

OP Jindal University, Raigarh

Department of Electrical Engineering

Quarterly Reports JANUARY –MARCH 2024

1. International Conference:

- **Dr G Madhusudhan Rao** of Electrical Department published a research paper, “Design of an Interline Power Flow Controller Using Advanced Simulation Tools “Proceedings of the 6th International Conference on Communications and Cyber Physical Engineering, Lecture Notes in Electrical Engineering 1096, https://doi.org/10.1007/978-981-99-7137-4_22.”
- One of the research works of **Dr. Sandeep Biswal**, of Electrical Department entitle "**A Differential Amplitude Variation Based Pilot Relaying Scheme for Micro Grid Integrated Distribution System**" has been accepted for publication in one of the renowned journals (Q3 Indexed SCIE Journal) named International Journal of Emerging Electric Power System with Impact factor 1.0

2. Research Achievements and Publications:

- SCOPUS indexed book chapter of **Dr. Sandeep Biswal**, Sr. Assistant Professor, Department of EE, Title: Directional Relaying Issues in Power Transmission Networks, it will be published in the book titled “Energy and Environmental Aspects of Emerging Technologies for Smart Grid”.
- SCOPUS indexed book chapter of **Dr. Sandeep Biswal**, Sr. Assistant Professor, Department of EE OP Jindal University, Raigarh Department, Title: Optimal Location Selection of Electric Vehicle Charging of Electrical Engineering Stations and Capacitors in Radial Distribution Networks using GJO Algorithm, it will be published in the book titled “Energy and Environmental Aspects of Emerging Technologies for Smart Grid”.
- SCOPUS indexed book chapter of **Dr. R. D. Patidar, Dr. Sushree Dipti Swain Dr. Sandeep Biswal**, Sr. Assistant Professor, Department of EE, Performance of Grid-Connected Shunt Active Filter Equipped PV System, it will be published in the book titled “Energy and Environmental Aspects of Emerging Technologies for Smart Grid”.
- **Mr. Shashikant Kaushaley** has successfully published a patent on, “SELF HEALING IOT NETWORK PROTOCOLS FOR INDUSTRIAL AUTOMATION” on 12th January 2024.
- **Mr. Shashikant Kaushaley** successfully filed a patent on, “Natural Language Processing based Language Translating Device” on 10th January 2024.

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- **Dr G Madhusudhan Rao** of Electrical Department published a research paper/ patent, “Enhancing the performance of sustainable energy management of buildings in smart cities “Indonesian Journal of Electrical Engineering and Computer Science in the Vol. 33, No. 3, March 2024, pp. 1315~1326 Doi :10.11591/ijeecsv33.i3. pp1315-1326.
- One of the research works of **Dr. Sandeep Biswal**, School of Engineering (Electrical Engineering) entitle "**Technical Indices Evaluation of Radial Distribution Network with Optimally Allocated DGs and Capacitors**" has been accepted for publication in one of the SCOPUS indexed journals named ECTI Transactions on Electrical Engineering, Electronics, and Communications (ECTI-EEC).

3. Webinars:

4. Workshops and Faculty Development Programmes:

- **Pushpanjali Shadangi**, Assistant Professor (Senior Grade) of Electrical Engineering Dept., attended FDP on a topic “Big Data Analytics in Smart Grid “organized at the remote center of O P Jindal University organized by NITTTR Chandigarh. From 12 February to 16th February 2024
- **Dr. Ankireddy Narendra** of Electrical Engineering Department participated FDP on “Big Data Analytics in Smart Grid” organized by NITTTR Chandigarh. From 12 February to 16th February 2024.
- **Pushpanjali Shadangi**, Assistant Professor (Senior Grade) of Electrical Engineering Dept., attended FDP on a topic “Operation and Control of Modern Power System “organized by department of Electrical Engineering, RIT Rajarnagar in association with RIT-IEEE students branch and RIT CTL from 5th February to 10th February 2024.
- **Mr. Rakesh Patidar** of Electrical Department participated in FDP on “Big Data Analytics in Smart Grid” organized by NITTTR Chandigarh, from 12 February to 16th February 2024.
- **Prof. Rupesh Patel** Dept. of Electrical Engineering has attended a 5-day Faculty Development Program on "Iron and Steel Processing: Recent Advancements, Innovations, and Future Prospects" organized by Dept. of MME, from 04 - 08 March 2024
- **Dr. Ankireddy Narendra** Dept. of Electrical Engineering, has attended a one-week Faculty Development Program on "**Aiming towards 3D's in Electrical Engineering**"

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organized by Dept. of EEE, Mahatma Gandhi Institute of Technology during 11th to 15th March,2024.

- **Pushpanjali Shadangi** Senior Assistant Professor from Electrical Engineering Department, OPJU has attended a faculty development program on Block chain for Industry 4.0 organized by CSE Department, OP Jindal University held during 15 to 19 January 2024.
- **Dr. Sushree Diptimayee Swain**, Dept. of Electrical Eng. attended a 5-days FDP on “Block chain for Industry 4.0” organized by Dept. of Computer Science. Eng., O P Jindal University, Raigarh.

5. Collaborations and MoUs:

6. Awards:

- **Dr. Amit Jain** and **Mr. Rakesh Patidar** presented an Innovation Poster on behalf of the University at the Institution’s Innovation Council (IIC) regional meet, Indore (M. P.) on 27 January 2024 and got a Special Jury Award.
- Team Vikrant 2.0 participated in the Asia's biggest E-bike competition, SIEP E-BIKE Challenge 2024 at IES University Bhopal from 24th January 2024 to 28th January 2024 under the mentorship of **Dr. Dharmendra Singh Saini** and **Mr. Shashikant Kaushaley**.

7. Training Sessions conducted by the Center for Corporate Education and Training (CCET):

SL	Party	Title of the Training	Training From	Conducted By	Days	participant
1						
2						
3						

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8. Upgradation in infrastructure:

- Submitted a proposal for establishment of a research Lab in Electrical Engineering dept.
- Submitted a proposal for establishment of a Central of Excellence for Electric Vehicle (EV) in Electrical Engineering Department.

9. Important activities conducted by Department/ Expert Lecture Delivered:

- **Puspanjali Shadangi**, Senior Assistant Professor from Electrical Engineering Department, OPJU has conducted a seminar on “Awareness about Environmental Hazards of e-waste” by KARO SAMBHAV, speaker of the seminar was Mr. Omkar Ganu, senior specialist, KARO SAMBHAV dated 12 January 2024 via online mode. 55+students along with the faculty and staff members attended the event.
- The Department of Electrical Engineering, conducted a 5-day hands-on training workshop for ITI Students, Gharghoda from 12th - 16th February 2024. In which Basic Electronics and Soldering workshop, Industrial Visit (SSD & MRSS4), Electrical Machine-I and II, Measurement & Instrumentation and Basic Electrical Engineering, High Voltage Engineering, and visits of all engineering departments were planned on each day starting from 12th February 2024. The program was coordinated by **Mr. Rakesh Patidar (Assist. Professor)**
- Dept. of Electrical Engineering, conducted a 6-day Industrial visit to DCPD (3 Days) and JPL Tamnaar (3 Days) between 12th to 19th February 2024. The session was coordinated by **Mr. Rupesh Patel** and **Mr. Shashikant Kaushaley**.
- The Department of Electrical Engineering, organized expert talk series on the topic “Application of AI & Optimization in Power System “under the COE in Power Electronics and Power Systems on 23-02-2024.
- NITTTR is an autonomous organization established by the Ministry of Education, Government of India, to improve the quality of technical education in the country. Remote center of NITTTR Chandigarh was set up at O P Jindal University to facilitate training programs for teachers and professionals in the field of technical education. The Dept. of Electrical Engineering with NITTTR organizing a STTP on “Big Data Analytics for Smart Grid”. The remote center was coordinated by **Dr. Sushree Diptimayee Swain**.
- Department of Electrical Engineering, conducted a hands-on training for the students of Agrasen ITI College, Raigarh from 11 -15 March 2024 on Basic Electronics, Soldering, Electrical Machines & Instruments, Basic Electrical Engineering, High Voltage

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Engineering, Industrial Visit to SSD & MRSS4 and NIF3.0 exhibition. **Prof. Rakesh Patidar** has coordinated the program.

- Department of Electrical Engineering, School of Engineering in Association with OP Jindal University Raigarh Alumni Association (OPJURAA) organized Alumni Guest Lecture Series on "**An overview of utilizing Artificial Intelligence for electrical load demand forecasting**" by **Mrs. Rashmi Bareth (PhD Research Scholar, NIT Raipur)** on 16-03-2024.
- Facilitator of this event - **Dr. G.M. Rao** (Professor & Head, Department of Electrical Engineering, OPJU), Coordinator of this event - **Mrs. Pushpanjali Shadangi (Senior Assistant Professor, Department of Electrical Engineering, OPJU)** Moderator of this event - **Mr. Vikrant Singh (Teaching Associate, Department of Electrical Engineering, OPJU)** put their last longing efforts to make this webinar successful. This program is organized for faculties, research scholars, MTech students and industry persons. More than 65+ participants attended the program. It was a very informative and insightful talk series as per feedback from participants
- Department of Electrical Engineering, School of Engineering organized a Five-days expert talk series-2 on "A Masterclass in Technical Writing" on 4th-8th, 2024. **Dr. Sushree Diptimayee Swain Associate Professor has coordinated the program.**
- **Dr. Ankireddy Narendra** Dept. of EE, has delivered an **expert session** on "**Techniques of Technical Writing-Publishing**", in lecturer series for research seminar 2024 "**A Masterclass in Technical Writing**", organized by *O P Jindal University, Raigarh, India* on 07-03-2024.

10. Placement drives and Internships:

- AM/NS selected two of our B.Tech students.

11. Students participation in national or state level programs:

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12. Industrial Visit/ Training:

SL No	Course	Semester	Title of the Training	Training From	Industry	Days	No. of Students
1	M.Tech	2nd	Industrial Visit	12 th February	JPL Tamnar	3	12
2	M.Tech	2nd	Industrial Visit	17 th February	DCPP	3	12
3	ITI	4 th	Soldering workshop	12 th February	OPJU	5	20
4	ITI	2 nd	Hands on Training	11 th March	OPJU	5	22