University College Dublin
SPIE Student Chapter

Annual Report
June 2017 – November 2018
Contents
UCD SPIE Student Chapter........................................................................................................3
    Elected Officers .................................................................................................................. 3
    Current Chapter Members.................................................................................................. 4
    Members Update................................................................................................................ 4
    UCD SPIE Student Chapter Grant...................................................................................... 4
Chapter Activities 2017 – 2018 .......................................................................................... 4
    1) Election (December-February 2018) ........................................................................... 5
    Conference participation ................................................................................................. 9
Upcoming Chapter Activities................................................................................................. 13
    UCD Open days .............................................................................................................. 13
    UCD School of Physics program for Transition Year students ........................................ 13
    UCD Festival .................................................................................................................. 13
Activity Grant ..................................................................................................................... 13
    Financial Information ..................................................................................................... 13
Acknowledgements ............................................................................................................. 14
UCD SPIE Student Chapter

Chapter Advisor: Prof. John T Sheridan; Email: john.sheridan@ucd.ie

Elected Officers

<table>
<thead>
<tr>
<th>President</th>
<th>Vice President</th>
<th>Secretary</th>
<th>Treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min Wan</td>
<td>Salihah Qaysi</td>
<td>Yao Zhou</td>
<td>Najnin Sharmin</td>
</tr>
<tr>
<td>3772738</td>
<td>4140165</td>
<td>4162300</td>
<td>4138788</td>
</tr>
<tr>
<td><a href="mailto:min.wan@ucdconnect.ie">min.wan@ucdconnect.ie</a></td>
<td><a href="mailto:salihah.qaysi@ucdconnect.ie">salihah.qaysi@ucdconnect.ie</a></td>
<td><a href="mailto:yao.zhou@ucdconnect.ie">yao.zhou@ucdconnect.ie</a></td>
<td><a href="mailto:najnin.sharmin@ucdconnect.ie">najnin.sharmin@ucdconnect.ie</a></td>
</tr>
</tbody>
</table>
Current Chapter Members

Min Wan
Salihah Qaysi
Najnin Sharmin
Alessandra Carmichael Martins
Syedah Sadaf Zehra
Zhao Chen
Yao Zhou
Ra’ed Malallah
Derek Cassidy
Vivek Govindaraj
Xiaohui Lin
Feifei Zhang

Members Update

The UCD-SPIE student chapter heartily congratulates Dr. Inbarasan Muniraj (former President) and Dr. Ra’ed Malallah (former Vice President) on their successful viva-defense and graduation. We heartily congratulate Dr. Inbarasan Muniraj on his new job (Research Scientist) in Intel Labs, Ireland. We also congratulate Ms. Sathya Velayutham on her successful completion of research master’s degree. Miss. Min Wan finished her project’s first secondments for three months in Goethe University Frankfurt, Germany. In this year, we updated the chapter officers, therefore Miss. Min Wan is elected as chapter president, Miss. Salihah Qaysi is elected as vice president and Miss. Najnin Sharmin is elected as treasurer. We welcome Miss. Dovilė Čibiraitė from Goethe University Frankfurt on her 3 months project secondment within our group. We also welcome Mr. Bing Li from Beijing University of Technology (BJUT) on his 3 months internship in our group.

UCD SPIE Student Chapter Grant

The current budget available in our chapter account is 164.05 € and additionally this year we have requested for some grant as we planned to organize some outreach activities in 2019.

Chapter Activities 2017 – 2018

Our chapter members were actively involved in various chapters meet ups and annual chapter meetings. In addition to this, we also planned for several outreach activities in next couple of months.
1) Election (December-February 2018)

Earlier this year, UCD SPIE chapter has been reorganized (elected new chapter officers) as some of us have successfully graduated. We thank our former chapter members for handing over all the responsibilities to new members and generously suggested activities/plans for next year.

Picture 1: Picture taken at SPIE chapter meet up (29th 2018).

Picture 2: Picture taken at Mr. Derek Cassidy who gave a talk on laser safety (15th November 2017).
Picture 3: Members involving in discussion after Mr. Cassidy’s talk.

Picture 4: Visiting lecture grant from SPIE: We cordially invited Prof. Joseph Rosen from Ben-Gurion University of the Negev, Israel. He delivered a talk on “Optical Signal Processing: Imaging”.
Picture 5: Picture taken after the ceremony of Dr. Inbarasan Muniraj (former President) and Dr. Ra’ed Malallah (former vice president).

Picture 6: Recently, Min Wan organized a small Optical Conference where she spoke about in-line holography and interferometry methods, and guest speakers Dovilė Čibiraitė, from Goethe University Frankfurt giving a presentation on the design of THz detectors, and Bing Li, from Beijing University of Technology talking about the review of THz imaging and Ptychography in THz.
The current secretary Miss. Alessandra Carmichael Martins and treasurer Miss. Najnin Sharmin of the chapter organized 2 hours workshop on 'Physics of the eye' to transition year students organized by the School of Physics at UCD.

Earlier this year, Miss. Alessandra Carmichael Martins gave a talk in her former University of Sevilla, Spain, at the Faculty of Physics, open and advertised to the general public.

More recently, Miss. Alessandra Carmichael Martins and Miss. Najnin Sharmin participated in outreach to children in the public Botanical Gardens in Madrid, Spain, as a collaboration with the IOSA Student Chapter, CSIC, Madrid. This was to raise awareness about the 'Global Myopia Epidemic', where they made informative posters for adults and easy experiments for kids.
We have been in close contact with DIT Student chapter and some of our chapter members have actively participated in DIT invited lecturer program.

Conference participation

This year, our chapter members were very active in participating conferences around the globe, which includes 2017 Photonics Ireland in Galway, 2017 FiO + LS Conference, 2017 IONS Okinawa Photonics west 2018, 2018 Photonics Europe and 2018 Optical Ireland Cork. Especially, photonics Ireland conference series is the premier event for photonics research in Ireland, running since 2007. It covers a wide range of topics in Photonics, host to the most recent advances including: Photonic Materials, Photonic Devices, Photonic Integration & Packaging, Nanophotonics & Plasmonics, Laser-Material & Laser-Plasma Interactions, Imaging, Biophotonics & Optical Sensing, Optical Communications & Networks, Quantum Optics & Quantum Technologies, and Industry & Entrepreneurship. In laser technology worldwide. This year, as usual, our chapter advisor Prof. John T Sheridan chaired this conference in 2017 and 2018. Chapter members includes Dr. Inbarasan Muniraj, Dr. Ra’ed Malallah and Miss. Min Wan and Mr. Derek Cassidy participated and presented in 2017 Photonics Ireland in Galway.

Picture taken at Photonics Ireland 2017 (13th -15th September 2017)

- 2017 FiO + LS Conference, 17-21 September, 2017, Dr. Ra’ed Malallah participated and gave an oral presentation at the conference.
- 2017 IONS Okinawa, Japan from 25 to 27 October 2017, Dr. Ra’ed Malallah participated and very active during the conference.

- Meeting in Eindhoven from 08-12th December 2017, Min wan was presenting her research works.
• Photonics West 2018 in San Francisco, California, United States. Min Wan participated and presented a poster at the conference. She thanks SPIE for generous chapter member supports.
• 2018 Photonics Europe, Mr. Derek Cassidy and Miss. Min Wan participated and presented.

• 2018 Optical Ireland Cork, Dr. Ra’ed Malallah presented his research achievements in the conference.
Upcoming Chapter Activities

This year was great time for UCD-SPIE student chapter as some of our former members were graduated and many of us participated and presented research works at various forums. We aim to continue this trend in upcoming events (details below) with new members involved. In particular, we will again be participating in the UCD festival, UCD School of physics program for Transition Year students (15 to 16 years old), UCD Open day for middle school students and a further outreach activity coordinated by our group for attendees of an upcoming Myopia meeting organized at UCD in June, to name a few. We planned to host regular (social) meetings to discuss chapter plans and future activities as well as academic meetings to discuss our research works internally here in UCD.

Furthermore, the UCD SPIE student chapter will collaborate with UCD OSA student chapter to try to organize an IONS meeting in Ireland for 2020. UCC+Tyndal in Cork and DIT student chapters are expected to be participated.

UCD Open days
University College Dublin invites final year secondary school students, mature students, their families, and guidance counsellors to the UCD Open Day. One of the best ways to experience UCD life and will be able to gain a real insight into the student experience and life at UCD.

UCD School of Physics program for Transition Year students
UCD School of Physics hosts its Transition Year Week is a programme of interactive seminars, thought-provoking lectures, fun experiments, and exciting field trips which allow students to experience Physics in the real world.

UCD Festival
The UCD Festival is a special day in the University's calendar of events. It is an opportunity for alumni, current & retired staff, and our local community and friends to come to campus and enjoy a great day out.

Activity Grant
Amount spent last year: 100 € (we brought Pizza and drinks for two times meeting)
Available amount: 164.05 €

Financial Information

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balance</td>
<td>264.05 €</td>
</tr>
<tr>
<td>Funds raised and expended</td>
<td>100 €</td>
</tr>
</tbody>
</table>

(Source: SPIE activity grant)
Destination:
1. for chapter meeting, pizza and drinks 50€
<table>
<thead>
<tr>
<th>Details of SPIE funding received if any</th>
<th>2018 Officer travel grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other funding sources</td>
<td>OSA Student Chapter activity grant</td>
</tr>
<tr>
<td>Ending balance</td>
<td>164.05 €</td>
</tr>
</tbody>
</table>

**Acknowledgements**

The SPIE UCD Student Chapter extremely grateful for the support from volunteers throughout our events. In addition to this, Mr. Min Wan acknowledges the full-financial support from SPIE (Officer Travel Grant 2018) to attend Photonics West 2018 in San Francisco, California, United States.