



**MANAV RACHNA**

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MANAV RACHNA EDUCATIONAL INSTITUTIONS

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**Department of Electrical and Electronics Engineering**

**Faculty of Engineering & Technology**

**Manav Rachna International University**

## FROM EDITORS DESK

We are delighted to present the First edition of MRIU, FET-EEE buzz in the campus for the session Jun-Dec 2016. This buzz gives the measure of Progress. The past year was full of various activities by the students and faculty in academics, co-curricular, extra-curricular as well as research & developments. The three sections of this Newsletter – **College Buzz**, **Faculty Buzz** and **Student Buzz** throw light on the activities & happenings in our department.

## COLLEGE BUZZ

### Factory Automation Lab Setup

It is a matter of great pride for the department of Electrical and Electronics Engineering to have Mitsubishi Factory Automation Lab sponsored by Mitsubishi Electric India (MEI). The inaugural ceremony of “**Mitsubishi Factory Automation Lab**” was organized on 26.09.2016. The lab was inaugurated by **Dr. Amit Bhalla** (VP-MREI) and **Mr. Yokoyama** (Director-MEI).

**Mr. Kitamura** (GM-MEI), **Mr. Hemant Thakur** (AGM HR), **Dr. Sanjay Srivastava** (MD-MREI), **Dr. M.K. Soni** (ED & Dean, FET, MRIU), **Dr. Anita Khosla** (HOD, EEE) and other senior dignitaries of MRIU also graced the occasion.

The objective of the Advanced Automation (Factory Automation) lab is to train the students and faculty on Automation and to encourage engineering students to take up this



multidisciplinary field as a choice of their Carrier and have hands on experience with latest automation technologies as per industry requirement.

The lab has world class infrastructure with latest iQR set up which includes Q series Programmable logic Controller (PLC), servo, variable frequency drive (VFD), Graphical operational terminal (GOT)2000 and X-Y Plotter.

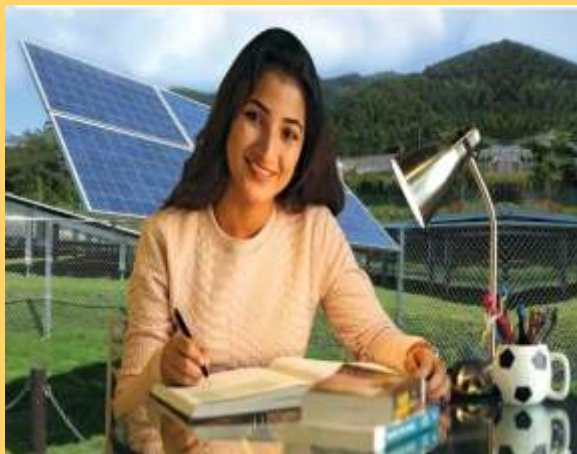


## 1<sup>ST</sup> BATCH OF B-TECH (ELECTRICAL ENGINEERING) WITH SPECIALIZATION IN POWER ELECTRONICS IN COLLABORATION WITH SU- KAM

The department has also signed a MoU with **Su-Kam Power systems Pvt Ltd** to jointly offer B.Tech in Electrical Engineering with specialization in **Power Electronics** with an intake of 30 students.

### Salient features of the course:-

- Exhaustive curriculum catering to industry requirement.
- Industrial Training by **Su-Kam Power Systems Pvt Ltd**.
- Mentorship by Industry Experts for students' projects.
- Assured placement at a minimum package of 3.4 Lac per annum & **Letter of Intent at the time of admission.**



“Smart Solar Lab” has also been established in the campus which shall contribute to impart practical knowledge to students as well as faculty.

## ORIENTATION PROGRAM

To welcome students in their new journey and to facilitate a smooth transformation into college life, an orientation program was organized at the campus. The program began on an auspicious note by doing Hawan Ceremony followed by orientation which was attended by all students and senior functionaries.



## FACULTY BUZZ

Ms. Ashish Grover, Ms. Richa Adlakha, Ms. Neha Midha and Ms. Sarita Singh from EEE Department have enrolled themselves into Ph.D Programme in MRIU.

Ms. Prabhjot Kaur, Assistant Professor, EEE, has successfully completed her course work for Ph.D programme from National Institute of Technology, Kurukshetra.

## INDUSTRIAL INTERACTION



**Dr. Amit Bhalla** (VP-MREI), **Dr. Sanjay Srivastava** (MD-MREI), **Dr. M.K. Soni** (ED & Dean, FET, MRIU), **Dr. Anita Khosla** (HOD,EEE), visited factory of Mitsubishi Electric India, Pune on 29<sup>th</sup> August 2016.

Ms. Sonam Jain visited Centre of Excellence (by Siemens) at BML, Munjal University on 30.08.2016.

Dr. Anita Khosla, Ms. Richa Adlakha and Mr. Shashank Gaur visited Mitsubishi Electric India, Gurgaon on 5<sup>th</sup> July, 2016.

### PAPER PRESENTED

Dr. Anita Khosla, Ms. Richa Adlakha and Ms. Sonam Jain presented and won **Best Paper award** at Engineers's Day Celebration by **IE(India)- Skill Development in Core Sector-Vision 2025** for 1 day on 15<sup>th</sup> September 2016 in K Hotel, Faridabad. The paper title was "**Skill Development**

**for Young Engineers in Renewable Energy Sector"**.

**Ms. Prabhjot Kaur**, has presented her research paper in **IEEE sponsored conference** at Delhi Technical University, Delhi on 6<sup>th</sup> July - ICPEICES-2016. In this paper the author has designed and developed a Graphical User Interface for the real time measurement of vital human body parameters using LabVIEW. The paper will be uploaded in IEEE explore.

### EXPERT LECTURE

An expert lecture on "**Entrepreneurship**" was organized by the department of Electrical and Electronics Engineering on 26th October 2016. The resource person was Mr. Nitin who is leading an Export Company (Divine International) and doing business in 56 countries. All the faculty members and the students of EEE attended the lecture.

## FACULTY DEVELOPMENT PROGRAMME ATTENDED

Department of Electrical and Electronics Engineering had organized 5 days Faculty Development Programme in Mitsubishi Factory Automation Lab in collaboration with Mitsubishi Electric India Pvt Ltd. from 19<sup>th</sup> Dec- 23<sup>rd</sup> Dec, 2016 on “**Process Control**”. The workshop was attended by 18 members. The participants included internal as well as external faculty members.



The training was provided by trainer from Mitsubishi. After successful completion of FDP, certificates were given to participants by **Dr. M.K. Soni** (ED & Dean FET).

Other FDP's attended by faculty members in MRIU were:-

- “**Time Management**” on 17<sup>th</sup> Dec, 2016.
- “**Office Functioning & How to be more Productive at work**” on 22<sup>nd</sup> October 2016.
- “**Enhancing Quality of University Research organized by Internal Quality Assurance Cere (IQAC)**”, on 16<sup>th</sup>-17<sup>th</sup> September 2016.
- **In-House** FDP was organized by the department where all the faculty members delivered lectures on topics related to their teaching assignments from 20.07.2016 to 22.07.2016.

## WEBINAR ATTENDED

The webinars hosted by MEI resource persons are arranged on regular basis.

The webinars attended by the faculty members are listed below:-

- “**Mitsubishi Servo Systems:MR-JE Features**” on dated 26 December 2016.
- “**Introduction to Mitsubishi D700 VFD**” on dated 25 November 2016.
- “**MR-JE Amplifier: Advanced Functions**” on dated 22 November 2016.
- “**MELSEC iQ-F Series: The next level of industry**” on dated 25 October 2016.
- “**iQR Analog Advance Functions**” on dated 7 October 2016.

## **SHORT TERM COURSE/ WORKSHOP ATTENDED**

Ms. Ashish Grover attended the Short Term Course on “**Advanced Operations Research**” through ICT from 7<sup>th</sup> – 11<sup>th</sup> Nov 2016.

Ms. Ashish Grover, Ms. Richa Adlakha and Mr. Shashank Gaur attended training on **iQR** for 2 days from 18<sup>th</sup> July-19<sup>th</sup> July 2016 at Mitsubishi Electric India, Gurgaon.

## **WORKSHOP/SEMINAR ATTENDED**

Ms. Meenakshi Chahar and Ms. Sonam Jain along with students of 1<sup>st</sup> Semester EEE Department attended a one day workshop conducted by Mr. P.K.Jain on 24<sup>th</sup> october 2016 at **SU-KAM Centre of Excellence**.

Dr. Anita Khosla, Dr. Leena G, Ms. Ashish Grover, Ms. Richa Adlakha and Ms. Sonam Jain attended a seminar on “**Intellectual Property Rights and Patent Filing**” on 5<sup>th</sup> November 2016.

## **PUBLICATIONS**

Ms. Amrinder Kaur, Dr. Yadwinder Brar and Dr. Leena G have published paper on “Neural based Algorithm for Fault Detection in a Transformer” in International Journal (FEJESC, Vol-3, ICCS- 591-625, November - 2016).

Ms. Meenakshi Chahar and Ms. Deepali Puri have published paper on “A Review on Physical Protection of Smart Grid” in International Journal (IJCSMC, Vol-5, Issue-11, November -2016).

Ms. Deepali Puri and Ms. Meenakshi Chahar have published

paper on “Relevance of Neural Network in Fault Detection of Single Phase Induction Motor” in International Journal (IJCSMC, Vol-5, Issue-10, October - 2016).

Dr. Anita Khosla, Dr. Abdul Hamid Bhat and Saima Ashraf have published paper on “Power Quality Improvement using Voltage Source Converter Based Unified Power Quality Conditioner (UPQC) in International Journal (IJCA, Vol-148, Page No.-21 - 27, August -2016).

Dr. Anita Khosla and Akanksha have published paper on “Power Flow Control in Wind Power System Through Narma L2 and PID Controller” in International Journal (IJERSTE, Vol-5, Issue-08, August -2016).

Dr. Leena G, Humeera Altaf and Dr. Abdul Hamid Bhat have published paper on “ Performance Evaluation of Multilevel AC/DC Converter for Power Quality Improvement with DC Bus Capacitor Voltage Balancing” in International Journal (JEEEE, Vol-147, Issue-04, Page No.-25 - 31, August - 2016).

Rajiva Thakur, Mr. K.P. Tomar and Dr. Anita Khosla have published paper on “Investigation of Power System Voltage Stability Improvement with VSC HVDC” in International Journal (IJESIT, Vol-4, Issue-03, August - 2016).

Saduf Shabeer, Ms Ashish Grover and Dr. Abdul Hamid Bhat have published paper on “Shunt Hybrid Filter for Harmonics Reduction to Improve Power Quality using PI and Hysteresis Controller” in International Journal (IJCA, Vol- 147, page No.7-12, August - 2016).

Saduf Shabeer, Ms Ashish Grover and Dr. Abdul Hamid Bhat have published paper on “Shunt Hybrid Filter for Harmonics Reduction to Improve Power Quality using PI and Hysteresis Controller” in International Journal (IJCA, Vol- 147, page No.7-12, August - 2016).

Ms. Amrinder Kaur and Dr. Leena G paper on “Investigation on the role of D-Statcom for Power Quality Improvement in Distribution Networks” have been accepted for publication in MR Journal Engineering and Technology.

## STUDENT BUZZ

### MITSUBISHI ELECTRIC CUP

Students of VII Sem, EEE Navdeep Singh, Nikhil Khera, Gaurav Sharma and Adarsh (VI Sem , Mech.) representing team “Technokats” submitted project “**Intelligent Building for Greener Tomorrow**” for the **Mitsubishi Electric Cup**. The project has been shortlisted from amongst 100 teams nationwide to be presented in the MEI Cup in Feb 2017 at Pune.



The project aims at building a housing society that provides a healthy environment by monitoring and controlling air and noise pollution. The society will be integrated through IoT for centralized intimation and security system, smart bin and proper space allocation of vehicles.

### TRAININGS

The 5 days Skill Development Training Programme for students was conducted by National Power Training Institute (NPTI), Faridabad from 19<sup>th</sup>-23<sup>rd</sup> september 2016. During the first three days the training was provided at MRIU campus and for the last two days students visited NPTI where they were given hands on training on **Thermal Simulator** and **CCGT Simulator**.



## PLACEMENTS

13 students from the batch passing out in 2017 have been placed in companies like IBM, TCS, Just Dial, Bucks and Gainer, Eureka Forbs, etc. and 3 students from 2016 batch were placed in Su-Kam.

## FINAL YEAR PROJECTS

Some of the major projects made by final year students of EEE department were PLC Based Car Washing System, Traffic Light Monitoring System Based on Vehicle Density, Automatic Railway Gate Control, PLC based Smart Building, Intelligent Alcohol Detection System, Automatic Transformer Protection, Smart Parking Solution etc.

## INDUSTRIAL VISIT

The students of 7<sup>th</sup> semester EEE along with two faculty members Ms. Amrinder Kaur and Ms Sonam Jain visited **Condour Power Products Pvt Ltd, Sector 4, Ballabgarh** on 22<sup>nd</sup> October 2016 to gain knowledge on electrical machines. **Mr B.B. Singh**, Managing Director, addressed the students about fundamental concepts of designing and manufacturing of Electric Motors.



The students visited **11KV Substation of MRIU** to get exposure and practical knowledge of transformers, relays, circuit breakers, control panels etc .The Resource person was Mr. Sudheer, Maintenance Engineer, MRIU.To get exposure of latest technology used in inverters and solar panels.

Dr. P.K. Jain addressed students of EEE departments at **Sukam-Centre of excellence in Manav Rachna International University**.

Final year students along with Dr. Anita Khosla and Ms. Ashish Grover attended education fair “**Renewable Energy India Expo**” (AUBM event) at **India Expo Centre, Greater Noida** on 7<sup>th</sup> September 2016.

## EVENTS ATTENDED

The three day Annual festival **Resurrection-2K16** of Manav Rachna – was organized from 6<sup>th</sup>-8<sup>th</sup> October 2016. The festival brimming with excitement, entertainment and exuberance was a huge success as more than 3000 students from over a 100 colleges all over the Nation participated.

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