

SPIE 
Student Chapter
Boston University

Annual Report

2010-2011

I. Boston University Chapter of SPIE Members

The elected officers during the 2010-2011 academic year were:

President	Katherine Calabro	kcalabro@bu.edu
Vice-President	Suraj Bramhavar	suraj10@bu.edu
Treasurer	Brian Hicks	bahicks@bu.edu
Secretary	Alket Mertiri	alket.mertiri@gmail.com

Current student members

1	Serap Aksu	saksu@bu.edu
2	Suraj Bramhavar	suraj10@bu.edu
3	Katherine Calabro	kcalabro@bu.edu
4	Marie Drottar	mdrottar@bu.edu
5	Brian Hicks	bahicks@bu.edu
6	Dianmin Lin	lindm@bu.edu
7	Yang Lu	luyang@bu.edu
8	Marc McGuigan	mxmcgu@bu.edu
9	Alyssa Pasquale	pasqua@bu.edu
10	Kashma Rai	
11	Guoxin Rong	gxrong@bu.edu

II. Chapter Activities

1) Fall General Body Meeting

October 29th, 2010

A general body meeting was held on October 29th open to all current and interested members of the SPIE/OSA student chapter at BU. Pizza and beverages were provided. The event was held in the Boston University Photonics Center. Discussion centered around the previous events held in the previous year, and the events planned for the upcoming year.

2) Industry Networking Night

March 17th, 2011

This event was held in conjunction with the local New England Chapter of the Optical Society of America.

Students from BU and the surrounding Boston Area were invited to speak with industry professionals currently working in the area. The event was held at the Boston University Photonics Center. Dinner was provided to attendees. The first half of the event had students and industry professionals introduce themselves and their current areas of interest. They were then given the opportunity to mingle and network. The second part of the program involved a structured set of presentations by invited speakers from industry.

They included:

William Nelson- Retired

Keith Hinrichs- MIT Lincoln Labs

Gregg Favalora- Optics for Hire

There were approximately 50 attendees: ~25 students and ~25 industry attendees.





3) Professional Development Seminar: Light Tools and Code V

April 20th, 2011

Representatives from Optical Research Associates (software company) were invited to give a seminar on the use of two of their software packages: Light Tools and Code V.

These are common software applications used in the optics industry. Students from BU were invited to attend the event over the lunch hour where sandwiches were provided.

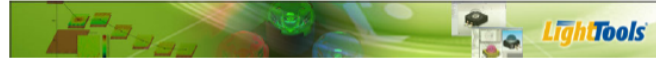


BU Student OSA Chapter

Professional Development Seminar

Light Tools® and CODE V® optical design software overview and demo

Wednesday, April 20th 12pm Photonics 9th floor colloquium room



LightTools Illumination Design Capabilities, *Groot Gregory*

LightTools is an optical design program combining a 3D CAD modeling environment with generalized ray trace to analyze and optimize a wide variety of problems. Designers will utilize LightTools for cell phone displays, street lights, LEDs and medical imaging applications. Models use light sources, with simple to complex output distributions, to interact with optical and mechanical parts designed within LightTools or imported from mechanical CAD programs. LightTools also provides a flexible programming API permitting integration of MATLAB, Excel and other programs to drive analysis. An overview of LightTools capabilities will be presented.



CODE V Optical Design and Analysis Capabilities, *Bruce Irving*

CODE V is a powerful tool for the design and analysis of image-forming optics and photonics systems. Its capabilities range from simple ray tracing of basic camera lens systems to the optimization of microlithography systems, and even diffraction beam propagation analysis of complex systems such as segmented-mirror telescopes. Its features for optimization and tolerancing (simulation of manufacturing errors) are especially powerful. CODE V has an intuitive graphical user interface but also supports commands and macro programming. This lunchtime seminar will include a brief overview and demo of CODE V's capabilities.

Lunch will be provided.

III. Future Planned Activities

1) Fall Organizational Meeting and Officer Elections

September 2011

A free lunch will be provided to the students of the Photonics community at Boston University. The purpose of the activity is to provide information about the activities held during the past year and to announce the activities for the upcoming 2011-2012 academic year. The current student chapter members are expected to participate in the activities.

We intend to encourage new students to join SPIE and to participate in the chapter.

During the meeting, we will also be holding the elections for the new officers for the upcoming year.

2) Family Optics Day

September 17th, 2011

In conjunction with the local New England Section of the Optical Society of America, the BU chapter is planning an educational outreach event intended to get kids excited about optics. Children of all ages will be invited. Chapter members will each be in charge of a demonstration table that will be 'demoing' interactive activities. These activities will range from color to polarization to free space communications. Snacks will be provided for all those who attend. The event will be free.

*** Please note that we received SPIE funding for this event to be held last spring, but scheduling conflicts necessitated that we postpone the event to September.***

3) Professional Development Series

Monthly or Bi-Monthly through the academic year

We intend on continuing our professional development series through the next year. We will have seminars that will instruct students how to use many of the various resources available to members of the BU photonics center. For example, we will have a student who is familiar with the use of the Scanning Electron Microscope do a presentation describing the use of the machine and how it would benefit in other students' research.

IV. Financial Information

Item	Income	Spent	Net
Starting Balance (July 2010)			\$398
SPIE Funding			
Family Optics Day	\$500		\$898
OSA Funding (we are a joint chapter)			
Industry Networking Night	\$500		\$1398
General Body Meeting (food)		\$200	\$1198
Networking Night (food and facility)		\$511	\$687
Current Balance			\$687