





## WORD FROM THE Director

Dear Friends

First of all I am delighted to welcome the budding engineers and freshmen at IIT Ropar family. The 2022 batch of UG program students is special to IIT Ropar. 159 students (including all categories) below the rank of 2000 have joined IIT Ropar. We got a stupendous response to our new course B.Tech course in "Engineering Physics". We got all our 25 seats filled this year.

IIT Ropar surpassed a significant milestone of 20% female students. Our campus has a female student for every five students, thereby creating an impact in sectors of technology and sciences. We are extremely proud to have our students making a mark in vigorous placements early on. The Career Development and Placement Cell at IIT Ropar continues to grow with effective strategies to attract leading companies on campus and provide one of the most promising placements and internships.

Students of IIT Ropar are making our campus vibrant with their cultural and aesthetic initiatives. In our beautiful scenic campus, we celebrated Diwali with great joy and festivity. Moreover, this year students organized Leadership summit, inviting the student council heads of other IITs to build character and hone leadership skills through event organization and people skills.

The interdisciplinary approach is deeply rooted in our innovative academic curriculum. Students are offered a number of interesting minor programs and explore depth and breadth in their major engineering disciplines.

With a vision of becoming a trendsetter among the technology universities and Institutes, IIT Ropar is helping the society to solve problems ingeniously, resourcefully and creatively through technological solutions and innovations.

With young, energetic and growing strength of faculty members at IIT Ropar we have set standards for quality research and technological achievements without losing any focus on engrained human values, social responsibility, and concern for the environment.

I hope that with this mission and vision, we shall grow to fulfill our dream of producing not only quality engineers but the leaders of tomorrow.

Jai Hind!

**Professor Rajeev Ahuja** Director, IIT Ropar

## **NEWS, EVENTS & ACTIVITIES**



#### **IIT ROPAR TOPS IN GRADUATE QUALITY INDEX**

IIT Ropar ranked 1st in College Graduate Quality Global Distribution Index- a research paper published by Federal Reserve System. Vast dataset lets researchers to take sample of 2 million workers who obtained a Bachelor's degree from 3,368 different colleges in 66 countries around the world to construct average earnings of graduates from colleges around the world by earning power of their alumni. IIT Ropar topped the index.



#### **IIT ROPAR CELEBRATED ENGINEERS DAY 2022**

IIT Ropar celebrated Engineers Day, commemorating the birth anniversary of India's greatest engineer, Bharat Ratna Mokshagundam Visvesvaraya and felicitated the technical staff of the Institute. Sh. Vikas Garg IAS & Ms. Bhawna Garg IAS were the Guests of Honour during the event. They recognized the pivotal role of engineers and technical supporting staff in the growth of Institute.



#### **IIT ROPAR ORGANIZED LEADERSHIP SUMMIT**

IIT Ropar student community organized Leadership Summit from 14-16 October 2022, inviting various stakeholders from the industry, academia and administration to discuss and take stock of various advancements and challenges facing by different sectors. The first day of the talk was presented by Ms. Shailender Kaur IFS, Director Horticulture and she remarked on the persistent problem of brain drain in our society and she also stressed on the importance of retaining the young talent in the country. The third day of Leadership Summit witnessed the talks by Prof. Rajeev Ahuja, Director, IIT Ropar and Mr. Somveer Anand, Innovation Mission Director, Punjab, emphasising on the importance of bridging the gap between UG & PG/PhD and its role in training students for core companies.



#### **IIT ROPAR OBSERVED VIGILANCE AWARENESS WEEK**

Vigilance Awareness Week was observed at IIT Ropar, on the theme "Corruption free India for a developed Nation". Prof. Rajeev Ahuja, Director IIT Ropar, inaugurated the Vigilance Awareness Week by administrating pledge to faculty and staff. Dr. Somdev Kar , CVO , IIT Ropar sensitised all employees towards ethical business practices and effective measures taken by the Institute to foster a culture of honesty and integrity for good corporate governance and for the welfare of our society.



#### **IIT ROPAR ORGANIZED UNITY RUN 2022**

To celebrate the birth anniversary of the Iron Man of India, Sardar Vallabhbhai Patel a "Run for Unity" was organized at IIT Ropar. Professor Rajeev Ahuja, Director, IIT Ropar flagged off the run. The course of the race was about 4 kms and about 200 students participated in this event. Participants took a determined oath to keep the unity of the motherland above all else. Early in the morning, the picturesque campus came alive as the runners, imbued with a sense of purpose, ran amidst the greenery and the crisp breeze to celebrate the enduring legacy of Sardar Patel. The event was organised by the Outdoor Activity Club (ODAC) and Institute Student Mentorship Program (ISMP) and Sports section of the Institute as a demonstration of unity and integrity.



#### IIT ROPAR ORGANIZED FIT INDIA FREEDOM RUN

IIT Ropar organized Fit India Freedom Run, an endeavour to strengthen the fit Indian Movement envisaged and involve IIT Ropar fraternity to embrace fitness as a way of life. Campus residents enthusiastically took part in the run to help in the pursuit of building a healthier Institute community. The Director urged the students, faculty & staff to incorporate exercise and physical activities in their daily routine.



#### **IIT ROPAR CELEBRATED INDEPENDENCE DAY 2022**

In the spirit of Azaadi Ka Amrit Mahotsav, IIT Ropar fraternity celebrated Independence Day with full enthusiasm and with a befitting salute to our tricolour, the symbol of pride and unity and celebrating Har Ghar Tiranga. Prof. Rajeev Ahuja, Director, IIT Ropar hoisted the Tiranga along with students, faculty & staff. The celebrations to mark this day commenced with patriotic singing and dance performances by IITians and the inspirational speech of the Director set the tone of the day.



#### **IIT ROPAR ORGANIZED A QUARTER MARATHON**

The Fitness Club and ODAC, IIT Ropar organized the 4th edition of IIT Ropar Run of 11 KM Quarter marathon and 5 KM Fun run to promote health, wellness, and fitness on the auspicious day of Gandhi Jayanti 2022 under the Fit India Movement by Gol. The event was sponsored by State Bank of India to promote fitness among the youth of today.



#### IIT ROPAR WELCOMES FRESHMEN WITH AN ORIENTATION PROGRAM

With the vision of Fresher's today, Leaders tomorrow, the fresher's orientation program for the 2022 batch was scheduled at IIT Ropar, the power-packed day with so much new energy, enthusiasm, laughter, and vibrancy. All the freshers at Indian Institute of Technology, Ropar comprising 79 girls and 321 boys in the 2022 batch get to know the insights of how personal and professional support is given by IIT Ropar time to time apart from academics. A condensed introduction of the Institute was given by Professor Rajeev Ahuja, Director, IIT Ropar, followed by the facilitation of all Deans and the Registrar.



#### IIT ROPAR OBSERVED PARTITION HORROR REMEMBRANCE DAY

As per the directions of the Ministry of Education , GoI, IIT Ropar observed "Partition Horror Remembrance Day" on 14th Aug 2022 in memory of the struggles and sacrifices of the people as the pain of partition can never be forgotten. An exhibition of the pictures of the turbulent period of the partition was set up at the Radhakrishnan Block. The exhibition was showcasing the largest displacement of human population in the last century, which also claimed the lives of large number of people.



#### IIT ROPAR ORGANIZED LECTURE ON "AAHAR SE AROGYA"

IIT Ropar hosted the lecture of Dr. Khadar Vali, known to be the "Millet Man of India" on "AAHAR SE AROGYA". The session outlined the ways in which the 'Legacy Grain' of millets can help cure prevailing lifestyle diseases and also have a positive impact on the environment and the ecology of Punjab. The event was organized, recognizing the pressing need to have an alternative model of sustainable agriculture for the state of Punjab.



#### **INAUGURATION OF "KARYASHALA"**

Prof. Rajeev Ahuja, Director, IIT Ropar inaugurated "Karyashala" organised for a week (Sept 24-30, 2022) and funded by Science and Engineering Research Board (SERB\_ONLINE) by the Department of Physics. This Karyashala was specially focused on the Renewable Energy.



#### **IIT ROPAR CELEBRATED 'JANJATIYAGAURAV DIVAS'**

IIT Ropar celebrated birth anniversary of Bhagawan Birsa Munda with a talk on tribal heritage & a debate competition on Contribution of Janajati Heroes in Freedom Struggle. Bhagawan Birsa Munda was an iconic freedom fighter, social reformer & revered tribal leader of the country who fought bravely against the exploitative system of the British colonial government. IIT Ropar commemorated the day by saluting the contribution of the tribal freedom fighters.



#### INAUGURATION OF "CENSUS DATA RESEARCH WORKSTATION"

IIT Ropar inaugurated "Census Data Research Workstation" to carry out meaningful research and making the data easily accessible to people for its optimum use. While giving details about data collection, Dr. Abhishek Jain IAS, Director, Census Operations & Citizen Registration, Punjab & Chandigarh, urged the Research scholars to carry out in-depth and critical analyses of the database for value-addition and other social applications. Professor Rajeev Ahuja, Director, IIT Ropar said that the setting up of the workstation would boost qualitative and utilitarian research among the faculty and research scholars.



#### **EXPERT TALK BY DR SUVROKAMAL DUTTA**

Dr. Suvrokamal Dutta who is also a leading political and foreign policy expert with various national and international news channels visited IIT Ropar and discussed briefly about the historical background of the world politics and how power shifted from UK to USA and how India is emerging as leading world economy.

During an interactive session, students also shared their views regarding current political and economic scenarios across the world and what steps should be taken to build a better economic environment.



#### **UNESCO INDIA AFRICA HACKATHON 2022**

Indian Institute of Technology Ropar participated in the Unesco India Africa Hackathon 2022. As many as 23 nations have participated in this hackathon. It has provided a suitable platform allowing young innovators to come together and find solutions for solving real world problems. The hackathon is serving as the foundation for creating potential start-ups with the potential to transform the world. It allows the participating students to unleash their creativity and explore new technologies to solve real-world problems under the guidance of experts - thus, spearheading business innovation in the modern world.



#### **SAMVIDHAN DIWAS 2022**

Indian Institute of Technology Ropar in association with Central Bureau of Communication Jalandhar and Press Information Bureau, India, observed Samvidhan Diwas 2022 with the guidance of Prof. Rajeev Ahuja, Director, IIT Ropar. The officials from CBC Jalandhar organised a quiz competition on the Constitution of India. Students performed drama and patriotic song. The Additional Deputy Commisioner, Rupnagar, Mr. Damanjit Singh Mann, read the preamble of the constitution together. Prof. Bhagwant Singh Satyal, Registrar, Lamrin Tech Skills University, S.B.S Nagar also delivered the special speech of the day.



## NATIONWIDE PAKHWADA ON DISCRIMINATION AND VIOLENCE AGAINST WOMEN

Indian Institute of Technology Ropar is observing Nationwide Pakhwada on Discrimination and Violence against women (25th Nov. to 10th Dec.). Various talks and seminars shall be organised during the pakhwada highlighting the Acts to the elimination of violence against women. The Institute solemnly proclaims on the Elimination of Violence against Women and urges that every effort be made so that the various Acts made for the Elimination of all forms of Discrimination against Women becomes generally known and respected.



## **RESEARCH & INNOVATION**



#### IIT ROPAR DEVELOPS A WAY TO SEE BACTERIA FOR LONG

More than 10% of patients having bacterial infections die in India every year. Scientists at IIT Ropar have developed a modified protein fragment that can boost the detection of a specific bacterial species for a longer time, two to three hours, in the infection area. It grabs the bacterial membrane tightly and helps protein fragments stay on the bacterial surface longer.



#### **IIT ROPAR DEVELOPS A MOBILE-BASED APP, EPILEPTO SYSTEMS**

In order to provide a major relief to epilepsy patients, IIT Ropar has developed a mobile-based app, Epilepto Systems, through which an automatic call can be initiated just before a seizure. The app has been developed by Dr. Ashish Sahani of Department of Biomedical Engineering and his student Rahul Shukla. The team also comprises Krishnu R S and Hemant Kumar Chattar of IIT Ropar, Dr. Gagandeep Singh, Brinder Singh Paul, Ranjit Kaur and Arun Khokhar from Dayanand Medical College & Hospital, Ludhiana. The emergency call and messaging service informs about the patient's location to caretaker contacts with just a click on the alert button. Epilepsy is one of the most common neural disorder affecting nearly 50 million people across the globe.



## IIT ROPAR DEVELOPS NECK SENSOR FOR BETTER HEALTHCARE OF CATTLES

Indian Institute of Technology, Ropar in association with a Pune based startup Areete Business solutions has developed a neck sensor with collar arrangement for cattle providing timely alerts on various health and heat condition of the cattle. The 'cattle health and heat monitoring solution' measures various cattle parameters, including rumination, body temperature, activity level, heat cycle, and lameness and GPS location.



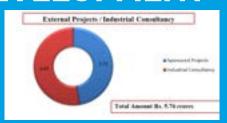
#### IIT ROPAR TAKES NANO ROUTE TO TREAT POLLUTED WATER

Indian Institute of Technology Ropar researchers have developed a first of kind nano bubble (NB) generator that may prove helpful in treating the polluted water coming out of industries or at sewerage treatment plants (STP), and it would also save 50% running cost in comparison to the technology presently being used at STPs. Besides wastewater treatment, the NB generator can prove beneficial in farming and fishery purposes. It can be used in drip irrigation and agriculture, aquaculture and fishery, pond and river restoration, gas and oil sectors, sterilization, medical sectors, surfactant free cleaning and chemical-free disinfection.

## **INDUSTRIAL RESEARCH & DEVELOPMENT**

Sponsored Projects & Consultancy Jobs Undertaken Through R&D Unit During July-October 2022

- 09 Sponsored projects with a total sanctioned value of Rs. 2.73 Cr
- 32 Consultancy projects with a total sanctioned value of Rs. 3.03 Cr



## **AWARDS & RECOGNITIONS**



## IIT ROPAR PROFESSOR AWARDED FIRST IN THE ACM MULTIMEDIA 2022'S MULTIMEDIATE GRAND CHALLENGE

Dr. Abhinav Dhall from Computer Science and Engineering Department at Indian Institute of Technology Ropar and collaborators from Monash University brought solution for back channel detection and awarded first position in ACM Multimedia 2022's MultiMediate grand challenge.



#### **IIT ROPAR STUDENTS GOT DAAD AINET FELLOWSHIP**

Ms. Pratibha Kumari, Research Scholar, CSE Department Indian Institute of Technology Ropar got selected as a DAAD Alnet fellow for the Postdoc-AI in Cyber Physical Systems (CPS).



#### IIT ROPAR PROFESSORS RANKED IN THE WORLD'S TOP 2% SCIENTISTS

10 Professors; Prof. Rajeev Ahuja, Director, IIT Ropar, Prof. Harpreet Singh, Professor, Department of Mechanical Engineering, Prof. Narinder Singh, Professor, Department of Chemistry, Dr. Rajendra Srivastava, Professor, Department of Chemistry, Dr. Rakesh Kumar Maurya, Associate Professor, Department of Mechanical Engineering, Dr. Mukesh Kumar, Associate Professor, Department of Physics, Dr. Ranjan Das, Associate Professor, Department of Mechanical Engineering, Dr. Subrahmanyam Murala, Associate Professor, Department of Electrical Engineering, Dr. Nagaraja C. Mallaiah, Associate Professor, Department of Chemistry, Dr. Abhinav Dhall, Assistant Professor, Department of Computer Science and Engineering & one Post-Doc Researcher, Dr. Arjun Behera from Department of Chemistry of IIT Ropar have made it to the top 2% of scientists in a survey conducted recently by Stanford University and published by Elsevier.



#### IIT ROPAR TEAM BITBOT BAGGED 3rd POSITION

Team BITBOT bagged 3<sup>rd</sup> position in MathWorks Minidrone Competition Finals- India 2022, held at IIT Kanpur on 14th-15th October 2022. MathWorks Minidrone competition is an International level competition were participants learn how to develop an autonomous minidrone line follower and develop key skills like Model-Based Design relevant to the industry—all while having fun using drones. This year MathWorks Minidrone Competition Finals — India 2022 was held at the Indian Institute of Technology Kanpur on 14 October & 15 October 2022 in collaboration with Society of Aerospace Engineers, IIT Kanpur and ICT Academy where top 10 teams shortlisted from 1000+ teams competed!



#### **IIT ROPAR WON SOLAR DECATHLON INDIA**

"Team Tejasvi" of IIT Ropar won Solar Decathlon India under the category 'Community Resilience Shelter Category" 2021 and recognized by DST India and Ministry of Science & Technology Government of India. IIT Ropar has performed exceedingly well in the past two years of Solar Decathlon India-Winners in the Community Resilience Shelter Category (2021) and Finalists in the Educational Building Category (2020). The team led by IIT Ropar (Prabhjot Singh, Kanha Singhania, Himanshu Parganiha, Vedant Sati, Satanshu Pathak) under the guidance of Dr. Asad H. Sahir, PhD , involving students from five different institutions was recently recognized in a ceremony by Dr. Jitendra Singh Hon'ble Minister of State (Independent Charge) for the Ministry of Science and Technology, GoI and Dr. Srivari Chandrasekhar, Secretary DST, GoI.



#### KBC PICKED UP THE QUESTION OF IIT ROPAR'S ROSHINI APP

Kaun Banega Crorepati, SonyKBCliv seo Team has picked up this question and makes it known to the much larger audience regarding our APP "ROSHNI" for blind people to identify the currency notes.



#### **BEST PAPER AWARD**

Sonal Jain, Research Scholar, Department of Computer Science and Engineering, IIT Ropar received Best Paper Award at the 14th International Conference on Intelligent Human Computer Interaction, Tashkent, Uzabekistaan for the paper titled "Real-Time image based Plant Phenotyping using Tiny-YOLOv4.



#### IIT ROPAR ALUMNI JOINED AS ASSISTANT PROFESSOR IN IIT PATNA

Dr. Akshar Tripathi, Ph.D from Indian Institute of Technology Ropar (2021) joined Indian Institute of Technology, Patna as an Assistant Professor in the Department of Civil and Environmental Engineering.



#### THIRD POSITION IN THE INTERNATIONAL SYMPOSIUM

Mr. Arnab Chowdhury, Research Scholar, Department of Chemistry at Indian Institute of Technology Ropar secured third position in the International Symposium on Recent Trends and Future Opportunities in Pharmaceuticals, PHARMACON 2022, held at National Institute of Pharmaceutical Education and Research (NIPER), SAS NAGAR, Mohali.



#### IIT ROPAR WON MEDALS IN ANNUAL SPORTS MEET 2022 HELD IN IIT MANDI

Indian Institute of Technology Ropar contingent of 73 students won 10 Gold medals, 2 silver medals and 4 bronze medals in the Indian Institute of Technology Mandi Annual Sports Fest Ran-Neeti'2022. Mr. Sawan Kumar won the best Athlete of the championship Gold Medal in Athletics.



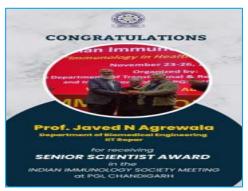
#### FELLOW OF PRESTIGIOUS INSTITUTE OF PHYSICS (UK)

Dr. Mukesh Kumar from Department of Physics has been elected as Fellows to the prestigious Institute of Physics (UK), which recognizes those who have made notable contributions to the field of physics. According to the Institute, fellowships are offered to those who are at "the peak of their career" and have had a substantial influence within their sector.



## IIT ROPAR RESEARCH SCHOLAR SELECTED FOR THE VISITING SCHOLARSHIP POSITION

Mr. Sayar Ahmad Shah, Research Scholar, Department of Humanities and Social Sciences, IIT Ropar got selected for the Visiting Scholarship Position at Indira Gandhi Institute of Development Research, Mumbai.



#### SENIOR SCIENTIST AWARD

Prof. Javed N. Agrewala, Department of Biomedical Engineering, IIT Ropar received Senior Scientist Award in the Indian Immunology Society Meeting at PGI Chandigarh. This award is highly competitive and decided among nominees from all over India based on their overall scientific contributions in the field of Immunology as documented by the quality of publications and citation index of the research papers.

### **DELEGATION VISIT**



#### MEETING WITH GEN. ANIL CHAUHAN

Prof. Rajeev Ahuja, Director, Indian Institute of Technology Ropar had a meeting with Gen. Anil Chauhan PVSM UYSM AVSM SM VSM, the current and 2nd Chief of Defence Staff of the Indian Armed Forces during the Defence Expo at Gandhinagar. The CDS was apprised of the key initiatives being taken Indian Institute of Technology. Ropar in the areas of defence, aerospace and security.



#### **VISIT OF PROBATIONARY IAS OFFICERS TO IIT ROPAR**

IAS officers of 2021 batch, Mr. Nitesh Kumar Jain, Mr. Simrandeep Singh and Dr. Akshita Gupta visited Indian Institute of Technology Ropar during their Punjab Darshan and met Prof. Rajeev Ahuja, Director, IIT Ropar along with Dean International Relations Prof. Reddy C. C. and Associate Dean R&D, Dr. Pushpendra P. Singh. Professor Rajeev Ahuja gave them wishes for their successful, happy, bright, and rewarding future ahead. The meet had discussions on the initiatives IIT Ropar has taken for the betterment of society and for strengthening Research and Innovation culture in the Institute and the way forward on how IIT Ropar can help solving various issues pertaining to environment and society at large.



#### MEETING WITH HON'BLE MINISTER OF TEXTILE MR. PIYUSH GOYAL

Prof. Rajeev Ahuja, Director, IIT Ropar met Hon'ble Minister of Textile Piyush Goyal during the mission steering group to discuss & work for holistic development of entire technical textile sector on pan-India basis and to promote #MakeinIndia competitiveness.



#### **DELEGATION VISIT OF SOUTH DAKOTA STATE UNIVERSITY**

Prof. Sanjeev Kumar, Dean, Jerome J. Lohr Endowed South Dakota State University visited IIT Ropar to foster academic exchange and cooperation between the two institutions & to foster joint academic programme in the field of education and research. This endeavor will further set a significant milestone for closer academic collaboration.



## VISIT OF BRITISH DEPUTY HIGH COMMISSIONER-CAROLINE ROWETT TO IIT ROPAR

British Deputy High Commissioner-Caroline Rowett, Dominic Beales Head of UK Defence & Security Exports India, and the team visited IIT Ropar to meet Prof Rajeev Ahuja, Director, IIT Ropar & faculty to discuss partnership opportunities between UK and India to explore possibilities of collaborations in technology development, Defence & security and many more areas of mutual interest.

### **MoU SIGNING**



#### IIT ROPAR SIGNS MOU WITH PUNJAB REMOTE SENSING CENTER

IIT Ropar signed an MoU with Punjab Remote Sensing Center to enhance research and academic collaboration for application of remote sensing and geospatial technology and to make advancements in Geoinformatics with this tactical partnership, IIT Ropar and PRSC aims to share knowledge, faculty and resources to make advancements in the areas of geoinformatics and remote sensing focusing on advanced geospatial tools and techniques.



#### IIT ROPAR SIGNS MoU WITH DALHOUSIE UNIVERSITY

The visit of Dalhousie University at Indian Institute of Technology Ropar was seen by Prof. Rajeev Ahuja, Director IIT Ropar along with HoD's of all Departments, came out a very successful foray that could bring a deeper engagement between the two institutions. A memorandum of Understanding was signed between the two Institutions acknowledging the value of international cooperation and to establish a Joint Doctoral Program for Computer Science and Engineering students.



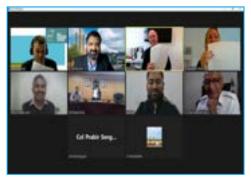
## IIT ROPAR SIGNS A PARTNERSHIP MoU WITH INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Indian Institute of Technology Ropar has signed a partnership MoU with Indian Institute of Technology Madras to execute the Kotak Mahindra Bank - IITM save energy mission project based on Environment & Sustainable Development to promote decarbonisation & energy efficiency for MSME sector.



#### IIT ROPAR SIGNS MOU WITH UK INDIA BUSINESS COUNCIL

Indian Institute of Technology Ropar signed MoU with UK India Business Council on behalf of Aerospace & Defence Industry Group, signed by Prof. Rajeev Ahuja, Director, IIT Ropar & UKIBC CEO Dickie McCallum, in presence of Mark Goldsack, UK Defence and Security Exports. The UKIBC is an advocacy and strategic advisory business on a mission to build economic prosperity in the UK and India. This collaborative partnership between the UKIBC and IIT Ropar will help to boost Research and Development in aerospace and defence by proactively developing the research environment and strengthening collaboration & will support and build huge opportunities for collaboration that exist between the defence industries of the UK and India.



## IIT ROPAR SIGNS MOU WITH IRISH INSTITUTE OF DIGITAL BUSINESS (DOTLAB) DUBLIN

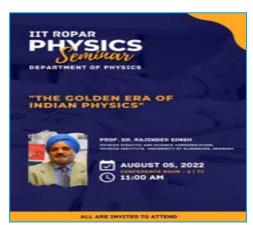
IIT Ropar signed an MoU with The Irish Institute of Digital Business (dotLAB) Dublin City University, Ireland to support collaboration on domestic and international research projects and to enable technologies and transform processes in the area of aerospace, Defence and Security sector and to encourage direct contact, cooperation, and exchanges between their faculty and administrative staff, departments, and research institution.

## **CONFERENCES / WORKSHOPS**



## ONLINE GIAN COURSE ON CURRENT ISSUES IN BIOLINGUISTICS AND EVOLUTIONARY LINGUISTICS

The Department of Humanities and Social Sciences, IIT Ropar organized an online GIAN course titled 'Current Issues in Biolinguistics and Evolutionary Linguistics'. The course was led by Professor Koji Fujita (Kyoto University, Japan and Dr. Somdev Kar, Associate Professor of Linguistics at the Department of Humanities and Social Sciences, IIT Ropar.



#### A SEMINAR ON "THE GOLDEN ERA OF INDIAN PHYSICS"

Department of Physics at Indian Institute of Technology Ropar hosted a physics seminar on 5th August. Prof. Rajinder Singh from Physics Didactic and Science Communication Group, Physics Institute, University of Oldenburg, Germany delivered a seminar on the topic "The Golden Era of Indian Physics."



## WORKSHOP ON EFFICIENT ENERGY MANAGEMENT SYSTEM FOR SMART RESIDENTIAL NETWORKS VIA INTELLIGENT MOBILE WEB SERVICES

SYnchrophasor Measurement And Research (SYMAR) lab at the IIT Ropar organised a two-days in-person workshop entitled "Efficient Energy Management System for Smart Residential Networks via Intelligent Mobile Web Services". There were expert lectures by the faculties from different IITs and hands-on demonstrations/training.



#### A GIAN COURSE ON "THEORY OF SURFACE NONLINEAR SPECTROSCOPY"

The Department of Physics, IIT Ropar conducted GIAN course on "Theory of Surface Nonlinear Spectroscopy'. Dr. Kailash Chandra Jena, Associate Professor, IIT Ropar was the coordinator and Prof. Akihiro Morita, Professor of Chemistry, Tohoku University, Sendai, Japan was invited as an expert of this GIAN Course.



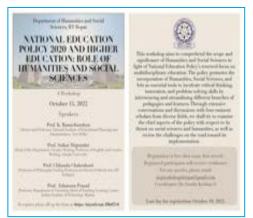
#### A WORKSHOP ON "AAVISHKAR- THE IDEATHON CHALLENGE" WAS ORGANIZED

"Aavishkar- The Ideathon Challenge", a workshop by Boston Scientific was conducted by E-CELL IIT Ropar in collaboration with Indian Institute of Technology Ropar Technology Business Incubator Foundation (TBIF). The event was a huge success with more than 200 students from various departments participating in the workshop. Knowledge pertaining to industry best practices for medical devices and healthcare product development was imparted. The participants learnt about problem formulation, company legal structure, intellectual property rights (IPR), financial planning, market research and investment strategies. A short product demonstration of Boston Scientific products, along with know-how of the product development life cycle was also given.



#### A WORKSHOP ON "NEXT GENERATION WIRELESS NETWORKS"

IIT Ropar in association with DST and SERB organized a workshop on "Next Generation Wireless Networks" from 26th August to 27th August 2022. The workshop addressed the current trends in today's rapidly changing wireless industry, bringing together international experts in wireless systems and radar to explore and present technical talks in the development of these systems.



## A ONE-DAY WORKSHOP ON "NATIONAL EDUCATION POLICY 2020 AND HIGHER EDUCATION: ROLE OF HUMANITIES AND SOCIAL SCIENCES" ORGANIZED

The Department of Humanities and Social Sciences of IIT Ropar organised a one-day workshop titled "National Education Policy 2020 and Higher Education: Role of Humanities and Social Sciences." This workshop aimed to comprehend the scope and the significance of Humanities and Social Sciences in light of national Education Policy's renewed focus on multidisciplinary education.



#### **GOING GLOBAL ASIA PACIFIC 2022**

Professor Rajeev Ahuja, Director, Indian IIT Ropar joined the Going Global Asia Pacific 2022 conference under the flagship of British Council, held from 28 November to 1 December at Singapore to explore International Education in the UK and Asia Pacific region.

## **AWaDH - TECHONOLY INNOVATION HUB**



#### IIT ROPAR'S IHUB - AWADH BEEN RANKED IN TOP 5

IIT Ropar was recently appreciated by NM-ICPS, Government of India, during the first review meeting held at IIT Madras in May 2022. iHub - AWaDH, the Technology Innovation Hub of IIT Ropar, has been ranked as one of India's top 5 Technology Innovation Hubs on the basis of performance in terms of targets achieved during the first year of operations.



#### **AI-CPS CERTIFICATE COURSE**

IIT Ropar conducted a 9-week online certificate course on AI and CPS for Agriculture Automation for the employability enhancement of UG students and recent graduates. The course has been facilitated by faculty members from different institutes of high repute who have extensive experience in teaching, research, and industry connections. The course included 36 contact hours for lectures and 18 hours of labs.



#### **AWADH INTERNSHIP CARNIVAL (AIC - 2022)**

AWaDH- IIT Ropar introduced the program in which 365 internships were offered and assigned with 10 socially relevant projects. The interns were divided into 73 teams who participated in the competition of AIC - 2022. The winners are offered paid internships for duration of 6 months at iHub - AWaDH which they can do as per their academic schedule and convenience.

#### **CERTIFICATE PROGRAM ON "SUSTAINABLE AGRICULTURE"**

A group of 100 students from different institutes has been offered a specially designed Internship program on "Sustainable Agriculture- What can be / should be done in India to make agriculture more sustainable and profitable? IIT Ropar invited Guests from different institutes for lectures to make sessions more interesting and also help to gain the knowledge from different perspectives.



#### "MOST PROMISING INSTITUTE IN AGRITECH DOMAIN 2022"

IIT Ropar is recognised as "Most Promising Institute in AgriTech Domain 2022" during the "Indo-Asia Business Excellence Summit - 2022" powered by InnovaTeZone—India. The Summit honored the concerted efforts of corporate leaders from multiple industries and backgrounds.

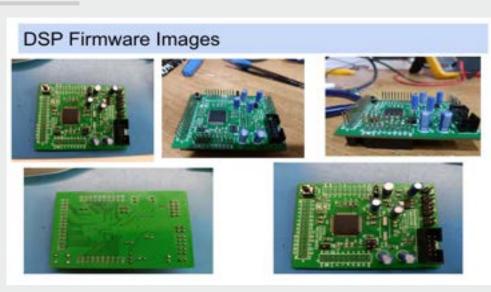


#### **UBREATHE A TECH START-UP**

In a bid to provide the Indian Urban City population with some relief from the ever-increasing Air pollution, Ubreathe a tech start-up of Indian Institute of Technology, Ropar incubated at TIH - AWaDH, IIT Ropar launches Ubreathe Wall, a completely HEPA filter-free and sustainable air purification for public gathering places. With inspiration from nature and a lot of research around their 'Breathing Roots Technology', the Ubreathe team has engineered a solution scientifically proven to remove air pollutants much faster than standard living walls. The active Bio-Filtration is further clubbed with their novel 'Rain-Shower Technology' that mimics the wet deposition of air pollutants at the quantum level that happens naturally during rainfall.

## TECHNOLOGY BUSINESS INCUBATOR FOUNDATION

Over the past few months, TBI has been aggressively working to improve operational efficiency with the aim of providing startups a medium to incubate and avail of space, funding and other ancillary resources. Various transformative steps have been taken in that regard. The organization incubated 5 notable faculty and student driven start-ups in the area of clean energy (hydrogenbased), water treatment (through a novel nanobubble technology), water manage-



ment (smart-pumps), electronic hardware and controllers and neonatal care (anti-sore beds). Select start-ups of TBIF also got the opportunity to engage actively with a delegation from the British High Commission which appreciated the impact various technologies under their development would have. As a nodal agency for Start-up Punjab, TBIF also facilitated the evaluation of several regional start-ups for registration or funding. On the students' front, members of the E-Cell of TBIF engaged with Boston Scientific to conduct a session on healthcare and medical device entrepreneurship which was attended by over 200 students. Another event conducted by the cell on opportunities in defence innovation was also well—received.

## राजभाषा गतिविधियां





#### संस्थान में हिंदी दिवस के उपलक्ष्य में हिंदी पखवाड़ा 2022 का आयोजन

भारतीय प्रौद्योगिकी संस्थान रोपड़ ने हिंदी दिवस के उपलक्ष्य पर 15 दिवसीय हिंदी पख्यवाड़ा 2022 का आयोजन सफलतापूर्वक संपन्न किया। यह पख्यवाड़ा 14 सितंबर 2022 से 28 सितंबर 2022 तक आयोजित किया गया था। हिंदी पख्यवाड़ा 2022 का उद्घाटन समारोह दिनांक 14 सितंबर 2022 को मुख्य अतिथि डॉ. तारो सिंदिक (साहित्य अकादेमी युवा पुरस्कार से पुरस्कृत), अरुणाचल प्रदेश, भारत तथा संस्थान के निदेशक प्रोफेसर राजीव आहूजा जी की गरिमामयी उपस्थित में संपन्न हुआ। हिंदी पख्यवाड़ा उद्घाटन समारोह के मुख्य अतिथि डॉ. तारो सिंदिक ने अपने हिंदी भाषा के विकास तथा इसके उत्तरोत्तर प्रयोग की दिशा में अपने विचार व्यक्त किए। साथ ही, अरुणाचल प्रदेश के साथ साथ- पूर्वोत्तर राज्यों में हिंदी के विकास पर भी प्रकाश डाला। इस पख्यवाड़ा के उद्घाटन समारोह के बाद अगले 15 दिनों तक विभिन्न श्रीणयों में विभिन्न प्रतियोगिताओं का दौर चलता रहा जिसमें संस्थान के विद्यार्थियों, संकाय सदस्यों एवं कर्मचारियों ने न केवल अपनी उत्साहजनक सहभागिता दिखाई अपितु अपने कलागुणों को भी सभी के समक्ष रखा जो इस पख्यवाड़े के आयोजन का मुख्य उद्देश्य था। हिंदी पख्यवाड़ा 2022 के समापन समारोह की मुख्य अतिथि श्रीमती इंदिरा दांगी जी ने इस अवसर पर बड़े ही रोचक ढंग से हिंदी भाषा के विकास पर प्रकाश डाला तथा सभी से अपील की कि वे बोलचाल की भाषा के रुप में अपनी-अपनी मातुभाषा में अधिकाधिक प्रयोग को सुनिश्चित करें। इस पख्याड़ा का समापन समारोह में विजेताओं को संस्थान के माननीय निदेशक महोदय द्वारा पुरस्कार प्रदान किए गए। इस अवसर पर प्रो. राजीव आहूजा ने सभी विजेताओं का अभिनंदन किया।



#### स्वतंत्रता दिवस के उपलक्ष्य में देशभक्ति गीत गायन प्रतियोगिता

हिंदी प्रकोच्छ, भा.प्रौ.सं. रोपड़ ने प्रतिवर्ष की तरह इस वर्ष भी स्वतंत्रता दिवस के उपलक्ष्य में संस्थान सदस्यों के लिए देशभिक्त गीत गायन प्रतियोगिता का आयोजन किया। यह प्रतियोगिता संस्थान के विद्यार्थी और कर्मचारी ऐसी दो श्रेणियों में पुरस्कार राशि के साथ आयोजित की गई। इस अवसर पर संस्थान सदस्यों द्वारा अच्छी सहभागिता देखी गई। विद्यार्थियों तथा कर्मचारी सदस्यों ने देशभिक्तपरक गीतों की प्रस्तुति से न केवल अपने कलागुणों को सभी के समक्ष रखा बिल्क पूरा वातावरण देशभिक्त के रंग में रंग दिया। इस अवसर पर प्रतियोगिता के मूल्यांकन हेतु परीक्षक मंडल के रुप में डॉ. अभिषेक तिवारी, संकाय प्रभारी हिंदी और डॉ. सम दर्शी, सहायक प्राध्यापक, विद्युत अभियांत्रिकी विभाग को आमंत्रित किया गया था। कार्यक्रम के अंतिम चरण में, दोनों परीक्षकों ने सभी प्रतिभागियों द्वारा दी गई प्रसृति की प्रशंसा एवं सराहता की।



#### श्रीमती अमृता प्रीतम हिंदी व्याख्यानमाला के अंतर्गत पंचम व्याख्यान संपन्न

हिंदी प्रकोष्ठ, भा.प्रौ.सं. रोपड़ ने श्रीमती अमृता प्रीतम हिंदी व्याख्यानमाला के अंतर्गत पंचम व्याख्यान का आयोजन किया। इस व्याख्यानमाला में आमंत्रित वक्ता के रूप में डॉ. भीमराव अंबेडकर महाविद्यालय, श्री गंगानगर, राजस्थान के संस्कृत विभाग क एसोसिएट प्रोफेसर एवं विभागप्रमुख डॉ. घनश्याम बैरवा जी को आमंत्रित किया गया था। इस अवसर पर भारतीय प्रौद्योगिकी संस्थान रोपड़ के निदेशक प्रोफेसर राजीव आहूजा जी ने अपने विशेष संबोधन से इस कार्यक्रम की शोभा बढ़ाई। अपने व्याख्यान में आमंत्रित वक्ता डॉ. घनश्याम बैरवा ने संस्कृत के उद्भव एवं विकास पर बात की। अपने विचार को साझा करते हुए डॉ. बैरवा ने संस्कृत का अन्य भाषाओं से साथ जो सहसंबंध पर भी प्रकाश डाला। साथ ही, डॉ. बैरवा ने भारतीय इतिहास में संस्कृत के भाषायी एवं सांस्कृतिक योगदान के साथ-साथ आधुनिक काल में इसकी प्रांसगिकता पर विशेष रूप से अपने विचार साझा किए।



#### हिंदी कार्यशाला का आयोजन

राजभाषा विभाग, गृह मंत्रालय, भारत सरकार के दिशा-निर्देशों के अनुपालन में हिंदी प्रकोष्ठ, भा.प्रौ.सं. रोपड़ ने जुलाई-सितंबर 2022 तिमाही के दौरान हिंदी कार्यशाला का आयोजन संपन्न किया। संस्थान का हिंदी प्रकोष्ठ प्रति तिमाही एक कार्यशाला का आयोजन संपन्न करता आ रहा है। इसी क्रम में, दिनांक 12 सितंबर 2022 को आनलाइन माध्यम से हिंदी कार्यशाला का आयोजन किया गया। इस कार्यशाला का उद्देश्य संस्थान सदस्यों को हिंदी भाषा, वर्णमाला तथा व्याकरण संबंधि महत्वपूर्ण बिंदुओं पर मार्गदर्शित करना रहा है। अतः इस विषय पर संस्थान सदस्यों का मार्गदर्शन करने हेतु श्री चरणजीत वर्मा, सहायक निदेशक, हिंदी शब्द संसाधन/हिंदी टंकण, हिंदी शिक्षण योजना, राजभाषा विभाग, गृह मंत्रालय, भारत सरकार, नई दिल्ली को विशेष रुप से आमंत्रित किया गया था। इस कार्यशाला में संस्थान के कर्मचारियों ने बढ़-चढ़ कर अपनी सहभागिता दर्ज की।

## INFRASTRUCTURE DEVELOPMENT

The overall physical progress of construction is 90%. The Boys hostel of Phase 1C is completed and occupied by the Institute, The on-going construction of the 'Super Academic Block' is in progress.



**BOYS HOSTEL OF PHASE 1-C** 



**SUPER ACADEMIC BLOCK** 

### **MARCHING FORWARD AS A FACULTY - NEW JOININGS**



**Dr. Kishant Kumar**. Assistant Professor Gr. I Chemical Engineering



**Dr. Ravi Kumar**Assistant Professor Gr. I
Humanities & Social Science



**Dr. Basant Subba**Assistant Professor Gr. I
Computer Science & Engineering



**Dr. Rajendra Kumar Munian**Assistant Professor Gr. I
Mechanical Engineering



**Dr. Jagpreet Singh**Assistant Professor Gr. I
Computer Science & Engineering



**Dr. Santosh Kumar Vipparthi**Assistant Professor Gr. I
Electrical Engineering



**Dr. Jayaram Valluru**Assistant Professor Gr. I
Chemical Engineering



Ms. Gurdish K Sandhu
Adjunct Faculty
Centre of Applied Research in Data Science

## **MARCHING FORWARD AS A STAFF - NEW JOININGS**



Sh. Manpreet Singh Bedi Assistant Registrar Stores & Purchase



Lt. Cdr Nishbinder Singh (Retd.)
Assistant Registrar
R & D and IRA & A



**Sh. Ajay Kumar Srivastav**Project Assistant (Technical)
Student Affairs



**Sh. Suryanarayan Parida**Consultant (Mass Spectrometry Facility)
Central Research Facility



**Sh. Jagjit Singh**Project Engineer (Civil)
Works & Estate

#### **UPCOMING EVENT**

Indian Institute of Technology, Ropar is pleased to announce the sixth International Conference of The Robotics Society - 'Advances in Robotics 2023' (AIR 2023), during July 5-8, 2023 and invites unpublished research work in the various fields of robotics.





## **IIT ROPAR ON SOCIAL MEDIA**

- https://www.facebook.com/iitrpr/
- https://www.instagram.com/iitropar/
- in https://www.linkedin.com/company/iitropar
- •• https://www.researchgate.net/profile/lit\_Ropar
- https://www.youtube.com/channel/iitropar



# COMPILED AND PUBLISHED BY PUBLIC RELATIONS UNIT INDIAN INSTITUTE OF TECHNOLOGY ROPAR Ph: 01881-231301 | Email: pro@iitrpr.ac.in