1. Elected Officers 2019-2020

**President:** Lucy Ying-Ju Chu  
E-mail: yxc8175@rit.edu  
Member Number: 3654429

**Vice President:** Alexis Irwin  
E-mail: lmi3968@rit.edu  
Member Number: 4138146

**Secretary:** Kathleen Oram  
E-mail: kxo3594@rit.edu  
Member Number: 3561088

**Treasurer:** Catherine Fromm  
E-mail: caf8588@rit.edu  
Member Number: 4083711
## 2. Current Chapter Members

### Student Members:
19 Total

<table>
<thead>
<tr>
<th>Matthias Banet</th>
<th>Lilian Neim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shusil Dangi</td>
<td>Kathleen Oram</td>
</tr>
<tr>
<td>Kevan Donlon</td>
<td>Tyler Peery</td>
</tr>
<tr>
<td>Daniel Edwards</td>
<td>Katherine Seery</td>
</tr>
<tr>
<td>Ryan Ford</td>
<td>Biswa Ranjan Swain</td>
</tr>
<tr>
<td>Catherine Fromm</td>
<td>Abu Md Niamul Taufique</td>
</tr>
<tr>
<td>Golnaz Jalalahmadi</td>
<td>Lauren Taylor</td>
</tr>
<tr>
<td>Alex Knowles</td>
<td>Matthew van Niekerk</td>
</tr>
<tr>
<td>Dawei Liu</td>
<td>Jacob Wirth</td>
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<tr>
<td>Keegan McCoy</td>
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### Alumni Members:
22 Total

<table>
<thead>
<tr>
<th>Alexandra Artusio Glimpse</th>
<th>Cristian Linte</th>
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<tbody>
<tr>
<td>Douglas Axtell</td>
<td>Julien Mailfert</td>
</tr>
<tr>
<td>Javier Concha</td>
<td>Sanjit Maitra</td>
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<tr>
<td>David Coumou</td>
<td>Chris Maloney</td>
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<td>Andrew Davidhazy</td>
<td>Hassan Oubei</td>
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<td>John Deegan</td>
<td>Garreth Ruane</td>
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<tr>
<td>Dale Ewbank</td>
<td>Luke Rumbaugh</td>
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<td>Germain Fenger</td>
<td>Katie Salvaggio</td>
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<td>Neal Lafferty</td>
<td>Siddharth Sampat</td>
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<td>Zachary Levinson</td>
<td>Amanda Ziemann</td>
</tr>
<tr>
<td>Feng Li</td>
<td>René Zünd</td>
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3. 2018-2019 Chapter Activities

The activities for the 2018-2019 academic year are described, below.

**SPIE Optics+Photonics 2018 Student Leadership Workshop**

Date: August 18-23, 2018  
Number of attendees: 1  
Included in previous report: No  
Funding requested: 1300 was reimbursed from SPIE for Lucy Chu.

Description:

Our chapter member, Lucy Ying-Ju Chu, attended the Optics+Photonics 2018 Student Leadership Workshop as our chapter representative. She presented a poster for our RIT SPIE student chapter, and also met the student chapter from her undergraduate university that came all the way from Taiwan to attend this workshop. The picture below was also taken with one of the workshop facilitators, Jinxin Huang, who is a University of Rochester alumni and currently in Corning. In particular, the series of workshops held by Jean-luc Dumont was immensely helpful for professional development, chapter management, and presentation skills.

![Image of SPIE Optics+Photonics 2018 Student Leadership Workshop](image)

**Recruitment Event/New Student Mixer**

Date: August 30, 2019  
Number of attendees: 30  
Included in previous report: Yes  
Funding requested: Yes  
How chapter funding was spent: This event was funded by the Center for Imaging Science. No Chapter funds were spent.

Description:

To generate interest in the SPIE Student Chapter and ways to get involved, we hosted a recruitment event at a local restaurant near RIT. We discussed our chapter with RIT students while offering snacks & appetizers. Emphasis was placed on inviting students who had just
recently started their studies at RIT. Interested students were directed to our website and social media links and informed about our monthly meetings and events. This mixer was received positively by our members as it allowed connection between new and senior students.

**To help attract new members, we followed up to this event by making informative pamphlets about our chapter to give out to interested students. The printing cost was $5, which was not originally included in our previous report.

**Interactive Science Kit Competition Upgrade (Outreach)**

**Date:** September 22, 2018  
**Number of attendees:** 3  
**Included in previous report:** No  
**Funding requested:** None  
**How chapter funding was spent:** No chapter funds were spent.

**Description:**

Upgrades to the the interactive science kit competition from the 2016-2017 school year were performed. The developed kit teaches middle-school-age students about how electronics and optics work together to “invisibly” transmit information from one location to another. The upgrade added was to improve the method of generating near-infrared signals for transmission using a fiber optic cable. Students at the assembly worked together to implement this upgrade with the system.

**Dr. Mike Gazarik Talk: “Navigate Your Career with Confidence and Joy”**

**Date:** October 5, 2018  
**Number of attendees:** 30  
**Included in previous report:** No  
**Funding requested:** None  
**How chapter funding was spent:** No chapter funds were spent.

**Description:**

As a joint event with the RIT College of Science Dean’s Office and RIT Imaging Science Club we hosted Dr. Mike Gazarik, Vice President of Engineering at Ball Aerospace. Dr. Gazarik gave a professional development talk entitled “Navigate Your Career with Confidence and Joy” where he discussed his career path and tips on how to make the most out of your career. Dr. Gazarik then answered career-related questions from attendees.
Traveling Lecturer Event with Center for Imaging Science, RIT: Prof. Eric Lifshin
Date: October 10, 2018
Number of attendees: 30
Included in previous report: Yes
Funding requested: Yes. However, Dr. Lifshin was not on the approved list of SPIE Lecturers so we were unable to apply for the SPIE Travelling Lecturer Grant to cover the costs of his visit.
How chapter funding was spent: $457.00 of remaining account funding from last term was spent to reimburse the lecturer for travel and lodging costs.
Description:
We invited Prof. Eric Lifshin from SUNY Polytechnic Institute to present a lecture on “Improving Scanning Electron Microscope Resolution by Computational Means” as part of the Center for Imaging Science Department Seminar Series. Our chapter officers had a breakfast chat with the speaker, and we arranged laboratory visits for the speaker with RIT professors in related research fields. The speaker also had a lunch and Q&A session with the first year imaging science students.

SPIE Leadership Visit
Date: October 17, 2018
Number of attendees: 7
Included in previous report: No
Funding requested: None
How chapter funding was spent: No chapter funds were spent.
Description:
The RIT Student Chapter was visited by SPIE President Jim Oschmann, SPIE Board Member Dr. Jennifer Barton, and SPIE Director of Education and Community Services Krisinda Plenkovich. We discussed the ongoings of our chapter and potential improvements related to SPIE early career professional activities and offerings. We took attendees on tours of some of the optics and imaging laboratories at RIT to demonstrate some of the ongoing research of our Chapter members.

Tour of Toptica Photonics
Date: November 11, 2019
Number of Attendees: 8 student members
Included in previous report: No
Funding requested: None
How chapter funding was spent: No chapter funds were spent.
Description:
The student chapter visited Toptica, a local laser manufacturing company around 40 minutes away. We toured around their local research and developing facility, talked to research and engineering staff, and looked at prototype laser systems in production. After the tour, Dan Christensen (UR Alumni) presented a professional development session, discussing his career path and choices during and after his PhD studies in optics.
**Holiday Social / End of the Semester Party**

Date: December 13, 2018  
Number of attendees: 20  
Included in previous report: Yes  
Funding requested: Yes  
How chapter funding was spent: $107.72 was spent on appetizers for attendees.  
Description:  
Approximately twenty students celebrated the coming holiday season and the end of a semester of hard work at The Old Toad British Pub and Restaurant. This evening consisted of games and light discussion over snacks and appetizers.

**5th Annual Writing Retreat and Workshop**

Date: January 7-12, 2019  
Number of attendees: 6  
Included in previous report: Yes  
Funding requested: None  
How chapter funding was spent: This event was funded by the RIT Center for Imaging Science. No chapter funds were spent.
Description:
Students attended a writing retreat at a cabin on beautiful, frozen Lake Ontario. Each participant focused on self-appointed technical writing goals for the retreat. These goals included working on conference papers, peer-reviewed articles, thesis proposals, and starting/completing academic theses. Faculty and graduate student presenters informed participants about technical writing tips, figure generation, and presentation skills. Attendees were encouraged to collaborate in peer review. Throughout the retreat, the students cooked meals together, played games, enjoyed the outdoors, and built meaningful relationships. At the end of the retreat, participants evaluated their progress from the week, with many positive results.

Traveling Lecturer Event with Rochester OSA Chapter: Dr. Nelson V. Tabiryan
Date: January, 29, 2019
Number of attendees: 60
Included in previous report: None
Funding requested: None
How chapter funding was spent: No chapter funds were spent.
Description:
Along with the local Rochester OSA chapter we invited Dr. Nelson Tabiryan (CEO of BEAM engineering for Advanced Measurement Co.) to speak on the topic of “The 4th Generation of Optics and Electro-Optics.” On the day of the event, we had a casual lunch chat with Dr. Tabiryan, and arranged laboratory visits for him and 4 other RIT professors that are working in related research fields. The talk filled the whole auditorium with audiences including students and professors from RIT, University of Rochester, and people from local companies. Following the talk, we invited Dr. Tabiryan to have dinner with members of the chapter, some RIT and UR faculty/staff, and interested undergraduate students.
Collaborative Event with University of Rochester Student Chapter

Date: April 12, 2019
Number of attendees: 40 for Workshop, 15 for Board Games
Included in previous report: Yes
Funding requested: Yes
How chapter funding was spent: $165.64 on Dinner/Snacks for attendees and panel members.

Description:
The RIT SPIE and OSA Student Chapters collaborated with the University of Rochester SPIE Student Chapter to organize a Mental Health Workshop entitled, “A Light Discussion on Grad School and Mental Health”. The workshop consisted of a panel-based discussion on mental health and tackling challenges and stressors in graduate school. The panel consisted of a diverse group of professionals from optics, imaging, and psychology backgrounds: Dr. Hope Andreason (Mental Health Professional), Dr. Dan Christensen (Toptica Photonics / UR Alumni), Dr. Derek Walvoord (Harris Corporation / RIT Alumni), Leva Bukowski (Raytheon / UR Recent Graduate Student). During the workshop, panel members provided constructive advice, anecdotes, and perspectives on combating the stresses of graduate school. Panel members fielded questions directly from the student audience and questions collected anonymously as part of the event RSVP process. The panel discussion was followed by a catered dinner where attendees were able to interact directly with the panel members and continue the discussion on mental health. The workshop concluded with Dr. Hope Andreason leading attendees through a diaphragmatic
breathing exercise to help regulate stress. The workshop was followed by a stress-free evening of board games for UR and RIT students.

**Imagine RIT Outreach Event**
Date: April 27, 2019
Number of attendees: >30,000 visitors to the festival, 9 student presenters (including new active members from our recruitment event)
Included in previous report: Yes
Funding requested: Yes
How chapter funding was spent: $166.71 parts for improving IR LED display

Description:
The 2019 Imagine RIT Festival was held the last weekend of April 2019. An exciting day was spent by chapter members at Imagine RIT - an Innovation and Creativity Festival for showcasing the output of the RIT community. Our audience included RIT students, faculty, and staff, as well as audiences of all ages from the surrounding community. This year, we debuted a new demonstration using a handmade IR LED grid used to display a “secret message” only visible to camera phones! We also presented our Schlieren Imaging System which allows us to see changes in air density caused by heat and turbulence, and our “Rochester Cloak” demo - a relay imaging system which allows us to make objects placed in an optical path “invisible”. Attendees were able to interact with each demonstration in a hands-on fashion and learn about diverse physical phenomena which can be investigated using simple optical setups.
**Monthly Happy Hour**  
Date: 2nd Thursday of Every Month  
Number of attendees: 10-20  
Included in previous report: Yes  
Funding requested: None  
How chapter funding was spent: No chapter funds were spent.  
Description:  
The second Thursday of each month, graduate student chapter members gather at a local restaurant to have some snacks and drinks and chat amongst fellow chapter members, RIT peers from other disciplines, faculty, and friends.

**Monthly Chapter Meetings**  
Date: First Friday of each month  
Number of attendees: 9  
Included in previous report: Yes  
Funding requested: None  
How chapter funding was spent: No chapter funds were spent.  
Description:  
Eleven official chapter meetings have been held within the May 4 2018 - April 5 2019 year. Members used this time to organize events and outreach activities. The minutes for each of these meetings can be found on our website: [https://sites.google.com/a/g.rit.edu/spie-student-chapter-at-rit/meeting-minutes/2018-2019-academic-year](https://sites.google.com/a/g.rit.edu/spie-student-chapter-at-rit/meeting-minutes/2018-2019-academic-year)

4. Planned Activities for 2019-2020

**Tours of Local Optics Companies/Laboratories**  
Date: May 24, 2019.  
Description:  
The chapter is currently reaching out to The Laboratory for Laser Energetics for a group tour. A general presentation of the laboratory and the on-going research will be presented, followed by a Q&A session with scientists working in the lab. The tour will provide student members exposure for a research career path.  
Expected total: $50  
SPIE contribution: $50

**Student Chapter Trip**  
Date: Summer 2019  
Description:  
We plan to host another trip to the Corning Museum of Glass for a day of exciting educational fun with our chapter members and celebrate a year of hard work. This trip will also give newly-inducted members a chance to interact with current members in an informal, fun setting. Funding for this event will be used to offset the admission costs and reimburse travel fees.  
Expected total: $50
SPIE contribution: $100

**Recruitment Event**
Date: Early Fall 2019
Description:
Similar to last year’s event, we plan to increase the number of active members in our chapter via a recruitment event on the RIT campus. We plan to host a cookout with games on the lawn in front of the Center for Imaging Science to attract students studying optics, imaging, and photonics. During this event, we will collect contact information from interested students and have informal discussions about the ongoing activities of our chapter. We will follow up with interested students and provide them with promotional material about the benefits of SPIE student membership as well as participation in the RIT Student Chapter.
Expected total: $150
SPIE contribution: $150

**Visiting Lecturers**
Date: Fall 2019 and Spring 2020
Description:
We plan to invite a speakers (one in the fall and one in the spring), through the SPIE Visiting Lecturer Program and the OSA Traveling Lecturer program, respectively. The targeted audience will be the chapter members and optics community at RIT. We plan to use chapter funds to take the speakers and several interested chapter members to dinner and encourage exchange between the lecturer and rising scientists studying imaging, optics, and photonics. The potential speaker who we have reached out is Kenneth L. Marshall, PhD., from the Laboratory for Laser Energetics for Fall 2019.
Expected total: $300 ($150 per speaker event)
SPIE contribution: $150

**Holiday Social / End of the Semester Party**
Date: December 2019
Description:
We plan to throw a Holiday party for the RIT SPIE Student chapter members and peers/friends in the local optics community. This event will likely be subsidized by an OSA grant.
Expected total: $200
SPIE contribution: $150

**6th Annual Writing Retreat and Workshop**
Date: January 2020
Description:
For the sixth year in a row, we plan to host a student-organized writing retreat to take place at an off-campus location where students can avoid daily distractions and focus on writing. Past years have been cabins on Honeoye Lake & Lake Ontario. Attendees will focus on a specific technical writing task (conference paper, peer-reviewed article, thesis proposal/dissertation), while building meaningful relationships with their peers. Students will set goals prior to attending
and work to develop effective writing skills to meet these goals during the retreat. The work will be guided by a few experts, faculty, and professional writers, as well as through peer review. Funding for this event will be supported by the Chester F. Carlson Center for Imaging Science at RIT.

Expected total: $1500 (To be funded by RIT CIS)
SPIE contribution: $0

**Collaborative Social Event with University of Rochester Student Chapter**

Date: Tentatively Spring 2020
Description:
To encourage interaction with our local optics peers, we plan to host another collaborative event with the student chapter at the University of Rochester. We are planning to host another social gathering - tentatively a meetup to jointly play board games - to further facilitate camaraderie, collaboration, and intellectual exchange between chapter members from both universities.

Expected RIT total: $200
SPIE contribution: $100

**Imagine RIT Outreach Event**

Date: April 2020
Description:
The chapter is planning to present our Schlieren Imaging System, our Rochester Cloak, and a potential new development of an IR imaging system to fit with our current demo theme of “invisible optics” at the Imagine RIT event to other students, faculty, staff, and members of the Rochester community. The event should be engaging for persons of all ages, where attendees can learn about optics in an exciting, interactive setting. Funds will be spent to re-supply the heat/air sources for the Schlieren System and finalize implementation IR LED demonstration.

Expected total: $30 (To be funded by account rollover)
SPIE contribution: $0

**Monthly Happy Hour**

Date: Second Thursday of every month
Description:
The chapter will continue to promote social networking between graduate students across the RIT campus through this monthly gathering. No chapter funds will be spent for this event.

Expected total: $0
SPIE contribution: $0

5. Finances

<p>| DEPOSITS |</p>
<table>
<thead>
<tr>
<th>Deposit Date</th>
<th>Funding Source</th>
<th>Amount (USD)</th>
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<tbody>
<tr>
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<td>Remaining from last term</td>
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<tr>
<td>8/23/2018</td>
<td>SPIE Reimbursement to Lucy Chu for Optics+Photonics 2018 Student Leadership Workshop**</td>
<td>1300</td>
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<td>8/29/2018</td>
<td>SPIE Grant</td>
<td>1100</td>
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<td>10/24/2018</td>
<td>OSA Chapter Management Grant (2018)</td>
<td>700</td>
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<td>2/4/2019</td>
<td>Writing Retreat Venue Reimbursement</td>
<td>750</td>
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<td>2/4/2019</td>
<td>Writing Retreat Food/Supply Reimbursement</td>
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<td><strong>Total Deposits</strong></td>
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** Reimbursement funds were paid to member Lucy Chu personally and therefore are not included in Total Deposits.

## EXPENDITURES

<table>
<thead>
<tr>
<th>Event Date</th>
<th>Description</th>
<th>Amount (USD)</th>
<th>Funding Source</th>
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<tbody>
<tr>
<td>8/27/2018</td>
<td>Chapter Flyer Printing</td>
<td>5.00</td>
<td>SPIE Grant</td>
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<tr>
<td>10/31/2018</td>
<td>Visiting lecturer Prof. Lifshin Travel and Lodging Reimbursement</td>
<td>457.00</td>
<td>Funding remaining from last term</td>
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<td>11/16/2018</td>
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<td>78.69</td>
<td>SPIE Grant</td>
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<tr>
<td>11/23/2018</td>
<td>Infrared LED Secret Message Demo (Amazon)</td>
<td>15.63</td>
<td>SPIE Grant</td>
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<td>11/28/2018</td>
<td>Writing Retreat Venue, Supplies, and Food</td>
<td>1082.28</td>
<td>RIT Center for Imaging Science</td>
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<td>12/14/2018</td>
<td>Holiday Party Appetizers</td>
<td>107.72</td>
<td>SPIE Grant</td>
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<td>OSA Chpt. Management Grant</td>
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<tr>
<td>1/30/2019</td>
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<td>OSA Chapter Management Grant / funding from last term</td>
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<td>1/30/2019</td>
<td>OSA Travelling Lecturer Lunch</td>
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<td>OSA Chapter Management Grant</td>
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<td>2/19/2019</td>
<td>Infrared LED Secret Message Demo (Digikey)</td>
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<td>4/12/2019</td>
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6. Additional Information

Chapter Website: https://sites.google.com/a/g.rit.edu/spie-student-chapter-at-rit/

Chapter Facebook Page: https://www.facebook.com/groups/100489154274/

Chapter Twitter Account: https://twitter.com/spieosa_rit

Chapter Instagram: https://www.instagram.com/spieosa_rit/