

SPIE Chapter Activities Report

July 2015

Optics, Photonics and Imaging Society @ UC Davis (formerly UC Davis Optics Club)

Club Officers

Justin Klein, President, klein@ucdavis.edu

Eric Berg, Treasurer, eberg@ucdavis.edu

Edwin Leung, Vice President, ekleung@ucdavis.edu

Conrad Merkle, Secretary, conman89@gmail.com

Oybek Kholiqov, Outreach, okholiqov@ucdavis.edu

Members

Faezeh Azhari

Eric Berg

Hussain Fatakdawala

Brad Hartl

Sona Hosseini

Marisano James

Oybek Kholiqov

Justin Klein

Edwin Leung

Dinglong Ma

Conrad Merkle

Justin Migacz

Donghyeon Ryu

Anil Shrestha

Past Chapter Activities (July 2014-2015)

Recurring Events

Optics Club Social Hour

The Optics Club has periodically hosted a Social Hour, which is aimed at recruiting new members and providing a nice venue for students to interact. It has been successful in bringing together students from disparate departments to together for socializing and exchanging new ideas. The event has also been very successful in helping to recruit new members and build stronger ties of existing members to the chapter. There is normally ~10-20 students in attendance of this event.

Optics/Photonics Special Speaker Student Lunches

The student chapter organizes small lunches when biophotonics guest speakers visit UC Davis to give a lecturer. We typically organize 3-7 of these per year, limit attendance to 6 students and the lunch is sponsored by the Biophotonics and Bioimaging Seminar Series.

Special Events

Outreach to Irvington Highschool, September, 2014

We traveled to Irvington Highschool (located ~90 minutes from UC Davis in the Bay Area) to give a one hour presentation and one hour “lab”, interactive on optics, photonics and imaging. This outreach event was very well received by the students and included a “lab” portion at the end where we built an optical instrument to measure sugar concentration in a tube using refraction phenomenon. Approximately 30 students were in attendance of this event.

Day of Photonics, October, 2014

We organized a Day of Photonics event on October 21, 2014 which included a mixer component a biophotonics / optics poster session. The event was hosted in front of our building and promoted the event to numerous other departments and schools (biology, school veterinary medicine, school of medicine). Approximately 50 students, faculty, post doctoral researchers and staff from diverse department attended this event.

Visit to Photonics West 2015, February 2014

We organized a small event to encourage students (both undergraduates and graduate students) to meet up during PW2015 and arrange carpooling for those who were only planning on going to the exhibition.

Picnic Day Laser Maze, April 2015

We hosted our yearly Laser Maze during UC Davis Picnic Day (an extremely popular event for the community and Alumni which has approximately 100,000 visitors). The Laser Maze we host allows attendees to try to navigate a Laser Maze (and avoid breaking the laser beam a-la Mission Impossible; if the laser beam is broken then there is an audio or visual indication to the participant).

This year we made major upgrades to the maze, allowing us to host nearly 3X as many people as last year (we counted approximately 1,000 attendees compared to ~300-400 last year). Upgrades included additional lasers (8 lasers compared to 1 last year), Arduino-controlled feedback, 3D printed laser mounts, and electroluminescent wiring lighted the entire maze path.

Outside of the maze we he gave away >1000 pairs of diffraction glasses (provided by SPIE) and had numerous demonstrations

Picnic Day Laser Maze Setup Outreach Event, April 2015

The night before the Picnic Day laser maze we rolled our setup event into an outreach event which was coordinated by Tom Schefflin who along with Mrs. Sloss (Gold River Discovery Center, a K-8 school) had established a Photonics Club. Students from the Photonics Club came by to help set up the laser maze and learn about optics and photonics.

Special Lecturer Reception, May 2014

We held a reception for guest speaker Stefan Andersson-Engels, who was hosted by the Biophotonics and Bioimaging Seminary Series. This event offered a unique opportunity for students to interact with and socialize with the speaker and faculty members who had attended Prof. Andersson-Engels event. Approximately twenty students and faculty members attended this event.

Planned Future Activities

We plan to continue with four events which have been very successful in both promoting the club:

Optics Club Social Hour

Laser Maze

Special SPIE-sponsored Guest Lecture

We plan on organizing a large career fair type event involving relatively local optics/photonics companies.

Financial Statement

Summary

We began with a balance of 6.35 (from last year) + 900.00 which we received from SPIE for activities this year.

Funds raised/expended

Item	Amount	Starting Balance	Ending Balance	# Attendees (if an hosted event)
Beginning balance (from 2014)		6.14	6.14	
SPIE Student Chapter Activity Grant	+900.00	6.14	906.14	
Irvington Outreach Event (gas, bridge tolls)	-30.00	906.14	876.14	30
Day of Photonics (food, drinks)	-80.00	876.14	796.14	~50
Picnic Day Laser Maze Event	-185.36	796.14	610.78	~1000 attendees through the maze and
Special Speaker Reception	-147.11	610.78	463.67	20
Optics Club Social Hour (food, refreshments, disposable plates)	-105.82	463.67	357.85	~50