JAGTI Spring Issue 2018

## JAGTI JAGTI

QUARTERLY NEWSLETTER IIT JAMMU

## Our Logo: The Concept









SUN ASHOK CHAKRA

MAP OF J&K

The Logo of IIT Jammu is a unique amalgamation of the Sun's rays of enlightenment, the 24 spokes of the Ashok Chakra and the map of Jammu and Kashmir. IIT Jammu's logo communicates the Institute's pride in its roots and its optimistic vision of spreading the light of knowledge, far and wide.

#### **MOU'S AND COLLABORATIONS**

IIT Jammu signed important Memoranda of Understanding (MoU's) for academic cooperation and understanding in various disciplines of Engineering, for education and research.

An MoU has been signed was with **NI Systems**, on organizing courses and workshops on graphical designing, wireless communication, mechatronics, and process and control, as well as developing labs on virtual simulation, instrumentation, communication, and industrial automation.

Another important MoU was signed with **Northern Railway**, **Indian Railway**s for the development of USBRL (Udhampur Srinagar Baramula Rail Link). This MoU acts as a basis for the exchange of knowledge and research in Tunneling, Bridge Building and Underground Constructions. IIT Jammu will also offer relevant post-graduate courses to the serving railway engineering officers.

IIT Jammu has signed MoU's with **Khajer Nasir Toosi University**, **Tehran**, **National Institute of Technology**, **Srinagar and** 

**Malek-Ashtar University Tehran**. These MoU's address exchanging information, organizing short-term education programs, and holding seminars, conferences and workshops on topics of mutual interest.



## Republic Day 2018

IIT Jammu celebrated India's 69<sup>th</sup> Republic Day by unfurling the National flag at the campus in Paloura. The students and faculty members were addressed by the Director, Prof. Gaur and the Dean of Administration, Prof. Pandya. Patriotic songs were sung in unison and sweets were distributed.

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## **SADBHAVANA INITIATIVE**

A two-day workshop had been organized by the Indian Army and IIT Jammu, on 18<sup>th</sup> and 19<sup>th</sup> January, 2018, for the students of the Army Schools located in the border districts of J&K Army Goodwill Public School (Rajouri), Pinewood School (Hamirpur) and Army Goodwill School (Potha)) as a part of the Sadhbhavana initiative.

Mr. Dhananjay Gadre from the Netaji Subhash Institute of Technology Delhi, conducted the workshop for students of classes ranging from 6<sup>th</sup> to 11<sup>th</sup> standard. Thought-provoking science experiments based on sensors, embedded systems and electric motors were carried out. Students also had an opportunity to gain hands-on experience on designing electric generators and motors based on Faraday's law. "Science Kits" were distributed to the schools to enable the students to continue to tinker and experiment even after the conclusion of the workshop.



## **DONATION DRIVE**

In January 2018, the students of IIT Jammu organized a Winter-Cloth Donation Drive for the workers working in the construction of the campus of IIT Jammu.



## **WALK THE TALK**

Students of IIT Jammu have started teaching students from the neighbouring government schools the basics of IT in their computer labs, thereby enabling greater exposure to Computer Sciences.



## **AKSHARSHALA**

The students of the Welfare Club conduct regular hour-long tutorial sessions with the aim of promoting literacy among the children of construction labourers who live in and around IIT Jammu, Jagti Campus.

#### PHYSICS AND COMPUTER LABS

Computer and Physics labs have been set up at IIT Jammu, Jagti Campus. Along with apparatus needed for the lab component of the first year PHL100 course, the Physics lab also has numerous other experiments for interested students to try on their own.

The Computer lab is open 12 hours a day for students to hone their programming skills. With the help of co-operative lab assistants, these labs are giving the students hands-on practical expertise.







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## FIELD TRIP TO SALAL POWER PLANT

The 2<sup>nd</sup> Year students of IIT Jammu visited the Salal Power Plant located in Reasi District, for an informative field trip on the 13<sup>th</sup> of February 2018. Students were shown large turbines undergoing maintenance which provided an exposure to on-sight engineering models, followed by an illustrative presentation explaining the basic operations of the plant by its manager.

## **WORKSHOP FOR FACULTY & STAFF**

A two-day workshop on "Value Creation" was organized on 4<sup>th</sup> and 5<sup>th</sup> January 2018 for the staff and faculty members of IIT Jammu. Led by IIT Madras alumnus Gautam Mahajan, the workshop discussed various ways of improving the work environment and output at IIT Jammu, thereby enhancing the overall value of the Institute.



#### **TALKS AND WORKSHOPS**

- Workshop on "Deep Learning" by Mr. Unnikrishnan and the NVIDIA team (24 Jan)
- Faculty Orientation Workshop by Illumine Knowledge Group (30-31 Jan)
- Talk on "Analog Circuits" by Dr. Susanta Sen (3 Feb)
- Skype Session on 3D Printing by DS Application Engineer (5 Feb)
- Skype Session on Portable CMM by FARO Application Engineer (8 Feb)
- Talk on Linguistics and Language Learning by Dr. Rajesh Kumar from IIT Madras (9-10 Feb)
- Talk on Algorithms by Prof. Daya Gaur from the University of Lethbridge (15-16 Feb)
- Interaction with Prof. Sartaj Sahni from University of Florida (6 Mar)
- Talk on Startups by Mr. Vaibhav Singh and Mr. Anurag Prasad, founders of getvisitapp (9 Mar)
- Various talks on Computer Architecture delivered by Prof. Bhabani Prasad Sinha (13-17 Mar)
- Talk on "Solar Resource in India and applications of Solar Technologies" by Dr. P.G. Nikhil from NISE (15-16 Mar)
- Motivational Talk, "We can, we can" by Cmd. V.K. Jaitley (17 Mar)
- Robotics workshop conducted by Mr. Aditya Marathe from Nugenix (18 Mar)

## PhD at IITJM

In February 2018, IIT Jammu launched the admission to its interdisciplinary PhD program in the various fields of Engineering and Basic Sciences. The Institute is accepting year-round applications from candidates who fit the eligibility criteria mentioned on the website www.iitjammu.ac.in



Student-run workshop on Competitive Computer Programming

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## **Manthan Street Play**

The Drama Society of IIT Jammu performed a street play in the Wave Mall, Jammu, the central theme being 'Depression Among The Youth'. The participants threw light on depression among the youth, its causes and ways to combat it by performing a "Nukkad Naatak" on the 14<sup>th</sup> of March, 2018. Publicized by 'Manthan', the annual street play festival of Shaheed Sukhdev College of Business Studies, Delhi, it received widespread appreciation from the general public.



## Winners of Tech-2-Farm

Aditya Naresh and Sagar Rathee, 1<sup>st</sup> year students of IIT Jammu participated in the Tech-2- Farm competition of 'MECHANICA', the annual fest of the Department of Mechanical Engineering of IIT Madras. Their prototype of a 'Weed Uprooting Machine' was among the 5 prototypes to be selected as the winners among the 170+ initial entries.



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## INFINITO

IIT Jammu celebrated it's cultural day on 27<sup>th</sup> February, 2018. Named 'INFINITO', It was a day dedicated towards learning and having fun, and it unfolded as follows-



## **Holi Celebrations**

Living up to the expectations, the Holi Celebration which followed which followed the Gaming Events brought everybody together as the KCS Campus put on a blanket of colors.

## **Gaming Events**

'Life is Short, Play More'
Surely this was on the
mind of every student
as IIT Jammu hosted its
first-ever Gaming Event.
Adrenaline levels soared
up as teams competed
in all time favorites
'CS-Source' and
'Mini MIlitia' among
others. Finally, a
'Treasure Hunt'
wrapped up the event.

## **Cultural Events**

The day couldn't have ended without some stunning performances from various cultural societies of IIT Jammu as well 'Edge of Insanity' from Shri Mata Vaishno Devi University. In the presence of top dignitaries, 'Bhangra Warriors' and 'Happy Feet' lit the stage up. The day ended on a high with a DJ Night.



## Dr. Srujana Kagita

"Through my work at IIT Jammu, I want to contribute positively to Teaching and Research – two of the most important aspects to any IIT."

Dr. Srujana Kagita joined IIT Jammu as Assistant Professor, in the Electrical Engg. Dept. She earned her PhD from the Center for Applied Research in Electronics, IIT Delhi and her MS in Electrical Engineering from Arizona State University, USA. Her research experience includes Ferrite based microwave components.

#### Dr. Nitin Joshi

"A good engineer is one who can give simple solutions to complex problems"

Dr Nitin Joshi joined IIT Jammu as Assistant Professor in the Civil Engg. Dept. He did his PhD from IIT Roorkee and then worked as a Post-Doctoral fellow at McGill University, Canada. His research interests include groundwater and contaminant transport modeling, drought modeling, water resources management etc. He also enjoys trekking, cricket and football apart from his research work.

## Dr. Karan Nathwani

"You are the Creator of your own Destiny: Stand up, Be Bold and Be Strong."

Dr. Karan Nathwani joined IIT Jammu as Assistant Professor in the Electrical Engg. Dept.

He did his PhD from IIT Kanpur. He obtained the Raman-Charpak Fellowship 2014 to conduct research in France. He also worked in France as a Postdoctoral Researcher at Telecom ParisTech, Paris and INRIA, Nancy, France for more than 2 years. Before Joining IIT Jammu in Nov. 2017, he was also employed as Postdoctoral Researcher in the Oxford University, UK. His research interests include speech processing, speech enhancement, speech intelligibility improvement and speech recognition using machine learning.



"Learning is a never-ending process; a teacher learns and teaches how to learn"

Dr. Badri N. Subudhi did his PhD from Indian Statistical Institute, Kolkata (awarded from Jadavpur University). Before joining IIT Jammu as Assistant Professor in the Electrical Dept, he was Assistant Professor at NIT Goa. He received CSIR-senior research fellowship for 2011-2015. He was nominated for the ISCA young Scientist Award 2013. He was

awarded with Young Scientist Travel grant award from DST, Government of India and CSIR, India in 2011. He received the Bose-Ramagnosi Award in 2010 from DST, Government of India. His research interests include Image and Video Analysis, Medical Image Processing, Machine Learning, Pattern Recognition, and Remote Sensing Image Analysis.

#### **Dr. Sanat Kumar Tiwari**

"Everything is achievable with persistence, consistency and hard work."

Dr. Sanat Tiwari joined IIT Jammu as Assistant Professor in the Physics Dept. He did his Ph.D. from Institute of Plasma Research at Gandhinagar, Gujarat. He was a Postdoctoral Fellow at Institute of Plasma Research and after that a Post-Doctoral researcher at the University of Iowa, USA. He likes to write, play badminton and volleyball. His research interests include plasma physics, turbulence, thermodynamics and numerical simulation.

#### **Dr. Arun Kumar Perumal**

"Anticipate outcomes, learn what needs to be learnt, and stay focused:
nothing is impossible." - Thiruvalluvar, Tamil Poet and Philosopher.
Dr. Arun K. Perumal did his PhD in Gas Dynamics from Aerospace Engg., IIT
Kanpur. Before joining IIT Jammu as Assistant Professor in the Mechanical Engg.
Dept., he was a Postdoctoral Fellow at the Institute of Turbulence-Noise
-Vibration Interaction And Control at Harbin Institute of Technology Shenzen
Graduate School, China. His research interests include experimental
studies on jets, Subsonic and Supersonic Aerodynamics. He actively
participates in athletics, badminton, cricket, and football.

