

*The changing hues & shades...*







## Semiconductor Executives Roundtable chaired by Hon'ble PM

Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar, was one of the 25 exclusive semiconductor executives invited to a Roundtable with Hon'ble PM at his residence on September 10. The executives consisted of 22 CEOs/Chairmen/Presidents of leading global companies relevant for India Semiconductor Mission (ISM) and three academicians including Prof. Karmalkar. Each executive was given 4 minutes to share his/her ideas regarding ISM. Prof. Karmalkar spoke about Capacity Building, Odisha as a potential epi-center of Compound Semiconductor eco-system and the Industry-Academia Joint research at IIT Bhubaneswar in the areas of semiconductor technology and Chip design. He pointed out that capacity building should cover not only skills and research but also entrepreneurship, and is better done using activities rather than lectures. He also said that an average educated Indian should be sensitized regarding the unique features of semiconductor technology which distinguish it from other material technologies such as steel and glass, and thus explain why it took so long for India to manufacture chips while succeeding to send a satellite to the moon.







## Talk on

# 'Critical Role of Electrical Technology in Global Sustainability'



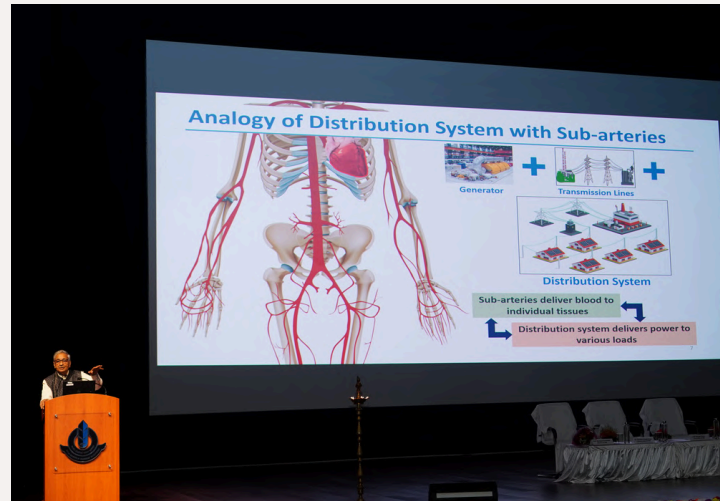
As part of the Engineer's Day celebrations, IIT Bhubaneswar organised a talk on 'Critical Role of Electrical Technology in Global Sustainability' on 18th and 19th September 2024. Dr. Rajendra Prasad Singh, Chairman, Board of Governors, IIT Bhubaneswar addressed students, faculty members and the employees of the Institute in these two sessions.







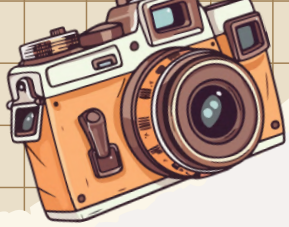
In his address, Dr. Singh shared his insights on the crucial role of electrical energy in modern society. He brilliantly showed how an electrical power system is analogous to human body, heart being the generator, arterial system the grid, blood pressure the voltage, heart rate the frequency, brain the control system and pace maker the battery.



Dr. Singh highlighted the pressing challenges posed by climate change, globalization, and population growth, all of which significantly impact electrical power consumption. He pointed out several factors contributing to the increasing demand for electricity, such as the depletion of coal and oil reserves, the challenges of alternative energy sources like hydropower and nuclear energy, and the rising costs of transmitting power from centralized generation systems. He also emphasized the growing challenges of power transmission to remote regions and the increasing concerns over system reliability. In response to these issues, Dr. Singh advocated for the integration of renewable energy and localized energy systems, particularly through solar and wind power, as viable solutions. He suggested that these approaches could lead to sustainable energy sources, reduced transmission costs, minimized system losses, and a more reliable power supply. Additionally, he underscored the potential of creating networked microgrids and virtual power plants (VPPs) to enhance energy management.





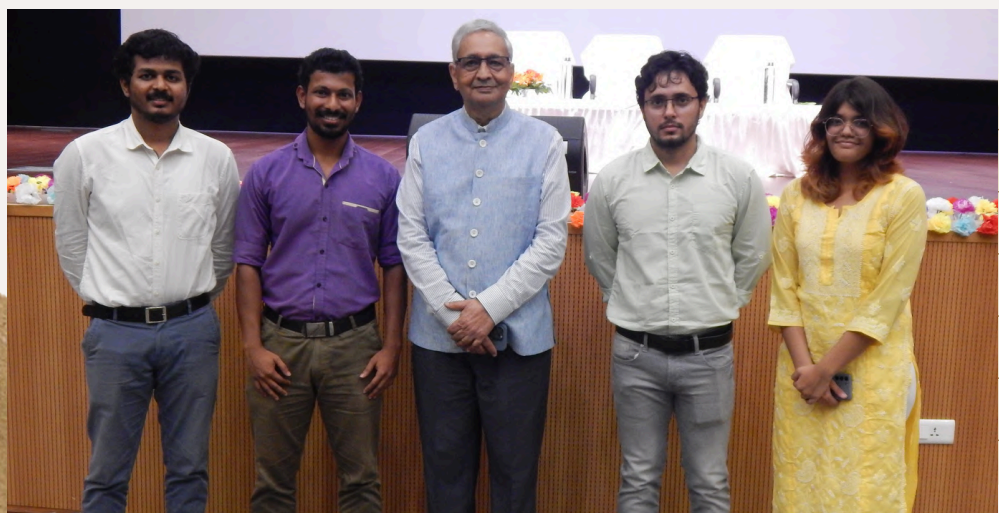


Speaking on the occasion, Prof. Shreepad Karmalkar, Director of IIT Bhubaneswar, appreciated Dr. Singh's talk for demonstrating the difference between information and wisdom, and for its effectiveness in getting complex ideas across to a non-specialist audience, and He said: "You can claim to have communication skill if you can explain your technical ideas to your grandmother. Dr Singh demonstrated how this is done. The slides should contain minimal text of large font size. Diagrams are preferred over text. Imaginative analogies and anecdotes should be employed to get across complex ideas. One may think fast but should speak slowly".



Prof. Karmalkar also shared the ways in which the institute is developing communication skills of its students and employees. Each faculty is required to address 11th and 12th-grade students and their parents on a topic related to their specialization. Apart from developing communication skill and deepening understanding in the faculty, this will also boost the Institute's perception. For students, courses are being run in the institute where the students get a chance to hone their communication skills for research and entrepreneurship.

Prof. P. Dinakar, Dean (Sponsored Research & Industrial Consultancy) proposed a vote of thanks. The two-day programme, held in the state-of-the-art 1500-seater auditorium of the Institute, witnessed an overwhelming response from the members of the Institute.







## Innovating for the Future: Open Innovation Workshop at IIT Bhubaneswar

The Research & Entrepreneurship Park (REP) of the IIT Bhubaneswar organized a two-day Open Innovation workshop on 13th and 14th September 2024. The objective of the workshop was to prepare corporate leaders to collaborate effectively and gain insights into emerging trends, technological breakthroughs, and disruptive strategies that could reshape the innovation landscape. Organized in association with India Accelerator, the workshop aimed to equip corporates and entrepreneurs with open innovation methodologies, enabling them to harness the collective intelligence of external stakeholders and startups to develop forward-thinking solutions and address industry challenges. The event brought together corporate leaders, innovation managers, and R&D teams from leading companies such as NTPC, Tata Steel, Grid Controller of India, and Bajaj Electricals.

Addressing the participants, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar highlighted that the concept of Capacity Building in the modern context should include skill development, research capability and entrepreneurship. He stressed: "Innovation happens when our outlook is enriched by past experience but not limited by it. Perceived simply as money making four decades ago, entrepreneurship is today regarded as a wealth generation skill to be introduced to students during their higher education. This follows from an observation of the curricula in developed countries."







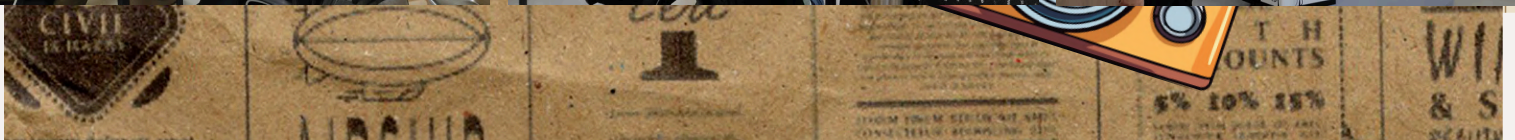
Highlighting the initiatives taken by the Institute towards achieving objective of developing entrepreneurship mindset, he said: “IIT Bhubaneswar, through its Research & Entrepreneurship Park has the mission to empower visionary entrepreneurs, industry leaders and researchers by providing resources and mentorship. To achieve this objective, we are sowing ideas of entrepreneurship among school students, college students and teachers. In addition to running sensitization campaigns, we are modifying our curriculum to incorporate courses which offer a taste of research and entrepreneurship.”

Speaking on this occasion, Dr. Soobhankar Pati, CEO, REP IIT Bhubaneswar said : “Our mission is to bridge the gap between ideas and execution, providing a platform where creativity meets opportunity. At REP, we offer cutting-edge resources, expert mentorship and a collaborative environment designed to transform innovative concepts into impactful solutions. The workshop serves as a platform for budding entrepreneurs to interact with corporate leaders, enabling them to design solutions that address industry pain points.”



Prof. P. Dinakar, Dean (Sponsored Research & Industrial Consultancy) and Dr. Debi Prosad Dogra, Associate Professor, IIT Bhubaneswar also spoke on the occasion and motivated the participants.

The two-day workshop had various insightful sessions including Introduction to Open Innovation by Mr. Arindam Mukhopadhyay, Partner & Corporate Innovation Head, India Accelerator; Understanding of Start-ups and Startup Ecosystem by Mr. Deepak Sharma, Co-founder, India Accelerator and IA Labs; Open Innovation in Real World by Mr. Shantam Shukla, Industry Expert; Strategies to Collaborate by Mr. Nikhil Suthar, Lead Partnership, India Accelerator. The workshop also featured different panel discussions and group activities.







## Plantation drive as part of 'Ek Ped Maa Ke Naam' Campaign

In continuation with the 'Ek Ped Maa Ke Naam Campaign', IIT Bhubaneswar, organised a mass plantation drive in its premises on 17th September 2024. Around 100 members of the Institute participated in the drive with enthusiasm and vigour and planted about 200 saplings at different locations in IIT Bhubaneswar campus.



Dr. Rajendra Prasad Singh, Chairman, Board of Governors, IIT Bhubaneswar led the plantation drive. Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar, Shri Bamadev Acharya, Registrar and Dr. Sivaiah Bathula, Coordinator-NSS also joined him and planted saplings. Faculty members and employees of the Institute participated in this programme. Dr. Srikanta Patra, Professor-in-Charge-Horticulture and Mr. K.V. Reddy, Horticulturist coordinated and participated in the event.







# Glimpses







## Hindi Pakhwada celebration commences at IIT Bhubaneswar

Hindi Pakhwada of the year was formally inaugurated at IIT Bhubaneswar on 17th September 2024. To mark the commencement of the celebration, a Hindi Book Exhibition is being organized in the Central Library of the Institute, in which excellent books of Hindi language are being displayed.



On this occasion, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar and Shri Bamadev Acharya, Registrar inaugurated the Book Exhibition. In his address, Prof. Karmalkar inspired all the faculty members, staff and students of the institute to read Hindi books. He said that knowledge of Hindi language is important not only as a language but also as a heritage of our culture and literature, and its study enhances our language skills.







## A step further in Green Campus Initiative: EV community bike service launched

Let's driEV, a leading EV bike sharing platform and IIT BBS Research and Entrepreneurship Park are proud to announce the inauguration of their EV community bike sharing station. This initiative aligns with IIT Bhubaneswar's commitment to fostering entrepreneurship and advancing the Sustainable Development Goals (SDGs).



Speaking on this occasion, Prof. Shreepad Karmalkar said: “We welcome startups like Let's driEV to our Research and Entrepreneurship Park. This partnership is a step forward in our sustainability journey, making our campus greener and encouraging climate-conscious behaviour by adapting new technologies. It also reflects our commitment to the 100 Cube vision—fostering 100 startups worth 100 Crore each by Odisha's centenary in 2036.”

Ankur B Patel, CEO of Let's driEV, said, “As we envision shaping all colleges/universities into bastions of adoption for climate positive consumer behaviour, today marks a special day as we tie up with IIT Bhubaneswar, our 11th Campus. We hope to make Urban Commute extremely affordable, accessible and available to everyone on the campus. Here's to welcoming more climate-conscious users to our vibrant and expanding community of over 30,000 members at Let's driEV”







## Swachhata Hi Seva Campaign

The Swachhata Hi Seva 2024 has been commenced in IIT Bhubaneswar from 17th September 2024, which will continue till 2nd October 2024. Various activities including cleaning of the campus and its surroundings, administration of Swachhata Pledge to members of Institute and mass awareness programmes are being taken up, in line with this year's theme '**Swabhab Swachhata-Sanskaar Swachhata**'.







# Workshop on Resilient Technologies for Sustainable Distributed Energy Resources in Smart Grid Systems

School of Electrical and Computer Sciences (SECS), in collaboration with the Scheme for Promotion of Academic and Research Collaboration, organized a workshop on Resilient Technologies for Sustainable Distributed Energy Resources in Smart Grid Systems for doctoral scholars and Post Graduate Students with power Electronics background, from 12th to 15th September 2024. The objective was to encourage brilliant young minds to build careers in areas of Electrical Engineering including Power Electronics, Power Systems, Renewable Integration, Smart Grids, and Control Systems. PhD scholars working in Power Electronics and its application across various institutes in India attended the Workshop. The programme was coordinated by Dr. Srinivas Bhaskar Karanki and Dr. Narsa Reddy Tumurru. The event featured Dr. Abhisek Ukil, Associate Professor from the Department of ECSE at the University of Auckland, New Zealand, as the chief guest. Dr. Srinivas Bhaskar Karanki delivered the welcome address and introductions. Prof. V. Pandu Ranga, Dean of Continuing Education, delivered the opening address about IIT Bhubaneswar, followed by Prof. S R Samantaray, Head of SECS, and Dr. Sankarsan M, Head of EE, who provided opening remarks on the School of Electrical and Computer Sciences and the Department of Electrical Engineering, respectively. Dr. Narsa Reddy Tumurru concluded the session with a vote of thanks.







The workshop had 14 sessions, featuring a mix of expert talks from academia and industry, PhD presentations, and hands-on training. Four hands-on training sessions on the C2000 Microcontroller were part of the workshop. The programme included 10 lectures by notable speakers such as Dr. Abhisek Ukil, Dr. Nawaz Hussain, Dr. Bidhan Biswas, Dr. Abhineet Prakash, Dr. Pankaj Dilip Achlerkar, Dr. Ramu Nair, and Dr. Abhinav Arya. Participants also toured the laboratory facilities at IIT Bhubaneswar.

The programme was supported by active volunteering from Mr. Ravi Ranjan, Mr. Pragya Nand Singh, Mr. Kingshuk Chakraborty, and other scholars.







## Orientation-cum- Interaction Session with ITEP freshers and parents

IIT Bhubaneswar welcomed the 2nd Batch of ITEP students and their parents with great enthusiasm. An orientation programme for them was held on 17th September 2024. Prof. Shreepad Karmalkar, Director, introduced the new members of the campus to unique features of IIT Bhubaneswar. Deans, Senior Faculty Members, Heads of Schools, Faculty Advisors, PICs and other functionaries briefed the members about various academic and non-academic facilities of the Institute. The queries and concerns of the students and parents were addressed during these sessions.



## Experience sharing session on Learning Outcomes (LOs) and Active Cooperative Learning (ACL)

The Experience Sharing Sessions on Learning Outcomes (LOs) and Active Cooperative Learning (ACL) was held on 17th and 19th September 2024. These concepts were introduced to faculty via two sessions in the month of May. Faculty were expected to implement these pedagogical concepts from the start of the present semester. Four faculty, namely - Dr Srikant Gollapudi, Dr. Debiprosad Dogra, Dr. P. R. Sahu and Dr. Akshay K shared their experiences of implementing these concepts and answered the queries of the faculty. The highlights of the course "Introduction to research and entrepreneurship" introduced in this semester were presented; this course is extensively activity based and has 4 reading, 6 ACL and 8 summary writing sessions. Director, Prof. Shreepad Karmalkar also interacted with the faculty and answered their queries.







## PM Shri, JNV, Sarang, Dhenkanal Students' visit to IIT Bhubaneswar campus

Under the Vigyan Jyoti programme, 122 students along with 6 teachers from PM Shri, JNV, Sarang, Dhenkanal visited several core sciences and engineering laboratory facilities of various schools on 13th September 2024. Dr. Aparna Pandey coordinated the visit, with active participation from all faculty members of the Vigyan Jyoti team. The students had enriching experience at the campus, which will help them pursue their career in STEM fields.



## Role model interaction and career counselling session at JNV, Konark, Puri

The Vigyan Jyoti team organized a Role model interaction and career counselling session at JNV, Konark, Puri for girl students studying in Class IX-XII. Dr. Remya Nelancherry, Associate Professor, School of Infrastructure conducted the role model interaction session followed by a career counselling session by our Career Development and Placement Officer, Mr. Rabi Kumar Patnaik. The students were greatly benefitted by these useful interactions.

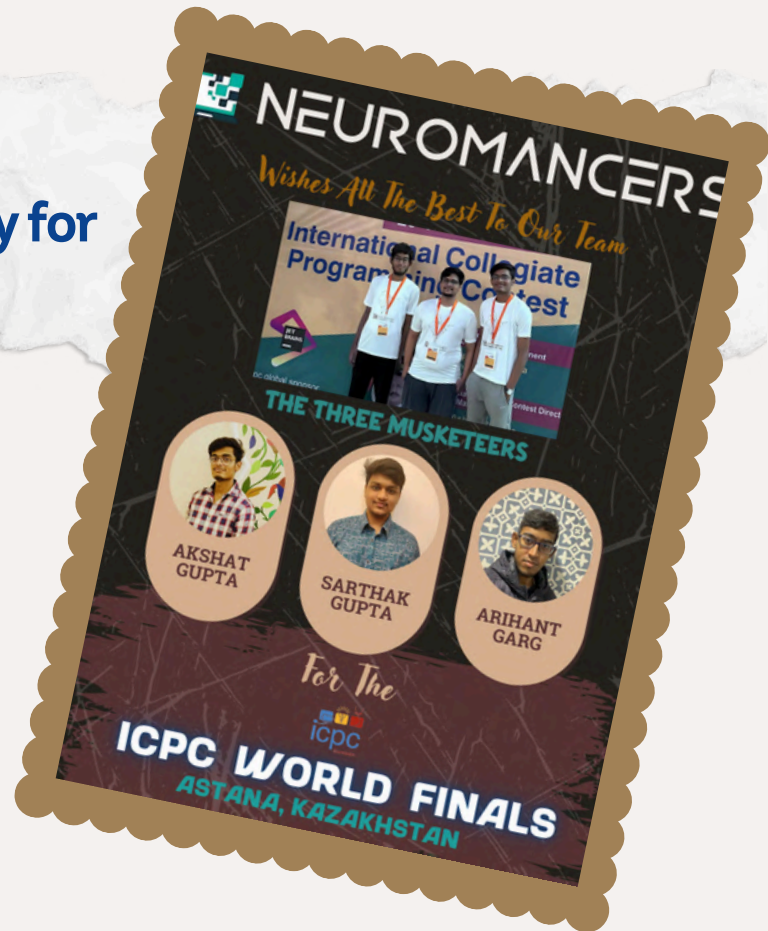






## Student Achievers Three Musketeers qualify for ICPC World Finals

The team 'Three Musketeers' of Neuromancers, comprising the talented members, Akshat Gupta, Sarthak Gupta and Arihant Garg, for successfully qualifying for the prestigious ICPC World Finals (The Annual World Finals of the International Collegiate Programming Contest).



This year's finals will be held in Astana, Kazakhstan. It may be mentioned that ICPC is the world's largest competitive programming event for college students, where some of the sharpest minds in the field of competitive programming come together to solve complex algorithmic challenges.

The Team from IIT Bhubaneswar has successfully secured a position among the 12 teams from India that have made it to the world finals. This reflects the team's remarkable problem-solving abilities, coding expertise, and teamwork on the global stage. ICPC represents the pinnacle of collegiate-level programming competitions, and to be among the few selected is a testament to the hard work and dedication of the team.







# Our Institute Nook & Corner

This page is dedicated to showcase different key places of our Institute, with glimpses and information. This is an effort to make you all familiar with our Institute and the campus.

To start with, this volume features our Central Library, the hub of knowledge and wisdom.

*Let's Explore!!!*

## Central Library @ a Glance

Library Opening Hours	
Monday to Friday	8.30 AM to 9.00 PM
Saturday and Sunday	8.30 AM to 5.30 PM
Library Circulation Hours	
Monday to Friday	9.00 AM to 8.30 PM
Saturday and Sunday	9.00 AM to 5.00 PM
Reading Room Hours @ 5th Floor	
Monday to Sunday	8.30 AM to 2.00 AM 24x7 (During Exam Period)



**New Arrival Books Section**

Text & Ref Books: 26000+	E-Journals: 9700+	ProQuest Dissertations & Theses: 6.8 Lakhs
E-Books (WEL thro NDLJ): 60 million+	Full-Text & Bibliographical Databases: 45	IITBBS PhD Theses: 297
Research Support Tools: 07	Print Magazines: 38	Daily Newspapers: 10



**Popular Book Section**

Central Library, a hub of learning resources, is one of the central facilities working with a mission to provide quality information resources in all forms to the academic and research community of IIT Bhubaneswar. In a nutshell, the library is currently having over 26000+ books, 50+ databases, popular print magazines and newspapers, theses & dissertations, etc. Apart from the procurement of print books, the library achieved phenomenal progress in the subscription of e-resources which includes 9700+ e-journals, 36000+ e-conferences, 17000+ e-standards to its digital collection making "24 x 7 Library" in a real sense on the institute-wide network and off-campus access to e-resources through MapMyAccess. The Central Library has air-conditioned reading rooms with 300+ seating capacity for the users.



### Library Services & Facilities:

- Library Membership and Borrowing Facilities
- Circulation (Issue, Return, Renewal, Reservation, E-mail Alerts)
- Library Catalog Search (WebOPAC), Reference Service
- Current Awareness Service: New Arrival Books/Theses/Publications
- Document Delivery, Remote Access & Research Support Service
- Latest Research Publication through Library Website
- Fully AC Reading Room Facility @ 4th and 5th Floor
- Barefoot Reading Space, Digital Learning Space
- Library Locker Facility, Wi-Fi (Wireless Fidelity) Facility
- Course Reserve Collection in Reading Area @ 4th Floor



**Reading Area & Digital Learning Space**



**Barefoot Reading Space**





तेरी यादों की सुनहरी धूप , एक जश्न है मेरी ज़िन्दगी का...  
गीली रेत पर छोड़ के अपने निशां , लिखती जाती है कोई गीत खुशी का...  
तेरे साथ बिताया हर लम्हा , दिल की धड़कन में कोई साज़ छेड़ जाता है ...  
आज भी जब दस्तक देती है तेरी यादें , तेरा अशक नगमों में बदल जाता है ...

The golden sunshine of your memories is a celebration of my life...  
Leaving her mark on the wet sand, she goes on writing a song of happiness...  
Every moment I spend with you, something strikes a chord in my heart's beat...  
Even today when your memories knock, your tears turn into songs...

*Teri Yaadon ki Sunahari Dhoop*  
*by: Ashish Kulshrestha*