## **University of Delhi at ANDC SPIE Sudent Chapter**

## **SPIE Annual Report 2019**

## Faculty Advisor: Dr. Amit Garg

Whooping record of 101 members in the Chapter make it perhaps one of the highest member chapter in the world. Some of the projects allotted to the students in the first round are:

- 1. Facial Recognition
- 2. Biological Waste Segregation
- 3. Barcode Tagging
- 4. 3D Printer Resin Development
- 5. Wireless Electricity

## **SPIE Office Bearers**

- 1. President- Rohit Saini B.Sc. (H) Electronics, III Year.
- 2. Vice-President- Chiradeep Das, B.Sc. (H) Electronics, III Year.
- 3. Secretary- Ritesh Raj, B.Sc. (H) Electronics, III Year.
- 4. Treasurer- Hardik Minocha, B.Sc. (H) Electronics, II Year.

**Orientation Day:** - SPIE Chapter at ANDC was involved in carrying out part of the Research sessions of 4 hours each on the Orientation Day held from July 20-23, 2018 that had an average of around 100 fresher's across all the departments. The Chapter members demonstrated two simple optics-based projects on Peppergram and Total Internal Reflection to the students along with the role of SPIE as a society at ANDC as well as internationally. The noteworthy contributions were of- Rohit Saini, Ritesh Raj, Vikram Bhardwaj, Akshansh Jha, Pranjal Singh and Ashutosh Singh.

SPIE International Conference at San Diego: - The SPIE Optics and Photonics Conference was held at San Diego, CA, USA from August 18-23, 2018 this year. Mr. Chiradeep Das, a student of B. Sc. (H) Electronics Part III was awarded officers' Travel Grant (OTG) to attend this conference with full funding from SPIE, USA. He demonstrated the phenomena of "Blue Sky and Red Sunset" at the Optics Outreach Games. He also presented a paper on the different activities of our Chapter and it's current position as compared to other Chapters worldwide at a Poster Session. It was a great opportunity for him and he returned with lots of ideas and inspirations for his fellow members of the Chapter.

**Induction Workshop:** - A two-day Induction Workshop was held from September 25- 26, 2018 for SPIE members. The workshop had an invited talk by Prof. Joby Joseph, Department

of Physics, IIT Delhi on the topic of "Fabrication of Nanophotonic Structures and some Applications". Hands-on sessions were conducted during the workshop on projects like Water drop Microscope, Communication through Fiber-Optic cables, Laser Spirograph, Lissajous light patterns through vibration and Holography. Dr. Sanjay Kumar, Department of Physics was the resource person in setting up and recording the holograms. The workshop convener was Dr. Amit Garg.

Workshop at Deen Dayal Upadhyay College, DU: A two-day workshop on Internet of Things (IOT) was organized by i3indiya in co-operation with IIT Bombay at Deen Dayal Upadhyay College, University of Delhi on October 12-13, 2018. Two teams of 4 students each (Rohit Saini, Pranjal Singh, Ritesh Raj, Vikram Bhardwaj, Lokendra Singh, Rajat Mann, Gaurav Lokhna and Ashutosh Singh) were sponsored by our Chapter to attend and take part in the workshop. They learned various projects like basics of LED blinking; relay board working for actual home appliances, controlling circuit over Wi-Fi, managing practical data for application over internet along with various other things. "Paradigm Shift in Physics Education through hands-on techniques in OPTICS" was organized in collaboration with "JOY OF LEARNING FOUNDATION, DELHI" on January 24, 2019 by University of Delhi at ANDC SPIE Student Chapter, Convener- Dr. Amit Garg.