2016 SPIE Student Chapter Report
The University of Melbourne Chapter
Compiled by Hamid Soleimaninejad, 2017 president
9 May 2017

Chapter and member details

Elected Officers

President: Hamid Soleimaninejad  hsoleimanine@student.unimelb.edu.au
Vice President: Lukas Weon  lwesemann@student.unimelb.edu.au
Secretary: Katherine Catani  catani@student.unimelb.edu.au
Treasurer: Saghar Masoomigodarzi  smasoomigoda@student.unimelb.edu.au
Advisor: Prof. Ann Roberts

SPIE chapter members

Hamid Soleimaninejad
Lukas Weon
Saghar Masoomigodarzi
Katherine Catani
David Nitneth
Markus Knoerzer
Evgeniy Panchenko
Kyra Schwarz
Maryam Rahou
Yang Xu
Thomas Fabig

Non-paying student affiliates

John Koo  Roi Hirata  Robert deGille  Ashley Savelkouls
Martin Schalken  Paul Geraghton  Yingy Ju  Neesevs Paraguli
Meirian Tozer  Robin Wang  David Broadway  Annelise Irvine
Wei Tong  Scott Lillie  Frank Mattea  Patrick Kenneddy
Ngoc Tran  Panji Achmari  Esther Kramer  Daniel Kelley
Srivasat -  Andy McCulloch  Olga Freydrin  Julia McCoey
Badariprasad  Ryan Trewrah  David Turner  Alex Nun
Garrett Mitchell  Richard Dorian  Huakn Zhan  Romina Norelo
Lisa Drummond  Rudy Tielen  Shiqiang Li  Tom Marius
Katie Drummond  Adam Browastein  Richard Wallace  Callum Jones
James Paynter  Paul Hibbert  Siyuan Wei  Aidan Dang
Michael Maygongling  James Klein  Lucy Strang  Braden Moore
Gus Steele  Nathen Goldwaser  Smith Kim  Shanette DeLamotte
Jack Li  Alex Duan  Kalpana Singh  Nikolai Dotschuk
Mitchell Longstaff  Graeme Berk  Jarryd Rasti  Nina Rajcic
Chris Tatli  Daniel Flynn  Steven Keyte  Daniel Edo
Cate Guenther  Viktor Perunicic  Jin Rong Chen  Haydn Bowers
Will Fulgenzi  Gary Mooney  Will Lawrie  Jesse Ross
Ariel Cherny  Arthur Azoam  Emajane Fisher

2015-2017 SPIE committee Meetings

20 Jan 2015: Election of 2015 committee and travelling officer

President: Stuart Earl
Vice President: Rory Spiers
Secretary: Dene Murphy
Treasurer: Lachlan Tantau

Arranged Merging of SPIE and OSA student chapters into one organisation for the purposes of organising optics related activities, while keeping committees and funding separate.
Planned the year’s events: Barbeques to be held
Elected Dene Murphy as travelling officer for 2015, to attend Optics + Photonics and Student Leadership Workshop.

3 March 2015: Planning of welcome barbeque, strategies to attract a larger membership

14 Aug 2015: Semester 2 launch meeting. Discussion and organisation of upcoming Scienceworks Festival of Astronomy and Light event

8 Feb 2016: Election of 2016 committee and travelling officer

President: Kyra Schwarz
Vice President: Daniel Flynn
Secretary: Katherine Catani
Treasurer: Daniel Kelly
General Committee Member: Peng Zeng
General Committee member: Hamid Soleimaninejad

8 May 2017: Election of 2017 committee and travelling officer

President: Hamid Soleimaninejad
Vice President: Lukas Weon
Secretary: Katherine Catani
Treasurer: Saghar Masoomigodarzi
General Committee Member: Faris Shahidan
General Committee member: David Ninth
General Committee Member: Thomas Fabig
General Committee member: Peng Zeng
Welcome to new committee members and handover.
Organisation of welcome barbeque, club fair and suggestions for 2017 events.
Prof. Ann Roberts had short talk and suggestions about chapter activities
Election of Hamid Soleimaninejad as travelling officer for 2017, to attend Optics + Photonics
and Student Leadership Conference.

2016 Joint OSA/SPIE Chapter Events

25 March 2016: Welcome barbeque, opening of joint OSA/SPIE student chapter and
University of Melbourne Physics/Optics Club Fair located in the MGSS room, School of
Physics, University of Melbourne.

In first semester every year we have a "recruitment BBQ", which is free to attend for students
in the physics department (including undergraduates) and invited student in optics related
fields from other faculties. All those that attend the BBQ are signed up as "Associate
members" of the student chapter. The idea behind this is to encourage students to become
active members of the chapter, and get involved in chapter events, before they have to start
paying for OSA membership.

This year's BBQ was very successful, with 100 people signed up as associate members.
There is quite a low rate of getting people involved in further activities, but our approach of
"casting the net wide" has helped significantly. It is an investment in future membership, as the
undergraduates are now reaching Masters level, and are now considering joining as paid up
members.

This year following groups are also participated in this event:

> Women in Physics
> Physics Postgraduate Student Society (PPSS)
> Growing Tall Poppies - student outreach programme

18 August 2016: 2nd Scienceworks AstroLight festival, Scienceworks Museum, Melbourne

The main event for our chapter this year was our participation in the Astronomy and Light
Festival, held at Science works Museum in Melbourne, attended by thousands of people. Look
like last year, this year event, was full of stalls, talks, and installations were presented by local
universities, groups, and industry.
The University of Melbourne SPIE chapter held a large and very successful display at the
event interacting with >500 members of the public throughout the evening. Our main drawcard
was the laser maze, which was extremely popular with children, and resulted hundreds of
people queuing to weave their way through the laser beams. Chapter members interacted with
many families waiting in line as they played with handheld spectroscopes, with which they
could view and understand light sources around the room. Our display also incorporated optics
demonstrations, which ranged from a Michelson interferometer demonstrating the wave nature
of light, to the laser board game of Khet. These demonstrations were particularly interesting to the parents, who intrigued but usually had little or no background in physics. Other demonstrations included an interactive laser radio, which demonstrated the principle of fibre optics, and vapour lamps, which demonstrated the quantized nature of atoms.

4 Nov 2016: 4rd Annual SPIE/OSA student chapter laser tag

This event was the 3rd annual Melbourne vs Monash OSA student chapter laser tag night. Each year this event gets bigger and better, and is the most attended event by our associate members. The chapters meet in the city for some friendly rounds of laser tag, which this year was: Melbourne vs Monash, boys vs girls, and randomly mixed teams. Laser tag is followed by an informal dinner in chinatown, with allyoucaneat dumplings.
2016 Budget

Budget:

Budget: No SPIE grants were submitted in 2016. Most of 2016 activities were supported with a successful grant from the Optical Society of America. $40 remains from the 2014 SPIE grant ($550), to be used in support of the upcoming 2017 Welcome BBQ.

2017 Planned Events

The expanded 2017 committee features many new members, including some in the Chemistry department, where there is a significant optics/spectroscopy research presence. The events listed below aim to increase positive interactions of students working in relevant fields of research throughout the University of Melbourne. The new committee expressed an interest in extending the chapter’s presence, and also in applying for SPIE funding for specific activities.

1) 2017 will begin with the annual Welcome BBQ for the OSA/SPIE chapter upon the commencement of the University semester (March) to increase visibility of the group and to welcome students at the beginning of the University year. This event has previously attracted new paid and unpaid associate members at both the undergraduate and postgraduate level.

2) We plan to host a function in semester two for undergraduate members of the chapter to encourage enrolment in the optics research group in 2017, involving lab tours and discussions about graduate level research. There were 40 students beginning graduate level study across all physics research areas in 2016, we aim to increase the intake into the optics stream by connecting interested students with active researchers and potential supervisors. We will encourage students to join the chapter as paid SPIE members, and will aim to create a committee position of an undergraduate liaison.

3) The Astronomy and Light festival (25th) was such a success looks likely to repeat in 2017 as 3rd one during the Australian National Science week, extending beyond the official mandate of the international year of light. While we now have a Laser Maze, it needs some repairs, we endeavour to allow develop other demonstrations and involve new and established members in this very successful outreach activity.

4) The annual Melbourne vs. Monash student chapter laser tag (5th) joint event will continue in 2017. This event has grown every year, and looks set to continue, providing value connections between chapter members in similar areas of research. Official meetings will proceed each event to facilitate organisation and discussion for future planning.