



SILESIAIAN UNIVERSITY OF TECHNOLOGY SPIE STUDENT CHAPTER ANNUAL REPORT FOR 2010

INTRODUCTION

The Silesian University of Technology SPIE Student Chapter was created in August 2005 at the Silesian University of Technology in Gliwice, Institute of Physics, Department of Optoelectronics at the initiative of prof. Tadeusz Pustelny, and Ph.D Kamil Barczak. The chapter members are Ph.D. students from the Institute of Physics, as well as students of Electronics and Telecommunication from the Mathematics-Physics Faculty and the Electrical Engineering faculty at Silesian University of Technology. Currently Silesian University of Technology SPIE Student Chapter is localized in The Department of Optoelectronics under the Faculty of Electrical Engineering.

ADDRESS

Department of Optoelectronics,
Faculty of Electrical Engineering,
Silesian University of Technology,
Akademicka Str. 2A, 44-100 Gliwice, Poland.

CHAPTER WEB SITE

<http://optics.polsl.pl/spie>

NEWLY ELECTED CHAPTER OFFICERS

Function	Name	Position	Address email	SPIE ID
Advisor	prof. eng. Tadeusz Pustelny	professor	Tadeusz.Pustelny@polsl.pl	
President	M.Sc. eng. Artur Szewczuk	Ph.D. student	Artur.Szewczuk@polsl.pl	3308793
Vice-President	M.Sc. eng. Grzegorz Konieczny	Ph.D. student	Grzegorz.Konieczny@polsl.pl	3246381
Secretary	eng. Sabina Drewniak	M.Sc student	Sabina.Drewniak@polsl.pl	3227753
Treasurer	M.Sc. eng. Aneta Olszewska	Ph.D. student	Aneta.Olszewska@polsl.pl	3304843

LIST OF THE STUDENT CHAPTER MEMBERS CURRENTLY ACTIVE

1. Artur Szewczuk
2. Grzegorz Konieczny
3. Sabina Drewniak
4. Aneta Olszewska
5. Przemysław Struk
6. Lukasz Drewniak
7. Michal Grabka
8. Marcin Jesionek
9. Bartłomiej Toron
10. Piotr Wcislo

CHAPTER ACTIVITIES FOR 2010

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

Participation in the [OPTO Meeting for Young Researchers & V International SPIE Students' Chapters Meeting 12 - 15 May, 2010 Torun, Poland](#) held in Torun in conjunction with Polish Student Chapters from Torun, Wroclaw ,Gliwice, and Student Chapters from Bucharest Romania.



Fig. 1. President Przemyslaw Struk during a presentation “*Activities of Silesian University of Technology SPIE Student Chapter*” - Activities session.

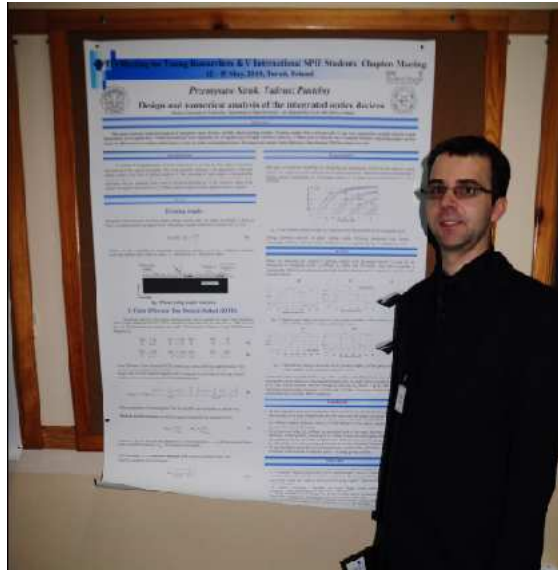


Fig. 2. President Przemyslaw Struk during a poster session. *“Design and numerical analysis of the integrated optics devices”*.



Fig. 3. Artur Szewczuk during a poster session *Applications and properties of multimode interference structures*.



Fig. 4. Michal Grabka during a presentation *“Diffraction patterns of optical fibers: near-field to far field transition”* at The Optical fiber sessions.



Fig. 5. The official banquet.



Fig. 6. After party in Torun.

OWD - The International PHD Workshop.

Members of the SPIE chapter at Silesian University of Technology were participating in The International PHD Workshop organized by Electrical Engineering Faculty, Silesian University of Technology. Workshop took place in polish mountains Wisla 23-26 October 2010. Participation of chapter members in The International PHD Workshop workshop were:

Przemyslaw Struk
Grzegorz Konieczny



Fig. 7. Przemyslaw Struk during a presentation “Design and numerical analysis of the photonic structures”.

During The International PHD Workshop our representatives were participating in conversations about forming new SPIE chapter in Poland. They were introducing advantages of SPIE Chapter membership such as:

- Activity grant
- Travel grant
- Free books
- Visiting lectures
- Etc...

We are hoping that new chapter will be founded in near future.

Lecture for high school students and students:

Members of The Silesian University of Technology SPIE student chapter organised workshops for high school students and undergraduates. During this events participants were introduced to optics and optoelectronics laboratory equipment and could test laws of physics on prepared stands. One of exercises showed audio and video transmission with use of light. For this exercise audio signal generator, CCTV camera and $\lambda=677\text{nm}$ laser were used. One of the other lab stands introduces students to phenomena of diffraction on thin gap. Last exercise enabled laser power measurement.



Fig. 8. Audio and video transmission with using of light.

Scheduled activities

- Co organization: International SPIE Student Chapters Meeting.
- Educational initiatives demonstration of various optical phenomena for High School students in the laboratories of Department of Optoelectronics.
- Participation of the most prominent student of The Silesian University of Technology SPIE Chapter in the forthcoming SPIE Optics + Photonics conference in San Diego 2011.

Financial Report:

Activity grant of \$425,81 was given to Silesian University of Technology SPIE student chapter. It allowed chapter members to participate in conference „OPTO Meeting for Young Researchers & V International SPIE Students' Chapters Meeting 12 - 15 May, 2010 Torun, Poland”. Remaining amount will be used for purchase of semiconductor and for snacks for members meetings.

Granted money (Activity Grant)	+ \$452,81
Participation of 3 chapter members in conference: “OPTO Meeting for Young Researchers & V International SPIE Students' Chapters Meeting”	- \$305,06
Remaining money:	= \$147,75

The planned use of funds (**\$147,75**):

- Purchase of a semiconductor laser for optical demonstrations.
- Preparation and printing of posters and promotion material about The Silesian University of Technology SPIE Student Chapter.
- Meetings of our chapter member (snacks).