



# SPARK

- **Volume 2 Issue 4**
- **(Sep-Dec 2025)**

*Newsletter of*

*Department of Electrical Engineering*

*Manipal University Jaipur*

**Faculty  
Editor**

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## About Newsletter

The 4th issue of second Volume of SPARK celebrates the remarkable achievements of the Electrical Engineering Department at Manipal University Jaipur. This edition showcases notable research publications, patented IPRs, engaging seminars, workshops, and professional development programs (PDPs), reflecting the faculty's dedication to innovation and academic excellence. The successful organization of an international conference further underscores the department's global engagement and thought leadership.

We also proudly highlight international conferences and expert & industrial connect lectures, & development programme organised, students' outstanding accomplishments, including excellent placements in top companies, accolades in co-curricular and extracurricular activities, and recipients of the Dean's Excellence Award, recognizing talent and dedication. SPARK continues to capture the dynamic spirit, hands-on learning, and forward-thinking initiatives driving the department's growth and success.

*Dr. Peeyush Garg, Faculty Editor- SPARK*

*Mr. Sanskar Bansal, Students Editor- SPARK*

# Messages



## From HoD Desk

It is a pleasure to share the 4<sup>th</sup> Issue of the 2<sup>nd</sup> Volume of our department newsletter, SPARK in year 2025. Each edition reflects the enthusiasm, creativity, and academic excellence of our students and faculty, strengthening our sense of community.

This issue highlights our continued commitment to learning, innovation, and industrial & academic collaboration. I encourage everyone to actively engage and contribute, making SPARK a source of inspiration and knowledge.

I extend my sincere appreciation to the editorial team for their dedication and efforts, and I wish this edition great success.

**Dr. Neeraj Kanwar, Head,  
Electrical Engineering Department,  
Manipal University Jaipur**

# Research Outcomes

## Journal Articles Published:

- **Bishwajit Dey**, Raj Jadav, Rangu Seshu Kumar, published a research article “Choice of an efficient, sustainable and cost-effective energy storage system for optimal operation of a microgrid system incorporating adaptive demand side management strategies” in Journal of Energy Storage, Volume 139, Part B, 2025.
- **Amit Saraswat** et al. published a research article “A Grid-Interfaced DC Microgrid-Enabled Charging Infrastructure for Empowering Smart Sustainable Cities and Its Impacts on the Electrical Network: An Inclusive Review” in Journal MDPI: Smart Cities, Vol. 8, issue 5, 2025.
- S. Jain and **Neeraj Kanwar** published a research article “Evaluation of System Performance for Load Dispatch Feasibility Under N-1 Generator Contingencies in Day-Ahead Unit Commitment in IEEE Access, vol. 13, 2025.
- K. Sapkota, Shabbiruddin, **Neeraj Kanwar**, et al published a research article “Techno-economic evaluation of a smart power management system based on wind turbine hybrid model using Homer tool: a case study in journal Scientific Reports Vol.15, (2025).
- **Bishwajit Dey** et al. published a research article “Fabrication of titanium dioxide nanoparticle-doped polymer electrolytes for dye-sensitized solar cell modules: self-powered internet of things applications” in journal Materials for Renewable and Sustainable Energy Vol. 14(64), 2025.
- **Amit Soni** et al, published a research article “Inorganic lead-free double perovskites for eco-friendly energy conversion technology” in Journal of Materials Science: Materials in Electronics, Vol. 36, 2025.
- **Bishwajit Dey** et al. published a research article “Profit Maximization of Distribution Network Stakeholders Facilitating EV Demands with Adaptive Demand Side Management Policies, in IEEE Open Journal of Industry Applications, 2025.
- **Bhuwan Pratap Singh, Sunil Kumar Goyal & Shahbaz Ahmed Siddiqui** published a research article “A comparative analysis of varying weather patterns effect on the performance of the MPPT techniques” in journal Discover Applied Sciences Vol. 7, 2025.

## Conference Paper Published:

- J. Singh, T. Rawat, **Neeraj Kanwar** and R. Tiwari published a conference paper title as Multi-stakeholders Perspective for Smart Scheduling of Electric Vehicles, in 2025 IEEE 5th International Conference on Sustainable Energy and Future Electric Transportation (SEFET), Jaipur, India, 2025.
- S. Jain and **Neeraj Kanwar** published a conference paper title as Performance Comparison of Gaussian and Weibull Distribution for Next-Day Solar Irradiance and PV Power Generation Forecasting, in 2025 IEEE 5th International Conference on Sustainable Energy and Future Electric Transportation (SEFET), Jaipur, India, 2025.

## Participation in Faculty Development Programme (FDP)

Faculty Name	Organizing institution	Name of Event
Dr. Pulakraj Aryan	UGC- MMTTC, JNV University, Jodhpur	<b>NEP-2020: Orientation &amp; Sensitization</b> during 06- 13 Oct 2025.
Dr. Gaurav Kansal	UGC- MMTTC, JNV University, Jodhpur	<b>NEP-2020: Orientation &amp; Sensitization</b> during 15- 23 Oct 2025.
Dr. Peeyush Garg	MUJ & NITTTR Chandigarh	<b>Sustainable Energy Technologies</b> during 01- 05 Dec 2025.

## A Warm Welcome to Our New Faculty



We are delighted to welcome **Dr. Gaurav Kansal** as Assistant Professor. He has completed his Ph.D. from MNIT Jaipur and holds an M.Tech degree from MNIT Jaipur and a B.Tech from UPTU Lucknow. His research primarily focuses on power systems, electrical machines, demand response, and electric vehicle modeling, with an emphasis on sustainable and intelligent energy solutions. He has actively contributed to research-oriented teaching and has earned elite NPTEL certifications, reflecting his strong engagement in advanced research, innovation, and academic excellence.



# 5<sup>th</sup> International Conference FlexEV 2025



**MANIPAL UNIVERSITY  
JAIPUR**



## 5<sup>th</sup> International Conference on Flexible Electronics for Electrical Vehicles (Flex-EV 2025)

**December 15<sup>th</sup> - 16<sup>th</sup>, 2025**



**Mr. Ashu Srivastava**  
State of Wisconsin  
Pittsburgh, Pennsylvania, USA



**Dr. Narendra D. Londhe**  
Professor, NIT Raipur



**Mr. Shiv Narain**  
Senior Technical Manager  
Central Electronics Ltd.



**Dr. Jaume Anguera**  
Ramon Llull University  
Barcelona, Spain



**Dr. Pramod Kumar**  
Professor  
Central University of Karnataka



**Ms. Divya Srivastava**  
FedEx  
Pennsylvania, USA



**Dr. Priyanka Chawla**  
Associate Professor  
NIT Warangal



**Dr. Doğan Çelik**  
Associate Professor  
Yil University, Van, Turkey



**Dr. Sanyog Rawat**  
Central University of Rajasthan



**Dr. Akash Saxena**  
Professor  
Central University of Haryana



**Dr. Hari Om Bansal**  
Professor  
BITS Pilani



**Dr. Yeshpal Gupta**  
President  
Lincus Inc., Arizona, USA

*Organized By*

**Department of Electrical Engineering,  
Manipal University Jaipur, Rajasthan, India**



# 5<sup>th</sup> International Conference FlexEV 2025





# Industry Connect Expert lecture



MANIPAL UNIVERSITY  
JAIPUR

## Industry Expert Lecture on “Powering the future in Industrial perspectives”



**Ms. Shruti Sharma**  
Graduate Engineering Trainee  
Schneider Electric India



Date & Time: 05/11/2025 (Wednesday) 3:30 PM onwards,  
Venue: Room No. 118D, AB1  
Gmeet link: <https://meet.google.com/kxb-iftx-oyh>

Organised by  
Department of Electrical Engineering, Manipal University Jaipur





# Workshop Organised












## Workshop on "Power Flow and Fault Studies for the Evolving Power Grid"

**Features:**

- ❑ Fundamentals of Power Flow Analysis in Modern Grids
- ❑ Short-Circuit and Stability Studies for Grid Reliability
- ❑ Insights into Long-term Transmission Planning



**Parth Shah, P.E**  
 Technical Consultant (Hitachi Energy)  
 M.S. in Electrical Engineering (Power Systems), University of Southern California, Los Angeles, CA (USA)

**Schedule: 06/10/2025 (Monday), 9:00 AM onwards**  
**Meeting Link: <https://meet.google.com/uny-xefd-ooc>**  
**Mode: Online**

**Organised by**  
**Department of Electrical Engineering, Manipal University Jaipur**











## Workshop on "Smart Grid Innovations: Anomaly Detection in AGC Systems with Entrepreneurial Insights"

*In collaboration with E-cell*

**Features:**

- ❑ Introduction to Cyber-physical system
- ❑ AGC framework in Indian grid
- ❑ Case study on THDC, NLDC
- ❑ Demonstration of hack-detection prototype (Hardware and Software)



**Mohammad Yasir Nazir**  
 Senior Research Fellow,  
 IIT Roorkee

**Schedule: 09/10/2025 (Thursday) 12 Noon onwards**  
**Meeting Link: <https://meet.google.com/jdx-csqz-wpr>**  
**Mode: Online**

**Organised by**  
**Department of Electrical Engineering, Manipal University Jaipur**



# Expert Talk Sessions









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**JAIPUR**

## Expert Talk on

### “Operational excellence in EHV substations through maintenance, asset Management, and safety”

**Features:**

- ❑ Hands-on experience in the operation and maintenance of Extra High Voltage (EHV) substations.
- ❑ Expertise in grid operations and asset management.
- ❑ Insights into ensuring safety in high-voltage substations.
- ❑ Best practices for optimizing maintenance and managing assets efficiently in EHV substations.



**Tarali Deka**  
 Assistant General Manager (Tariff)  
 Assam Electricity Grid Corporation  
 Limited (AEGCL)  
 Bijulee Bhawan, Paltan-Bazar, Ghy:-1

**Schedule: 28/10/2025 (Tuesday), 1.30 PM onwards**  
**Meeting Link: <https://meet.google.com/vao-jpgd-pjz>**  
**Mode: Online**

**Organised by**  
**Department of Electrical Engineering, Manipal University Jaipur**









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**JAIPUR**

## Expert Talk on

### “Enhancing Reliability and Safety in EHV Substations”

**Features:**

- ❑ EHV Substation Operations & Maintenance
- ❑ Smart Grid Operations & Asset Management
- ❑ Safety in High-Voltage Environments
- ❑ Maximizing Reliability & Asset Performance



**Tarali Deka**  
 Assistant General Manager (Tariff)  
 Assam Electricity Grid Corporation  
 Limited (AEGCL)  
 Bijulee Bhawan, Paltan-Bazar, Ghy:-1

**Schedule: 28/10/2025 (Tuesday), 3:30 PM onwards**  
**Meeting Link: <https://meet.google.com/vao-jpgd-pjz>**  
**Mode: Online**

**Organised by**  
**Department of Electrical Engineering, Manipal University Jaipur**

# International Expert Sessions

 **MANIPAL UNIVERSITY  
JAIPUR**  
INSPIRED BY LIFE

**4** QUALITY  
EDUCATION

**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE

 **INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)

## International Expert Session on Antenna Booster Technology for V2X Communications

Organised  
by  
**DEPARTMENT OF ELECTRICAL ENGINEERING**

Date: - 15<sup>th</sup> December 2025  
Time: - 02:00 PM (IST)  
Venue: - Board Room, Faculty Block – II, 1AB  
Meeting Link: - <https://ln.run/e0pCp>  
(Expert will join Online, Participants can also join Online)

Event Coordinator  
**Dr. Sunil Kumar Goyal,**  
Department of Electrical Engineering



**Dr Jaume Anguera**  
Founder and CTO – Ignion  
Professor – Ramon Llull University, Barcelona, Spain

 **ACCREDITED WITH GRADE  
A+  
NAAC**

**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE

**11** SUSTAINABLE CITIES  
AND COMMUNITIES

 **INSTITUTION'S  
INNOVATION  
COUNCIL**  
(Ministry of Education Initiative)

 **MANIPAL UNIVERSITY  
JAIPUR**  
INSPIRED BY LIFE

## Seminar on “Magnetic Photonic Opal/Fe<sub>3</sub>O<sub>4</sub> Glasses Application”

Date & Time: 16/12/2025 (Tuesday) 09:30 AM onwards,  
Mode: Online  
Meeting Link: <https://url-shortener.me/308Q>



**Dr. Jesus Edurado Lugo**  
University of Montreal, Canada

Organised by  
**Department of Electrical Engineering, Manipal University Jaipur**



## Expert talks



### Expert Talk on

## Energy-Efficient Query Processing in IoT- Enabled Wireless Sensor Networks

Organised

by

DEPARTMENT OF ELECTRICAL ENGINEERING

Date: - 15<sup>th</sup> December 2025

Time: - 02:45 PM (IST)

Venue: - Board Room, Faculty Block – II, 1AB

Meeting Link: - <https://ln.run/e0pCp>

(Expert will join Online, Participants can also join Online)

Event Coordinator

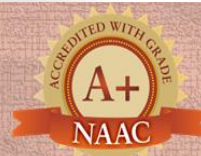
Dr. Amit Saraswat, EE



**Dr. Promod Kumar**

Professor

Central University of Karnataka, India



### Seminar on

## “High End Ceramic Material for Fabrication of C&X Band Phase Control Module (PCM) for PESA Radar”

Date & Time: 15/12/2025 (Monday) 1:10 PM onwards,

Venue: Board Room, Faculty Block 2, Academic Block 1

Meeting Link: <https://ln.run/e0pCp>



**SHIV NARAIN**

Technical Manager at Central Electronics  
Limited (A Govt. of India DSIR Enterprise),  
Uttar Pradesh, India

Organised by  
Department of Electrical Engineering, Manipal University Jaipur



# Professional Development Workshop

## Digital Content Creation for Educators using Canva

Date: 02-04 Dec 2025

Venue: LAB 204 1AB

Mode: Offline

Organised by

Department of Electrical Engineering, Manipal University Jaipur

in collaboration with

HR Department, Manipal University Jaipur



## Dean's Excellence Award for Academic Achievements

Regn No.	Student Name	Batch / Semester
229205008	Ayush Saxena	B.Tech EEE – VI Sem (Jan–May 2025)
23FE10EEE00006	Shreyansh Saxena	B.Tech EEE – IV Sem (Jan–May 2025)
229209030	Vikas Choudhary	B.Tech ELC – VI Sem (Jan–May 2025)
229209032	Khushal Kedawat	B.Tech ELC – VI Sem (Jan–May 2025)
229209033	Ayushi Mittal	B.Tech ELC – VI Sem (Jan–May 2025)
229209036	Sanskar Bansal	B.Tech ELC – VI Sem (Jan–May 2025)
229209038	Vishesh Gupta	B.Tech ELC – VI Sem (Jan–May 2025)
229209040	Saksham Agarwal	B.Tech ELC – VI Sem (Jan–May 2025)
229209041	Mohd Ateek Khan	B.Tech ELC – VI Sem (Jan–May 2025)
23FE10ECO00003	Anvi Singh Chhetri	B.Tech ELC – IV Sem (Jan–May 2025)
23FE10ECO00015	Himanshu Patel	B.Tech ELC – IV Sem (Jan–May 2025)





## Dean's Excellence Award for Research & Sports

Regn. No.	Students Name	Award
229209036	Sanskar Bansal	Excellence in Research
229205010	Rudra Sankar Bishnu	Excellence in Research
229209032	Khushal Kedawat	Excellence in Research
2292090	Harshita Dua	Excellence in Research
2292090	Naman Bashim	Excellence in Research
229209033	Ayushi Mittal	Excellence in Research
229205008	Ayush Saxena	Excellence in Research
2292090	Akash Mukherjee	Excellence in Research
2292090	Aryan Bhati	Excellence in Research
2292090	Arjavi Arya	Excellence in Sports
229205001	Aayush Saxena	Excellence in Sports





# Students' Placement (Sep-Dec 2025)



*Congratulates*

**Sanskar Bansal**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Jaskaran A Singh Rustam**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Anurag Sharma**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Vikas Choudhary**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Saksham Agrawal**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Nishit Dongre**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :





# Students' Placement (Sep-Dec 2025)



*Congratulates*

**Akash Mukharjee**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Naman Bhasin**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Raghav Bhatia**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :



*Congratulates*

**Arjavi Arya**

B.Tech Electrical and Computer  
Engineering  
Batch: 2022-2026

For Getting Placed in :





## • Alumni Testimonial



**Mr. Jaswant Singh Gogadev**

**GET, Secure Meter**

**B.Tech. (ELC), Batch 2021-2025**

*The Department of Electrical Engineering at Manipal University Jaipur has been instrumental in building my strong technical foundation and professional mindset. The department's rigorous curriculum, hands-on laboratory exposure, and consistent faculty mentorship prepared me effectively for industry & professional expectations.*

*I am proud to be an alumnus of a department that emphasizes academic excellence, practical learning, and career readiness, which has enabled me to confidently contribute in my role as a Graduate Engineering Trainee at Secure Meters Limited, a leader in smart energy and metering solutions.*



**Website:**

<https://jaipur.manipal.edu/foe/departement-of-electrical-engineering.php>



**Facebook:**

<https://www.facebook.com/eemuj/>



**LinkedIn:**

<https://www.linkedin.com/in/departement-of-electrical-engineering-manipal-university-jaipur-564398271/>



**Instagram:**

<https://www.instagram.com/eeemuj/>