

DEPARTMENT OF ELECTRONICS ENGINEERING

IIT (ISM) Dhanbad



NEWS LETTER

December 2024

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From The HoD's Desk



Dear Readers,

Wishing you all a prosperous and successful New Year, filled with growth, achievements, and new opportunities.

It indeed gives me great satisfaction and pride to be at the helm of an affair of the Department of Electronics Engineering with dynamic faculty colleagues, talented students, dedicated Research Scholars, and a very efficient supporting staffs. Last month (December'24) was another vibrant month for the department with full of activities and a couple of milestones.

The month started with a two-day "Workshop on Fiber Optic Sensors and its Applications". Prof. Karun Rawat delivered a compelling talk titled "Challenges in RF Power Amplifier Design & Development: From Chip to Module", addressing the complexities of designing RF power amplifiers and the challenges of optimizing performance from the chip level to module integration.

Followed by an invited talk by Prof. Piran Kidambi focused on "Atomically Thin 2D Membranes for Next-Generation Hydrogen Technologies". Additionally, a faculty development program on Crystal Growth, Semiconductor Processing, and Manufacturing Technologies was conducted. As an outreach program, the department also conducted a Drone Bootcamp at B.I.T. Sindri, providing participants with hands-on training in drone technology. Prof. Swati Rajput had the opportunity to visit National Sun Yat-sen University (NSYSU) in Taiwan. During this short visit, she engaged in scientific interactions and delivered an invited talk.

We congratulate Mr. Basit Shafat Makhdoomi, a research scholar, and Prof. Rajeev Kumar Ranjan for receiving the "Best Paper Award" for their outstanding research contribution. In sports, our technical staff member, Mr. Bappa Ghosh, secured the Silver Medal in Football at the Inter IIT Staff Sports Meet 2024.

Lastly, Prof. Manodipan Sahoo on filing a patent, marking another significant achievement in his innovative research endeavours.

These events and accolades highlight the vibrant academic, research, and extracurricular environment at Department of Electronics Engineering of IIT ISM Dhanbad.

Please find the Newsletter for detailed updates and give your valuable feedback to fertilize us to be bigger and better.

Wish you all the best!

Prof. Ravi Kumar Gangwar
HoD, Department of Electronics Engineering,
IIT(ISM) Dhanbad

WORKSHOP

on

Fiber Optic Sensors and its Applications

Rate Measurement

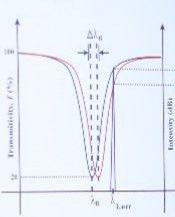


Fig. 9.3. Laser power variation due to the change in Bragg wavelength ($\Delta\lambda_B$)

12/6/2024

Dr. Anurag Kumar, IIT (ISM) Dhanbad

THE DEPARTMENT OF ELECTRONICS ENGINEERING AT IIT (ISM) DHANBAD SUCCESSFULLY ORGANIZED A TWO-DAY WORKSHOP ON FIBER OPTIC SENSORS AND ITS APPLICATIONS FROM 6TH DECEMBER TO 7TH DECEMBER 2024



The Department of Electronics Engineering at IIT (ISM) Dhanbad successfully organized a two-day workshop on Fiber Optic Sensors and its applications from December 6-7, 2024. This event witnessed enthusiastic participation from 79 attendees, including 10 renowned speakers, students, and industry professionals.

The workshop was inaugurated by the director of IIT (ISM), Prof. Sukumar Mishra, who underscored the pivotal role of fiber optic sensors in addressing contemporary challenges in sectors like telecommunications, healthcare, and structural engineering. He elaborated on how India's expanding research capabilities and collaborations with global experts' position the nation as a key contributor to advancing fiber optic technologies.

The sessions offered in-depth insights into fiber optic sensor's working principles, design, and diverse applications. Eminent speakers such as Prof. Balaji Srinivasan (IIT Madras), Prof. Patha Roy Choudhuri (IIT Kharagpur), Prof. Rajan Jha (IIT Bhubaneswar), Prof. Sachin Kumar Srivastava (IIT Roorkee), and Dr. Santosh Kumar (KL University) delivered impactful talks on advancements in structural health monitoring, biomedical engineering, and distributed sensing.

Participants also engaged in hands-on training led by Dr. Nishit Malviya, who provided a detailed demonstration using COMSOL Multiphysics software. This session enabled attendees to model and simulate fiber optic sensors, exploring their performance under various conditions.

The workshop emphasized the importance of industry-academic collaboration in promoting fiber optic sensors as sustainable, high-precision solutions for modern challenges. The event highlighted real-world applications and bridged the gap between theoretical principles and practical implementation. The workshop received widespread acclaim for its well-structured sessions, technical depth, and interactive format. Students appreciated the exposure to cutting-edge technologies, while professionals valued the opportunity to discuss emerging trends with peers and researchers.

The event concluded with a heartfelt vote of thanks to the organizing committee, along with a commitment to continue fostering innovation and learning at IIT (ISM). This workshop has undoubtedly marked a significant milestone in inspiring the next generation of engineers and researchers to lead advancements in fiber optic technology.

INVITED TALKS

It was our privilege to host an insightful session organized by the IEEE Student Branch Chapter at IIT ISM Dhanbad and the Department of Electronics Engineering. The event featured Prof. Karun Rawat, Head of the Centre for Semiconductor Design & Technology and Professor in the Department of Electronics & Communication Engineering at the Indian Institute of Technology (IIT) Roorkee, India, and a Senior IEEE Member, who delivered a talk titled "Challenges in RF Power Amplifier Design & Development: From Chip to Module."

Prof. Rawat explained the importance of RF Power Amplifiers (PAs) in modern technology, such as 5G networks, electronic warfare, consumer electronics, and medical devices. He shared insights into how PAs amplify signals for various applications and the challenges in designing them to be smaller, lighter, more efficient, and capable of handling wide frequency ranges.

He discussed advanced technologies like GaN, MMIC and CMOS, which are shaping the future of RF design, and highlighted key techniques to improve power efficiency, heat management, and overall performance. The talk also included practical examples of testing methods, the evolution of PA designs, and their real-world applications, making complex concepts easier to understand. This session left us with a deeper appreciation of the innovations and challenges in RF design.

We are incredibly thankful to Prof. Rawat for sharing his knowledge and inspiring everyone to think beyond conventional designs in this exciting field.



INVITED TALKS

Atomically Thin 2D Membranes for Next-Generation Hydrogen Technologies



Dr. Piran R. Kidambi is a Harrington Faculty Fellow at the University of Texas at Austin and Assistant Professor at the Departments of Chemical and Biomolecular Engineering and Mechanical Engineering, Vanderbilt University (on-leave). His research leverages the intersection between (i) nanomaterial synthesis, (ii) process engineering, and (iii) in-situ metrology, to enable bottom-up materials design and synthesis for energy, separations, and healthcare applications. His research has been recognized via several awards/honors including ASME Rising Star (2024), AIChE NSEF Young Investigator (2023), DOE Early Career Award (2022), ACS PMSE Young Investigator (2022), NSF CAREER (2020), ECS Toyota Young Investigator (2020), and Ralph E. Powe Junior Faculty Award (2018), among others.

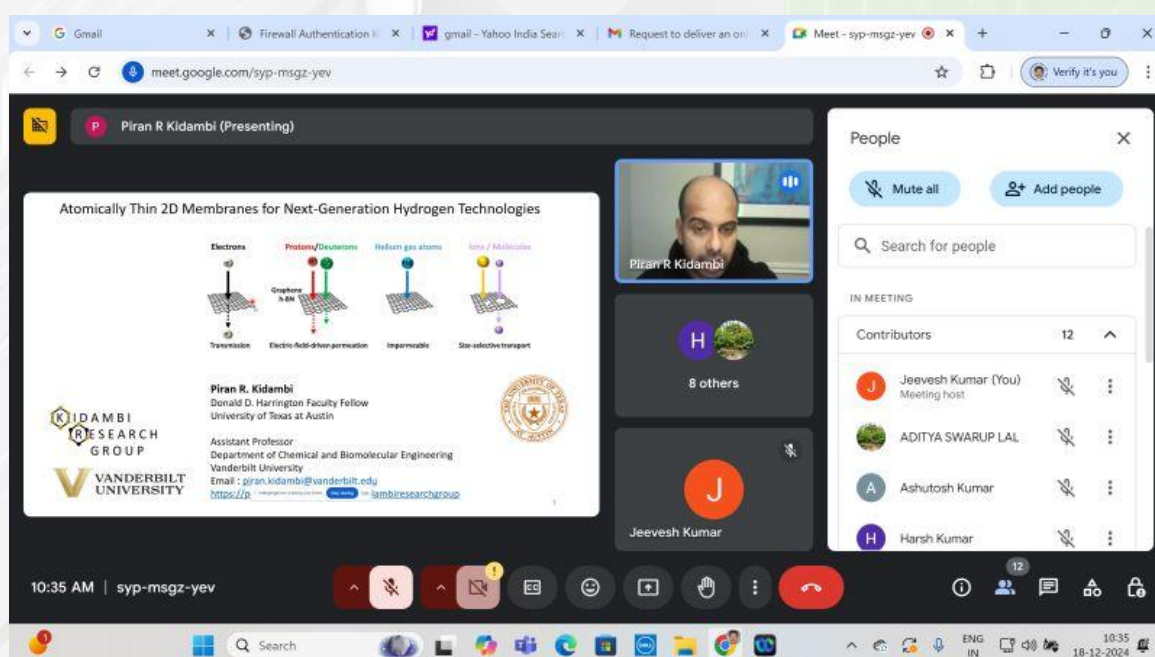
SPEAKER
Prof. Piran R. Kidambi
 Donald D. Harrington Faculty Fellow,
 University of Texas at Austin
 Assistant Professor, Vanderbilt University

Mode of Talk
Virtual

It was our privilege to host Prof. Piran Kidambi, Donald D. Harrington Faculty Fellow, University of Texas at Austin and Assistant Professor, Vanderbilt University, in virtual mode for an Invited talk titled "Atomically Thin 2D Membranes for Next-Generation Hydrogen Technologies".

During the talk Prof. Kidambi discussed the unique strategy of using graphene for H₂ generation, which would be very impactful for the green energy technology. The talk showed many research gateways to our researchers in the path of application of 2D material for the green energy applications.

Thank you Prof. Kidambi for giving your valuable time!





Six days AICTE Training and Learning (ATAL) Academy approved online Faculty Development Program
On
Crystal Growth, Semiconductor Processing and Manufacturing Technologies
16- 21 December, 2024

Organized by
Department of Physics,
Indian Institute of Technology (Indian School of Mines) Dhanbad,
Dhanbad-826004, Jharkhand

Subject Experts:

Coordinator **Co -coordinator**

Faculty Development Program on Crystal Growth, Semiconductor Processing, and Manufacturing Technologies

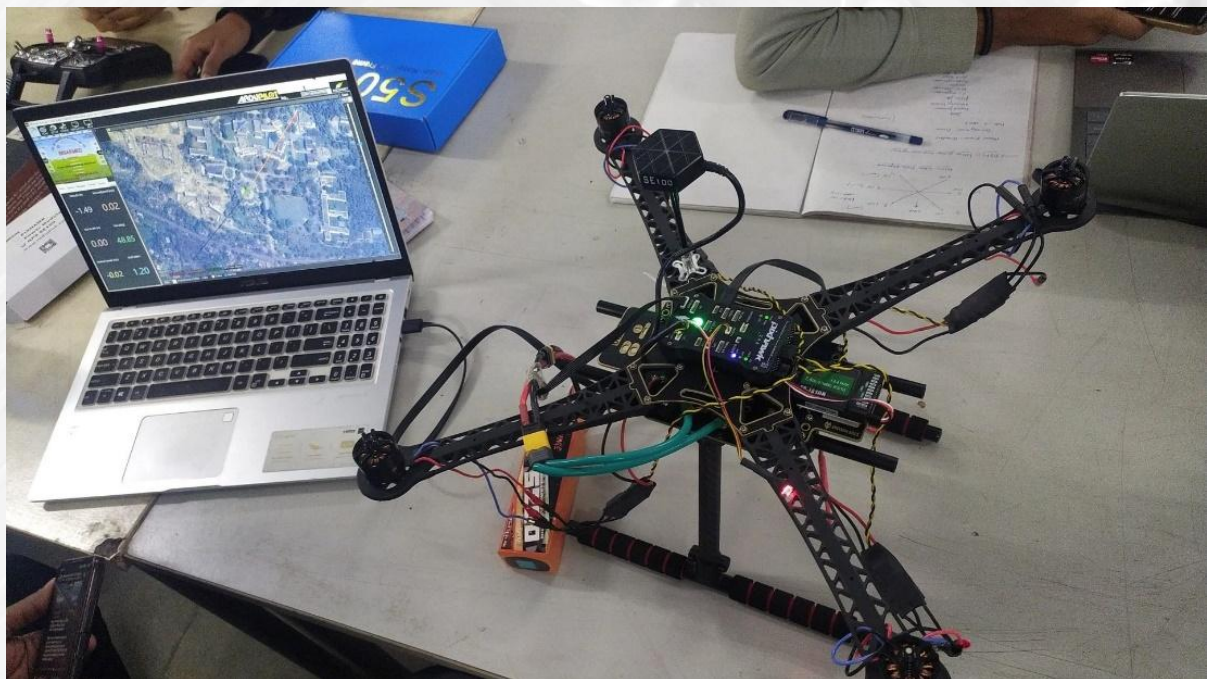
The six-day AICTE ATAL Faculty Development Program (FDP) on “Crystal Growth, Semiconductor Processing, and Manufacturing Technologies” was conducted during 16-21 December, 2024 jointly by the Dept. of Electronics Engineering and Dept. of Physics, IIT(ISM) Dhanbad. The program, conducted online, attracted nearly 210 participants and aimed to enhance educators’ knowledge and teaching efficiency in these key technological fields. The FDP featured expert lectures on various topics including Crystal Growth Techniques, Semiconductor Processing, and Manufacturing Technologies. The notable sessions included: Crystal Growth Techniques by Prof. J. Kumar from Anna University and Prof. R.R. Sumathi from Leibniz-Institut, Germany; Semiconductor Technology by Dr. Pratap Kumar Das from AMD, Bangalore; Process Integration in Semiconductor Manufacturing by Dr. Akhilish Pandey, SSPL, DRDO; Wafer Processing and Photolithography by Dr. C.V. Kannan and Prof. Suresh Sundaram; and Data Science in Semiconductor Fabs by Shri Siddareddy Kurakula, Applied Materials, India. Program coordinators, Prof. R. Thangavel, Associate Professor in the Department of Physics, and Prof. Manodipan Sahoo, Associate Professor in the Department of Electronics Engineering at IIT(ISM) emphasized the program’s role in equipping educators with the skills necessary for advancing teaching and research in these fast-evolving fields.

OUTREACH

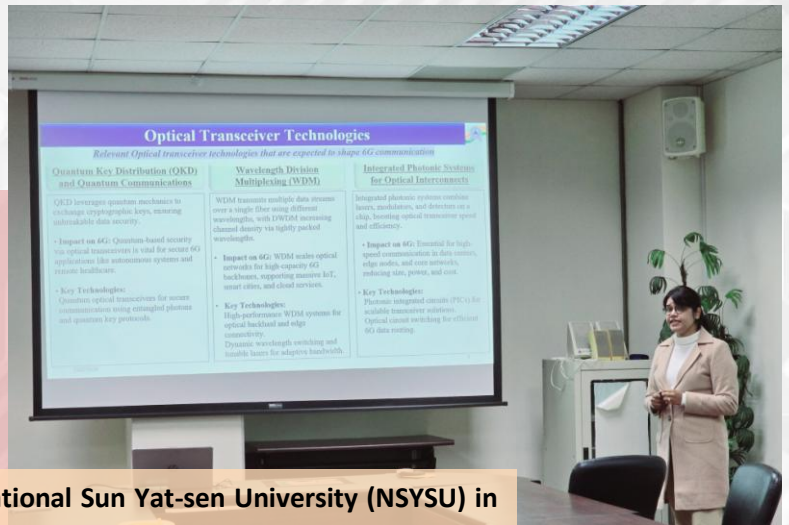
The Electronics Engineering Department of IIT(ISM) Dhanbad recently conducted a Drone Boot camp at B.I.T. Sindri, Jharkhand, under the MeitY-funded project on "Capacity Building for Human Resource Development in Unmanned Aircraft Systems (Drone and Related Technologies)". Held from December 3rd to 7th, 2024, the boot camp aimed to provide participants with a robust understanding of drone technology through both theoretical and practical sessions.

Nearly 60 students from various engineering disciplines participated in this five-day program, gaining hands-on experience in assembling, configuring and successfully flight-testing 12 drones, including 06 hex copters and 06 quad copters. The boot camp's curriculum encompassed key aspects of UAV systems such as UAV introduction, aerodynamics, sensors, GPS, antenna design, UAV communication, image processing, artificial intelligence (AI) and machine learning (ML), control systems and embedded systems.

This initiative not only equipped students with essential skills but also fostered a deeper interest in cutting-edge UAV technologies.



EXCHANGING IDEAS AND INNOVATIONS



Prof. Swati Rajput had the opportunity to visit **National Sun Yat-sen University (NSYSU) in Taiwan** from December 23rd to 30th, 2024. During this short visit, she engaged in scientific interactions and delivered an **invited talk on the topic of "Optical Transceiver Technologies for 6G Communication"**.

This talk delves into recent breakthroughs in optical transceivers, emphasizing silicon photonics and hybrid material platforms that leverage innovative designs and advanced functionalities. These developments overcome silicon's inherent limitations, such as weak light-matter interaction and limited electro-optic efficiency, enabling high-performance optical modulation and detection. Additionally, novel photonic device architectures, including slow-light waveguides, significantly enhance light-matter interaction, resulting in ultra-compact, energy-efficient, and high-speed solutions.

The presentation will underscore the pivotal role of silicon photonics-based optical transceivers in meeting the demands of 6G networks, from high-capacity data centers to photonic neural networks. Furthermore, it will explore the seamless integration of these technologies into the 6G ecosystem, driving reliable, scalable and sustainable communication infrastructures for the future.



Media Corner



धनबाद 06-12-2024

बीआईटी सिंदरी में बूट कैंप: एमईएमएस सेंसर की रक्षा क्षमता के बारे में बताया



सिंदरी बीआईटी में यूएवी बूट कैंप के तीसरे दिन गुरुवार को एमईएमएस सेंसर एवं ड्रोन असेंबली पर ध्यान केंद्रित कर हड्डलाइट पर पहुंच गया। अक्स राज ने एमईएमएस माइक्रो-इलेक्ट्रो-मैकेनिकल सिस्टम सेंसर पर एक सत्र दिया, जिसमें यूएवी रक्षा अनुप्रयोगों के लिए रडार क्रॉस-सेक्शन आरसीएस कमी व सटीक नेविगेशन में उनकी भूमिका पर जोर दिया गया। फ्लाइट कंट्रोलर और जीपीएस स्थापित करना, मोटर एवं ट्रांसमीटर को कैलिब्रेट करना और कार्यक्षमता के लिए मोटर का परीक्षण करना। प्रतिभागियों ने यूएवी यांत्रिकी और एमईएमएस सेंसर की रक्षा क्षमता के बारे में व्यावहारिक जानकारी ली।

संचार के लिए इलेक्ट्रॉनिक्स पर बूटकैंप का तीसरा दिन

दिव्य झा सिंदरी संवाददाता

सिंदरी। पांच दिवसीय यूएवी बूटकैंप (3-7 दिसंबर) तीसरे दिन एमईएमएस सेंसर और ड्रोन असेंबली पर ध्यान केंद्रित करते हुए एक हड्डलाइट पर पहुंच गया। अक्स राज ने एमईएमएस (माइक्रो-इलेक्ट्रो-मैकेनिकल सिस्टम) सेंसर पर एक सत्र दिया, जिसमें यूएवी रक्षा अनुप्रयोगों के लिए रडार क्रॉस-सेक्शन (आरसीएस) कमी और सटीक नेविगेशन में उनकी भूमिका पर जोर दिया गया। व्यावहारिक खंड में तीन चरणों में ड्रोन को असेंबल करना शामिल था।



फ्लाइट कंट्रोलर और जीपीएस स्थापित करना, मोटर और ट्रांसमीटर को कैलिब्रेट करना और कार्यक्षमता के लिए मोटर का परीक्षण करना। प्रतिभागियों ने यूएवी यांत्रिकी और एमईएमएस सेंसर की रक्षा क्षमता के बारे में व्यावहारिक जानकारी प्राप्त की। दो दिन शेष होने के साथ, बूटकैंप आगे और नवाचार का वादा करता है।

A glimpse from print media regarding our boot camp activity in B.I.T. Sindri

बीआईटी सिंदरी में यूएवी बूटकैंप में मानव रहित हवाई वाहन संचार व उड़ान परीक्षण का किया आयोजन



प्रोड्यूसर फाइटर संवाददाता सिंदरी (धनबाद) : बीआईटी सिंदरी में पांच दिवसीय यूएवी बूटकैंप में चौथे दिन गुरुवार को संचार और व्यवहारिक उड़ान परीक्षण पर प्रकाश डाला गया। प्रो. सम्राट मुखोपाध्याय ने मानव रहित

हवाई वाहन संचार प्रोटोकॉल और एआई अनुप्रयोगों पर व्याख्यान दिया। जिसमें नेविगेशन और वास्तविक समय में निर्णय लेने में उनकी भूमिका बतायी। हर्ड्स-आन सेमेट लेब में ड्रोन असेंबल का सत्यापन किया गया। जिसके

बीआईटी सिंदरी में मेटलर्जिकल इंजीनियरिंग विभाग ने औद्योगिक इंटरनेट ऑफ थिंग्स पर कार्यशाला

सिंदरी (धनबाद) : बीआईटी सिंदरी में मेटलर्जिकल इंजीनियरिंग विभाग प्रमुख डॉ. बीएन राय के नेतृत्व और प्रो. सुमित कुमार के संचालन में आयोजित कार्यशाला में उन्नत औद्योगिक प्रौद्योगिकियों और प्रक्रियाओं पर ध्यान केंद्रित किया गया। डॉ. अखलाकुर रहमान ने औद्योगिक इंटरनेट ऑफ थिंग्स पर व्याख्यान दिया। डॉ. रहमान ने इंटरनेट ऑफ थिंग्स के आवश्यक घटकों, इसके अनुप्रयोगों और इससे उन्नत डेटा कनेक्टिविटी और स्वचालन के माध्यम से स्मार्ट विनिर्माण पर चर्चा की। डॉ. रहमान ने उद्योग 4.0 के लाभ की दृष्टि, जिसमें बढ़ी हुई दक्षता, पूर्वानुमानित रखरखाव और लागत में कमी पर व्याख्यान दिया। डॉ. रहमान ने प्रतिभागियों को उद्योग 5.0 की कल्पना करने के लिए निर्देशित किया, जिसमें मानव केंद्रित और टिकाऊ षट्कोणों पर जोर दिया गया।

बाद एक रोमांचक उड़ान प्रदर्शन किया। इसमें प्रतिभागियों ने अपने ड्रोन का प्रदर्शन किया।

IIT-ISM Concludes AICTE ATAL FDP on Semiconductor Technologies

Dhanbad: The six-day AICTE ATAL Faculty Development Program (FDP) on "Crystal Growth, Semiconductor Processing, and Manufacturing Technologies" concluded with a valedictory session at IIT-ISM. The program, conducted online, attracted nearly 210 participants and aimed to enhance educators' knowledge and teaching efficiency in these key technological fields. Program coordinator, Professor R. Thangavel, Associate Professor in the Department of Physics at IIT-ISM, welcomed participants and provided a summary of the sessions. The



FDP featured expert lectures on various topics including Crystal Growth Techniques, Semiconductor Processing, and Manufacturing Technologies. The notable sessions included: Crystal Growth Techniques by Professor J. Kumar from Anna

University and Professor R.R. Sumathi from Leibniz-Institut, Germany; Semiconductor Technology by Dr. Pratap Kumar Das from AMD, Bangalore; Process Integration in Semiconductor Manufacturing by Dr. Akhilish Pandey; Wafer

Processing and Photolithography by Dr. C.V. Kannan and Prof. Suresh Sundaram; and Data Science in Semiconductor Fabs by Shri Siddareddy Kurakula.

Professor Thangavel emphasized the program's role in equipping educators with the skills necessary for advancing teaching and research in these fast-evolving fields.

The session concluded with a vote of thanks by Dr. Manodipan Sahoo, Co-coordinator of the program, expressing gratitude to all involved, including the resource persons and participants.

The six-day AICTE ATAL Faculty Development Program (FDP) Published in international research online and print journal. The Researchers'

Workshop on Fiber Optic Sensors and Its applications

फाइबर ऑप्टिक सेंसर पर कार्यशाला शुरू

आइआईटी आईएसएम

धनबाद. आइआईटी आईएसएम में शुक्रवार से फाइबर ऑप्टिक सेंसर और उनके अनुप्रयोगों पर दो दिवसीय कार्यशाला शुरू हुई. आयोजन इलेक्ट्रॉनिक्स इंजीनियरिंग विभाग द्वारा एकेडमिक ब्लॉक के सर जेसी बोस हॉल में किया जा रहा है. कार्यशाला में देश भर के विभिन्न संस्थानों से 79 प्रतिभागी हिस्सा ले रहे हैं. इनमें 10 संकाय सदस्य और जूनियर रिसर्च फेलो शामिल हैं. प्रतिभागी फाइबर ऑप्टिक सेंसर के मौलिक सिद्धांतों, तकनीकी विकास और उनके विशिष्ट अनुप्रयोगों, जिनमें प्लाज्मोनिक्स पर आधारित सेंसर भी शामिल हैं, पर व्यापक चर्चा कर रहे



कार्यशाला को संबोधित करते निदेशक प्रो. सुकुमार मिश्रा.

फोटो: प्रभात खबर

हैं. कार्यशाला का उद्घाटन निदेशक प्रो. सुकुमार मिश्रा ने किया. उन्होंने भारत सरकार द्वारा सेंसर प्रौद्योगिकी के क्षेत्र में चलाए जा रहे कार्यक्रमों की जानकारी दी. बताया कि भारत सरकार द्वारा सेंसर परीक्षण प्रयोगशालाएं स्थापित करने के लिए लगभग 25 हजार करोड़ रुपये का आवंटन किया गया है. उन्होंने विभिन्न उपकरणों में आयतित सेंसरों के

उपयोग को उजागर करते हुए इस क्षेत्र में घरेलू नवाचार की आवश्यकता को जोर दिया. उद्घाटन सत्र में फिजिक्स विभाग के प्रो. पार्थ रॉय चौधरी और इलेक्ट्रॉनिक्स इंजीनियरिंग विभाग से प्रो. सुबिंदु कुमार, ने विभाग के इतिहास, पाठ्यक्रम और संरचना के बारे में जानकारी दी. प्रो. अमितेश कुमार ने स्वागत भाषण दिया.

सेंसर परीक्षण पर भारत सरकार गंभीर

जार्स, धनबाद : आइआईटी आईएसएम में फाइबर ऑप्टिक सेंसर और उनके अनुप्रयोगों पर दो दिवसीय कार्यशाला का आयोजन किया जा रहा है। शुक्रवार को अकादमिक परिसर के जेसी बोस सभागार में इसकी शुरुआत हुई। कार्यक्रम में देश भर के विभिन्न संस्थानों के 10 फैकल्टी सदस्य और जूनियर रिसर्च फेलो सहित 79 प्रतिभागी भाग ले रहे हैं। यह कार्यशाला इलेक्ट्रॉनिक्स इंजीनियरिंग विभाग की ओर से की जा रही है।

प्रतिभागी प्लाज्मोनिक्स पर आधारित फाइबर ऑप्टिक सेंसर के मौलिक सिद्धांतों, तकनीकी प्रगति और विशिष्ट अनुप्रयोगों पर व्यापक चर्चा में शामिल हुए। संस्थान के निदेशक प्रो. सुकुमार मिश्रा ने सेंसर प्रौद्योगिकी में भारत सरकार के महत्वपूर्ण निवेश पर जोर दिया। कहा कि भारत सरकार के इस निवेश से आगे का रास्ता आसान होगा। इसमें

●आइआईटी आईएसएम में फाइबर ऑप्टिक सेंसर पर दो दिवसीय कार्यशाला की शुरुआत
●आज फाइबर सेंसर, फ्लेक्स बायोसेंसर, ऑप्टिकल सेंसर माडलिंग साफ्टवेयर पर होगी चर्चा

सेंसर परीक्षण प्रयोगशालाओं की स्थापना के लिए लगभग 25 हजार करोड़ रुपये का आवंटन किया गया है।

विभिन्न उपकरणों में आयतित सेंसर पर वर्तमान निरंतरता पर प्रकाश डाला और इस क्षेत्र में घरेलू नवाचार की तत्काल आवश्यकता को रेखांकित किया। भौतिकी विभाग के प्रो. पार्थ रॉय चौधरी, इलेक्ट्रॉनिक्स इंजीनियरिंग विभाग के प्रो. सुबिंदु कुमार, प्रो. अमितेश कुमार ने भी संबोधित किया।

शनिवार को कार्यशाला के दूसरे दिन औद्योगिक वातावरण के लिए



आइएसएम में कार्यशाला को संबोधित करते निदेशक सुकुमार मिश्रा ● जागरण

फाइबर सेंसर, माडल इंटरफेरोमीटर का उपयोग कर प्रदर्शकों को पता लगाना, स्वास्थ्य सेवा अनुप्रयोगों के लिए वेब फ्लेक्स बायोसेंसर, ऑप्टिकल सेंसर माडलिंग साफ्टवेयर पर विशेषज्ञ विस्तार से अपनी बात रखेंगे।

Achievements



Prof. Ravi Kumar Gangwar

Conferred as a Fellow of the Institution of Engineers (IEI), India



Mr. Basit Shafat Makhdoomi and Prof. Rajeev Kumar Ranjan received the **Best Paper Award** for their work on "Memristor Emulator Circuit Design Using MOCCII" at the IEEE International Conference on Modelling, Simulation and Intelligent Computing (MoSiCoM-2024) held at BITS Pilani, Dubai Campus. Dr. Niranjan Raj, a former Ph.D. scholar of Prof. Ranjan, also participated in the conference, presenting two papers with Prof. Ranjan as a co-author, including the award-winning one.

Dr. Niranjan Raj, a previous student of **Prof. Rajeev Kumar Ranjan**, received the IMTR award. This award recognizes his outstanding research publications from the calendar year 2022, which reflect his significant contributions to the field.



"Heartiest congratulations to one of our technical staff on securing the Silver Medal in Football at the Inter IIT Staff Sports Meet 2024! Your dedication and excellence are truly inspiring. Well done, **Mr. Bappa Ghosh!"**





Prof. Manodipan Sahoo

PATENT FILED

A patent has been filed by him on "2D dual gate biosensor FET device and method of performance evaluation of the device in nanometric scale through multiscale simulation approach" on 19th December, 2024.

UPCOMING EVENT

Mark your calendar for our upcoming workshop on the Phased Array Antenna System from 15th to 19th February 2025. Kindly register and grab your seat asap!

[FORM LINK](#)

Key-note Speakers / Resource Persons

- **Prof. Satish Kumar Sharma**
Professor, San Diego State University, San Diego, CA, USA.
- **Prof. Gabriel M. Rebeiz**
Professor, UC San Diego, Franklin Antonio Hall 9500 Gilman Drive, MC 0407, La Jolla, CA 92093, USA.
- **Prof. Gourab Banerjee**
Professor, Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore 560012, India
- **Prof. S. P. Singh**
Professor (Retd.), Department of Electronics Engineering, IIT(BHU), Varanasi, U.P. India.
- **Dr. A. K. Singh**
Dr Raja Ramanna DRDO Distinguished Fellow & Former Director, DLRL Hyderabad.
- **Dr. Milind B. Mahajan**
Group Director, Antenna System Group, Space Application Centre (ISRO), Ambawadi Vistar P.O., Ahmedabad-380015, Gujarat, India
- **Dr. Prashant Vasistha**
Scientist 'G' and HEAD DEST & Project Director, Defense Laboratory, Ratanada Palace, Jodhpur-342011
- **Dr. V. S. Gangwar**
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Scientist F, LRDE DRDO, Bangalore, 560093
- **Dr. Nikesh Kumar Sahu**
Senior Engineer, RF Design Company: Amphenol Omnicomnect India Pvt Ltd, Chennai.
- **Dr. Jayprakash Thakur**
Principal Engineer, Antenna Design & Wireless System Integration Architect Intel Technology, Bangalore.
- **Mr. Marwin Coutinho**
Senior Manager, Rohde & Schwarz, Hyderabad
- **Prof. Ravi Kumar Gangwar**
Professor, Department of Electronics Engineering, IIT(ISM) Dhanbad, Jharkhand.



Patron
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WORKSHOP ON

**Phased Array Antenna Systems:
A Revolutionary Technology for
Modern Communication and
Defence Application**

15th-19th February, 2025



Organized by



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