Report of Activities of SPIE The Penn State Univ. Chapter
(September 2012 through August 2013)

Shuo Zhao, Chapter President

Name of Chapter
SPIE The Pennsylvania State University Chapter
http://spie.ee.psu.edu/

Chapter Leadership

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</tbody>
</table>

Member Count: 20 members (as of 9/15/2013)

Abbreviated SPIE-PSU Expense/Income Report

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>Amount</th>
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<tbody>
<tr>
<td>O+P 2013 Trip Total expenses</td>
<td>August 2013</td>
<td>$3,300</td>
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<tr>
<td>From SPIE Officer Travel Grant</td>
<td>August 2013</td>
<td>$1,100</td>
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<tr>
<td>Subsidy from University</td>
<td>August 2013</td>
<td>$2,250</td>
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<td>Current chapter balance</td>
<td>September 2013</td>
<td>$1188</td>
</tr>
<tr>
<td>Outreach account</td>
<td>September 2013</td>
<td>$70</td>
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Chapter activities from September 1st 2012 – August 31st 2013
The events are listed here in chronological order. Officer only meetings are not listed.

Sep. 4th 2012: Chapter kick-off meeting
During the New Year’s (2012-2013) first meeting, we welcomed new members to the chapter. Fellow members shared their experiences of the summer trip to SPIE O+P conference in San Diego, CA.

Dec. 5th 2012: Summary meeting for the semester
At the end-of-school week, members gathered together to set preliminary plans for the coming semester, including visiting lectures and outreach opportunities.

Mar. 19th 2013: Exhibition at the Exploration U - A STEM Event for the Community
Ten of our members attended the Exploration U exhibition held by the university, aiming at providing STEM activities for the community, as well as enhancing the chapter's visibility to the public. During the event, posters and experimental demos are presented, and several hands-on activity kits are distributed to kids and their parents.
Apr. 18th 2013: Visiting lecture - Dr. David Aspnes from NCSU
With the help of Dr. Liu, we were able to invite Dr. David Aspnes from NCSU for a visit. During his visit, profound discussions were carried out between Dr. Aspnes and our members, in aspects of academia and career planning. A lecture was also given to students from various departments in the field of linear and nonlinear optics, more specifically on 'bond model', which is of Dr. Aspnes major research interest.

Apr. 23rd 2013: Connection built with Penn State Electro-Optical Center
After several attempts, our chapter was finally able to contact to Penn State EOC, and major members had discussed with its chief coordinator about possible activities. It became very promising that we would build more connections with optic companies and other student chapters within the Pennsylvania region.

May 21st 2013: Summer activity planning meeting
During this meeting, reflections on the previous meeting with EOC coordinator was discussed among members and more ideas about future activities were brought about. Preliminary social event plans during the summer was also proposed.

Jun. 20th 2013: Presentation at Millennium Mash-up Seminar
As an invited student organization, our chapter presented at the Mash-up Seminar to provide this year's REU students some information of our chapters. We utilized this opportunity to communicate with undergraduate students, as well as other professional societies in the university.
Aug. 23rd~29th 2013: SPIE O+P Conference
Three of the members Nikhil Mehta, Ding Ma, and Shuo Zhao, have attended the SPIE O+P Conference at San Diego, CA, with the generous aids from SPIE and the University. Through leadership workshops, oral presentations, and various social activities, they have broadened their horizons, ignited their creativities, and extended their networks. Provided is a list of works presented at the conference developed by students, post-doctorate scholars, and faculty member affiliated with SPIE Penn State chapter.

[Proceeding paper number] authors, title

[8828-43] Iam Choon Khoo, Kuan Lun Hong, Shuo Zhao, “Nonlinear optics with blue-phase liquid crystals”
[8845-34] Chuan Yang, et.al, “Parallel axial imaging in scanning microscopy”
[8845-38] Perry S. Edwards, Corey Janisch, et.al, “Raman spectroscopic sensing using whispering gallery microresonators”
[8847-29] Shizhuo Yin, et.al, “Fabrication of nanostructures on curved surfaces”

**Future Directions:**

The SPIE student chapter is working hard to create a beneficial experience for its student members. Emphasis in the next year would be increasing the influence of SPIE on campus, which has already shown strong signs of promise. Moreover, a long-term development blueprint is being formed right now, thus it is expected that more activities will be conducted which can make us a better group.