



IIT Bhubaneswar joins the Nation in celebrating 76th Republic Day

IIT Bhubaneswar joined the Nation in celebrating the 76th Republic Day with patriotic fervour, aligned with the national theme of the year. 'Swamim Bharat: Virasat aur Vikas'. Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar unfurled the National Flag on the occasion. In his address, he said: "Heritage conservation versus modern development has been a debating point. The task is to understand the advantages of both and learn how to pursue one without sacrificing the other. Inclusive and sustainable development is impossible without the recognition of a common history and culture. Our efforts at IIT Bhubaneswar resonate with this year's Republic Day theme, as we work towards the Viksit Bharat@2047 vision. On the one hand, we are contributing our might in the field of education, research, entrepreneurship and solving societal problems. On the other hand, we are introducing our students to Indian Knowledge Systems via courses or modules and doing research to establish their relevance to present day needs."





The celebration also showcased the March-Past by the security unit, National Cadet Corps (NCC), Inter-IIT Students' Sports Contingent and exciting performances by the students of the Institute. Dr. Rajendra Prasad Singh, Chaiman, Board of Governors, IIT Bhubaneswar graced the occasion. Among others, Prof. Rajesh Roshan Dash, Dean (Student Affairs), Shri Prashant Kumar Sahoo, Dean (Alumni Affairs & International Relations), Shri Bamadev Acharya, Registrar, Dr. Srinivasa Ramanujam Kannan, Professor In-Charge, Extra-Academic Activities, senior members of faculty and senior officers of the Institute were present on the occasion.







A vibrant cultural programme by the students was also organised in the evening to mark the Republic Day celebrations enjoyable and eventful.





Kendriya Vidyalaya, IIT Bhubaneswar also celebrated the Republic Day with great enthusiasm. Prof. Sarat Kumar Panda, Professor, IIT Bhubaneswar unfurled the Triranga, in the presence of Guest of Honour Dr. Raj K Singh, Associate Professor, IIT Bhubaneswar, Principal KV IIT Bhubaneswar Mr. Chakradhara Prusty, Teachers, staff and students of the school. The students of the school also performed various cultural programmes to mark the celebrations.



Dr. R.P. Singh, BoG Chairman receives award for Lifetime Achievement in Indian Power Sector



Dr. Rajendra Prasad Singh, Chairman, Board of Governors, IIT Bhubaneswar has received the coveted Lifetime Achievement Award from Independent Power Producers Association of India (IPPAI). This award recognizes his exemplary service and contribution in Indian power sector that have left an indelible mark in this field and his visionary and transformative leadership.

Currently, Dr. Singh is focusing on promoting the non-conventional energy sector and creating mini and micro grids to supply power to far-flung areas of the country, which is still an issue to be resolved. He is a strong advocate of 'Sabka haath, Sabka saath, Sabka vikas'. "Unless the poorest of the poor of the society gets engaged in the development of the power sector, it will remain a herculean task to provide power, which is the basic need of the country and its people. There is a need to integrate and involve the citizens to work towards this objective for an inclusive and sustainable growth," Dr. Singh remarked.

Dr Singh also mentioned that the development of Micro and Mini power grids and promotion of unconventional energy sources will help in decentralization of the energy sector, without affecting essential services. He is impressed by the research and innovation carried out by IIT Bhubaneswar towards achieving this objective. A rooftop photovoltaic (PV), wind and Battery integrated Microgrid has been developed by Dr. Chandrasekhar Perumalla, Renewable Energy Systems lab, IIT Bhubaneswar. The system developed can serve a peak load of 10 KW, is useful for research and feeding power to the grid, and improves system reliability under grid failures. It operates seamlessly irrespective of the grid presence / availability, and has necessary protection features. The system operation is assessed with the custom developed weather station that measures all important weather parameters. The

developed system can recover its cost within 6 years, beyond which it can yield energy up to another 14 years, with a total life span of around 20 years.





PanIIT World of Technology (PIWOT) Satellite Conference at IIT Bhubaneswar

IIT Bhubaneswar Bhubaneswar organized the PanIIT World of Technology (PIWOT) Satellite Conference on 23 January 2025. The programme was a one-of-its-kind event uniting a diverse group of leaders from industries, academia, and the government sector to foster a collaborative approach between industry and academia. The conference was jointly organised by the IIT Alumni Association, Wheels Global Foundation India, and Confederation of Indian Industries (CII).

In his address, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar highlighted the transformation of the IITs beyond knowledge dissemination or teaching, and knowledge generation or research over the last five decades. He said that, today, the IITs are also involved in knowledge application or directly solving societal problems via multidisciplinary approach, and in wealth generation or developing entrepreneurship. He also highlighted some unique features of IIT Bhubaneswar.





Speaking on this occasion, Prof. Brahma Deo, MGM Chair Professor, IIT Bhubaneswar discussed the issues and concerns about Industry-Academia collaboration. He stressed that there should be an industry-academia interaction cell at every IIT to bridge the existing gap in this field.

In his address, Dr. Prashant Kumar Hota, Co-Chairman of the CSR & AA Sub Committee and



President and group CSR of Jindal Steel and Power Ltd., delved into the aspects of Industry-Academia collaboration in the field of Sustainability. He emphasized the importance of individual responsibility and human-friendly research to attain sustainability.

Mr. S.S. Mohanty, former Chairman, CII Odisha spoke on the role of IIT in the incubation of startups and new business processes. He highlighted the importance of a collaborative effort between industry and academia in a structured manner to boost research and development in the country.





Mr. Sambit Tripathy, Ex-IRS and CMD, Livelihood Alternatives threw light on the need for an Industry-Academia collaboration with Rural Development. He spoke about how farmers in Odisha are adopting new technologies in farming with the help of SHGs and NGOs to yield good quality crops. He also gave insightful examples about how small-scale farmers are being trained in techniques related to plucking, preserving and packaging fruits and vegetables to make them export quality products. Mr. Ratan Agarwal, Vice President, Wheels Global Foundation India also spoke on this occasion.





The inaugural session was followed by different insightful presentations and interactions. Prof. Dinakar Pasla, Dean, Sponsored Research & Industrial Consultancy of the Institute presented on the Research Ecosystem at IIT Bhubaneswar. Prof. Saroj Kumar Nayak gave a presentation on the Centres of Excellence (CoE) at IIT Bhubaneswar, which are serving as the catalysts for innovation and growth.

The plenary sessions were followed by a panel discussion on Strengthening Odisha's Industrial Growth and Rural Development: The Pivotal Role of IIT and Wheels Global Foundation India. Mr. Suresha G, Executive Director Odisha Asset Operations, Arcelor Mittal Nippon Steel India Limited, Mr. Prashant Biswal, Head CSR, JSW, Mr. Pradeep Kapur, IFS, Former Ambassador, Prof. B K. Mishra, Former Director, IIT Goa participated in this discussion. Dr. Soobhankar Pati, CEO, of Research & Entrepreneurship Park, IIT Bhubaneswar moderated the session. Prof. B.K. Mishra and Mr. Suresh Shenoy, Vice Chairman, and Board Member, of Wheels Global Foundation spoke on the theme–Innovate, Integrate and Elevate Technologies.

The delegates also visited the exhibits by the Startups incubated under IIT Bhubaneswar and the laboratories of the Institute, which showcased the research and innovation acumen of IIT Bhubaneswar. The PIWOT Satellite Conference ended with a group interaction, a feedback essence and an award example a prime prime way of the provide acument of the prime way of the provide acuments of the

a feedback session and an award ceremony where prizes were given to three most innovative start-ups.

Prof. Ashis Biswas, Associate Dean of Alumni Affairs & International Relations, IIT Bhubaneswar delivered the closing remarks of the inaugural plenary session. Prof. P.K. Sahu, Dean of Alumni Affairs & International Relations, IIT Bhubaneswar proposed a vote of thanks.



IIT Bhubaneswar holds 3rd Alumni Meet

With an objective to reunite with the alumni of the Institute and recognize them for their success in post-graduation life, Indian Institute of Technology (IIT) Bhubaneswar organised the 3rd Alumni Meet on 25th and 26th January 2025. The 2-day programme offered a platform to the alumni of the students to visit the campus and interact with the faculty members and existing students of the Institute and share their valuable feedback for improvement.





During the inaugural session, Prof. Shreepad Karmalkar interacted with the students and highlighted the recent developments that the Institute has undertaken in the fields of academics, research, entrepreneurship and innovation. Prof. Prashant Kumar Sahoo, Dean of Alumni Affairs & International Relations, welcomed the alumni and encouraged them to be connected with the Institute. Prof. Ashis Biswas, Associate Dean of Alumni Affairs & International Relations also spoke on the occasion. Mr. Pratik Pattanaik, President, Alumni Association, IIT Bhubaneswar proposed a vote of thanks on this occasion.

The inaugural session was followed by a panel discussion on 'Building an Institute Alumni Ecosystem'. Prof. Shreepad Karmalkar, Director, Mr. Pratik Pattanaik, President, Alumni Association, IIT Bhubaneswar, Dr. Soumya Prakash Dash, Assistant Professor, School of Electrical and Computer Sciences and one of the alumni of the Institute and Mr. Yuvraj Pratap Singh, Vice President. Students' Gymkhana participated in this discussion and shared their views about building a strong network of alumni for the development of the Institute.



During the programme, the alumni visited the schools and laboratories of the Institute, they interacted with the faculty members and participated in World Café event organised on theme of Mental Wellness and Entrepreneurship. They also witnessed the Republic Day celebrations of the Institute during their visit.



Silicon Carbide Research and Innovation Center (SiCRIC) Inaugurated in IIT Bhubaneswar



Silicon-Carbide Research and Innovation Centre (SiCRIC) – A Joint Industry Laboratory between IIT Bhubaneswar and SiCSem Pvt. Ltd. was inaugurated virtually by Shri Ashwini Vaishnaw, Hon'ble Union Minister of Railways, Information & Broadcasting, Electronics & Information Technology, Govt. of India, during Utkarsh Odisha. The center is being built in IIT Bhubaneswar at an initial cost of Rs. 45 cr, and is expected to indigenize the know–how of SiC crystal growth, and high volume production of 150 mm and 200 mm SiC wafers. The center will provide research and innovation support to the Rs. 3000 cr SiC device fabrication and ATMP plant being established by SiCSem Pvt. Ltd. 15 km away from IIT Bhubaneswar in Infovalley–2. The foundation stone for this plant was laid virtually by Hon'ble Chief Minister of Odisha, Shri Mohan Charan Majhi before the inauguration of SiCRIC. Among others, Dr. Mukesh Mahaling, Hon'ble Minister for Health & Family Welfare, Parliamentary Affairs and Electronics & IT, Govt. of Odisha, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar and Mr. Guru Thalapaneni, Managing Director, SiCSem Private Limited were present on this occasion.

IIT Bombay, IIT Bhubaneswar & iVP Semiconductor Sign MoU to Develop Customized Power Semiconductor Products

In a significant step towards advancing power semiconductor device technology in India, SemiX – IIT Bombay, IIT Bhubaneswar, and iVP Semiconductor signed a tripartite Memorandum of Understanding (MoU) on 23rd January 2025. This marks the beginning of a groundbreaking project aiming to design and develop highly customized silicon power MOSFETs for EV and other applications.





The project will leverage the combined expertise of two premier academic institutions and a leading industry innovator. IIT Bombay and IIT Bhubaneswar bring their research capabilities and academic excellence, while iVP Semiconductor contributes its cutting-edge industry experience and insight. Together, the team will focus on product definition, design optimization, device layout and device characterisation.

This project focuses on optimizing power device performance for a range of applications. It will facilitate the development of customized solutions that address the increasing demands for advanced power electronics across various sectors, including automotive, renewable energy, industrial automation, and consumer electronics.

Odisha Legislative Assembly Library Sub-Committee visits IIT Bhubaneswar

The members of the Library Sub-Committee, Odisha State Legislative Assembly, led by Mr. Akash Dasnayak, Hon'ble MLA, and Chairman of the Sub-Committee visited the Central Library of IIT Bhubaneswar on 31st January 2025. The main objective of this visit was to see the operations and the facilities available in the Central Library of the Institute.





In his remark during the visit, Mr. Dasnayak expressed his satisfaction with the extensive facilities available in the library of the IIT Bhubaneswar for the students and the operational sophistication of the same. He was also impressed by the different initiatives taken up by the Institute towards the development of the State of Odisha. The members also visited the Research & Entrepreneurship Park (REP) of IIT Bhubaneswar and interacted with some of the start-ups incubated under REP.

On this occasion, Prof. Rajesh Roshan Dash, Dean (Student Affairs) and the Director-in-Charge welcomed the members of the Sub-Committee and shared the profile of the Institute. Dr. Sasidhar Kondaraju, Chairperson, Central Library briefed them about the Central Library and its facilities. Shri Bamadev Acharya, Registrar proposed a vote of thanks. Among others, senior officials of the Odisha State Legislative Assembly, faculty members and senior officers of the Institute were present on this occasion. Dr. Bibhuti Bhusan Sahoo, Deputy Librarian coordinated the programme.





Successful Conclusion of Inception Workshop on Seagrass & Salt Marshes Restoration under ECRICC Project

IIT Bhubaneswar, in collaboration with the Enhancing Climate Resilience of India's Coastal Communities (ECRICC) Project in Odisha, successfully organized an Inception Workshop on Seagrass and Saltmarshes Protection, Restoration, and Management on 4th February, 2025 in Bhubaneswar. The event, conducted in both physical and virtual modes, brought together key stakeholders, experts, and policymakers to deliberate on ecosystem-based solutions for coastal resilience in Odisha.



The ECRICC project, supported by the Green Climate Fund (GCF) and implemented in partnership with the Ministry of Environment, Forest and Climate Change (MoEF&CC) and the Government of Odisha, aims to safeguard India's coastal communities and ecosystems against climate change impacts. A significant component of this initiative focuses on scientific restoration and management of seagrass and saltmarsh ecosystems, which are crucial for biodiversity conservation, carbon sequestration, and coastal protection.

The technical consulting assignment for this initiative has been awarded to Dr. S. H. Farooq of School of Earth, Ocean and Climate Sciences, IIT Bhubaneswar, in collaboration with James Cook University, Australia, and other institutions to implement scientific and community-based restoration strategies in Odisha's coastal landscapes.

The workshop featured addresses by eminent dignitaries, including: Shri Ashish Chaturvedi, Head, Energy, Environment & Resilience, UNDP India, who provided an overview of UNDP-GCF initiatives and updates on the ECRICC project's progress.

Dr. Sundeep, National Project Coordinator, MoEFCC, Gol, who emphasized the significance of ecosystem-based adaptation in mitigating climate risks. Prof. T. K. Biswal, Emeritus Professor, IIT Bhubaneswar, who reiterated IIT's commitment to pioneering research in coastal ecosystem restoration. The technical session featured insightful presentations from leading researchers and experts: Dr. S.H. Farooq, Associate Professor & Head, School of Earth, Ocean and Climate Sciences, IIT Bhubaneswar, outlined the scope of Seagrass and Saltmarsh interventions, expected outcomes, and deliverables. Dr. Amrit Mishra, Senior Scientist, James Cook University, Australia, presented a detailed action plan, discussing stakeholder roles, timelines, and capacity-building requirements. Dr. Spandita Kar, State Project Manager, ECRICC Odisha, summarized key takeaways, milestones, and action points for long lasting impact of the initiative.



The interactive discussions facilitated knowledge-sharing on global best practices, policy recommendations, and innovative restoration methodologies tailored to Odisha's unique ecological and socio-economic context. The event concluded with a vote of thanks by Dr. Y. K. Singh, followed by a networking session for participants to foster collaboration and future partnerships. The insights gained from this workshop will guide the next steps in the restoration, protection and management of Seagrass and Saltmarshes, ensuring long-term environmental and socio-economic benefits for local communities.

Workshop on Power Devices and Power Electronics

IIT Bhubaneswar organised a one-day workshop on 'Power Devices and Power Electronics' on 6th February 2025. The workshop witnessed discussions on next-gen research, workforce and supply-chain programs necessary to build India from the bottom up in Power Electronics from Design to Devices to Packaging and Systems, so as to bridge the manufacturing gap between advanced countries and India. This workshop was part of the national level effort to establish Industry Co-development Centres (ICCs) in 12 strategic research areas to promote industry-academia collaboration and manpower training. IIT Bhubaneswar is leading the proposal for the ICC on Power Devices and IIT Bombay is leading the ICC on Power Electronics. The workshop conducted at IIT Bhubaneswar was a joint effort for these two ICCs, which witnessed participation from industry and academia.



Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar and Advisor to the ICC on Power Devices, and Prof. Rao Tummala, Advisor to Government of India in India Semiconductor Mission and Emeritus Professor, Georgia Institute of Technology inaugurated the event and addressed the participants. In his inaugural address, Prof. Karmalkar pointed out the strengths of IIT Bhubaneswar in industry-academia collaboration, entrepreneurship development and semiconductor technology and chip design. "This workshop is a significant effort to build industry-academia collaboration towards setting up of the Industry Co-development Centre on Power Devices and contribute to the India Semiconductor Mission," he added. Prof. Rao Tummala highlighted efforts to create a complete ecosystem for Indian Design, Semiconductor, Packaging and System (IDSPS) technologies. The IDSPS focus is not on either semiconductors or packaging but a total of 12 strategic research areas to form any electronic system.

Leaders from companies such as SiCSem, RIR, iVP Semiconductor, CDIL, Texas Instruments, MacDermid Alpha Electronics Solutions, MELSS, and Indium Corporation participated and spoke about their current focus and future needs in terms of research and manpower. The proposal on the ICC on Power Devices was presented by a team of faculty, namely – Dr. Akshay K, Dr. P. V. Satyam and Dr. Abhinav Arya (IIT Bhubaneswar), Dr. Arvind Ajoy (IIT Palakkad), Dr. G. Vijaya Kumar (IIT Tirupati) and Dr. Ankush Bag (IIT Guwahati). The proposal on the ICC on Power Electronics was presented by Dr. Shiladri Chakraborty (IIT Bombay). This was followed by a site visit to key facilities of IIT Bhubaneswar related to semiconductor characterization, chip design, power electronics, research and entrepreneurship park, and SiCRIC (Silicon Carbide Research and Innovation Centre).





वन्दे मातरम् ।

सुजलां सुफलां मलयजशीतलाम् शस्यश्यामलां मातरम् ।

शुभ्रज्योत्स्नापुलकितयामिनीं फुल्लकुसुमितद्रुमदलशोभिनीं सुहासिनीं सुमधुर भाषिणीं सुखदां वरदां मातरम् ।।

वन्दे मातरम् ।

Mother, I bow to thee!

Rich with thy hurrying streams, Bright with thy orchard gleams, Cool with the winds of delight, Dark fields waving, Mother of might, Mother free.

Glory of moonlight dreams, Over thy branches and lordly streams, Clad in thy blossoming trees, Mother, giver of ease, Laughing low and sweet, Mother, I kiss thy feet, Speaker sweet and low,

Mother, to thee I bow.