

SPIE Student Chapter at Ivan Franko National University of Lviv



<http://www.electronics.wups.lviv.ua:8102/stchapter>

Student Chapter Report

May 2007-June 2008

Name of Chapter:

SPIE Student Chapter at Ivan Franko Lviv National University

Person Completing Form/Contact:

Rostyslav Bilyy, Former Chapter President (2007)

E-mail: r.bilyy@gmail.com

Number of members: 10

This year most of former chapter member have graduated the University of have finished their PhD study. The new generation of young talented students become our new members.

Chapter Officers elected for the next Academic year (April 2008-April 2009):

President: Bohdan TSOP jin_87@ukr.net

Vice President: Oksana Drobchak oxdr@mail.ru

Secretary: Vita Dmytruk vita_dmytruk@mail.ru

Treasurer: Hanna Danulyuk danyljuk@electronics.wups.lviv.ua

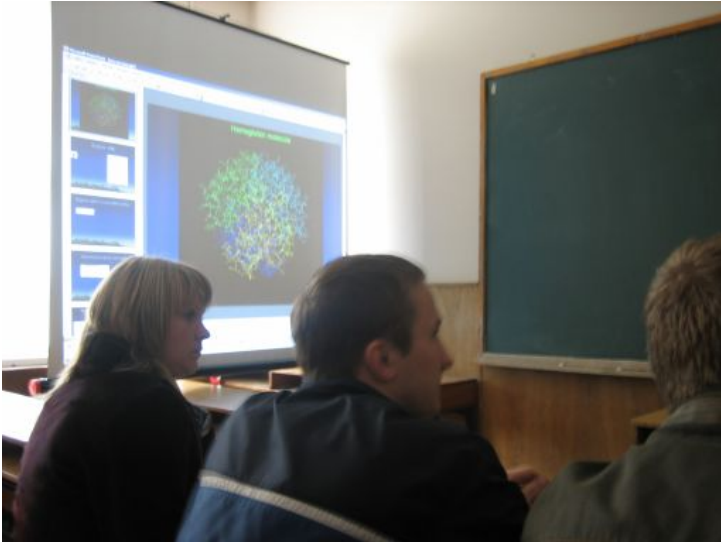
Chapter Advisor: Dr. Alexander Bilyi Bilyi@electronics.wups.lviv.ua

Chapter activities:

1. Chapter members participated at III International Student Chapters Meeting, Wroclaw, Poland. Andrew Tomy and Rostyslav Bilyy presented a plenary lecture.
2. Chapter member Andrew Tomy was awarded the SPIE Scholarship.
3. Oksana Drobchak participated in PW-2008 and have made a poster presentation during the conference. The visit was in frames of SPIE Officer travel grant.
4. Chapter members Ivanna Yarynovska and Myroslava Omelchenko participated at the European Conferences on Biomedical Optics (ECBO) co-located with SPIE Europe Optical Metrology, 17 - 21 June 2007, Munich, Germany; where they presented their scientific works. They were supported by SPIE Student chapter travel grant. After arrival they made a presentation for chapter members about the results of their visit.
5. Students of the chapter, as well as other volunteer students from the University, studied the advanced course "Physical principles of biomedical methods for clinical diagnostics" taught by Chapter Advisor Dr. Alexander Bili. The development of course was supported by *2006 SPIE Educational Grant in Optical Science & Engineering*.
6. Chapter members are preparing the course of presentations for a young scientists which is to be started in September. The course will consist of the following topics: how and where to search for scientific data? how to write an article? how to write a CV and resume? how to improve scientific presentation? what is scientific idea how valuable is it? how and when to patent you invention? how to apply for scientific grants and to be successful?
7. Student chapter members prepared an presented few presentations "Amazing optics" for younger students. Few other demonstrations are in preparation.

8. We continue our established scientific collaboration with SPIE Student Chapter at Wroclaw University. During the reporting period a few promising results were obtained and a joint article was accepted in Physica E (with IMPACT factor ~1.05): Bilyy R., Podhorodecki A., Nyk M., Stoika R., Zaichenko A., Misiewicz J., Strek W. Utilization of GaN : Eu³⁺ nanocrystals for the detection of programmed cell death / Physica E: Low-dimensional Systems and Nanostructures, 2008, V.40, p.2096–2099. in press; doi:10.1016/j.physe.2007.09.147.
9. Chapter activities were presented at OSA/SPIE Ukrainian Regional Chapter Meeting, Kharkiv, Ukraine, December 12-13, 2007.
10. We are constantly recruiting new members.
11. Meetings with the students of Ivan Franko Lviv National University, Lviv Polytechnic University and Lviv Medical University with the aim to promote SPIE activities.
12. During reporting period there were 9 Chapter meeting. The meetings are usually arranged last Thursday of the month (regular), additional meetings are arranged when needed.
13. Chapter members are activity involved in scientific work, some of their results were published at:
 1. Utilization of GaN : Eu³⁺ nanocrystals for the detection of programmed cell death. Bilyy R., Podhorodecki A., Nyk M., Stoika R., Zaichenko A., Misiewicz J., Strek W. / **Physica E: Low-dimensional Systems and Nanostructures**, 2008, V.40, p.2096–2099
 2. Luminescence of thin films of bismuth and lead complex oxide compounds/ O. Bordun, I.Y. Kukharsky, V. Antonyuk and V. Dmytruk / **Radiation Measurements**, Volume 42, Issues 4-5, April-May 2007, Pages 569-571
 3. Light scattering application for bacterial cell monitoring during cultivation process. Igor Ya. Kotsyumbas, I. M. Kushnir, R.O. Bilyy, I.H. Yarynovska, V. B. Getman, and A.I. Bilyi / **Proc. SPIE** 6631, 66311I (2007).
 4. Optical spectroscopy of phosphatic urinary calculi. I. Yarynovska, A. Bili, / **Proc. SPIE** 6628, 66281C (2007)
 5. Method for quantitative determination of microbiological object during their cultivation process; Kushnir I.M., Kotsyumbas I.Ya., Bilyi O.I., Getman V.B., Bilyy R.O., **PCT Patent Application**, 2007, PCT/UA2007/000044.

Course “Physical principles of biomedical methods for clinical diagnostics”, taught by Chapter Advisor Dr. Alexander Bilyi



Promotion of Optics among 1st grade students

Demonstration of amazing properties of liquid crystals, done by Chapter members



Financial information:

Beginning balance - \$0.

Funds obtained from SPIE - \$1100.

Funds expended: \$1100

Details:

	\$
Participation in the ECBO Conferences,	415
Participation in the Wroclaw Student Meeting	350
Library subscriptions	225
Organization of optics presentations for students	75
Other (including bank expenses)	35
Total	1100

Ending balance - \$0.