

## **IEEE DELHI SECTION PES-IAS CHAPTER**

### **Annual General Meeting (February 12, 2023) Secretary's Report**

The PES-IAS Chapter conducted total of 35 activities in 2022. Out of these 5 were administrative and 30 technical and professional activities. Few activities were organized jointly with PELS-IES Chapter. Technical activities include lectures/seminar/workshop by many well established researchers/professionals from academic and industries as well as workshops. There were some distinguished lectures also. Many activities were conducted outside Delhi region this year also, especially at TIET, Patiala and online by Dr. Anshul Varshney.

Thomas Alva Edison Memorial Lecture (26<sup>th</sup> in the series) was delivered by Dr. Brij N Singh, Technical Fellow - Power Electronics Engineering in John Deere Inc., USA. The Title was: "Emerging Technologies for Agriculture Vehicles" on 24th November 2022. The lecture was very well attended by more than 44 participants and their feedback was overwhelmingly positive.

Distinguished Lecture on "Role of the Smart Grid in facilitating the integration of renewable into the Power Grid" was delivered by Dr. Saifur Rahman, Director, Virginia Tech, Advanced Research Institute, USA and 2022- IEEE President Elect.

A number of technical lectures were planned and delivered by various experts from academics and industry. A wide variety of topics were widely covered in the lectures such as

"Electric Vehicle-At a Glance" by Prof. Bhim Singh,

"Control of wind power generation system and grid connection techniques" by Prof. Dong-Choon Lee, Yeungnam University, Gyeongsan, Korea,

"Microgrid control and dynamics and security" by Dr. Deepak Reddy Pullaguram,

"Load Management through Delhi SLDC" by Deputy General Manager (O&M), Delhi Transco Limited, Delhi,

"Why Do We Need Cybersecurity in the Power Grid?" by Dr. Vivek Kumar Singh, Iowa State University,

"Women in Power - An Introduction" by Dr. Ruomei Li, Chair, WIP PES and Ms. Staji Wilson, Sub-regional representative, WIP PES India.

"EV and Battery Energy Storage System For Sustainability" by Prof Saad Mekhilef at CART, IIT Delhi.

All the lectures were informative and well organized.

PES\_IAS Chapter has also co-sponsored Delhi section student congress - Young Professionals - Women in Engineering Congress 2022. Some of the eminent speakers of the workshop from PES were Prof. Subrata Mukhopadhyaya, Prof. Rachana Garg, Prof. Abdul Q Ansari and Prof Priya Mahajan.

PIICON 2022- Power India International Conference 2022 – PIICON 2022, the 10th in the series was held from 25 – 27 November 2022 at National Institute of Technology Delhi, India. Around 250 participants attended the conference.

NPSC 2022- 22nd National Power System Conference (NPSC) was held in the capital city of India and was organized by the Indian Institute of Technology Delhi and Power System Operation Corporation (POSOCO) Limited, India during 17-19 December 2022. The central theme of NPSC-2022 was "Reliable, Resilient, and Carbon Neutral Future Electricity Grid." 450 participants from academia, industry and professionals attended the conference.

Signing of MOU between Power Grid and IEEE-This engagement under PES Corporate Membership program would enable leveraging expertise and experience of Power Grid Corporation of India Ltd.

Student related activities were another highlight this year. Activities related to IEEE Student Branches at the college level and/or with students in grades K-12 (or equivalent) were also conducted. Slogan writing competition on Energy Conservation on 15th Dec 2022,

**Achievements:**

- \$610 for IEEE PES High Performing Chapter Award 2021-2022 for PES Delhi Section Jt Chapter

**PES Delhi Chapter Outstanding Engineer Award given to:**

1. Outstanding Chapter Engineer Awards for 2021 (with more than 15 years in the profession) - Prof. Alka Singh, DTU Delhi

Prepared by Dr. Vivek Srivastava, Secretary, IEEE PES-IAS Chapter of Delhi Section

List of Activities of PES-IAS Chapter of Delhi Section 2022		
Event Title	Event Date	Event Category
4th Execom meeting of the IEEE PES-IAS Delhi Chapter	12/30/2022 18:00	Administrative
Emerging research trends in power electronics and allied areas	12/29/2022 16:00	Technical
Electric Vehicle-At a Glance	12/28/2022 16:00	Technical
Control of wind power generation system and grid connection techniques	12/27/2022 11:00	Technical
SiC power semiconductors: a key enabler for cost-optimal design and operati	12/20/2022 16:00	Technical
Peripheral Circuit for Wide BandGap Devices	12/19/2022 9:00	Technical
DISTINGUISHED LECTURE on Role of the smart Grid in facilitating the integrati	12/17/2022 11:30	Technical
22nd National Power System Conference (NPSC)	12/17/2022 9:00	Technical
Slogan writing on Energy conservation	12/15/2022 10:00	Technical
Overview of EPIC (Energy Production and Infrastructure Center) at UNC Charl	12/12/2022 4:00	Technical
Microgrid control and dynamics and security	12/8/2022 16:00	Technical
Phasor Measurement Units and Wide Area Monitoring Systems: A revolution	11/29/2022 11:00	Technical
Device Centric Advanced Power Electronics Control	11/28/2022 10:00	Technical
3rd Execom meeting of PES_IAS Chapter of Delhi Section	11/27/2022 18:00	Administrative
Electro-Magnetic Interference (EMI) Filter Design and Modelling	11/25/2022 18:30	Technical
2022 IEEE 10th Power India International Conference (PIICON-2022)	11/25/2022 9:30	Technical
Thomas Alva Edison Memorial Lecture by Dr Brij N singh	11/24/2022 19:00	Technical
AI-Based Grid Integrated Solar Energy Conversion System	11/24/2022 10:00	Technical
Load Management through Delhi SLDC	11/1/2022 15:00	Technical
POWER SYSTEM OPERATION	10/21/2022 12:30	Technical
IEEE Technical Lecture on "Fractional KVA rating converter doubly-fed variabl	9/29/2022 12:30	Technical
IEEE Technical Lecture on "EV and Battery Energy Storage System For Sustain	9/24/2022 10:00	Technical
IEEE Technical Lecture on "PV Technology's current status and future pro	9/22/2022 15:00	Technical
IEEE Delhi Section Students - Young Professionals - Women in Engineering Co	9/17/2022 8:00	Professional
IEEE Technical Lecture on "IIoT for Motor Management Solutions"	9/15/2022 18:00	Technical
2nd Execom meeting of PES_IAS Chapter of Delhi Section	9/2/2022 17:30	Administrative
Signing of MOU between Power Grid and IEEE	7/7/2022 0:00	Professional
1st Execom meeting of PES_IAS Chapter of Delhi Section	4/22/2022 17:30	Administrative
Annual General Meeting (AGM) of IEEE PES-IAS Delhi Chapter	2/25/2022 17:30	Administrative
EV challenges when interfaced with the power system	3/16/2022 17:00	Technical
Optimization Techniques" & "Basics of Smart Grid	1/31/2022 11:00	Technical
Intermittency of Renewable Energy Resources	1/31/2022 11:00	Technical
How to write a research Proposal	1/24/2022 12:00	Technical
Why Do We Need Cybersecurity In The Power Grid?	1/21/2022 20:30	Technical
WIP - Women in Power - An Introduction	1/15/2022 16:00	Nontechnical