

Semiannual SPIE Student Chapter Report 2007 of Taras Shevchenko Kyiv National University

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Current SPIE Student Chapter Officers:

President - Fedosenko Oliana

Vice-president - Hakimov Roman

Treasurer - Olga Lopatynska

Secretary - Bukatar Oleksandra

Current SPIE Student Chapter Members:

- | | |
|------------------------|-------------------------|
| 1. Aleksandra Bukatar | 7. Andrew Lopatinsky |
| 2. Oliana Fedosenko | 8. Olha Malinochka |
| 3. Viktor Garashchenko | 9. Valerij Rozouvan |
| 4. Olena Ivashyna | 10. Ihor Shavrin |
| 5. Roman Khakimov | 11. Valentin Stadnytsky |
| 6. Olga Lopatynska | 12. Ruslana Udovytska |

Since summer our Chapter held the number of activities with educational and inspirational purposes.

1. Annual Young Scientists Conference

8-th International Young Scientists Conference "Optics & High Technology Material Science SPO 2007" was been held at Physics Department of Taras Shevchenko Kyiv National University in October 25 - 28, 2007. It is a traditional Conference. As previous conferences its main goal was to broaden the range of knowledge in optics and to profound the range of interests of young researchers as well as exchange of the opinions on the decision of the mainstream optical problems. This year the Conference was a little smaller (about 100 participants) due to some obstacles but in future we plan to gain more access in this important type of activity.

The topics of this Conference were following:

A: Physics of Condensed Matter and Nanotechnology

B: Lasers and Optoelectronics

C: Optical Design and High-Speed Photography

D: Biomedical Optics

Special Workshop "3-D Imaging: Technology and Application".

And Photo-Exhibition "Art in Optics".



The auditory, reports and discussion at Plenary Session of 8-th International Young Scientists Conference "Optics & High Technology Material Science SPO 2007"

Eight Invited Speakers (three of them are from foreign countries) had presented their lectures which gave an opportunity to look close into nanotechnology investigations, laser optoelectronics and other interesting research fields. It is necessary for gaining some insight about world research.

Ukrainian representative of world optical equipment producer, Head of subdivision of biomedical equipment of Carl Zeiss Company Zinaida V. Smila has presented at Conference Exhibition the Poster report with interesting facts in instrument-making industry world and have some handout stationery with Carl Zeiss logotype. This report was as a part of partnership between Optics Division and Carl Zeiss Ukraine.

During the Conference the participants had an opportunity to attend 21 oral reports and to discuss poster reports (60).

There were 10 participants from foreign countries (Greece, Japan, Russia, Belarus, Poland, Moldova and Egypt). Ukraine was presented by graduate and post graduate students and young scientists from Kyiv Universities, Academic Institutes and Universities from different regions of Ukraine.



After Poster Session at 8-th International Young Scientists Conference "Optics & High Technology Material Science SPO 2007"



Secondary school students with Prof. Sergiy M. Yablochkov at 8-th International Young Scientists Conference "Optics & High Technology Material Science SPO 2007"

Secondary school students have attended Conference Exhibition and Plenary Session. They have a fruitful discussion with Advisor of SPIE Student Chapter, Head of Optics Department Prof. Leonid V. Poperenko dealing their future.

MAIN TOPICS:

- Nanotechnology
Thin Films and Coatings
- Lasers and Optoelectronics
Materials and Devices
- Biomedical Application
of Optics

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The book with scientific works of conference was published (8-th International Young Scientists Conference "Optics & High Technology Material Science SPO 2007").

2. Working with school children

We have some activities for school children for involving them to Optics Division. These activities include Computer Video Presentation during June 2007 at Physics Department, working with undergraduates to improve their math skills, inspiring school children in Optics (using Hand-On-Optics kit and other supplement).

3. Attending Conferences and Meetings

PhD student Oliana Fedosenko, current President of our Chapter have attended the "Optics and Photonics 2007" in San Diego, CA in August with the support of Officer Travel Grant. She has made the report after this travel for Chapter and the staff of our Optics Division at Optics Division meeting and at SPIE Student Chapter Meeting.

Our six members, 4th year students, have attended as an International Delegation All-Russian Students Competition in Optical Engineering 2007 (Всероссийская Студенческая Олимпиада по Опотехнике) in St.-Petersburg and gained 4th Prize.



There was tense atmosphere at All-Russian Competition in Optical Engineering. 4th year student Iegor Rafalovskiy is at work.

Our SPIE Chapter members this school year have attended two Conferences with topics in Optics: in Kharkiv (Ukraine), December 2007, and "Optics-2007" in St. Petersburg (Russia), October 2007. The travel expenses were reimbursed as well as travel expenses for attending All-Russian Competition by SPIE Student Chapter.

We have upgraded Chapter Library by a lot of useful books in Physics, particularly in Optics, and in Math.

We plan to continue existing collaborations and finding new partners for holding Annual Young Scientists Conference, to upgrade more Chapter Library (it is always necessary for students). We plan to actively work with school children to inspire them in Physics and particularly in Optics. We understand that nowadays it is necessary for first year students of our Department to pull up their math skills. So it is also in our agenda. Of course one from our Chapter will be happy to obtain that opportunity to attend "Optics and Photonics" at San Diego, USA, next summer.

We plan to gain more access in Annual Young Scientists Conference. Although next year it will be 9th conference yet, but there are some ways to improve this important type of activity. In particular we should aware about conference appearance, design and entertainment. Photo Exhibition should be more developed.

FINANCIAL REPORT

Beginning balance	0 USD		
Funds raised and expended	4000 USD		
		Source/destination	Amount
		Annual Young Scientist Conference SPO 2007 Publishing	500 USD
		Annual Young Scientist Conference SPO 2007 Refreshments and Coffee Breaks	100 USD
		Annual Young Scientist Conference SPO 2007 office accessories and supplements	200 USD
		Organization of SPIE Membership Day with Reception	50 USD
		Organization of Lectures for students of our University	200 USD
		Organizations of Official Meetings of SPIE Members, non-Members, Students in Optics	250 USD
		Travel expenses of SPIE Student Chapter members for attending conferences and meetings (10 students)	1000 USD
		Purchasing digital supplement for SPIE Student Chapter Office	300 USD
		TOTAL	2600 USD
Details of SPIE funding received	3000 USD		
<i>Other sources:</i> Qpsi Quantum Photonics Science Research Center, Hanyang, Korea	1000 USD		
Ending balance	1400 USD		