Department of Electrical Engineering

NEWSLETTER

JUNE 2024 – JUNE 2025



New E-Vehicle Lab Setups

The new Electric Vehicles laboratory is a cutting-edge facility designed to revolutionize hands-on learning and equip students with the skills needed to lead in the evolving EV industry.

HR meet at Hyderabad

HR meet was a resounding success! Engaging sessions, networking opportunities, and thoughtprovoking discussions made it an event to remember.

Institute Achieves Autonomous Status: Paving the Way for Innovation

In a significant development, our institute has gained autonomy this year, allowing it greater flexibility and independence in decisionmaking. This newfound status empowers us to chart our own course, enhance academic programs, and foster research excellence.

Introducing the New Branch: Electrical & Power Engineering

From inspiring keynote sessions to interactive workshops, participants explored innovative business ideas, networked with industry leaders, and discovered pathways to success.

HoD's MESSAGE



I am delighted to share the remarkable achievements and initiatives undertaken by the Electrical Engineering Department at PIEMR. Over the past few months, we have successfully conducted expert talks, hands-on training sessions, and impactful collaborations that have strengthened our commitment to academic excellence and industry integration.

Our students and faculty have actively engaged in cutting-edge learning experiences, including an insightful session on Arduino applications in power electronics and a faculty interaction with adjunct expert D.P. Kothari. Industry leader Mr. Akhilesh Gandhi shared his expertise, enriching our understanding of modern power systems. Additionally, the Expert Talk Series inaugural lecture marked a significant milestone in fostering knowledge exchange within our department.

We take immense pride in forging industry collaborations, as seen in our Mous with Yolax Infranergy Pvt Ltd. and Darling Pumps, ensuring enhanced industry exposure and practical learning opportunities. The successful execution of training programs on electric vehicles and smart power grids has empowered students with future-ready skills. Our students' selection of the solar-powered drone project in Srijan 2K25 stands as a testament to their innovation and dedication.

As we move forward, we remain committed to equipping our students with cutting-edge knowledge, fostering research, and strengthening industry ties. I encourage all to continue their enthusiasm in learning and exploration, ensuring that PIEMR remains a hub of innovation and excellence.

Dr. Dípalí Sarvate Head of the Department Department of Electrical Engineering Prestige Institute of Engineering, Management and Research

Revving Up Innovation: Our New Electric Vehicle Lab

The Electric Vehicles (EV) lab provides students with a dynamic, hands-on learning experience. As they delve into the history, development, and design features of electric vehicles, they gain practical insights into this burgeoning technology. Students learn how to build their own electric vehicles, exploring real-world problems and applying critical thinking skills to solve them. This immersive approach fosters a deeper understanding of sustainable transportation and prepares students for the evolving automotive





Workshop on E-Vehicle

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Hands-On Workshops

Workshop on PLC and SCADA systems

A three-day workshop focused on PLC and SCADA systems was organized on 4th April 2024. Fortyeight students participated, gaining practical insights into precision control, real-time monitoring, and data-driven decision-making. Second, third, and final-year students participated and are capable to apply their knowledge in the manufacturing, energy, and water management sectors.



Exploring Substations: A Practical Insight for EE Students

The field trip was organized to provide the students with a firsthand understanding of the inner workings of a substation and its role in the broader electricity distribution network.

During the visit, the students were given a comprehensive tour of the facility, where they observed the various components and systems that work together to transform, regulate, and distribute electrical power. They were able to witness the operation of transformers, circuit breakers, and other critical infrastructure, gaining valuable insights into the practical aspects of substation management.



PRESTIGE INSTITUTE OF

Plantation Drive

On August 6, 2024, a plantation drive was organized in association with MPPKVLC. The esteemed chief guest for the event was:

- Anita Raghav W/O Superintendent Engineer, Testing and Communication, MPPTCL Indore Pologround
- Nutan Sharma Executive Engineer, MPPTCL 400KV Indore
- Karunamay Kori Testing Attended, 220KV South Zone Substation, Khandwa Road, Indore

As part of the initiative, Holy basil plants were distributed to all faculty members.



Innovative Ideas Shine at Udhyamita 4.0



Udhyamita 4.0, an Idea Pitching Competition held from 8th to 10th April, was a resounding success! Esteemed judges, including Manish Goyal, Suresh Naagar, and Dr. Sanjeev Patni, presided over the event, which saw an overwhelming response from talented students of PIEMR, Prestige Engineering, ranging from first-year to final-year. The competition, spanning two full days, featured two intense rounds that tested the creativity, innovation, and problem-solving abilities of participants.

Notably, students from other prestigious institutions, such as DAVV and IIM Indore, also participated, bringing diverse perspectives and ideas to the table. The event was made possible through our partnership with AIC Prestige Inspire Foundation, which continues to support and foster entrepreneurial talent. The competition served as a platform for students to showcase their innovative ideas, with the potential to impact industries such as



Insightful Expert Talk on Intelligent Off-Grid Systems for

On April 10, 2024, Dr. Rajasekar Natarajan from VIT Vellore delivered a compelling tech talk on "Intelligent Off-Grid Systems for Energy-Sustainable Villages." The session focused on his groundbreaking work in electrifying Alambadi village in Karnataka, a rural community that had been without power for the past 75 years. Dr. Natarajan detailed the design, installation, and commissioning of two distinct off-grid energy models that utilize renewable resources to provide electricity to areas with limited or no access.

He explained the process of designing energy management systems that support centralized power generation, storage, and monitoring. Additionally, he discussed the development of microgrids integrated with IoT technology for automation and demand-side management. Dr. Natarajan also highlighted the creation of intelligent data analysis algorithms for operator interfaces, such as EMS dashboards, and the establishment of cloud-based servers and hub/controller architectures for centralized data visualization and processing. Finally, he addressed the importance of conducting socio-economic market assessments to evaluate and optimize business models for the operation of Panchayath-owned microgrids. His insights not only showcased innovative solutions for rural electrification but also emphasized the integration of modern technology to enhance energy sustainability in underserved regions.







Prestige Institute of Engineering Management and Research

Indore, January 2, 2025 - In a significant stride towards fostering environmental sustainability,

Prestige Institute of Engineering Management and Research is proud to announce its partnership with the Historic Indore Climate

Mission. This 100-day initiative, led by the Indore

Municipal Corporation and Energy Swaraj Foundation, aims to reduce greenhouse gas emissions and establish Indore as the world's leading climate-conscious city.

During his visit to the institute, Prof. Chetan Solanki, a distinguished advocate for sustainable

energy elucidated the mission's ambitious target: to achieve a 20% reduction in electricity consumption in January and March 2025 compared to the same period in 2024. The mission underscores the power of collective action through the following key measures:

1. Reducing organizational electricity consumption by 20.

- 2. Encouraging individual efforts.
- 3. Expanding community influence.

With the combined efforts of the Indore Municipal Corporation, Energy Swaraj Foundation, Prestige Institute, and the wider community, this mission is poised to transform Indore into a beacon of climate consciousness, setting an exemplary standard for cities worldwide.



ग्रीनहाउस गैस उत्सर्जन को कम करने हेतु क्लाइमेट मिशन से जुड़ा प्रेस्टीज शिक्षण समूह

इंदौर। इंदौर शहर को प्रयांदरणीय स्थिरता और हरित भविष्य की दिशा में ने जाने के उड़ेप्र्य से, प्रेस्टीज इंस्टीटयुट ऑफ इंजोनियारेग, मेनेजमेट और रिसर्व ने इंदौर वलाइमेट सिंगन के साथ साझेदारी की है। प्रेस्टीज प्रयुक्ते मन फाउडेमान के वेयरमैन डॉ. उडिया जैन ने इस पहल की घोषणा करते में का परबर बताया।

्हेरी स्वस्कृतिर सितन, तिसं, स्वताव ही घरांक्स के रौतान री। हरीर नाम तिमा अधीर प्रतानी पैक्तन सोलंकी, वित्रें -धरत के स्वाराज घरदिलन ह्या संयुक्त कम सोलन मैन-के कम में जजा खाता से संबाधित किया जा रहा है, जा है, जे सितन के उदेरायें पर प्रकार देवरथ आती 100 दियों के भीरत डालते हुए कहा, नाम जनावी से ग्रीमहरूस सिंग डासवीन में कमी मार्च 2025 के बीचा विजयी जाना और दूरी सा जिस का जावन में 2024 को बीचा विजयी

के लिए कार्य करेंगे। यह पहल और सतत भविष्य के निर्माण के जलवापु परिवर्तन के प्रति शार की लिए दुइ स्वर्तापत है। प्रतिबद्धत का प्रयान होंगों जॉ. समझेते पर हलाक्षर के टीमन वेंसल जे ने ने कह, देशे स्वायों: प्रदेशित स्टोट्यूट्यू से ओर से मितन के साथ हमग्री साइंटोरो फर सॉनिसर उपरेश्वर दों. मनोन मिद्द करती है कि गए कह लिर ब्लुप्स रेलाई और या दे देशनी

ि ण के सरवटे उपस्थित थीं। इस अवसर पर श्री हिमांश् दौरान जैन, पंआईएमआर रूप खयरेक्टर दौरा से खें. शेर सिंह भाकर, कर्नल रमण मानेज अध्यम् और जी राजीव राजवंशी

हापा-नाहरलगुन के मध्या स्पेवशल ट्रेन का परिचालन

इंदेरेश पश्चिम रेलवे सत्ताममंद्रन से होकर हवा से नाहत्लपुन के मध्य स्पेतल ट्रेन घलेगी। यह सुविधा आगले अदेश का बजी रोगी ट्रेन संख्य 09525 हाव-नाहत्लपुन सेराला 60 जनवरी, 2025 से अलगि सुचना कह जा से प्रीज कुष्णव के 60.40 वर्ष वे अलबर तात्वाम मंदल के तरावार (155:15:05, कुष्णवरी), नागव(15.35:11.55), उजीवरी (15.05'15:10) एवं समर्थी, 16.30/16.32) होते हुए गुष्ठवर को 16.00 वर्ष वारत्लपुन, विष्याल प्रदेश, पुर्वेषी शों का स्वर वारत्म में ट्रेन सीज 05:25 से आगति सरेता एवं स्वर्थ के 17 व्याय रेड के प्रार्थ होता के बात स्वर तात्मा मंदल के तात्मा (15.05) होते हुए गुष्ठवर को तरात्म प्रारंत में नागली, 08.16:08.20 सेंग्रेजवरी, उजीवर (96.03/09.05), जायल(09.50)/09.52) एव रात्मला (10.20/10.30) होते हुए मंगलवा के 00.30 बने हवा खुरेखी।





Academic and Industry Experts' Engaging Visit to Electrical



Indore, September 10, 2024 - The faculty members of our college were privileged to host two distinguished guests—Dr. S. C. Choube, Professor at RGPV, UIT Bhopal, an academic expert, and Mr. B. M. Sharma, Managing Director of Shakti Pumps, an industry expert. Their visit featured an engaging interaction session where they shared valuable insights on recent trends in the industry and research fields.

Dr. Choube discussed advancements in Industry 4.0 technologies, particularly focusing on the role of Artificial Intelligence, robotics, and edge computing. He emphasized the importance of human-machine collaboration and the bright future of smart manufacturing.

On the other hand, Mr. Sharma, drawing from his extensive industry experience, highlighted the industry's shift towards sustainability and renewable energy. Elaborating on Shakti Pumps' experiences, he discussed the increasing demand for solar and energy-efficient pumps in India's agriculture sector.

The session concluded with a Q&A where faculty members eagerly sought advice on aligning their teaching practices with these emerging industry trends.

The interaction was a valuable learning experience, providing faculty with insights into both academic perspectives and real-world applications.

Creative Showcase Highlights Engineers' Day

On September 14, 2024, in celebration of Engineers' Day, our department hosted an exciting poster-making competition. The event brought together enthusiastic 2nd-year and 3rd-year students who showcased their creative visual representations on the following themes: Smart Grid Technologies-innovative solutions to enhance the efficiency and reliability of power distribution systems, EV and Charging Infrastructure—advancements in electric vehicles and the development of robust Renewable charging networks, Energy Systems—explorations of technologies harnessing solar, wind, and other renewable IoT in Electrical Engineering sources, integration of the Internet of Things to revolutionize electrical systems, and Sustainable Solutions—ideas Energy promoting sustainability and reducing the environmental impact of energy consumption. Judged by a panel of experts, the competition recognized and awarded students for their ingenuity and technical understanding, making it a vibrant display of talent and innovation, truly embodying the spirit of Engineers' Day.









Industrial Tour to 440kV Indore Substation and SCADA center

On October 17, 2024, the Electrical Department of PIEMR organized an industrial tour to the 440kV Indore Substation. During the visit, students conducted a field tour, explored the state-of-the-art SCADA lab, and learned about various internship opportunities available at the substation. Additionally, they gained valuable insights into wide area monitoring systems, enhancing their understanding of real-world applications in electrical engineering.





Students Attend SEMICON Inauguration by PM Modi



On March 13, 2024, our students had the opportunity to attend the live online inauguration of SEMICON India 2024 by Prime Minister Narendra Modi, organized by AICTE. The event highlighted India's ambitious semiconductor strategy and showcased the country's advancements in the global semiconductor industry. Students gained valuable insights into the future of semiconductor technology and India's role in this rapidly evolving field.

Use of Arduino in Power Electronics Applications

On August 24, 2024, the Electrical Department hosted an enlightening workshop titled "Exploring Arduino in Power Electronics Applications," led by the esteemed R.S. Tare. Attendees delved into the practical applications of Arduino in power electronics, gaining hands-on experience with projects and learning how to integrate Arduino technology to enhance the performance and efficiency of power electronics systems.

Participants praised the workshop for its insightful content and practical approach, making it a valuable learning experience for all involved







Interaction with Adjunct Faculty D.P. Kothari

On December 13, 2024, the faculty and students had the privilege of an enriching interaction session with our esteemed adjunct faculty member, D.P. Kothari. Known for his illustrious career and extensive contributions to the field of electrical engineering, Prof. Kothari has authored several books that are revered in academic circles.

The interaction provided a unique opportunity for attendees to gain insights from his vast knowledge and experience. Prof. Kothari shared his perspectives on the latest trends in electrical engineering and discussed the practical applications of his research





Industry Expert Mr. Akhilesh Gandhi's Insightful Session



Successful Completion of Expert Talk Series Inaugural Lecture at PIEMR's Electrical Department

The Department of Electrical Engineering at Prestige Institute of Engineering Management & Research (PIEMR), Indore, successfully completed its inaugural expert talk series for this semester. The first lecture on "Basic Electrical Fundamentals in Engineering Education," delivered by Dr. Archana Nanoty from the National Institute of Technology, Hamirpur (Himachal Pradesh), took place on January 11, 2025. First and second-year undergraduate students benefited greatly





PIEMR Signs MoU with Yolax Infranergy Pvt Ltd. for Enhanced Industry Equipment Usage and Student Opportunities

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Powering Innovation: MoU Between Electrical Engineering Department and Darling Pumps

On 29th January 2025, the Electrical Engineering Department successfully formalized a Memorandum of Understanding (MoU) with Darling Pumps, a renowned manufacturer of industrial pump solutions. This collaboration aims to foster industry-academia partnerships, enhance technical knowledge exchange, and provide students with hands-on experience in advanced pumping technologies.

Through this MoU, students and faculty will benefit from expert-led workshops, industrial training sessions, and access to cutting-edge research on fluid dynamics and electric pump systems. Additionally, the agreement opens avenues for collaborative projects, internships, and realworld applications, bridging the gap between theoretical learning and practical implementation. This partnership marks a significant step toward strengthening innovation and professional growth in the field of engineering.





Faculty Expert Talk: Green Hydrogen for Sustainable Development

The Electrical Engineering Department organized an expert talk on "Green Hydrogen for Sustainable Development" on 8th February 2025. The session was led by Dr. Shambhu Ratan Awasthi, Ex-General Manager (CPMG) at BHEL, New Delhi, with coordination from Dr. Namami K Sharma and Dr. Pragya Nema. The event witnessed enthusiastic participation from students and faculty members, who gained valuable insights into the evolving landscape of hydrogen technology.

Dr. Awasthi delivered a comprehensive lecture, shedding light on the National Green Hydrogen Mission, the role of liquid hydrogen in rocket propulsion, and the fundamental properties of hydrogen. He explained the color codes of hydrogen, detailing the distinctions between green, blue, and grey hydrogen based on production methods. The discussion also covered hydrogen storage techniques, current industry status, and transportation and distribution challenges, offering a well-rounded perspective on the future of hydrogen energy in sustainable development.

The session encouraged active engagement from the audience, fostering discussions on the practical implications of hydrogen technology in clean energy transitions. Participants appreciated the structured content and expert insights, expressing interest in further exploration of hydrogen-based innovations. The event concluded with a collective reflection on its significance in advancing green energy solutions for a sustainable future.







One-Day Hands-on Training on Introduction to Electric Vehicles

The Electrical Engineering Department organized a oneday hands-on training program, "Introduction to Electric Vehicles," on 19th March 2025, featuring both expert-led online lectures and engaging offline practical sessions. The event aimed to introduce students to foundational and emerging concepts in EV technology, including electric vehicle architecture, battery management systems, and power electronics, alongside real-world simulation tools. Undergraduate students, faculty members, and technical staff participated actively, green showing interest mobility а strong in advancements.

The morning online session was conducted by Mr. Kartikyen V., an Application Engineer at ARK Infosolutions, who provided insights into EV design principles and system components like electric motors, power converters, and vehicle control strategies. His lecture also covered battery technology innovations, charging infrastructure, and the role of power electronics in improving EV performance. Interactive discussions and real-world examples enriched the learning experience, allowing students to engage deeply with the subject.

In the afternoon, the focus shifted to hands-on learning in Room A205(a), where Mr. Anshuman Prakash, Senior Application Engineer at ARK Infosolutions, guided participants through practical EV design applications using simulation tools like MATLAB and Simulink. Students worked on power converter designs and mathematical modeling of DC motors while receiving detailed guidance on system validation and control implementation. concluded The program with discussions on learning outcomes and career prospects in the EV and renewable energy industries, reinforcing its value in bridging academic knowledge with industry practices.









Two-Day Destination Workshop on Smart Power Grid & Renewable Energy

The Department of Electrical Engineering at PIEMR, Indore, in collaboration with UIT-RGPV Shivpuri, hosted a two-day workshop on "Smart Power Grid and Renewable Energy" from 24th to 25th April 2025 at the Centre of Excellence for Power Engineering and Renewable Energy, UIT-RGPV Shivpuri. The event aimed to bridge academic learning with real-world applications, offering students practical insights into smart grid systems and sustainable energy solutions. Coordinated by Dr. Namami Krishna Sharma and Mr. Sanjeev Verma, the workshop featured expertled discussions on energy storage, AI-driven power optimization, and policy frameworks.

Participants engaged in hands-on demonstrations using advanced lab facilities, exploring renewable energy integration with smart grids, real-time simulations, and challenges in implementation. Interactive sessions encouraged knowledge exchange between students, faculty, and industry professionals, strengthening their understanding of modern power systems and sustainability.

The workshop successfully provided students with valuable exposure to renewable energy operations, equipping them with practical skills and industry knowledge. It concluded with discussions on career opportunities in the field, reinforcing the significance of smart grids in shaping the future of energy systems.



Selection of Solar-Powered Drone Project in Srijan 2K25

On May 10, 2025, a team of students from our institution—Dipen Bangad, Nikhil Ranve, Sushmita Dubey, and Kapil Lodhi—achieved a remarkable feat with the selection of their solar-powered drone project in Srijan 2K25. Under the guidance of Dr. Dipali Sarvate, the team showcased their innovative approach to sustainable aerial technology, demonstrating the potential of renewable energy in modern drone applications. During the event, the students had the valuable opportunity to interact with the Minister of Technical Education, Madhya Pradesh, discussing their project's relevance in advancing green technology. The minister appreciated their efforts and vision, recognizing the importance of studentled innovation in shaping future energy solutions. The selection of the project at Srijan 2K25 underscores the commitment of our students to pioneering advancements in engineering and sustainability. Their achievement not only highlights their technical expertise but also reflects the institution's dedication to fostering and development in research emerging technologies. This milestone will undoubtedly inspire future students to pursue creative and impactful engineering solutions.





