

## Director's Message



Dear Friends,  
Greetings on our nation's 71<sup>st</sup> Independence day! New academic year 2017-18 has brought cheers to IIT Ropar community with multiple happenings on campus. We have started our transition plan by moving a part of our academic activities to our second transit campus just adjacent to our

newly built campus. This is a dress rehearsal of our final movement to the new campus during the forthcoming winter. Our students have taken the pains of initial teething problems at the new location but have yet shown extraordinary resilience to be with the institute. Our staff and faculty members worked overtime to make the new place habitable. I salute all of them.

Our student strength has jumped from 820 to 1111 this year. Newly admitted students at IIT Ropar went through a uniquely designed induction program to impart life skills which will help them in taking tough challenges ahead. We have brought out a specially designed curriculum for B. Tech. from this session with focus on hands-on experience, strong fundamentals and social awareness. We have also

seen an unprecedented growth of faculty strength from 65 to 113 in the last two years. We have also started B.Tech. in Chemical Engineering and M.Tech. in Computer Science, Electrical and Biomedical Engineering from this session.

IIT Ropar showing its excellence in research is not news anymore because month after month the research data shows the ascendancy and consistency of the quality of research at IIT Ropar. The recent data shows that IIT Ropar tops citations per publication among all new IITs with 8.12 citations per publication. One of our young faculty members, Dr. Durba Pal has received the prestigious NASI Platinum Jubilee Young Scientist award.

With a step towards the new campus, the entire IIT Ropar community is looking forward for a much bigger space to start its dynamic journey. On this significant milestone of our 70 years of independence, I am sure with the help from all of you, we will be able to take great strides and greater glory to excellence guided by our motto:

**धियो यो नः प्रचोदयात्**

*(Direct our intellect in the right path)*

Jai Hind,  
Prof. Sarit K. Das

## IIT Ropar leads in Research Impact

Citations per paper



IIT Ropar continues to lead the second generation IITs in research impact with an average citation of 8.12.

\*Source : Scopus, dated 9.9.2017

## NASI Young Scientist Platinum Jubilee Award



Dr. Durba Pal, Assistant Professor, Centre for Biomedical Engineering has won the National Academy of Sciences Young Scientist Platinum Jubilee Award, 2017 in the field biomedical, molecular biology and biotechnology.

*Details about her research are on page no. 2*

## Know Our Faculty

**D**r. Durba Pal has joined Indian Institute of Technology Ropar, India as an Assistant Professor in the Center for Biomedical Engineering in December 2016. After completing her Master's from the University of Calcutta, she joined CSIR-Indian Institute of Chemical Biology, Kolkata and then Visva-Bharati University, West Bengal for pursuing her Ph.D. in the field of insulin resistance and type 2 diabetes. She carried out her PhD research work on the topic – “Role of fetuin-A in lipid induced insulin resistance”. She discovered that fetuin-A, a hepatic secretory glycoprotein, acts as a molecular adapter which links toll-like receptor (TLR4) with saturated free fatty acids and plays a vital role in lipid-induced adipose tissue inflammation and insulin resistance. Thus, her research demonstrated that fetuin-A could be a novel therapeutic target for the management of insulin resistance and type 2 diabetes. This work was published in Nature Medicine, where she contributed as the first author, and highlighted in other reputed journals like Cell, Science, Nature Cell Biology, Nature Immunology, Diabetes. After completion of her PhD, she joined as a Post-doctoral Fellow at The Ohio State University-Wexner Medical Center, where she worked in the field of cellular reprogramming and regenerative medicine. During her postdoctoral research, she has been successful for in-vivo transdifferentiation of dermal fibroblasts to endothelial cells as well as neurons using a novel, yet simple-to-implement nano-electroporation approach. This work recently published in Nature Nanotechnology where she contributed as a joint first author. She has also authored several research publications in peer-reviewed international journals and her work recognized with various awards. After joining at IIT Ropar, she has received Early Career Research Award from SERB, Department of Science and Technology, New Delhi. Her current research work is primarily focused on the cell-based therapeutics in disease biology and application of tissue engineering in regenerative medicine.



## Independence Day



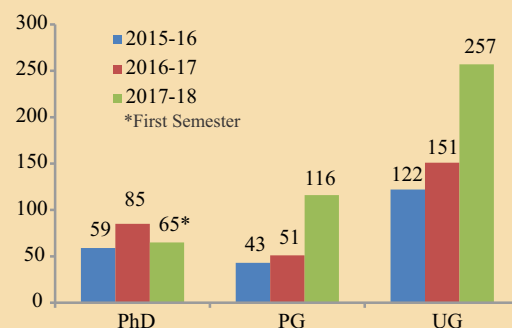
**I**ndependence Day was celebrated at the institute with patriotic fervour. On the occasion of the 71<sup>st</sup> Independence Day, Prof. S. K. Das, Director, IIT Ropar unfurled the national flag and conveyed his greetings to all. This was followed by the singing of the National Anthem. In his address, the Director narrated the exciting journey that our country travelled in the last 70 years. Our country has a cultural heritage which dates back to centuries. We should be proud of the legacy and accomplishments made so far. He emphasized our higher and technical education system, CSIR labs, Atomic Energy and Space programs are a few prominent examples. Faculty, staff and students thereafter participated in *Sadbhavana Daud* for social harmony.

## Students' Orientation & Induction program



IIT Ropar conducted a one of its kind 2-week induction programme for UG and PG students enrolled for Academic year 2017-18. The larger aim of this programme was to make students aware of the exciting life ahead. Several sessions were held where faculty members from IIT Ropar and invited experts gave talks on academics, research & the life ahead.

Orientation of students of batch 2017

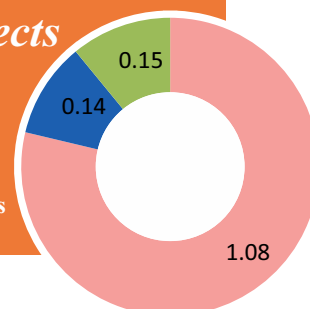


IIT Ropar witnesses significant increase in intake of students.

## External Funded Projects

- DBT
- DST
- Industrial Consultancy

Total Amount Sanctioned Rs. 1.38 Crores from (June 2017- August 2017)



## Summer Visitation Program - 2017

This summer, IIT Ropar conducted a unique initiative where faculty across all the departments were promoted to visit some of the best known labs/research groups in the world. Under this program, 10 faculty members were awarded with Institute fellowships through a competitive process to carry out research work during summer. The fellows under this program visited the following universities: *University of California-Santa Barbara; Georgia Institute of Technology; Cardiff University; University of Trento; Monash University; Princeton University; Cambridge University; State University of New York and University of Toronto.*

## MoU with Central Scientific Instruments Organisation, Chandigarh

Central Scientific Instruments Organisation (CSIO) and Indian Institute of Technology Ropar (IIT Ropar) have entered into Memorandum of Understanding (MoU) for Academics as well as advancement of Science & Technology. This MoU will facilitate exchange of staff and students towards co-supervision of Undergraduate, Postgraduate and PhD theses and participation in research, thus promoting interaction among the scientists, professors and research scholars of both the organizations. Prof. R. K. Sinha, Director, CSIR-CSIO, Chandigarh and Prof. Sarit K Das, Director IIT Ropar signed this MoU on May 31<sup>st</sup>, 2017. Senior officials from both the organizations were also present on this occasion.



## Celebration of Yoga Day

The Yoga day was celebrated in the presence of Acharya Shirva Sudhesh Chand ji from Mysore on June 21, 2017. The session was followed by therapeutic session and question and answer session. This 10 days workshop was arranged to spread awareness of yoga in all aspects, both for the uninitiated as well as practitioners, to help students to channelize their energy and reinvent themselves. On this occasion, Prof. Sarit K. Das, Director IIT Ropar said Yoga brings harmony in all walks of life and is known for disease prevention, health promotion and management of many lifestyle-related disorders. Yoga practice classes are already being run on the campus in the morning. On this occasion, Dr. S. R. S. Iyenger noted it is not about exercise but to discover the sense of oneness with yourself, the world and the nature.



## Physics Day, 2017

The Department of Physics had organized its second annual scientific event 'Physics Day' during August 18-19, 2017. In its inaugural session, Prof. S. K. Das, Director,



Prof. Rohini Godbole,  
IISc, Bengaluru

IIT Ropar, had discussed on the role of Physics in modern-day technology, how IIT Ropar emphasizes on science education in general, and about his own passion about Physics in particular. Several eminent scientists, namely, Prof.

G. Ravindra Kumar (TIFR, Mumbai), Prof. Rohini Godbole (IISc, Bengaluru), Prof. Anantha Ramakrishnan (IIT Kanpur), and Dr. Goutam Sheet (IISER Mohali) graced the scientific sessions through their colloquia and interactions with students.



Prof. Tarun Souradeep,  
IUCAA, Pune

Prof. Tarun Souradeep (IUCAA, Pune) delivered a public lecture on LIGO-India during the event. He elaborated the science behind the LIGO-India explorations and the engineering challenges ahead in making such a mammoth indigenous project successful. Prof. Godbole shared in an interactive session her views on the



Prof. G. Ravindra Kumar  
TIFR, Mumbai

challenges of women professionals in science in India. The PhD students in the Department made their oral and poster presentations as well. Through their zestful interaction, all the speakers instilled an aura of enthusiasm during their stay. Overwhelming participation of the speakers, faculty members and students made the event a true celebration of Physics, indeed, through a rainy weekend.



Boys Hostel with Illuminated Streets



Utility block



CSE Block



Boys' Hostel



Girls' Hostel

## Main Campus

*Glimpse of New Campus*

IIT Ropar during the last three months has made rapid progress and is inching towards completion of Computer Science block, Lecture Hall Complex, Utility Buildings, Girls' and Boys' hostel. Apart from this, the campus has made progress in construction of roads, provision of street lights, commissioning of all the three Electric Sub Stations, Data Networking, Borewell water, Sewage and other facilities, which are essential for the campus to be made functional. Also, horticulture and landscape in and around priority buildings have made significant head way. As regards to faculty quarters, about 40 apartments are ready for occupation. At the moment, quality audit of all buildings by expert committee is under way for hassle-free living and working. Some pictures of the new campus, which we are going to move, are given above.

## हिंदी कार्यशाला

मानव संसाधन विकास मंत्रालय, भारत सरकार के राजभाषा विभाग के दिशानिर्देशों के अनुसरण में भा.प्रौ.सं.रोपड़ में दिनांक 28 जून 2017 को हिंदी कार्यशाला सह प्रतियोगिता कार्यक्रम के अंतर्गत हिंदी कविता प्रतियोगिता का आयोजन किया गया। इस प्रतियोगिता में आईआईटी रोपड़ के विद्यार्थियों, कर्मचारियों, अधिकारियों ने बढ़-चढ़ कर हिस्सा लिया। इस प्रतियोगिता में विद्यार्थी एवं कर्मचारियों में से विजेताओं को पुरस्कार राशि प्रदान की गयी। इस प्रतियोगिता में कर्मचारियों में श्री विपिन कुमार तथा विद्यार्थियों में श्री संदीप ने प्रथम पुरस्कार प्राप्त किया। इस कार्यक्रम का संचालन डॉ. गिरीश प्रमोदराव कठाणे, कनि. हिंदी अनुवादक ने किया। इस अवसर पर श्री लगवीश कुमार, उपकुलसचिव (लेखा) एवं हिंदी अधिकारी ने सभी को हिंदी के उपक्रमों से जुड़ने तथा हिंदी में अधिक से अधिक कार्य करने की अपील की। सभी प्रतिभागियों ने बड़े ही उत्साह के साथ अपनी-अपनी कविताओं का गायन किया। उपस्थितों ने सभी के गीत गायन की प्रशंसा एवं सराहना की।



## Women's Forum

A Skill Development Workshop was organized by the Women's Forum, IIT Ropar from June 22-24, 2017 for the staff and students of IIT Ropar. Soft skills are required in today's world in order to become more successful in personal, professional and social life. For this purpose, professional trainers from Focus Academy for Career Enhancement (FACE), Gurgaon were invited. The workshop included eight sessions covering different topics i.e. Productivity through self-discipline and mindfulness, Communication skills, Complex & Written Communication, Body language, Presentation skills, Professionalism, Workplace Etiquettes and Stress Management. More than 70 participants participated and took advantage of this workshop.

## New Joinings



**Prof. Harpreet Singh**  
Professor  
Mechanical Engineering



**Prof. J. S. Sahambi**  
Professor  
Electrical Engineering



**Dr. Asad Hasan Sahir**  
Assistant Professor  
Chemical Engineering



**Dr. A.V. Ravi Teja**  
Assistant Professor  
Electrical Engineering



**Dr. Ramachandra Sekhar**  
Assistant Professor  
Electrical Engineering



**Dr. Reena Rani**  
Medical Officer



**Dr. Charanjit Singh**  
Medical Officer