

Dear all.



Director's Message

he second edition of the newsletter is an active chronicler of the

growth and progress that IIT Jammu has witnessed during the

last quarter. IIT Jammu welcomes twenty new faculty members.

It is great to have a dedicated and accomplished group of scholars and

enthusiastic teachers who will guide and inspire our students.

IIT Jammu has reached a crucial stage in its development. Even as we express our deepest gratitude to our mentor institute, IIT Delhi, we must also work tirelessly towards creating our own independent identity. It is while working towards this goal that IIT Jammu organised workshops to ascertain our own Vision and Mission. Moreover, we also had rigorous discussions pertaining to the formulation of the curriculum of IIT Jammu. Our aim has been, and will be, to stay far-sighted in our plans, while ensuring absolute dedication in

our execution. Speaking of execution, I also congratulate the students for their active

participation in various events be it in the field of sports or social welfare. I am confident that

together we will keep working towards setting new standards not just for our peers, but for

## **JAGTI** QUARTERLY NEWSLETT

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### WHY "JAGTI"?

Jammu organised a Curriculum of IIT Jammu's independent curriculum. Guests from institutions like IIT Delhi, SMVDU, Jammu University, participated in the discussions where questions regarding the foundational thought and structural framework



The workshop was followed by a



north of Jammu city. A quiet and scenic hamlet with rich biodiversity, Jagti also has a significant presence in the history of J&K. Jagti was home to Mian Dido, a famed hero in Jammu's history, known for his fight for social justice. In Hindi, "jagti" refers to the "world and the people", in Urdu it means "to be awake". Naming the newsletter after Jagti, is a way of acknowledging the past as well as the present world of which IIT Jammu is a part.

### **CURRICULUM WORKSHOP**

addressed



dinner gathering at the KCS campus, organised by IIT Jammu for the students participating in the Inter-IIT sports meet.

## IIT Jammu is in Jagti - a village located

On 9th December 2017, IIT Workshop at the Jagti Campus in order to kickstart the formulation of IIT Jammu's curriculum were



## Thank you Prof. Manoj Singh Gaur

our own selves.

VISION AND MISSION WORKSHOP

On 2<sup>nd</sup> and 3<sup>rd</sup> December, IIT Jammu organised a workshop at the Jagti Campus to discuss the conception of the Institute's Vision and Mission. The workshop was attended by the following esteemed dignitaries:

Prof. S.K. Koul (Deputy Director IIT Jammu), Air Cmdr. Kamal Singh (NIIT University), Prof. Dheeraj Sanghi (IIT Kanpur), Prof. Ashok K. Ganguly (Director INST, Chandigarh), Prof. Cedric Serpes (GIM), Vice Admiral H.S. Malhi, Dr. Gayatri Menon (NID, Ahmedabad), Mr. Rajeev Dubey (President HR, Mahindra Group), Prof. Neelu Rohmetra (Director, IIM Sirmor), Ms. Sarita Chauhan (IAS & Former Commissioner Education)

After two days of extensive brainstorming and stimulating discussion the initial Vision Document was drafted. The Institute's primary Vision was identified as follows:

"To create tomorrow's world through technological interventions which are humanistic, creative and futuristic."









\*IIT Jammu's newsletter has been renamed, since a publication by IIT Delhi is also known as "Muse". We regret our previous lack of information and seek to redress the same.

# Student Activities

## INTER-IIT SPORTS MEET //

The 52<sup>nd</sup> Inter-IIT Sports Meet was held at IIT Madras from 15<sup>th</sup> to 23<sup>rd</sup> December 2015. The sports meet is an annual tournament where all the existing IIT's throughout the country participate. The students of IIT Jammu represented the Institute in athletics, chess, basketball, badminton, table tennis and volleyball. The primary aim of this event, according to the Inter-IIT Rule Book is "...to organise sports competitions in some selected Olympicsrecognised events to encourage sportsmanship, to promote and create a better harmony, understanding and friendly interaction among the students of the IIT's as well as to foster a close association among them".









NATURE WALK

A Nature Walk near Jagti village was To celebrate Sardar Patel Jayanti, IIT Jammu The students of B.Tech Mechanical organised on 21st September, 2017. members of the faculty and staff, began the walk early morning at 6 AM and walked for about 6 km. After an provided with refreshments.

organised a Historical Essay Writing Competition on The students, along with the various 31st Oct 2017. Students wrote essays on "The Character and Contribution of Sardar Patel" in either Hindi or English. **Kshitii Singh** bagged the first place. The students, staff and faculty also took a pledge for uphill hike, the participants were corruption-free India, as way of acknowledging the Vigilance Awareness Week.

Engineering, spent a winter semester (2017) at IIT Delhi. On 30th November, the students got an opportunity visit the National Thermal Power Corporation's centre at Faridabad to learn about its operations.



Jijnasa Meeting by **Iskon Temple** 



In-house rain football match



First Diwali at the **Jagti Campus** 



T-shirt designing competition



Trip to Mansar

## FRESHERS' PARTY











On 20th September the Batch of 2016, IIT Jammu organised a gala event to welcome the freshers' batch. The event, which was based on the theme of Television series, took place at the KCS campus. The function began with a ramp walk by the freshers, followed by an impressive line-up of performances by the studenrs of both the batches. It was also the occasion for launching the first issue of the quarterly newsletter of IIT Jammu.

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The students of IIT Jammu have formed a Social Welfare Society wherein various events directed towards social goodwill and betterment are organised. On 18th November 2017, the Social Welfare Society organised a Blood Donation Camp in collaboration with the Government Medical College, Jammu. A team of medical experts arrived at the Jagti campus along with a fully equipped bus where the donors went to donate blood after going through a health check-up. The donors were presented with refreshments and tokens of appreciation for their valuable contribution. The Director Prof. Manoj Singh Gaur commenced the donations, followed by numerous students, and members of the staff and faculty of IIT Jammu.



### SARVA SHIKSHA ABHIYAN //

Two faculty members of IIT Jammu, namely B. N. Subudhi and Karan Nathwani contributed to the Computer Aided Learning segment of the Sarva Shiksha Abhiyan by acting as the technical experts and working with the Sarva Shiksha Abhiyan Purchase Committee for the establishment of Computer Aided Learning/Smart Classrooms.

# IIT Jammu conducted a workshop for the students of Army

WORKSHOP ON SOCIAL NETWORK SECURITY //

Public School Nagrota in November 2017. The workshop, led by Mr. Pranjal Ranjan, addressed the issue of the vulnerabilities of social network accounts. Students were guided as to how they could configure their accounts to safeguard personal information and prevent data leakage.

A Social Network Security and Desktop Security workshop was also conducted in co-ordination with C-DAC Mohali, C-DAC Hyderabad, and NMCIET Jammu. The workshop, by Pranjal Ranjan, was for the school teachers of Kendriya Vidyalaya – Jammu Region. This was done as part of Project ISEA-II.

## Karan Nathwani **WORKSHOPS**



- ▶ Talk on critical Problem Solving by Prof. Suraj Kothari from Iowa State University 6<sup>th</sup> October, 2017
- ▶ Workshop on Web Development by Abhishek Rathore from YouStart Labs 24<sup>th</sup>, 25<sup>th</sup>, 26<sup>th</sup> October, 2017
- ▶ "Introduction to Cryptology" By Bimal Roy from ISI Kolkata 30<sup>th</sup> October, 2017
- ▶ Talk on Statististical and Computational Problem-Solving Skill by Prof. Bismal Roy from ISI Kolkata -31st October, 2017
- ▶ Interactive Workshop on Embedded Systems by Mr. Dhananjay Gadre from NSIT 14<sup>th</sup> November, 2017
- ▶ Workshop for Career Guidance by Prof. O.P. Sharma from IIT Delhi 6<sup>th</sup> November, 2017
- ► MATLAB Workshop by Dr. Vipparthi 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup> November, 2017

### **GUEST INTERACTION**



- ▶ Prof. Timothy A. Gonsalves, Director IIT Mandi
- ▶ Akash Keshav (IIT Gandhi Nagar Alumnus) from Mojo Networks
- ▶Mr. Sahil Gupta Sr. Managar at Qualcomm.
- ▶Dr. Soumitra K. Sanadhya IIT Ropar



**By Abhishek Rathore** 



Workshop on Embedded Systems By Mr. Gadre

## RECENT PUBLICATIONS BY OUR FACULTY $\llbracket / rbracket$

- ▶ Dr. Karan Nathwani "DNN Uncertainty Propagation using GMM-Derived Uncertainty Features for Noise Robust ASR" in IEEE Journal on Signal Processing Letters, 2017.
- D. K. Rout, B. N. Subudhi, T. Veerakumar, and S. Chaudhury, "Spatio-Contextual Gaussian Mixture Model for Local Change Detection in Underwater Video," Expert Systems with Applications (Elsevier), 2017. (Accepted) (IF: 3.928)
- D. K. Rout, P. Bhatt, B. N. Subudhi, T. Veerakumar, S. Chaudhury"A Novel Five-frame Difference Scheme for Local Change Detection in Under Water Video", in Proceedings of 4th International Conference on Image Information Processing (Published by IEEE), Shimla, India, 2017.
- P. Bhatt, D. K. Rout, B. N. Subudhi, T. Veerakumar, "Vision Sensory Substitution Aids the Blind in Reading and Object Recognition", in Proceedings of 4th International Conference on Image Information Processing (Published by IEEE), Shimla, India, 2017.
- ▶ Ehsan Jafari, Pankaj Chauhan, Mukesh Kumar, Xiang-Yu Chen, Sun Li, Carolina von Essen, Kari Rissanen, and Dieter Enders, "Organocatalytic Asymmetric Synthesis of Trifluoromethylated Tetrahydrocarbazoles via a Vinylogous Michael/Aldol Formal [4+2] Annulation", European Journal of Organic Chemistry, 2018,
- Mukesh Kumar, Pankaj Chauhan, Stephen, Bailey, Ehsan Jafari, Carolina von Essen Kari Rissanen, Dieter Enders, "Organocatalytic Oxa-Michael/Michael/Michael/Aldol Condensation Quadruple Domino Sequence: Asymmetric Synthesis of Tricyclic Chromanes", Organic Letters 2018. Accepted
- ▶ Swetha Chowdary V, Ravikumar Dumpala, Anand Kumar S, Kondaiah VV, Ratna Sunil B, "Influence of Heat Treatment on the Machinability and corrosion behavior of AZ91 Mg Alloy", Journal of Magnesium and Alloys, 2018.
- SK Tiwari, SD Baalrud, "Reduction of Electron Heating by Magnetizing Ultracold Neutral Plasma", Physics of Plasmas 25 (1), 013511
- S Maity, A Das, S Kumar, SK Tiwari, "Interplay of Single Particle And Collective Response in Molecular Dynamics Simulation of Dusty Plasma System", arXiv preprint, arXiv:1712.02137

# **MEET OUR FACULTY**



"I believe that actions speak louder than words. Your words will hold significance as long as they are backed by performance and effort."

**Dr. Pankaj Chauhan** is an Organic Chemist who joined IIT Jammu as Assistant Professor in October 2017. He did his Ph.D. from Guru Nanak Dev University and did his post-doctoral research at RWTH Aachen University, Germany. Till now he has published over 50 papers in the Journals of International repute. For his research work Dr. Chauhan has received recognitions such as Thieme Journal Award Germany and DST INSPIRE Faculty Award India. His research interests include asymmetric synthesis, organocatalysis, photoredox catalysis, domino reactions and total synthesis.

## "Honesty, respect and hard work are the keys to happiness and success."

**Dr. Ashok Bera** joined IIT Jammu in October 2017 as Assistant Professor in the Department of Physics. He did his Ph.D. from IACS (Jadavpur University) Kolkata. He was a post-doctoral fellow at Nanyang Technological University, and later at the Solar and Photovoltaic Research Center, King Abdullah University of Science and Technology. His research focused on designing solution processed high efficient solar. He received the Newton International Post-Doctoral Fellowship, DST INSPIRE Faculty Award and Carl Tryggers Foundation Post-Doctoral Fellowship.





"Knowledge is power if applied."

**Dr. Anup Shukla** did his Ph.D. from IIT Kanpur. He received POSOCO Power System Award (PPSA) 2017 in Top 10 Doctoral Thesis category, New Delhi and Dr. P. S. Nigam Power Sector Award in 93th Annual General Meeting at Institution of Engineers, Lucknow. He joined IIT Jammu in Oct 2017 as Assistant Professor in the Department of Electrical Engineering. His research interests include Power System Optimization & Control, Distributed Generations and Smart Grid.

# "Education and knowledge do not guarantee success without goal-commitment, tenacity and hard work."

**Dr. Rahul R. Salunkhe** joined the Department of Physics at IIT Jammu as Assistant Professor in October 2017. He did his Ph.D. from Shivaji University Kolhapur. He did his post-doctoral research at reputed institutes like Hanyang University, Korea, National Tsing Hua University, Taiwan and National Institute for Materials Science, Japan. His main research focus was thedevelopment of next-generation energy storage materials for rapid charge storage applications (such as supercapacitor). Hereceived the INSPIRE Faculty Award andthe Ramanujan Fellowship by Science and Engineering Research Board (SERB), Government of India. His current research interests include the development of novel materials for sensors, supercapacitors, Li-ion capacitor, Li-ion battery etc.





"Be a creative imaginator to find innovative approach towards solving problems."

**Dr. Kushmanda Saurav** is an Electronics Engineer who joined IIT Jammu as an Assistant Professor in October 2017. He did his Ph.D. from IIT Kanpur and then worked as a post-doctoral fellow at the Royal Military College, Canada. Dr. Saurav has received the Best Ph.D. Thesis award in the Electronics track of the Ph.D. Symposium organized by IEEE UPCON 2017 held at GLA University, Mathura. His research interests include Microwave Antennas, Multiple Input Multiple Output (MIMO) Antenna Systems, Characteristic Mode Theory, Metamaterials, and Frequency Selective Surface.

# "At IIT Jammu, my primary aim is to work towards high quality of academia and research which, in turn, would contribute to the growth of the Institute."

**Dr. Subhas Samanta** joined the Department of Chemistry, IIT Jammu as an Assistant Professor in October, 2017. He received his Ph.D. from the Department of Inorganic Chemistry, IACS Kolkata (Jadavpur University). Supported by an Alexander-von Humboldt Fellowship he moved to the Georg-August-Universität Göttingen, Germany where he developed a new kind of pincer type pyrazolate bridged dinucleating scaffold for cooperative reactivity. He also received the DST-INSPIRE Faculty Fellowship. His research interests lie in the area of homogeneous cooperative and non-innocent transition metal catalysis that are relevant to bio-catalytic and sustainable chemical transformations.

