



From the Director's Desk



I am happy to place before you the second volume of our bi-annual issue of the newsletter “ऊर्जा प्रवाह”. An eventful period of six months passed in no time. Over this period, we have achieved several milestones and created several new avenues. Our last year’s high-

pitched ranking, path-breaking research activities, and fruitful collaborations with industry and, also the achievements and laurels of the students and faculty, as evinced from our academic and R&D portfolio, are proof of our commitment to the fast-paced adaptive learning system for technological benefits of the country.

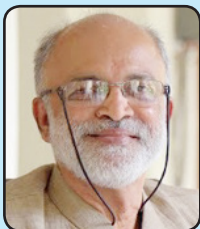
During this period we successfully organized a summit, two symposia, and a couple of workshops. I am happy to inform you that all these events were a huge success with a large number of delegates and several dignitaries. The institute had another reason to celebrate in receiving a huge grant from DST for its Innovation and Incubation Foundation. We witnessed a very active period concerning our publication profile, in addition to the presentation

of papers by our faculty and students at leading national and international conferences, a total of 90 research papers with good impact were published and our faculty edited four books.

Another attraction of the period was the successful organization of the institute’s flagship programmes, Urjotsav and Kaltarang. These are crucial events in the institute’s academic calendar designed to cherish the student community.

All these successes and glories cannot be without the continuous support of our stakeholders, and I must thank all my students, faculties, and staff for their contribution. This newsletter is the last edition in my capacity as the Director of the institute. It has been a privilege to serve RGIPT as its Director for the past five years. As I look at the performance and capabilities of the Institute over the past four to five years, I am extremely proud of what we have achieved, and even more excited about our outlook for an equally promising future.

With Warm Regards,
(A S K Sinha)



Professor A B Pandit appointed President, Board of Governors, RGIPT

Professor A B Pandit has been appointed President, Board of Governors, RGIPT by the Ministry of Petroleum and Natural Gas, Government of India. He will have a tenure of three years with effect from July 03, 2024. A Chemical Engineering graduate from the Indian Institute of Technology, Banaras Hindu University, Professor Pandit currently holds the position of Vice-Chancellor at the Institute of Chemical Technology, Mumbai.



Professor Alok K Singh takes over as Officiating Director, RGIPT

With the end of Professor A S K Sinha’s tenure as Director, RGIPT, Professor Alok K Singh, Senior Faculty in the Department of Petroleum and Geoengineering took over the charge of Officiating Director with effect from July 09, 2024. An alumnus of Banaras Hindu University, Professor Singh’s expertise lies in the field of Coal Geology, Coal and Organic Petrology, Thermal Maturation and Petroleum Source Rock Characterization, CBM, Shale Gas and CO₂ sequestration.

Research and Academic Highlights

New Industrial Projects Taken Up

Externally Funded Projects

- Development of synthetic polymer-based reservoir drilling and completion fluid for high-pressure and high-temperature wells: fluid invasion modelling and mitigation
Dr Sidharth Gautam
Science and Engineering Research Board
- Study of hydrate promoters for development of transport system for CO₂ as gas hydrate
Dr Amit Kumar
Science and Engineering Research Board
- Development of catalyst-coupled photoelectrode for renewable energy
Dr Debasis De
UGC- DAE Consortium for Scientific Research
- Technical Upgradation of electrode and membrane-less electrolyzers for seawater electrolysis
Professor A S K Sinha
NTPC-NETRA

Internally Funded Projects

- Catalytic upgradation of unconventional feedstock into valuable fuel and chemicals
Dr Omvir Singh
- Instrumentation for industrial crystallization in laboratory
Dr V S Sistla

- Enhancement of ammonia dissociation for hydrogen production with partial oxidation auto thermal strategy
Dr Arvind Singh
- Nonprecious metal exchange synthesis of MAg₂₄ nanoclusters from Ag₂₅ nanocluster for high water electrolysis
Dr Malaya Kumara Sahoo
- Development of high efficiency thermoelectric materials based on binary and ternary metal chalcogenides
Dr Tanmay Ghosh
- A metagenomic exploration of accelerated Lignocellulosic biomass degradation (LBD) Biotransformation dynamics during vermicomposting and biogas production
Dr Praveen K Srivastava
- Evaluation of fire risk analysis in ethanol industries by using PHAST Software
Dr Nilambar Bariha
- Design of a battery charger for electric vehicle EV based on wide band gap devices
Dr Vijay Kumar Singh
- Performance evaluation of wide band gap device-based voltage source inverter fed multiple traction motor for EV Application
Dr Bheemaiah Chikondra

Industrial Projects Completed

- Performance evaluation of a bio-gas integrated semi-transparent photo-voltaic thermal collectors.
Professor A S K Sinha
Centre for High Technology (Petroleum Conservation Research Association)
Date of Completion: January 15, 2024

Research Breakthrough

Technical upgradation of electrode and membrane-less electrolyzers for seawater electrolysis

The research team led by Professor A S K Sinha had earlier developed electrodes and a prototype of membrane-less electrolyzer of capacity 1L/hr hydrogen production. The developed electrodes were stable for longer period, producing hydrogen from seawater electrolyte, without significant performance loss even in adverse operating conditions. The membrane-less electrolyzer produces hydrogen gas with more than 99% purity. The current project significantly expands the scope of previous work and aims to develop and demonstrate a modular membrane-less electrolyzer plant with all balance of plant enclosures producing 1.0 m³/h H₂ gas using seawater as electrolyte. The electrolyzer and its components will be designed and scaled up with utmost attention to maintain the requisite flow pattern to achieve the same or higher purity of hydrogen gas.

MoUs Signed

Bharat Petroleum Corporation Limited

The MoU, signed on January 17, 2024, mutually agreed to collaborate for the promotion of education of efficient human resources, research, and innovation, under which it has been agreed by the parties to give opportunities to the CSIR-NET and/or GATE-qualified students to pursue their M Tech /PhD under the joint supervision of RGIPT and BPCL officials on the topics of mutual interests.



Dr V Ravi Kumar, CGM (R&D), BPCL and Professor A S K Sinha, Director, RGIPT inking the MoU

Yokogawa Technology Solutions India Private Limited

The MoU reached on February 07, 2024, aimed to initiate joint research activities in the areas of alternative energy and their utilization for power generation.



Shri Sanjeev Neelappa, Managing Director, Yokogawa India and Professor A S K Sinha exchanging the MoU document

Centre for Development of Advanced Computing (C-DAC)

Inked on June 28, 2024, on the premises of RGIPT, the MoU is aimed at strengthening collaborations and working together in emerging technology areas like Artificial Intelligence and Cyber Security for joint research projects and promoting start-up ecosystem.



Professor A S K Sinha (Director RGIPT) and Dr Ch A S Murty (Scientist G and Centre Head, C-DAC) are seen exchanging the MoU document

New Research Facilities Created

- Muffle Furnace with Programmable Temperature
- Tubular Furnace
- HP-HT CO₂ flooding system with Gas Booster and Reactor Cell
- Borosil Die-cast Aluminium Microprocessor
- HLBS CMW 1000T
- New Era Syringe Pump
- Autoclave
- Microfluidic Pressure Sensor
- Dynamic Fluid Loss Tester
- Flow Loop Setup
- Workstation with Intel
- Gas Chromatography
- High-Pressure SS Hydrothermal Reactor
- EOR Microfluidic Chip
- Ultra-Micro Weighing Balance
- 4-Stroke Petrol Engine
- Mass Flow Controllers
- LCR Meter
- Light Source (30W Deuterium lamp)
- Ultrasonic Cleaner
- Hot Plate Magnetic
- Probe Station and Detectors

Inauguration of the state-of-the-art New Laboratories

Professor A S K Sinha, Director RGIPT inaugurated the newly constructed laboratories on March 12, 2024 in the framework of the institute's advanced research projects in the arena of Renewable Energy, i.e., Renewable Engineering Energy Laboratory 1 and Renewable Engineering Energy Laboratory 2 which were allotted to Dr Omvir Singh, Dr Arvind Singh, Dr Karan Malik and Dr M K Sahoo.

Faculty and staff of the institute were present during the inaugural function. This addition to the campus will be a centerpiece of the institute's broad portfolio of work on renewable energy helping the institute to reach newer heights.



Research Profile

High-Impact Publications	75
Papers Presented in Conferences	30
Book Chapters	05

Patents Granted

- A system for effective hydrogen storage in heterogeneous formations using TiO_2 nanofluid and method for synthesizing TiO_2 nanofluid of varying sizes
Patent Number: 540002(India)
Date of Filing: 17.08.2021
Date of Grant: 30.05.2024
Inventors: Dr Tushar Sharma and K R Chaturvedi
- A Method for Synthesizing Alkali Treated Polymeric Colloidal Suspension of Silica Nanoparticles to Improve CO_2 Storage and Enhanced Oil Recovery (EOR)
Patent Number: 529101(India)
Date of Filing: 17.08.2021
Date of Grant: 19.03.2024
Inventors: Dr Tushar Sharma and K R Chaturvedi

- Stiff plastic material possessing autonomous self-healing ability
Application Number: 3230/DEL/2015 (India)
Date of Filing: 08.10.2015
Publication Date: 19.03.2024
Inventors: Dr Uma Prasana Ojha and Anuj Kumar
- A suspension based integrated auxiliary power storage unit in an electric vehicle and method of operation thereof
Patent Number: 527257(India)
Date of Filing: 15.09.2022
Date of Grant: 15.03.2024
Inventors: Dr Arjun Deo and Akshar K R

Visits on Strengthening R&D

- Dr Piyush Sarkar, Invited for Session Chair at National Conference on Geoscience for Sustainable World (GSW-24), Department of Geophysics, BHU, Varanasi, March 06-07, 2024
- Dr Piyush Sarkar, Invited as External Examiner for Viva, Department of Geophysics, BHU, Varanasi, May 06-07, 2024

Director's Visits

- Bharat Petroleum Corporation Limited, Mumbai, January 17, 2024
- Yokogawa Engineering Solutions Limited, Bengaluru, January 18, 2024
- Institute of Oil and Gas Production Technology, ONGC, January 22, 2024
- Sun Petrochemicals Private Limited, Mumbai, January 22, 2024
- Hindustan Petroleum Corporation Limited, Mumbai, January 23, 2024
- HPCL Management Development Institute, Pune, January 24, 2024
- Praj Industries, Pune, January 24, 2024
- Tata Passenger Electric Mobility Limited, Pune, January 24, 2024
- Bharat Petroleum Corporation Limited R&D, Mumbai, January 25, 2024
- Numaligarh Refinery Limited, Guwahati, January 29, 2024
- Oil and Natural Gas Corporation Limited, February 12, 2024
- Ministry of Petroleum and Natural Gas, New Delhi, February 12, 2024
- CSIR-Central Institute of Mining and Fuel Research, Dhanbad, February 28, 2024

- NITI Aayog, New Delhi, April 05, 2024
- Department of Physics, BHU, Varanasi, April 24, 2024
- Ministry of Petroleum and Natural Gas, New Delhi, May 13, 2024
- National HRD Network, New Delhi, May 13, 2024
- National Institute of Technology, Patna, May 30, 2024
- NASSCOM, Noida, June 08, 2024
- Numaligarh Refinery Limited, Guwahati, June 20, 2024

Distinguished Visitors

- **Mr Sanjeev Balahall Neelappa**, Managing Director, Yokogawa Technology Solutions, February 06, 2024
- **Mr M K Naveen Kashyap**, Chief Product Officer, Yokogawa Technology Solutions, February 06, 2024
- **Professor Pratap Sahay**, Professor of Seismology, CICESE, Baja California, Mexico, February 11-13, 2024
- **Dr Rabi Bastia**, Padmashree, CEO, Oilmax Energy Private Limited, Mumbai April 03, 2024
- **Mr D M Butala**, Ex-ED, Gujrat State Fertilizer and Chemicals, April 25-28, 2024
- **Mr Sachiv Kumar**, ADG Development, Directorate General of Hydrocarbons, April 26, 2024
- **Dr M Gajendiran**, Assistant Manager (R&D), Chennai Petroleum Corporation Limited, May 23, 2024
- **Mr Aditya Kumar Sinha**, Director, C-DAC, Patna, June 27, 2024
- **Dr Chandrapati Appala. Satyanarayana Murty**, Centre Head, C-DAC Kolkata, June 27, 2024
- **Mr Ritesh Mukherjee**, C-DAC, June 27, 2024
- **Dr Arun Jana**, C-DAC, June 27, 2024

Invited Talks

- **Dr Deepak Dwivedi**, Industry Lecture Jubilant Ingrevia, Corporate Office, Noida, February 23, 2024
- **Professor A S K Sinha**, Sustainable Energy Transition in India, CSIR-Central Institute of Mining and Fuel Research, Dhanbad, February 28, 2024
- **Dr Vivek Kumar**, Fundamentals of Simulation Tool in Design & Analysis of Chemical System, Madan Mohan Malaviya University of Technology, Gorakhpur, UP, March 03-07, 2024
- **Professor A S K Sinha**, Energy Transition and Hydrogen Energy Research at RGIPT, Department of Physics, BHU, Varanasi, April 24, 2024
- **Professor A S K Sinha**, An overview of Hydrogen Energy Research at RGIPT, National Institute of Technology, Patna, May 30, 2024
- **Dr Deepak Dwivedi**, Industry Lecture, BHEL, Jagdishpur, June 27, 2024

Training Programmes Organized

- **Petroleum Refining Technology**, *For officers of Indian Oil Corporation Limited*, February 26, 2024 to March 09, 2024

Honours and Awards

- **Dr Praveen Kumar Srivastava**
Third Prize in Best Paper Award category for paper titled "*Enhanced biogas production by anaerobic co-digestion of food waste with raw and alkali-pretreated rice straw*", International Conference of SOLARIS 2024: Energy, Ecology and Environment, Sodha Energy Research Park, Ballia, UP, February 07-09, 2024
- **Dr Piyush Sarkar**
Young Researcher Award at National Conference on Geosciences for Sustainable World (GSW-2024), Department of Geophysics, Banaras Hindu University, March 07, 2024
- **Arjun Krishna, Sujeet Pandey, and Amit Ranjan**
Third Prize for idea titled "*Enhancing the properties of ZnTiO₃ for supercapacitor electrode material application*" in New Generation Ideation Contest 2023, Hindustan Petroleum Green R&D Center, March 27, 2024

Degrees Awarded

	Discipline	Awarded
PhD	Chemical Engineering	01
	Computer Science and Engineering	04
	Management Studies	06
	Sciences and Humanities	04

Achievement of RGIPT Innovation and Incubation Foundation

RGIPT IIF has secured a project entitled "Innovation and Entrepreneurship in Energy, Healthcare, and Agriculture Sectors for Sustainable Development of India" from the Department of Science and Technology (DST) Government of India. The project aims to set up an Inclusive Technology Business Incubator (i-TBI) at RGIPT. The National Expert Advisory Committee (NEAC) has recommended that the project is to be considered for support under NIDHI i-TBI program. The committee has sanctioned a provisional budget of Rs 500 Lakhs and recommended "Energy, Clean Fuel, Healthcare, Agriculture" as the primary thrust area for the proposed i-TBI. The Call for Proposals for different start-ups is expected to be announced in late August 2024.

Annual Flagship Programmes

Energia *a legacy of champions*

Rajiv Gandhi Institute of Petroleum Technology (RGIPT) once again showcased its vibrant spirit through its annual sports extravaganza, Energia 2024. Held during February 17 and 18, 2024, the event proved to be an immense success, drawing participation from over 150+ outside participants and 250+ enthusiastic individuals from within the institute. The event featured 20+ activities, including basketball, volleyball, lawn tennis, table tennis, badminton, kho kho, kabaddi, chess, athletics, shot put, snooker, and various informal events. Adding prestige to the event was the presence of the Padma Shri awardee in Athletics 2022, Ms. Sudha Singh. The event concluded with a vibrant band night, marking the culmination of the event with a celebration of music and unity.



Lamp Lightning during the Energia Inauguration by Distinguished Chief Guest Ms Sudha Singh, Professor A S K Sinha, Director RGIPT, Dr Debashis Panda, Dean, Student Affairs, Dr Shailesh Kumar, Sports Convener and Mr Saket Kumar, Sports Secretary

Attraction of the event was the presence of the renowned Monty Shroff Band took the stage, captivating the community with their performance. Special tributes were paid to the core team of Energia, recognizing their hard work. The band night provided a fitting end to the two-day event, allowing participants to relax, celebrate, and create lasting memories.

KALTARANG 2024

Kaltarang is a prestigious annual cultural fest of RGIPT, showcasing the vibrant spirit and creativity of students. This extraordinary event stands as a testament to the dedication of students, who strive ceaselessly to craft an event that not only exudes grandeur but also celebrates cultural diversity and artistic talent.

The event was organized during April 12-14, 2024, and witnessed enthusiastic participation from students of various esteemed institutions including FGIET, SGPGI, and NIEFT.

A multitude of events were held, spanning various cultural domains such as Khayaal (Music), Swaang (Drama), Fab Fiesta (Dance), Drishya (Cinematography), Vichaar Vivaad (Debate), Ensemble Elysium (Fashion Show), Awadh Alankar (Poetry Writing), Palette Pantomime (Live Painting).

Adding to the cultural festivities, Kaltarang 2024 featured special entertainment nights including a comedy night with Rajat Sood, a band night with Lost Fireflies, and EDM nights with DJ Tuhina, DJ Swattrex, and DJ Tracer. These events added a vibrant and electrifying atmosphere to the fest, making it a memorable experience for all attendees.

The primary aim of Kaltarang 2024 was to foster a sense of community and cultural appreciation among students, providing them with a platform to showcase their talents and engage in creative expression. It was a resounding success, leaving participants and attendees eagerly anticipating the next edition of this grand cultural celebration.



Glimpses of Kaltarang Opening Ceremony

SERB Workshop – Artificial Intelligence (AI) for Smart Sensing and Internet of Everything

Hosted with meticulous planning and foresight, this workshop served as a beacon, guiding participants through the labyrinth of smart sensor design and the deployment of cutting-edge artificial intelligence algorithms tailored for IoE applications. With a blend of theoretical discourse and hands-on exploration, attendees embarked on a journey to unlock the full potential of IoE across diverse domains, from localization and healthcare to smart agriculture and urban development. At the heart of the workshop lay a series of engaging lectures, meticulously curated to instill participants with a profound understanding of IoE fundamentals. Delving deep into the theory of machine learning, signal processing, and smart sensor design, various sessions laid the groundwork for attendees to comprehend the underlying mechanisms driving IoE innovation. The workshop was conducted by Dr Ankur Pandey and Dr Sajal Agarwal of Department of Electrical and Electronics Engineering.



ICSSR Summit – Net Zero Energy Transition for Sustainable Development

The Net Zero Summit, 2024, organized by Arrucus Media Pvt. Ltd., was held on May 30, 2024, at Hotel Eros, Nehru Place, New Delhi. The event was inaugurated by Shri Hardeep Singh Puri, Hon'ble Union Minister for Petroleum & Natural Gas, Government of India. The conference focused on discussions and strategies to achieve net-zero emissions, bringing together industry leaders, policymakers, and experts in the field. Several MBA students participated in the summit to gain insights and knowledge on sustainable practices and energy policies. The convenors of the Summit were Dr Jaya Srivastava and Dr R Bansal of Department of Management Studies.



SERB Workshop – NextGen Spectro(Micro)scopic Method for Energy-Independent Bharat

Science and Engineering Research Board (SERB)-sponsored One-Day Workshop- “NextGen Spectro (Micro) scopic Method for Energy-Independent Bharat” has been organized on March 07, 2024. More than 50 participants have actively engaged in academic discussion and scientific dissemination of knowledge.

Professor A S K Sinha, Director, RGIPT delivered inaugural address and said hard work, cooperation and collaboration are the recipes for achieving academic excellence and developing entrepreneurial traits. He has shared the research infrastructure and internship opportunities available at RGIPT. Professor A K Choubey, Head of the Department of Sciences & Humanities has presented departmental perspective emphasizing existing research avenues and laboratory facilities. Professor Debashis Panda, Dean Student Affairs, RGIPT and convenor of the event has briefed his research on spectro(micro)scopic methods for characterization of photoluminescent material and Rice-straw derived Nanocellulose and Lignin. Professor T K Mukherjee, IIT Indore delivered an invited talk on the role of spectroscopic methods to understand enzymatic activity under macromolecular crowding. Professor S K Khatua, IIT Gandhinagar spoke on Nanoplasmonic Catalysis with an emphasis on Gold Nanoparticles. Other Speakers were Dr Arshad Aijaz, Dr Sikha Singh, Dr Malay Sahoo and Dr Omvir Singh of the in-house Department.

DSIR Workshop – Refining Intelligence: Exploring AI/ML in Refinery Operations - Foundations, Trends, Challenges, and Prospects

The event was organized by Department of Chemical and Biochemical Engineering and witnessed the participation of more than 80 delegates. Conducted in online mode the participants were drawn from refineries (IOCL, HPCL, BPCL, CPCL, and NRL) and Centre for Development of Advanced Computing (C-DAC). Convenor of the workshop was Dr Milan Kumar, Head - Department of Chemical and Biochemical Engineering.

SBRB Workshop Energy Transition: Sustainable Pathways

Convenor – Dr Shivanjali Sharma, Department of Petroleum and Geoengineering, April 03, 2024 - dealt with academia panel discussion on the topic Hydrocarbon Sector in the Era of Energy Transition.

12th Annual FIPI Student Convention

Organized by RGIPT FIPI Student Chapter, April 04, 2024

UP-CST Workshop – Intellectual Property Rights

Convened by Dr Amarish Dubey, Department of Electrical and Electronics Engineering, March 09, 2024

Miscellanies Campus News

International Yoga Day Celebration 2024

The 10th International Day of Yoga was celebrated on June 21, 2024 with a theme— “Yoga for Self and Society.” On this day the Campus came alive with the celebration of Yoga Day. Students, faculty, and staff gathered to practice Yoga for uniting mind and body. Led by Yoga Guru, the event highlighted the holistic benefits of yoga and health awareness among participants. The day left a lasting impression of tranquility and mindfulness among RGIPT community.



Yoga session in progress.

Saraswati Puja Celebration

The Cultural Council of RGIPT organized Saraswati Pooja on February 14, 2024. Students, Faculty members and staffs had participated in the rituals including Puspajali, Pooja, Hawan at the Ground Floor of Admin Block. An evening Sandhya Aarti with chanting holy mantras had created a spiritual ambience in campus. Students performed in the cultural evening to make it a memorable one. Photographs captured the essence of these cherished moments.



Students participating in Saraswati Puja

Inauguration of New Canteen in the Campus

There is a new addition to the already existing night canteen and a Bakery Shop with additional facilities for providing tea, coffee and snacks to the students and residents of the campus.

The shop was inaugurated by Professor A S K Sinha, Director, RGIPT on March 12, 2024. Inaugurating this new facility, Professor Sinha said that this was a long-standing request by students and faculty and the institute is always ahead in bringing such enablers to the campus to make life of the students comfortable.



Professor A S K Sinha, Director RGIPT inaugurating the canteen

World Environment Day

On World Environment Day, June 5, 2024 the Institute commenced the ‘Ek Ped Maa Ke Naam’ campaign, which embodies the concept of environmental conservation. The day was remembered by a joint effort to plant trees, led by the Professor A S K Sinha, Director of the Institute, and facilitated by dedicated faculties, staff, and enthusiastic PhD and B Tech students. This effort not only represents a commitment to sustainability, but also highlights the Institute’s active involvement in creating a greener future. Each planting placed in the calm surroundings indicates a vow to nurture and safeguard the environment, which is consistent with World Environment Day’s main theme.



Students participating in Saraswati Puja

Industrial Visit

- **B Tech 2nd Year Students of Chemical and Biochemical Engineering Department** visited Indorama India Private Limited, Jagdishpur under the supervision of Dr Karan Malik and Dr Koushik Guha Biswas, January 13, 2024
- **Industrial and Field Visit of B Tech 3rd year Petroleum Engineering Students** at ONGC and geological features around Dehradun under the supervision of Professor S K Sinha, Dr A Kumar, Dr H K Singh and Dr S Gautam

Energy Institute Bengaluru a center of RG IPT

Symposium on Digitalization for Disruptive Technologies 2024

A symposium on Digitalization for Disruptive Technologies 2024 was organized in association with NASSCOM's at NASSCOM's auditorium, Bangalore during April 18-19, 2024. During symposium, a national level Hackathon was also conducted and a total of Rs. 1,35,000/- prize money was awarded to the winners from different colleges and universities.



Jury members Interaction with the Hackathon participants



Valedictory session photo of the Symposium

SERB Sponsored Workshop

SERB sponsored a two-day workshop on Developments and Innovations in Solar Photovoltaic/ Floating PV with its applications in Green Hydrogen Production and

Electric Vehicle: Assisted with Hands on Training during May 16-17, 2024.



Valedictory session photo of the workshop

Assam Energy Institute a center of RG IPT

Sports week "Krida Orja"

An exhilarating and vibrant Sports Week was organized on February 17-18, 2024, bringing together students, athletes, and sports enthusiasts to celebrate physical activity, teamwork, and healthy competition. The event aimed to promote fitness, camaraderie, and sportsmanship among participants. The Sports Week featured a diverse range of indoor and outdoor games namely; Football, Cricket, Volleyball, Badminton, Chess, Carrom, Tug of war and Kabaddi. The event started with an inaugural session which was graced by the presence of Shri Bhogeswar Baruah. Shri Baruah is an Indian former-athlete and coach. He was one of the first Assamese to win gold at 800-metre running event at the 1966 Asian Games. He is the first Assamese to obtain the Arjuna Award. Institute flag was hosted by the Convener, Sports & Cultural committee. The students of all the five departments then paraded in the group with flag of their respective branches. The AEI community including faculty members enthusiastically participated in the Sports Week, creating a lively and energetic atmosphere. The event facilitated interactions among students from different



Glimpses of enthusiastic participants in indoor and outdoor game

backgrounds, promoting a sense of unity and camaraderie. The sports activities emphasized the values of healthy competition, teamwork, and perseverance. Participants displayed exceptional sportsmanship, encouraging, and supporting each other throughout the various events. Winners and outstanding performers were awarded medals and trophies as a token of recognition for their achievements in the closing ceremony.

53rd National Safety Week 2024

Student Welfare and Grievance Redressal Cell (SW&GC) in association with Fire and Safety Engineering discipline organized National Safety Week during March 4-10, 2024. The week emphasized safety protocols and measures that need to be adhered to, to avoid any type of workplace accidents. The theme for the 53rd National Safety Day/Week 2024 was "Focus on Safety Leadership for Environmental, Social, and Governance Excellence." On this occasion, SW&GC in association with Fire and Safety Engineering discipline organized webinar on "Promoting workplace safety/Role of Industry towards Sustainable Development Goals". Poster competition, Essay writing competition, Extempore speech competition, On spot quiz competition and oral Presentation on the theme of Safety Week were also organized. The events were well participated by the students. Certificates and medals were awarded to the winners.



Glimpses of different competitions held and certificate distribution during National Safety Week 2024

Inauguration of New Hostels and Academic Block

The institute inaugurated a newly built Girl's Hostel, a Boy's Hostel and an Academic Block at the hands of Shri

Rameswar Teli, Hon'ble Union State Minister, Petroleum and Natural Gas and Labour and Employment amidst the presence of Shri Arun Kumar Singh, Chairman and CEO, ONGC, Shri Bhaskar Jyoti Phukan, MD, NRL, Professor A S K Sinha, Director RGIPT and the AEI Faculty. The facilities were inaugurated on March 04, 2024.



Glimpses of Inaugural Ceremony

New Course Initiated

Two new Diploma Programmes has been initiated from this academic session 2024-2025 namely Diploma in Computer Science Engineering and Electrical Engineering. Also IDD courses (Diploma + 3 years B Tech) has been introduced for Six Departments namely Electrical Engineering, Electronics and Instrumentation Engineering, Chemical Engineering, Computer Science Engineering, Mechanical Engineering and Petroleum Engineering.

Training Programme

T&P cell organized an interactive program titled "Students interaction with industry expert from Oil India Limited" with the student community of AEI Sivasagar in coalition with Oil India Limited, Duliajan on April 05, 2024. Mr Pankaj Kumar Goswami, Director(Operation) , OIL and Mr Borthakur involved in the hydrogen project of OIL in Jorhat graced the occasion.



Students interaction with industry expert from Oil India Limited

Workshop

T&P cell organized a workshop on General PM-DevINE Objectives with focus on Global Industry 4.0 Initiatives in oil and gas sector in coalition with AMTRON, Guwahati on April 22, 2024.



Students interaction with experts from AMTRON

Industrial Visit

T&P cell had successfully organized an industrial visit to BCPL, Dibrugarh for Chemical Engineering students on April 26, 2024



Industrial visit to BCPL Dibrugarh

Awareness Programme

T&P Cell has also organized an awareness session on Start up and Entrepreneurship in coalition with Assam Startup on April 26, 2024. Mr Kangkan Jyoti Khargoria from Assam Start up (Guwahati), Mr Angshuman Goswami from NE CRAFTERS ENTERPRISE LLP(

Jorhat) and Mr Wysulon Chetia from Let's Learn Together(Guwahati) graced the occasion.



An awareness session on Start up and Entrepreneurship

Colloquia/Talks

- Dr M Chakkarapani, "Challenges Involved in Detecting PV Array Faults and Localization Method", SERB sponsored workshop on "Developments and Innovations in Solar Photovoltaic/ Floating PV with its applications in Green Hydrogen Production and Electric Vehicle: Assisted with hands on training", at Energy Institute Bengaluru(Centre of RGIPT), on May 16, 2024.
- Ms Ananya Borah, "Safety & Risk Analysis", at Assam Engineering College, Guwahati, February 22, 2024.
- Dr M Chakkarapani, "Applications of MATLAB in Process Control", at Department of Chemical Engineering, KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu on March 19, 2024.
- Dr Karthik Babu NB, "Advanced 3D Printing Technologies for AR/VR", National Institute of Technology, Puducherry on March 19, 2024
- Dr Bhaskor Jyoti Bora, "Power Generation from Bioresources", Entrepreneurship and Skill Development Program, Girijananda Chowdhury University, Guwahati, India on March 23, 2024.
- Dr M Chakkarapani, "Global MPPT Implementation and Challenges Involved in Detecting PV Array Faults", SERB Sponsored high-end workshop (KARYASHALA) titled "Grid Connected Photovoltaic Inverter Design and MPPT Implementation" National Institute of Technology Puducherry on May 11, 2024.

MoU Signed

Assam energy institute signed an MoU between Oil India Limited and Sibsagar Municipal Board to supply MSW as feedstock to 2 TDP CBG Plant which will be set up within the premises of AEI Sivasagar in the presence of Honorable

Union Minister Shri Rameswar Teli, Shri Aditya Vikram Yadav, IAS, DC Sivasagar, Shri Arun Kumar Singh, Chairman & CEO ONGC, and Professor A S K Sinha, Director RG IPT on March 04, 2024.



Signing of the MOU between OIL INDIA LIMITED and Sivasagar Municipal Board at AEI Sivasagar

Honours and Awards

- Dr Naveen Mani Tripathi awarded Life Membership of the Natural Gas Society (NGS) of India
- Ms Ananya Borah received "Safety Hero Award" in the category "Young Safety Professionals" by the Centre of Excellence in Occupational Health, Safety, Fire & Environment (C-OHSFE) at GD Goenka University
- Dr Sanat Kumar Singha awarded as NPTEL Star - Enthusiast

Research Profile

High-Impact Publications	16
Papers/Attendance Presented in Conferences	22
Patents	02



Administrative Block of the Institute

RG IPT Jais Launches New Academic Programmes

MBA in Energy Transition *(for Working Professionals)*

B Tech in Mechanical Engineering

These programmes has been commenced from the Academic Year 2024-25

Publisher: **Director, Rajiv Gandhi Institute of Petroleum Technology**

Jais, Amethi 229 304, Uttar Pradesh

Phone: +91 535 270 4800

|| Email: director@rgipt.ac.in

|| Website: www.rgipt.ac.in