October 2018 – October 2019 report
Chapter members 2019:

1. Fangfang Wei
2. Sanjay Kumar Keshri
3. Irfan Muhammad
4. Xiaokang Lian
5. James Walshe
6. Wei Han
7. Hai Huang
8. Vishnu Kavungal
9. Sankalp Agarwal
10. Graceson Antony
11. Sufyan Huma
12. Cara Jones
13. Deimantė Vosyliūtė
14. Faolan Radford Mc Govern
Outreach Activities:

Transition Year Student’s Workshop TUD, 27th Nov 2018.

Target audience: Transition year students (age 15-17 years) In Ireland the Transition Year (TY) is a one-year programme taken after Junior Cycle and before the two-year Leaving Certificate programme. It is designed to act as a bridge between the Junior Certificate and Leaving Certificate programmes. It is available to all second-level schools and currently some 550 schools offer the programme. Transition Year may be optional or mandatory for students depending on the school’s policy. Each school designs its own Transition Year programme, within set guidelines, to suit the needs and interests of its students. In establishing its own distinctive programme content, the school takes into account the possibilities offered by local community interests.

During the transition year students typically spend time with industry, academia, community services, etc in order to identify possible career choices and identify the most suitable choices of subject in the Leavening Certificate Programme.
The College of Sciences and Health hosts a one-week programme for transition year students who are interested in Science. The School of Physics, Clinical and Optometric Sciences organises lab visits and demonstrations as part of this programme.

Traveling Lecturer 2018:

It’s a great honour to invite Prof. Brian Culshaw to give a lecture to students in DIT SPIE student chapter.

Many thanks to Prof. Brian Culshaw for the interesting talk on Fibre Optics in sensing and measurement. Its contents proved highly relevant to our chapter members and the many lecturers and undergraduates in attendance.

The following is an excerpt from Prof. Brian Culshaw’s biography:

Brian Culshaw graduated from University College London with a BSc in Physics and thereafter a PhD in Electronic and Electrical Engineering, specialising in microwave semiconductors, completed in 1969. He spent 1970 in the US as a post-doc at Cornell, joining the staff of the then Bell Northern Research immediately afterwards and evolving into microwave system design, especially for long haul transmission.

He returned to UCL as a post doc after three years in Ottawa joining the academic staff at UCL in 1975 thereafter developing an interest in fibre optics for sensing and measurement. With many co-workers, he produced some basic results in the use of phase modulation in sensors and the interferometric architectures to demodulate them. A sabbatical year with John Shaw at Stanford in 1982 gave an opportunity to contribute to basic research in fibre gyros. These interests in fibre sensing evolved into applications in ultrasonics, NDE, smart structures, advanced materials technologies, environmental sensing and MEMS. He has founded or co-founded three small companies, of which two survive!

He moved to Strathclyde University in Glasgow in 1983 as professor of optoelectronics, and since then has also become involved in a number of professional activities including multi partner national and international research project management, conference organisation and journal editing. His work with professional societies includes serving as President of SPIE during 2007.
At Strathclyde, he served six years as vice Dean (Engineering) in the UK’s largest Engineering Faculty and has completed a five year term as Head of Department. He is currently professor emeritus at Strathclyde.

Officer Travel Grant:

Photonics West 2019

Brian Rogers successfully applied for the SPIE travel grant to, SPIE Optics + Photonics 2018, San Diego, California. During this conference time the DIT SPIE chapter president attended different workshops for chapter officers. The Student Chapter Leadership Workshop was a wonderful opportunity to meet not only with other officers from all over the world and to learn about the challenges they have to face in their chapters.

Brian also participated in the outreach games. It was a great pleasure to explain the principals of diffraction and to demonstrate some of its quirky and fun uses.
Treasury:

Approximately 300 euro (Exact figure unknown due to college bank closure during COVID-19 lockdown)