Chapter Annual Report
(April 2018 – March 2019)

A. Cagri Aydinkarahaliloglu
President, SPIE Student Chapter at University of Notre Dame
(March 20, 2019)
Personnel

Chapter Adviser:
Dr. Anthony Hoffman (ajhoffman@nd.edu)
Department of Electrical Engineering

Current Officers:
President Ahmet Cagri Aydinkarahaliloglu (aaydinka@nd.edu)
Vice President John Haug (jhaug@nd.edu)
Secretary Tianyuan Abby Cao (tcao@nd.edu)
Treasurer Ola Abdalsalam (oabdalsa@nd.edu)

Previous Officers:
President Junchi Lu (Junchi.Lu.53@nd.edu)
Vice President Hansheng Ye (hye@nd.edu)
Secretary Ahmet Cagri Aydinkarahaliloglu (aaydinka@nd.edu)
Treasurer Galen Harden (Galen.H.Harden.12@nd.edu)
Current Members

20 Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Expires</th>
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<tr>
<td>Ola Abdalsalam</td>
<td>2 November 2019</td>
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<tr>
<td>Michael Augugliaro</td>
<td>18 October 2019</td>
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<tr>
<td>Cagri Aydinkarahaliloglu</td>
<td>17 October 2019</td>
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<tr>
<td>Eric Bechter</td>
<td>30 April 2019</td>
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<td>Andrew Bechter</td>
<td>30 April 2019</td>
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<tr>
<td>Brendan Brown</td>
<td>28 October 2019</td>
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<td>Tianyuan Cao</td>
<td>2 December 2019</td>
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<tr>
<td>Lillian Deng</td>
<td>11 November 2019</td>
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<tr>
<td>Tuphan Devkota</td>
<td>2 November 2019</td>
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<tr>
<td>Karla Gonzalez Serrano</td>
<td>24 October 2019</td>
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<td>Galen Harden</td>
<td>1 December 2019</td>
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<td>John Haug</td>
<td>22 August 2019</td>
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<td>Jin Jia</td>
<td>12 October 2019</td>
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<td>Irfan Khan</td>
<td>30 October 2019</td>
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<tr>
<td>Junchi Lu</td>
<td>1 December 2019</td>
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<tr>
<td>Rebecca Scheidt</td>
<td>17 October 2019</td>
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<tr>
<td>Roy Stillwell</td>
<td>8 October 2019</td>
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<tr>
<td>Owen Dominguez</td>
<td>11 February 2020</td>
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Outcomes and Achievements

The SPIE University of Notre Dame (ND) chapter continues with its commitment to be the largest and most active student organization within the engineering and science departments at ND; which prides from bringing together optics and photonics researches. Through the years, SPIE at ND has established a tradition of recurrent set of educational and outreach events.

This year’s executive officers were elected on August 10, 2018 following an online application only open for SPIE members. This strong executive team is formed with experienced second and third year graduate students from different departments including Chemical Engineering, Biomedical Engineering and Electrical Engineering. This diverse leadership team has increased the presence of SPIE ND chapter in engineering and science departments and created new collaboration opportunities with other student clubs such as Chemistry Graduate Student Organization.

Using our combined experience, so far, we have organized a Kick-Off & Recruiting Event, a Football Concession Stand with a profit over $1400, and social events such as a Halloween Trip and monthly coffee hours where we can get feedback from our members and plan upcoming events. The full list of events is listed and described in detail in the following pages. These series of events had the objective of increasing the momentum and influence that of SPIE student chapter in Notre Dame.

Currently we are a huge group, with 20 active members and more than 100 graduate and undergraduate students subscribed to our monthly newsletter. With such a huge presence in ND community, we will continue to influence people with our professional development and outreach events planned for the Spring 2019. Moreover, for the first time in years, we are organizing a trip to Argonne National Labs to help both undergraduate and graduate students with their future career plans.

We foresee a future for SPIE with a continuous growing, with a strong leadership team. We have identified students that are eager to participate and continue developing SPIE ND Student Chapter. I believe SPIE at Notre Dame student chapter will continue to increase its presence and influence in years to come.
Activity 1: Visiting Lecturer: Dr. John Arenberg

April 19th, 2018

356A, Fitzpatrick Hall, Notre Dame, IN

Dr. Arenberg, the Chief System's Engineer for the James Webb Space Telescope, (the world's new premier space telescope to be launched in 2019) visited University of Notre Dame. He gave a talk that introduced the James Webb Space Telescope, NASA’s next Flagship astrophysics mission. During the talk, Webb’s science goals were presented and the flow of these science objectives into mission requirements and design was discussed. The main engineering challenges for the largest telescope designed and built for space were explored and the elements of the JWST Observatory were also highlighted.

We also organized a roundtable dinner with Prof. Arenberg after the talk. During the roundtable event, he described the benefits and challenges for working for private companies and future career opportunism at Northrop Grumman Aerospace Systems.

The lecture saw a huge amount of attention from both the faculty and the students. There were more than 30 people in the conference room, and more than 15 people attended the roundtable event.
Activity 2: Outreach Event at Clay Middle School

April 12th, 2018

Clay Middle School, South Bend, IN

Every year, we send volunteers to Clay Middle School (Clay Intermediate, South Bend) to do optics/science demos for a school day. This year, eight volunteers participated in this event. Multiple optical phenomena were demonstrated, including total internal reflection, refraction, diffraction gratings, and polarization of light. This event was both fun and educational for the students at Clay Middle School. At the end of the event, they were given an infrared picture of themselves as a souvenir. Those pictures were taken in collaboration with Mid-infrared Photonic Laboratory in University of Notre Dame.
Activity 3: Concession Stand at ND vs. Vanderbilt Football Game

September 15th, 2018

University of Notre Dame, IN

We started the fall semester by organizing a food concession stand during the football game day (Notre Dame vs. Vanderbilt). We invited our members to take this opportunity to socialize with each other while preparing/selling grilled food to raise fund for our chapter. More than 15 members and friends came to participate. We set up two large grills for cooking meat products and prepared cold drinks and snacks for our football fans. We also introduced SPIE to visiting fans and got donations for our student chapter. Every one of us who participated worked very hard at our positions and had a great deal of fun at the same time. At the end of the day, we made a net profit of $1,400.5 to be used in our future activities.
**MENU**

- Hamburger: $5
- Bratwurst: $5
- Cheeseburger: $4.50
- Hot Dog: $4
- Chips: $1.50
- Drinks: $2
- Soda, Water, Coffee, Hot Chocolate
Activity 4: Kick-Off Meeting

October 11th, 2018
217 Cushing Hall, Notre Dame, IN

The annual kickoff meeting serves as a crucial event to recruit new members and keep the existing members renewing their membership at Notre Dame. In this year’s event, the benefits of joining SPIE and potential future activities were presented. The student president, Cagri Aydinkarahaliloglu, talked about her own experiences about being an SPIE officer and the opportunities SPIE provides to the members. There were around 22 students attending the meeting to show their interests in becoming a member.
Activity 5: Halloween Special

October 28th, 2018

Niles Scream Park, MI

We organized a trip to Niles Scream Park with our members. We provided transportation to/from the Niles Scream Park which is approximately half an hour away from the university campus. During the event, members had a chance to socialize with each other and talk about upcoming events in an informal setting.
Activity 6: SPIE Winter Social

December 4th, 2018

Stinson Remick Hall, Notre Dame, IN

Before the final week of the school, SPIE offered free cookies and coffee to graduate and undergraduate engineering students. This was a good chance for us to introduce our club to more people and recruit volunteers for next semester’s outreach event. This socializing event also afforded an opportunity for networking with peers from different departments and disciplines such as electrical engineering, chemistry and civil engineering.
Activity 7: SPIE Spring Social

March 22th, 2019

Stinson Remick Hall, Notre Dame, IN

To get more volunteers for our spring events and socialize with other students, we organized a coffee hour, where we offered free donuts and coffee to engineering students in Notre Dame. Also in this event, we planned our upcoming events in an informal setting and signed-up 15 more people to our e-mail list.
Upcoming Spring Events and Future Plans

We have 5 more events planned currently for this year’s presidential term.

1. **Argonne National Lab Visit**: For the first time in years, we are organizing a trip to Argonne national labs on April 11th with 6 members.

2. **SPIE Talk**: This year we invited Hamid Dehghani who is a professor of medical imaging to give a talk about his research.

3. **SPIE ND International Day of Light Photo Competition**: We will organize a photo contest in April.

4. **Outreach Event**: We will organize the outreach event at Edison Center this year with 8 participants. It will be on the third week of April.

5. **SPIE Annual Conference at San Diego**: Our Vice President and Secretary will attend this year’s annual conference at San Diego.

6. **Next Presidential Elections**: We will elect the officers of the chapter in August 2019.
Funds Balance

**Income** (Total $6,774.87)

- Rollover balance from FY 2018 (+$4303.16);
- Interest income (+$4.36);
- Other Income Sources (Total: $2,522.35)
  - Notre Dame Day Fund 2018 (+$1121.87);
  - Concession Stand at ND vs. Vanderbilt Football Game (+1400.48)

**Expenses** (Total: $803.15)

- Concession Stand at ND vs. Vanderbilt Football Game (-298.96)
- Prizes ($-130.00)
- SPIE Kick-Off Event ($-335.71)
- Winter and Spring Social ($-38.48)

We haven’t requested the activity grant for the year of 2019 yet.

**Net Balance $5,971.72** (As of March 2019)