

SPIE Student Chapter Report 2010 of Taras Shevchenko National University of Kyiv

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Current SPIE Student Chapter Officers:

President – Andrii Maksymov

Vice-president – Olesia Snezhkova

Treasurer – Olena Poljanska

Secretary – Irina Lisova

Current SPIE Student Chapter Members:

1. Kolya Bednow
2. Alexandra Ganus
3. Viktor Garashchenko
4. Dmytro Gnatyuk
5. Andrey Karazhov
6. Denis Kozak
7. Kolya Kyrylyuk
8. Irina Lisova
9. Andrii Maksymov
10. Olena Poljanska
11. Mykhailo Rakov
12. Yaroslav Rybak
13. Rustam Rysov
14. Eugen Shynkarenko
15. Olesia Snezhkova
16. Valentyn Stadnytskyi

1. Annual Young Scientists Conference

Tenth International Young Scientists Conference “Optics & High Technology Material Science SPO 2009” was conducted at Physics Department of Taras Shevchenko Kyiv National University in 22 – 25 October 2009. This 10th anniversary SPO Conference was devoted to 70 years of Physics Department.

The Conference was organized by undergraduate and postgraduate students which are current members of SPIE and OSA chapters. This year 65 students participated in organization and 80 persons in general.

Young Scientists Conference provides a chance to acquaint oneself with young researchers' investigations which may turn later into a scientific breakthrough.

This year 165 members attended the Conference. Among them: 35 collaborators of Kyiv National University of Taras Shevchenko; 28 collaborators of NAS of Ukraine and NTU Kyiv Polytechnic Institute; 15 prominent scientists (academics, corresponding members, professors); 12 from other towns; 9 foreigners (University of Shizuoka (Hamamatsu), Japan; Aston University, Birmingham, England; Pierre and Marie Curie University, Paris, France; Riga Technical University, Latvia; Boston College, Chestnut Hill, Massachusetts, USA; Hamburg University of Technology, Germany).

27 oral and 38 poster reports were held in all topics:

- Physics of Condensed Matter and Nanotechnology
- Laser and Optoelectronics
- Optical Design and High-Speed Photography
- Biomedical Optics
- 3-D Imaging: Technology and Application

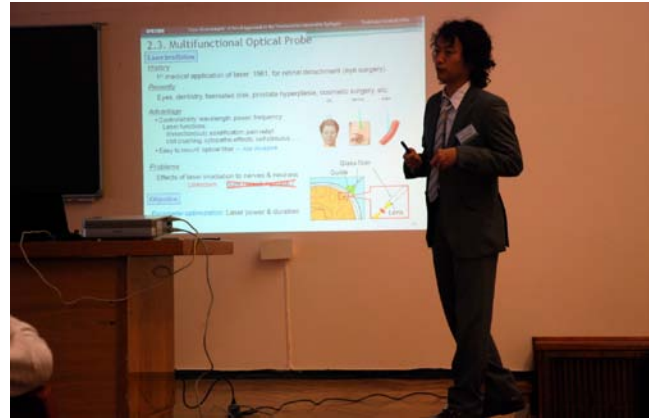


Annual Young Scientists Conference SPO 2009 Group Photo

The most interesting lectures were provided by the invited prominent scientist since their studies may attract not only students but also experienced researchers: Docenko I. "Modern problems in quantum optics", Bariakhtar I. "Quantum computer development", Prof. Toshitaka Yamakawa "Cryo-Neurosurgery: A Novel Approach to the Treatment for Intractable Epilepsy" (Japan), Dr. Alex Rozhin "Carbon Nanotubes for Ultrafast Photonics" (England), Dr. Irina Bariakhtar, "Optics Horizons" (USA), Toru Aoki "Novel x-ray measurement and application by photon-counting CdTe detector" (Japan).



Alex Rozhin makes his presentation



Prof. Toshitaka Yamakawa

2. Working with school children

We continue to invite secondary school students to our Physics Department in any time. They also attended Conference Exhibition and Plenary Session of 10th International Young Scientists Conference "Optics & High Technology Material Science SPO 2009". We organize and maintain activities of school children for involving them to Optics Division. Open Doors Days were conducted in May 2010 to agitate secondary school students to join our Division. We provide preparation courses for secondary school children one day a week to improve their skills in math and physics. These courses are organized by PhD S.V. Kondratenko.

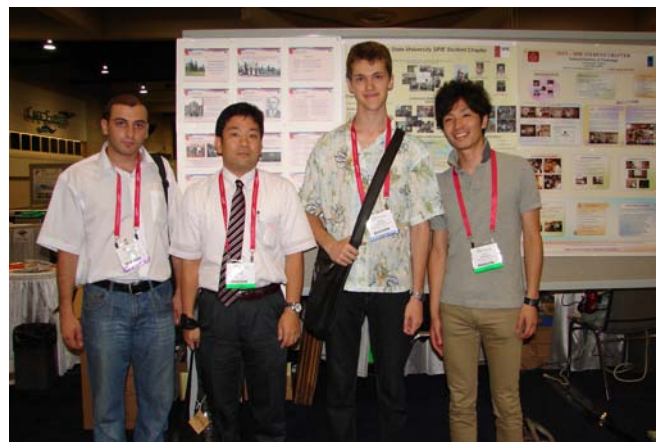
3. Attending Conferences and Meetings

6th year student Andrii Maksymov, current President of our Chapter have attended the "Optics and Photonics 2009" in San Diego, CA in August with the support of Officer Travel Grant. He made the travel report in front of the Chapter and the staff of our Optics Division at Optics Division meeting and at SPIE Student Chapter Meeting.

Annual Leadership Meeting "Optics&Photonics-2009", August 1-6, San Diego CA, USA



Luminescent microscopy imitation

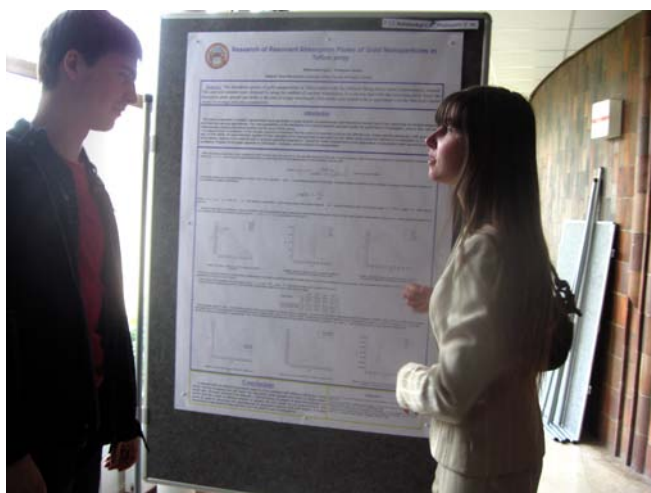


Poster session: Robert Sargsyan, Toru Aoki, Andrii Maksymov and Bunji Shinomiya

5th year student Olena Poljanska and 4th year students Dmytro Gnatyuk and Mykhailo Rakov were awarded by individual SPIE educational Grants in optical science and engineering.

6th year student Igor Rafalovskyi visited “18th Annual Student Conference Week of Doctoral Students 2009” with poster presentation. Conference was held on June 2-5, in Charles University Prague, Faculty of Mathematics and Physics, Troja, Prague, Czech. The trip was supported by the organization committee.

18th Annual Student Conference Week of Doctoral Students 2009, June 2-5, Troja, Prague, Czech



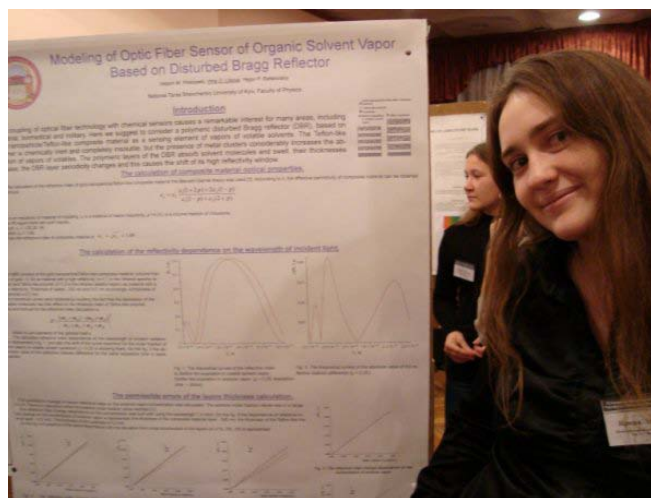
Igor Rafalovskyi presents his poster report

5th year student Valentyn Stadnytskyi attended 5th International Summer School New Frontiers in Optical Technologies, 10-14 August 2009, Tampere, Finland.

IX Kharkiv Young Scientist Conference on “Electromagnetics, Photonics, and Biophysics”, December 1-3, Kharkiv, Ukraine



Olesia Snezhkova and Darya Ivashchenko



Irina Lisova presents her poster

Students Eugen Shynkarenko, Irina Lisova, Daria Ivashenko and Olesia Snezhkova attended IX Kharkiv Young Scientist Conference on "Electromagnetics, Photonics, and Biophysics", December 1-3, Kharkiv, Ukraine. Conference was conducted by the Institute of Radiophysics and Electronics. Olesia Snezhkova was awarded for the best report in section of Optics and Photonics.

6th year student Olesia Snezhkova won special grant to attend Winter College on Optics and Energy that was held at the Abdus Salam International Centre for Theoretical Physics (ICTP), in Trieste, from 1 to 5 February and from 8 to 19 February 2010. She also visited OPTO Meeting for Young Researchers & V International SPIE Students' Chapters Meeting in Nicolaus Copernicus University in Torun, Poland. She represented there our Chapter as current Vice-President.

Preparatory School 1-5 February and the Winter College on Optics and Energy 8-19 February, ICTP 2010, Trieste, Italy



Participants of Winter College



Classes

OPTO Meeting for Young Researchers & V International SPIE Students' Chapters Meeting, 12 - 15 May, 2010, Torun, Poland



Discussions during the coffee break



Visiting labs

Student of 6th year Andrii Maksymov visited International Student Workshop on Laser Application 2010, that was held in Bran, Romania on 25-28 May. He made the oral presentation about his current scientific research.

International Student Workshop on Laser Application 2010, 25-28 May, Bran, Romania



Participants of ISWLA'10



Andrii Maksymov makes oral presentation

4. Chapter Activity

Students of our Chapter are working at creation of functional web page. Photographers, writers and web designers are involved to provide useful information concerning the activity of our Chapter. The Galileoscope IYA2009 is intended to be included into the Optical Systems Design course in the capacity of a demonstrative example. With this purpose all its characteristics were measured to allow students to calculate its optical system.

We are going to participate in All-Russian Competition in Optical Engineering 2010 in St.-Petersburg. We encourage students from younger years and provide trainings. We are looking forward to hold XI International Young Scientists Conference “Optics & High Technology Material Science SPO 2010” spreading invitations and advertisements. This year we succeeded to renew Photo Exhibition and we plan to improve it for the upcoming Conference.

5. Financial Report

Funds raised and expended	4450 USD		
		Young Scientists Conference SPO 2009	950 USD
		Organization of Lectures	1000 USD
		Organization of Research Work for Secondary School Graduate Pupils	600 USD
		Previous year travel reimbursement for the second team which attended All-Russian Competition in Optotechnics 2009	1000 USD
		TOTAL	3550 USD
Ending balance	900 USD		