SPIE Singapore Student Chapter
Annual Report (2012-2013)

Reported by
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www.spiesg.org

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Members

One of the most important tasks of our chapter is to recruit more members. Our current policy for members is we will provide 50% refund (SGD 12.00) for both new and renewed members. Till now, this policy works well, and helps us to attract new members.

Currently, our chapter has 27 student members and 12 alumni members. All members are listed as follows:

Achyut Adhikari                  Deepan Balakrishnan
Keren Chen                      Shuo Chen
Balaji Devarajan                Jing Dong
Ali Hasnain                     Hongru Li
Muhammad Mehmood                Ratheesh Kumar Meleppat
Yi Hong Ong                     Nishtha Panwar
Ramya Radhakrishnan             Mohammad Rahman
Nasim Sahraei                   Anant Shinde
Jin Tao                         Dushan Wadduwage
Jianfeng Wu                     Jing Xiao
Xiaoyan Xu                      Fang Yang
Derrick Yong                    Ming Zhao
Caigang Zhu                     Chao Zuo
Muneesh Maheshwari

Officers

The following are the chapter officers for 2012-2013

President: Ming Zhao
Vice President: Caigang Zhu
Seminars and workshops

Seminars and workshops are good places to learn new techniques and expand social network. Our chapter members can enjoy all the seminars provided by our chapter and the lectures, workshops, and short courses provided by the Optics and Photonics Society of Singapore (OPSS).

On April 12, 2013, we invited Prof. Yong Li from Zhejiang Normal University, China and Prof. Qican Zhang from Sichuan University, China to give us a talk. Prof. Li’s research interests include 3D display using Computer Generated Hologram (CGH) and optical 3D imaging. In this seminar, he introduced his work on three-dimensional display and hologram. Prof. Zhang has studied optical three-dimensional (3D) shape measurement for more than 10 years. He introduced the basic principles of 3D shape measurement, and presented his recent work on dynamic 3D shape measurement in this seminar.

Figure 1. Prof. Li Yong from Zhejiang Normal University, and Prof. Zhang Qican from Sichuan University presented their works on April 12, 2013.
Company visits

To bridge the gap between companies and students is also one of our tasks. Each year, we organize company visit to help students to have a better understanding of industry and local companies.

On October 31, 2012, we organized a visit to DISCO HI-TEC (SINGAPORE) Pte. Ltd. DISCO is a Japanese company which provides precision machines and related tools. Its Singapore branch is for sale and maintenance of DISCO's products. The company representatives Mr. Yew Leng Chye and Mr. Pang Bo demonstrated their recent products and answered our questions.

On January 29, 2013, we visited the Singapore branch of Ultratech. Ultratech is a supplier of steppers. Steppers are widely used in the manufacture of integrated circuits, and we were very interested in the principle and usage of steppers. The company representatives Mr. David D. Lee, and Mr. Kenneth Looi explained the principle of steppers and introduced their products very carefully.

Figure 2. Some of our members took a photo at the entrance of Ultratech.

Group activities

Our members are from different disciplines. Some are from mechanical engineering, some are from chemical and biomedical engineering, and some are from computer engineering. It is difficult for us to meet each other in our campus. But we all study or use optical technologies, so we can
join the same student chapter, and have the change to have fun together. Group activity is such kind of opportunity for us to meet new friends. Also, we believe “work hard, play hard”, and those group activities help us to relax.

Figure 3. Photos taken during our group dinners.
Connect with other chapters

SPIE has student chapters all around the world, which means we can have friends all around the world. Our chapter members visited Osaka in July, and we had a fantastic time there.

Figure 4. Photos taken during our tour to Night Safari.
Future activities

In the next year, we will still prepare regular group activities (like dinner, company visit) for our members. Meanwhile, we would like to pay more attention to the educational activities with local primary school or middle school students.
The most important task in the next year is holding a student conference which is attached to the International Conference on Experimental Mechanics 2014 (ICEM 2014). ICEM 2014 will be held in Singapore from Nov. 15 to Nov. 17, 2014. As this conference is supported by both SPIE and OPSS, we believe it is a good opportunity for students to communicate and share experiences with each other. We would like to invite students, especially the ones will attend ICEM 2014, to join our conference. Currently, the detailed plan is still under preparation, and it will be announced when it is ready.

For updates on our chapters activities, please visit [http://www.spiesg.org](http://www.spiesg.org).

Acknowledgement

Hereby, on behalf of all chapter members, I would like to express our special thanks to our chapter advisor Prof. Asundi, our former president Lei Huang, and following organizations for their support in the past year.

SPIE

Optics and Photonics Society of Singapore (OPSS)

Center for Optical & Laser Engineering (COLE), Nanyang Technological University

Edmund Optics

Ultratech Singapore

DISCO HI-TEC (SINGAPORE) Pte. Ltd