. Model United Nations as the name goes is a simulation of the United Nations and its various committees, involved in peace building along with social and cultural development of the world. One of the main reasons of the incorporation of the event was to help the engineers learn about various concepts of international relations, diplomacy, socio-cultural factors affecting the world and to imbibe in them the essential qualities of leadership, personality development and team building. Since then, as the saying goes, there has been no looking back.

The first two editions were intra editions which helped create a new wave of leaders who were responsible for hosting the first Inter College Jaypee Model United Nations on Feb 19-20, 2011. The event has had 6 editions to date, where more than 2000 delegates belonging to approximately 120 different colleges of India have enthusiastically participated. The Executive Board selected each year to evaluate the various committees showcase their credibility and dedicated commitment towards creating a better nation through deliberations and discussions. The desire to make a difference allow students to deliberate on topics which are highly relevant in today's scenario. Rather than a prepared speech, student representatives verbally react to circumstances as they arise, and make impromptu speeches based on their knowledge and research.



Six years after its initiation JMUN boasts about being one of the best MUNs not only in the NCR Region but even in the country and has produced some exceptional leaders within JIIT, who credit their achievements and success today in life to what they learnt

from the event itself. The well-regarded event lays stress on the fact that the responsibility of formulating meticulous policies rests solely upon the shoulders of responsible, committed and dynamic youth of today. The highlight of the event is the presence of executives of great standing and stature who share their philanthropic views and enlighten students with their experiences. The event has been graced by Mr.Peter Vrooman, Spokesperson, US Embassy, Ms Ambika Shukla, Proprietor of People for Animals foundation; Mr. MaloseMogale, Deputy High Commissioner of South Africa and Hans Foundation executives.











he world of literature is a world where there is no reality except that of the human imagination."

Parola, the official Literary Hub of JIIT speaks of a highly dedicated, committed and conscientious team with a mix of skills that go beyond the scope of any individual and act as a catalyst to encourage fervor for literary genres among the students. It works at giving every student, willing to participate and contribute to literary aspects the opportunity to hone their literary skills and to go beyond the realm of mundane literary activities.

The purpose of the Literary Club is to entertain, inform, challenge, and to get people to think about the worlds we inhabit and mind spaces we occupy. The hub provides a substantial and unrestricted environment for students to explore the world beyond technology. The Hub also aims at triggering thoughts, innovation and creativity among the students besides developing linguistic competence and logical thinking.

### Ríbose hub (Technical Hub, Biotechnology Department)

### **Technical Events**

RIBOSE, the Technical hub of Biotechnology Department at JIIT Noida organized various technical events during the academic year 2015-16. Students of the department, who are also actively working as hub volunteers, also organized event of societal relevance. A day before the Independence Day (Aug 14, 2015), hub organized a Quiz competition 'Pop Quiz'. During IMPRESSIONS 2016, hub organized three fun filled events viz. Scavenger Hunt, Pandora Box and Super Power League. While Scavenger Hunt was a clue based mystery solving event, Pandora Box and Super Power League were fun filled events competed by the participants in highest spirit. These events, that were also supported by external sponsors witnessed the participation of more than 100 participants each.

The hub also organized three events during CYBER SHRISTI 2016. A well appreciated event 'Hydrophilic' was based on the theme of designing a small scale water purification unit based on raw material provided. A variety of filtration units of competitive qualities were designed by the participants. Another event of the hub 'Code Breaker', organized during CYBER SHRISTI 2016 was forensic science based mystery solving event in which students used the knowledge of JAVA, C, C++, PYTHON programming languages to solve it. The event witnessed participations from students of different departments of the institute and was well appreciated.







### Societal Awareness Events

Apart from the technical events, students of the department, who are also volunteers of the RIBOSE hub, organized societal awareness events. On Aug 13, 2015 the students and teachers of the institute paid tribute to Hon'ble Former President of India, Late Dr. APJ Abdul Kalam by putting up sticky notes on a board outside Annapurna.

On the same day, an awareness drive to append students of the institute about the importance of organ donation was organized by the volunteers. As a part of outreach activity for societal benefit, a team of student volunteers of the hub visited a slum area near JIIT NOIDA (Sector-62) to educate the children of the slum area about the hygiene and accessible hygienic materials.



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### CICE Electronic Hub

CICE is a technical hub of JIIT that aims to teach and help students in understanding the seemingly incomprehensible concepts in electronic. also assists students It in understanding the existing gadgets and developing their own devices. The following are organised conducted the events and by CICE hub:

•PCB Fabrication Workshop for second year students, Oct 20-27, 2015.

•MATLAB Workshop for second and third year students, Jan 25-31, 2016.

•Image Processing Workshop for third year students, Feb 2-7, 2016.

### Knuth Programmimg Hub

KNUTH is a technical programming Hub of Department of CSE/IT and was initiated in year 2011 with a vision to community of coders/ develop a programmers at JIIT Noida. It regularly organizes a series of workshops and programming competitions titled, "Execute". During University's annual fest, "Impressions", the hub conducts annual programming competition, "The KNUTH Cup", and many other events based on debugging, design, testing. technical papers, project exhibition, etc. These workshops and competitions are organized with zeal and enthusiasm to share with the participants, the passion of coding and provide them a competitive environment to polish their skills and enhance their solving abilities. also problem It encourages and facilitates student participation various in national, international, and online programming competitions, namely, ACM ICPC, Codechef, TopCoder, etc.


## HUB EVENTS

#### Radiance hub

#### Vanity (Theme Walk)

This year Radiance hub put up two enthralling performances- "Bharat" which depicted the evolution and advancement of India after independence and how it has been breaking all clutches and moving forward ever since. The second was "Nirbhaya" which was a depiction of the strong fighter Nibhaya's story after her gang rape in Delhi. We were able to reach out to people's hearts and touch all their chords which was very overwhelming.

Mr. & Ms. Impressions is a platform where individuals get an opportunity to showcase their talents and become famous which takes place at the annual college fest.

#### Mr. & Ms. Ebullience 2016

Mr. and Ms. Ebullience serves as an excellent platform for the enthusiastic freshers to broadcast what they've got and rise and shine above the rest.

#### **IIIT** Mini Stars

Nothing can be more adorable than young stars dressed up as their favorite superheroes and princesses walking the stage with pride and confidence. An annual event held at the college fest where the faculty kids are trained and dressed up to own the stage and catch everyone's eyes. As entertaining it is for the audience to see these mini stars, it is equally entertaining for the kids and the hub. The mini stars at Impressions 2016 had over 20 kids participating and their blooming confidence and charm left everyone

in awe.



#### EcoQuence hub



 ${f E}_{
m coQuence}$  aims to help the students to generate a more active interest in the environment by using both technical and creative ways. The hub communicates regularly with students in the Institute about the "whys and hows" of sustainable living, on campus and beyond. This is done through activities, events, guest lectures, competitions and other methods.

#### Thespian hub

"The Thespian Circle Theatre Club of JIIT" through "We their credo, leave impressions through our expressions", encourages the active participation of students in showcasing their acting prowess and organises street plays, stage plays and many other forms of drama, annually. The hub also Social performs Outreach Programs with the aim of spreading awareness about contemporary social issues in backward societies. With the chant of "Jai Mata Di" at the end of every session, this hub functions with great zest and zeal!



## Vamuníque

VamUnique, The Western Dance Society of JIIT 128, actively takes an initiative in participating in events within and outside the college. Additionally, the crew has also choreographed & participated in the INTRA COLLEGE EVENTS. We believe that the starting point of achievement is desire and perseverance. It does not matter how slowly you go as long as you do not stop or give up.











In the generation of Western Music, Bhangde De Sartaaj-Indian Dance society of JIIT 128, is trying to reconstruct the belief in the Indian dance form. Bhangde De Sartaaj is trying to spread the essence and love of punjabi's among everyone with their dance. Energetic members of the society always transform their energy to the audience with their enthusiastic dance. This society is trying best to bring back the taste of indian tradition.

Bhangde de Sartaaj

### Fortíssímo

Fortissimo, the music society of jiit-128 is at the apex in its class. Fortissimo provides an environment full of melodious tunes and positive vibes where both learners and professionals touch cloud 9 with their music. Being one of the most active society of the college, music by Fortissimo is omnipotent.









#### JHANKAAR

'JHANKAAR', the Dance Hub of JIIT organizes all the intra-institute and interinstitute dance activities. It has conducted an event: 'Dandiya Night' on Oct 13<sup>th</sup>, 2015. During Impressions 2016, Jhankaar has organized a Group Dance Competition named 'STEPUP', a Solo Dance Competition named FIRE GROOVE and another On-thespot dancing event named JHOOM LE ZARA.



# HUB EVENTS

#### Jaypee Economics and Business Hub

Jaypee Economics and Business Hub is a group of students enthusiastic and passionate about the world of numbers, markets, profits and losses. The hub debuted with a quiz · EcoWhiz last year which depicted the massive interest students have, in the workings of the business world. The hub has an array of interesting events up their sleeve for the coming year including: Bizstreet · Mock Stocks, Startup Summit, Case Study Analysis and GD's to name a few, keeping with the hub's vision to promote a greater and deeper level of dialogue in the world of business and maintaining a boisterous approach to economics and finance.

#### PAGE TURNER SOCIETY

PAGE TURNER SOCIETY is the Book Hub of JIIT, NOIDA. With no restriction to the subject, book reviews, critical analysis of interesting ideas, share and exchange of books are some of the activities carried out here. The hub has two events namely 'Wordsmith' and 'In Lieu of Clue' (6th-7th conducted 2016, February) during Impressions where large number of students participated with complete enthusiasm. On March 14th, 2016 a book exchange event was organized where many books were exchanged between students which included motivational and inspirational novels.





## Panache

PANAHCE: The Fashion Society of JIIT-128, is the most vibrant, stylish and dyanamic platforms provided to students. We believe that "Style is a way to say who you are without having to speak and Panache-The Fashion Society is just another accessory for someone with great style".



## Programming hub

IIT Programming Hub is the most active and popular hubs of J128. Not only does it strive to constantly push the students to improve their programming skills, It also helps them by oraganizing regular workshops and classes. Frequent ACM ICPC styple competitions like Algofuzz are oraganized that helps the students to learn and develop their skills in competitive programming. The Technical events organized by J128 Programming hub in converge are the events with the most participation.



## Abhívyaktí

L he Dramatics Society of JIIT- 128 : ABHIVYAKTI shows the combination of passion and creativity. It is all about bringing a change, and the change has begun. We do not act to win, we act to depict a message and change people's thinking.



## सप्त-TARANG



"Ideas are like legs, what good are they if you can't run with them......"

We, at JIIT, provide various platforms to students to transform their ideas into reality. On Nov 2, 2015, a similar stage was provided, to skilled student enthusiastes through a hugely successful event called, 'Saptrang', which showcased the boundless talent of the budding engineers in varying fields. The painting hub, "Expressions", has made a theme exhibition titled "Right to Education", stressing upon the importance of providing education to all individuals in the society, irrespective of class, creed, sex and age. The esteemed NAAC committee thoroughly enjoyed the entire event as the students unveiled their skills through every means of expression: Poetry, Music, Art and Dance.





#### "Crescendo" The Music Hub

"Music is a string that vivifies your soul and fills its emptiness."

"Crescendo", the Music Hub of JIIT believes in the potent power of music in changing the way we perceive life. With such an outlook, Crescendo, organizes events that hugely captivate the psyche of musically oriented audience. The hub showcased its talent during the event "Fusion Night" organised on Nov 23, 2015. This event witnessed a grand audience because of its amazing concept of mixing different genres of music like Sufi, Bollywood, Classical. During impression 2016, the hub organized a variety of events namely:'Fresh Cover Artist' - a solo singing competition sponsered by Nescafe labs; "Antakshri" - a hugely popluar event registering participation of 300-400 students every year and "Atonol" - a team event where students in team of four to five members, comprising singers and instrumentalists participate in a musical battle.

"Expressions"-The Painting Hub gives the JIITians, an opportunity to express their creative talent, colour their fantasies and display them through paintings, sketches and posters. 'Kalakriti", is one such theme based exhibtion on the Indian dance forms. The creative talent "Kala" of the participants had been appreciated well. "Art speaks what words are unable to explain" rightly applying this quote, *Expressions* The painting Hub of JIIT organised an art gallery on yet another theme " Fantasia", in Impressions 2016 where participants had to bring to life their concepts of fantasy using a variety of colours.

WEL

Sports-Meet

"Fun Sports Meet - 2015" was organized from Oct 10 -16, 2015 in 10 sports disciplines including popular events such as: cricket, football, volleyball and table tennis. A total of 2401 students participated in the meet, which was more than 2.5 times as compared to the last similar meet. A total of 957 individual matches and 210 team matches were played. Winners bagged 76 gold medals while the runners up were given silver medals at a fun filled glittering prize distribution ceremony held on March 2, 2016. Sportsmen spirit of a very tall order was evident once again throughout the keenly contested sports meet and that needs a special mention.





#### Conserve Today to Survive Tommorow

A poster competition to generate awarness on conserving the environment

May 20, 2016 is celebrated world over as "The 11<sup>th</sup> Annual International Endangered Species Day". Commemorating the day and to generate awareness on conserving environment, a poster competition titled "Conserve today to Survive Tomorrow" took place that registered huge participation from 130 students across all branches of engineering. Piyush Tyagi (B. Tech 2<sup>nd</sup> year, CSE) won the first prize. The second prize was bagged by Vaibhav Bansal (B.Tech 3<sup>rd</sup> year, CSE). The third prize was conferred to Ms. Sneha (M.Tech 1<sup>st</sup> year, Biotech).



YogaWorkshop Conducted on International Yoga Day, June 21, 2016



The workshop was conducted by a team of Yoga Gurus: Smt. Bhupindra Kaur, Smt. Swadesh Kumari and Shri. Ashok Goyal, BHARTIYA YOG SANSTHAN,INDIA. The day's Program included a Physical Yoga session (Simple and Important Yoga postures useful in everyday life), Practical guidance and supervision by Yoga experts, Live Demonstration/ suggestions during the Yoga session about the benefits and related issues of Yoga.









EVENTS

#### Festival of Data Science in India

Dr. Chetna Dabas, Assistant Professor Computer Science and Engineering Department

Data Science is a hot vaporizing buzzword in the field of interdisciplinary research. Data science may be termed as magical wand of extracting deep insights, semantics and knowledge from structured, semi-structured or unstructured data across a wide spectrum of domains [1]. When it comes to India regarding interests in Data Science, it is topping the charts as revealed by Google Trends as depicted in fig1[2].



Fig 1: India on Globe: Data Science Interests Captured [Courtesy: Google Trends (9/9/11-9/9/16)]

In the highest point on the chart, corresponding to a specified time range and specified region signifies the search interest over time. India celebrates the top position across the globe in a past five year data science interests followed by Nigeria, Singapore and United States as captured in a snapshot in fig2. The Y axis in fig2 represents the popularity of data science and X axis represents various countries across the globe. The value 100 in fig 2, corresponding to India depicts the peak popularity for Data Science for the country.



#### Fig 2: Country-wise Interests in Data Science across the globe (Countrywise) while India topping the chart [9/9/11-9/916] [Courtesy: Google Trends]

In fig4, the Y axis represents the popularity of data science and X axis represents region-wise interests





across the years. Fig4 is a comparison snapshot of the data science with allied fields like big data and data analytics, where big data (red colour) seems to be favourite interest flavour during the past five years worldwide. Blue colour in fig 4 represents data science (worldwide) and green colour depicts data analytics (worldwide).



Fig 4: Region-wise Interests in Data Science [9/9/11-9/916] [Courtesy: Google Trends]

The above is an interpretation of what was observed, while looking at data science from interest dimensions across the globe; a little light was as well thrown on how India celebrates the festival of data science across the regions and streams. Meanwhile stay connected with data science in the research arena to keep the ball rolling for India.

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2) https://www.google.co.in/trends/

#### *Free Space Optics Wireless Communication at the Speed of Light*

Dr. Parul Puri, Assistant Professor Department of Electronics & Communication Engineering

ree space optical (FSO) communication is a line-of-sight (LOS) technology that establishes point-to-point laser links between two nodes that may be located on land, at the surface of the sea, in air, or in space. The FSO systems operate at the license-free band of the frequency spectrum and offer high bandwidth connections, making them suitable for broadband wireless application. Terrestrial FSO systems, as depicted in Figure 1, employ the atmosphere as the medium of communication and have the potential to provide reliable broadband capacity connections for various purposes. Some of the applications of terrestrial FSO systems include last mile access, enterprise connectivity, network backhaul, or to extend the existing telecom networks.

Like any other communication technology, the FSO technology faces certain challenges. Foremost, the requirement of a LOS path limits the range of a FSO link. Secondly, the optical path should be free of any obstructions. Even the temporary obstructions, such as flying birds and construction cranes, can cause interruptions. Furthermore, the atmospheric channel induces various impairments in the propagating optical signal. Another challenge is to maintain a perfect alignment between the transmitter and receiver telescopes. Lastly, the laser eye safety standards must be met, especially when FSO systems are installed in densely populated regions.

Over the last couple of years, tremendous amount of research has been carried out in order to overcome the adverse effects of fading caused by the atmospheric channel. Some of the methods proposed are the error-correcting codes, maximum likelihood sequence estimation, and diversity schemes. Among these, the diversity schemes have attracted considerable research interest due to their ease of implementation and good performance. In diversity based techniques, multiple copies of the same signal are transmitted, which are combined or selected from at the receiver. The motive is to add redundancy, such that even if one copy of the signal is of poor quality, the message can still be recovered from the remaining copies of the signal. Space diversity is one of the popular techniques used in FSO systems.



Figure 1: Basic Terrestrial FSO Model Consisting of the Transmitter, Free Space Atmospheric Channel, and Receiver

Spatial diversity in FSO systems can be achieved by transmitting multiple beams and/or by using multiple receiving apertures. An alternative strategy to achieve the advantages of spatial diversity is by employing relay-assisted FSO communication [2]. Relay-assisted FSO communication was introduced in context of the RF cooperative communication. In the absence of a direct path between distant nodes, intermediate relay(s) can be placed to establish a communication link between the two nodes. Such systems help to increase the coverage area of FSO transmission and also mitigate the distance-dependent fading effects by creating shorter hops [3].

Manufacturers such as LightPointe, Mostcom, Raytheon, etc. produce commercial FSO equipment. In 2013, the Mostcom Company produced a new wireless communication system that had a data rate of 10 Gbps with link range of up to 2.5 km.

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#### Vers Libre

#### All these knuckles and bruises: Hiding .....



ITERARY

You clench your fingers as you get up from the bed Every morning, preparing yourself for another fight, You stretch your legs and arms to the back of your spine Getting yourself ready for what's ahead of you, At the stroke of 6, the floor is cold, and you resist To land your toes onto it, but after a while. You get used to the feeling. You get up and look yourself in the mirror, Find out new maps designed for you in your skin, You look at all the brand new freckles from the last night And the bruises from the last fight, So you're here, bandaging them all, You're getting yourself into another fight, you can't lose, Then you open your wardrobe, with clothes you can kill And covering yourself in layers Hiding yourself beneath your own entity You're not toughened up or your chin isn't stiffening, But you're trying for another day, trying to make it work. You set yourself in shower of 2 minutes to 1 hour Contemplating thoughts of yesterday to be your action of today, But not all, You let the water clean all your soared knuckles, All your scars from sticks and stones thrown at you, You let the water re build you, once again. Amidst all the preparation, you pretending to be fearless. Turning your guard on, your heart locked in the cages of your ribs, Is still pumping, beating, letting you live, Your heart, that you hide in all those layers of your armour suit, Is the only raw and honest piece left of you, That you've to keep it safe, from someone else's hands To get onto to it, and it take it away from you too Because they're hunting and you've always been a survivor, And you're escaping every glance, every minute conversation, Every exchange of breath, so you know you can take this And as you comb your untameable hair You feel the roots of your hair aren't very strong, You, yourself aren't strong, nor is your built strong enough, But you held on, and you won, so maybe Your heart is stronger than your mind, Because your heart doesn't speak true lies, It doesn't give you shallow hopes, It stays, despite it all. And as someone you want to be, you'd want to stay Without seconding, or holding apprehensions, You'd prepare to fight As you're preparing now, with all or none, You're standing against the storm, With your palm on your chest feeling your heartbeat Reminding yourself, that every war you fight Is not bigger than the one you fight with yourself.



By: Neka Goyal 15101041 B.Teck, Bioteck

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#### New Entrants to JIIT Family

#### Professor, CSE & IT

 Prof. Padam Kumar, Ph.D Dean, Research

#### Associate Professor, CSE & IT

Dr. Nitin, Ph.D

#### Assistant Professors, CSE & IT

- Mr. Ashish Kumar Tripathi, M.Tech
- Mr. Keshav Ajmera, M.Tech
- Mr. Pranik Biswas, M.Tech
- Mr. Shariq Murtuza, M.Tech
- Mr. Taj Alam, M.Tech
- Ms. Himani Bansal, M.Tech
- Ms. Kirti Aggarwal, M.Tech
- Ms. Varsha Garg, M.Tech

#### Assistant Professors, ECE

- Dr. Abhinav Gupta, Ph.D
- Dr. Baljit Kaur, Ph.D
- Dr. Garima Kapoor, Ph.D
- Dr. Parul Puri, Ph.D
- Mr. Abhay Kumar, M.Tech
- Mr. Mandeep Singh Narula, M.Tech
- Mr. Rajesh Singh Parmar, M.Tech
- Mr. Varun Goyal, M.Tech
- Ms. Jyoti Vyas, M.Tech

#### Assistant Professors, MATHS

- Dr. Lakveer Kaur, Ph.D
- Dr.Suresh Kumar Shukla, PhD

#### Assistant Professors, HSS

Dr. Ekta Srivastava, Ph.D

#### Registrar

Mr. Raju Sangal, PGDBM

## Mark Your Calendar

FORTHCOMING EVENTS

08<sup>th</sup> December, 2016 to 10<sup>th</sup> December, 2016 International Conference on Recent Advances in Mathematical Sciences and it's Applications

#### ICRMASA 2016

 $26^{\rm th}$  December, 2016 to  $28^{\rm th}$  December, 2016 International Conference on Signal Processing & Communication

#### ICSPC 2016

02<sup>nd</sup> February, 2017 to 04<sup>th</sup> February, 2017 International Conference on Advances in Plant & Microbial Biotechnology

#### ICAPMB 2017

27<sup>th</sup> March, 2017 to 29<sup>th</sup> March, 2017 International Conference on Peaceful and Prosperous South Asia-Opportunities and Challenges

#### ICSA 2017



## Obítuary

## Many we love have passed away too soon...without reason...



The University lost an esteemed and beloved faculty, Dr. Ravindra Kumar, serving as Assistant Professor in the Department of Physics and Materials Science & Engineering to the Uttarakhand landslides on July 1<sup>st</sup> this year. In his efforts to rescue the unfortunate, trapped by the wrath of nature, he met his untimely demise. The institute deeply grieves the loss of the acclaimed young member with over ten years of rich experience. He had published a number of papers in international journals and as recognition of his dedicated and committed efforts was awarded the Young Scientist award from Uttarakhand Council of Science and Technology, Government of Uttarakhand. The department will never be able to fill the void left by his early demise.

The Institute also lost a young and promising first year student, Chandan Gupta of CSE Branch, Sector 128 campus on March 29, 2016 to cardiac arrest in the prime of his life. A child's death always changes a family and their grief is a lifelong trauma with a yearning that continues unabated. Our hearts go out to the bereaved family and pray to God to give them the strength to bear their irreparable loss.





Another valuable member of the JIIT family, Subedar Acchar Singh of Dogra Regiment and his wife lost their lives in a road accident on December 7, 2015. Subedar Acchar Singh after serving for two decades in the armed forces was working as caretaker of two floors of the Boys Hostel in the campus. He was well-regarded by the students and approached from time to time for advice and counsel. His lack of presence will be deeply felt by all those he was associated with. A mighty flame follo

sunburn

Sunburn.

Dante Alighieri

Noida prese

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Declared

Bin

IMPRESSION

in association with accenture



Photography

"Education is an instrument of empowerment to equip ou people to help them become economically independent and self sustaining"

- Jaiprakash Gaur









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