



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 4th Issue of the 2nd 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	NEP-2020: Orientation & Sensitization during 06- 13 Oct 2025.
Dr. Gaurav Kansal	UGC- MMTTC, JNV University, Jodhpur	NEP-2020: Orientation & Sensitization during 15- 23 Oct 2025.
Dr. Peeyush Garg	MUJ & NITTTR Chandigarh	Sustainable Energy Technologies 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.

5th International Conference FlexEV 2025



5th International Conference on Flexible Electronics for Electrical Vehicles (Flex-EV 2025)

December 15th - 16th, 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
Yıl 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

5th International Conference FlexEV 2025



Industry Connect Expert lecture



MANIPAL UNIVERSITY
JAIPUR

Industry Expert Lecture on “Powering the future in Industrial prospectives”



Date & Time: 05/11/2025 (Wednesday) 3:30 PM onwards,

Venue: Room No. 118D, AB1

Gmeet link: <https://meet.google.com/kxb-iftx-oyh>

Ms. Shruti Sharma

Graduate Engineering Trainee
Schneider Electric India

Organised by
Department of Electrical Engineering, Manipal University Jaipur



Workshop Orgainsed



Hitachi Energy



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



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-cszq-wpr>
Mode: Online

Organised by

Department of Electrical Engineering, Manipal University Jaipur

Expert Talk Sessions



7 INNOVATION AND CLIMATE CHANGE
9 INNOVATION AND INFRASTRUCTURE
11 INNOVATION AND COMMUNITY
nirf
Aaranyak 2021
Management (11) Engineering (11)
Engineering (11) Management (11)
Architecture (11) Law (11)
A+ NAAC
INSTITUTION'S
INNOVATION
COUNCIL
Inspired by Life

MANIPAL UNIVERSITY
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



7 INNOVATION AND CLIMATE CHANGE
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Aaranyak 2021
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Architecture (11) Law (11)
A+ NAAC
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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



International Expert Session on Antenna Booster Technology for V2X Communications

Organised

by

DEPARTMENT OF ELECTRICAL ENGINEERING

Date: - 15th 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)



Dr Jaume Anguera

Founder and CTO – Ignion

Professor – Ramon Llull University, Barcilia, Spain

Event Coordinator

Dr. Sunil Kumar Goyal,

Department of Electrical Engineering



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of Education Initiative)



MANIPAL UNIVERSITY
JAIPUR
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Seminar on “Magnetic Photonic Opal/Fe₃O₄ Glasses Application”

Date & Time: 16/12/2025 (Tuesday) 09:30 AM onwards,
Mode: Online

Meeting Link: <https://url-shortener.me/308Q>



Dr. Jesus Eduardo 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



Dr. Promod Kumar

Professor
Central University of Karnataka, India

Organised

by

DEPARTMENT OF ELECTRICAL ENGINEERING

Date: - 15th December 2025

Time: - 02:45 PM (IST)

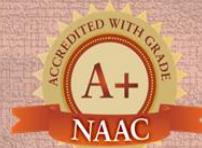
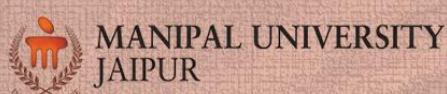
Venue: - Board Room, Faculty Block – II, 1AB

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

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

Event Coordinator

Dr. Amit Saraswat, EE



Seminar on

**“High End Ceramic Material for Fabrication of
C&X Band Phase Controle 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	Sanskars 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	Sanskars 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	Aakash 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)

 <p><i>Congratulations</i> Sanskar Bansal B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in : NEENOPAL</p>	 <p><i>Congratulations</i> Jaskaran A Singh Rustam B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in : SECURE</p>
 <p><i>Congratulations</i> Anurag Sharma B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in : SECURE</p>	 <p><i>Congratulations</i> Vikas Choudhary B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in : SECURE</p>
 <p><i>Congratulations</i> Saksham Agrawal B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in : accenture</p>	 <p><i>Congratulations</i> Nishit Dongre B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in : accenture</p>

Students' Placement

(Sep-Dec 2025)

 <p><i>Congratulations</i></p> <p>Akash Mukharjee B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in :</p> <p>ASCENT CIRCUITS An Amber Group Company</p>	 <p><i>Congratulations</i></p> <p>Naman Bhasin B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in :</p> <p>ASCENT CIRCUITS An Amber Group Company</p>
 <p><i>Congratulations</i></p> <p>Raghav Bhatia B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in :</p> <p>ASCENT CIRCUITS An Amber Group Company</p>	 <p><i>Congratulations</i></p> <p>Arjavi Arya B.Tech Electrical and Computer Engineering Batch: 2022-2026</p> <p>For Getting Placed in :</p> <p>ASCENT CIRCUITS An Amber Group Company</p>

• 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/department-of-electrical-engineering.php>



Facebook:

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



LinkedIn:

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



Instagram:

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