University of Toronto SPIE Student Chapter Annual Report

September 1, 2017 - August 31, 2018
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Executive Team for 2017/2018 (elected in March 2018)

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Email Address</th>
</tr>
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<tbody>
<tr>
<td>President</td>
<td>Katelyn Dixon</td>
<td><a href="mailto:katelyn.dixon@mail.utoronto.ca">katelyn.dixon@mail.utoronto.ca</a></td>
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<tr>
<td>Vice-President</td>
<td>Hazem Daoud</td>
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<td>Treasurer</td>
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<td>Secretary</td>
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<td>Executive At Large</td>
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<td>Faculty Advisor</td>
<td>Peter Herman</td>
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Standing (from left to right): Gligor Djogo, Zacharie Léger, Ali Zeineddine
Sitting (from left to right): Hazem Daoud, Katelyn Dixon
Current Student Chapter Members

Adam Butko
Valentin Demidov
Katelyn Dixon
Gligor Djogo
Ahmed Dorrah
Zacharie Léger
Siqi Liu
Rajiv Prinja
Arash Riazi
Mira Sibai
Robin Swanson
Amal Varghese
Ali Zeineddine
Hazem Daoud
SPIE Chapter Activities

a. Science Rendezvous (May 2018)

Science Rendezvous is the largest science festival in Canada. The main goal of Science Rendezvous is to communicate science to the public in an engaging and interesting manner. In collaboration with the physics department at the University of Toronto we set up several optics experiments and demonstrations to the public. Our demonstrations included, among other things, showing the diffraction pattern on the Canadian dollar bills, transmission of sound signals via laser light, showing the composition of white light and the refraction of light of various colors. Below are some photos of our participation in Science Rendezvous 2018.

http://www.science rendezvous.ca
b. DEEP Camp After Class Experience (July-August 2018)

The Da Vinci Engineering Enrichment Program (DEEP) Summer Academy is a camp aimed at highly motivated high school students with an aptitude for STEM disciplines. This University of Toronto based camp, runs out of the Faculty of Applied Science and Engineering, and invites students from around the world. To enhance the experience of the students After Class Experiences (ACEs) are lead by different groups. The SPIE Student Chapter headed two ACEs on the topic of optics. Below are some photos of the ACEs.

http://outreach.engineering.utoronto.ca/pre-university-programs/deep/
c. First Annual SPIE Student Conference (August 2018)

Our team organized the First Annual SPIE Student Conference. Graduate and undergraduate students from various disciplines in physics and engineering participated and presented their research. The conference featured invited talks from Dr. Niklas Waasem (Hübner Photonics), professor Joyce Poon (University of Toronto) and Dr. Aharon Brodutch (post-doc, Steinberg group and Helmy Group - University of Toronto).
Student discussions during the poster session

Awards to best poster presentation (left) and best oral presentation (right)
d. Officer Participation in SPIE Optics + Photonics 2018 (August 2018)

The vice-president, Hazem Daoud, represented our chapter at Optics + Photonics 2018 in San Diego using the SPIE Officer Travel Grant. Hazem benefited a lot from the Student Chapter Leadership workshop on August 17 as well as from the Entrepreneurship workshop on August 18. He also presented a poster about our chapter on August 21. The greatest benefit came through networking and making friendships with officers from other chapters around the world. Technically, Hazem listened to various relevant oral and poster presentations and networked with other scientists in his technical field of interest. Hazem will try to use what he learned to expand our circle of collaboration and improve our chapter.

Activities during the Student Chapter Leadership Workshop

Hazem with Meg All (SPIE student chapter coordinator) during the Poster Exhibit Mixer
Upcoming Activities

September Welcome Event
We will be hosting a BBQ in mid-September to welcome new and old graduate students back to a new school year. We will be serving food and refreshments, while insighting students to join the SPIE U of T Student Chapter.

Projects done in conjunction with the Photonics Innovation Center (PIC) at the University of Toronto, and the OSA University of Toronto Student Chapter:

SPIE Lecture Series
This seminar series will reach out to distinguished researchers from across the globe in the field of optics and photonics to speaker at the University of Toronto.

Throughout this seminar series, SPIE student chapter will be the main contact point of contact with the speakers and logistic coordination.

Additionally, we will be inviting SPIE members as speakers, and we will seek to invite a speaker through the Visiting Lecturer funding as to help fund the travels and accommodations of an especially popularly demanded speaker, as we are collecting suggestions from students and faculty.

OptoFest
OptoFest is a week long conference in optics. It will include three days of student hands-on training on topics like biophotonics and holography, one day of industry talks and exhibits, and one day students talks/posters along with grant committees for professors.

The SPIE U of T Student Chapter will provide critical assistance to the planning and deliverance of this conference.

Graduate Research Expansion Grant (GREG)
The GREG will be a grant offered to student doing multidisciplinary research with photonics as one of the cornerstones of their projects. This $40,000.00 (CAD) grant is funded by PIC, but it will be administered by the SPIE students chapter.
## Financial Overview

The following table summarizes chapter expenses during the 2017/2018 one year period.

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<th>Date</th>
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<th>Item</th>
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*Events not listed here have been supported by external funding or collaboration with other groups.*