



# Annual Report 2013/2014

Saint-Petersburg Academic University SPIE Student Chapter has been established from the initiative of group of students gathered by its main contributor – Vladimir Korenev, who became the first president of the Chapter. The Chapter's advisor function is being held by Dr. Artem Savelyev from the Department of Physics and Technology of Nanostructures. The chapter was established on 25 June 2013. The members of the Chapter are mostly graduate students with electrical/optical/bio engineering background.

## 1. Elected Officers

First/Last Name	Email	Position	SPIE ID
Eduard Moiseev	moiseev@spbau.com	President	3602447
Yulia Kudashova	yu.v.kudashova@mail.ru	Vice-President	3609722
Sergey Kurin	sergey.kurin@spbau.com	Treasurer	3536377
Igor Reduto	Reduto-igor@mail.ru	Secretary	3608352

## 2. List of current Student Chapter Members

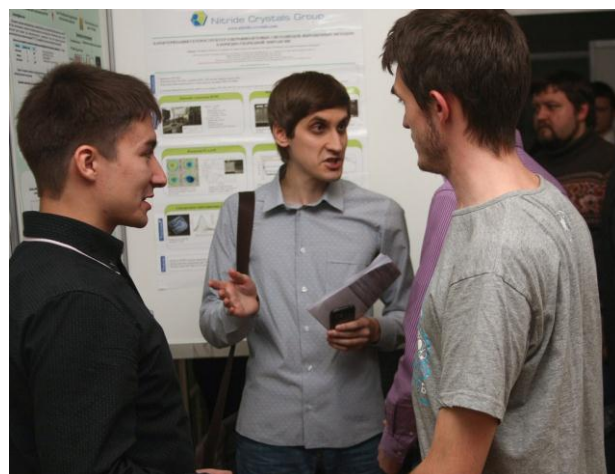
First/Last Name	Status
Daria Beznasyuk	member
Kirill Golenickij	member
Vladimir Klimenko	member
Aleksandr Koriakin	member
Yulia Kudashova	member
Sergey Kurin	member
Eduard Moiseev	member
Alexey Mozharov	member
Ekaterina Pilyugina	member
Maksim Popov	member
Igor Reduto	member
Dmitry Rybalchenko	member
Iurii Trushkov	member
Vladimir Korenev	alumni

### 3. Details of Chapter activities

#### A) Welcome reception for the members (October 2013): 10 attendees

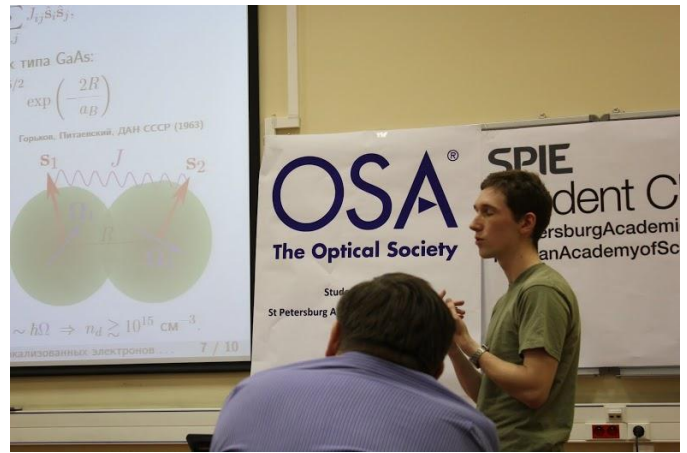
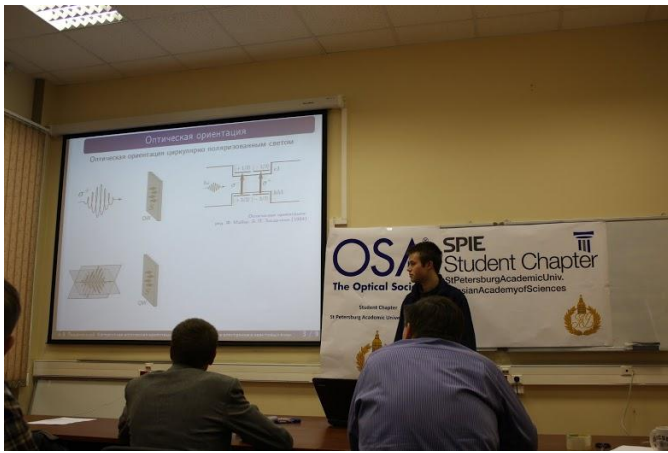


#### B) Recruitment event to involve new members (November 2013): 35 attendees



#### C) The organization of Student lecture for students from Lyceum "Physical-Technical High School" (PTHS) entitled "Nanotechnology and the variety of Nanostructures" (December 2013): 40 attendees





**D) The meeting of all members of the Chapter with Chapter's advisor – Dr. Artem Savelyev & Planning of new activities for 2014 & Annual elections (December 2013): 15 attendees**



**E) 1<sup>st</sup> School and Conference “St Petersburg OPEN 2014” (March 2014): 160+ attendees**  
[http://iopscience.iop.org/1742-6596/541/1/011001/pdf/1742-6596\\_541\\_1\\_011001.pdf](http://iopscience.iop.org/1742-6596/541/1/011001/pdf/1742-6596_541_1_011001.pdf)

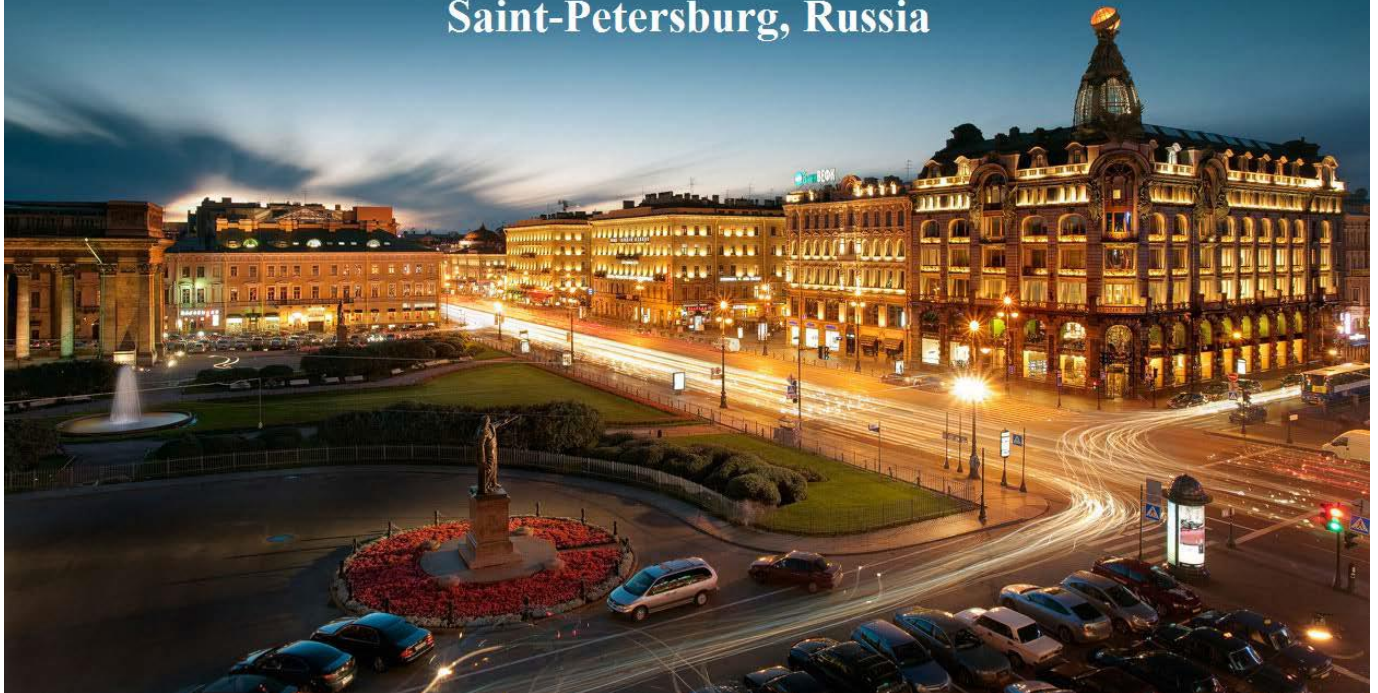
1<sup>st</sup> Conference and School "St-Petersburg OPEN2014" was held on March 25-27, 2014 at St. Petersburg Academic University. The event included a series of invited talks by leading scientists with the aim to introduce young scientists with actual problems and major advances in physics and technology. There was a special talk from Zhores I. Alferov, Nobel Prize winner in Physics 2000, on past and future of semiconductor electronics.

The conference topics were as follows:

- Semiconductor devices, micro- and nanoelectronics;
- Photovoltaics, solar cells;
- Electric and magnetic properties of semiconductor materials and nanostructures;
- Optoelectronics, nanophotonics, microcavities, photonic crystals;
- Growth of crystals and nanostructures, quantum dots, wires, wells;
- Quantum and nonlinear optics;
- Semiconductor lasers (including VCSELs, C3 lasers, and LEDs);
- THz and microwave electronics;
- Biophysics, nanobiotechnologies, biophotonics.

The poster session was organized in which undergraduate and graduate students presented their work. Each participant had an opportunity to share his/her most actual results with interested colleagues. The best papers were published in Journal of Physics: Conference Series (<http://iopscience.iop.org/1742-6596/541/1>).

**1<sup>st</sup> International School and Conference  
"Saint-Petersburg OPEN 2014"  
March 25 - 27, 2014  
Saint-Petersburg, Russia**



**1<sup>st</sup> International School and Conference "Saint-Petersburg OPEN 2014":  
Optoelectronics, Photonics, Engineering and Nanostructures**

**Keynote speakers:**

Mikhail M. Glazov (*Ioffe Physico-Technical Institute RAS, Russia*)

Vladimir G. Dubrovskii (*Saint-Petersburg Academic University RAS, Russia and Saint-Petersburg State University, Russia*)

Alexey V. Kavokin (*University of Southampton, United Kingdom and Saint-Petersburg State University, Russia*)

Vladimir L. Korenev (*Ioffe Physico-Technical Institute RAS, Russia and TU Dortmund, Germany*)

Sergey A. Kukushkin (*Institute of Problems of Mechanical Engineering RAS, Russia*)

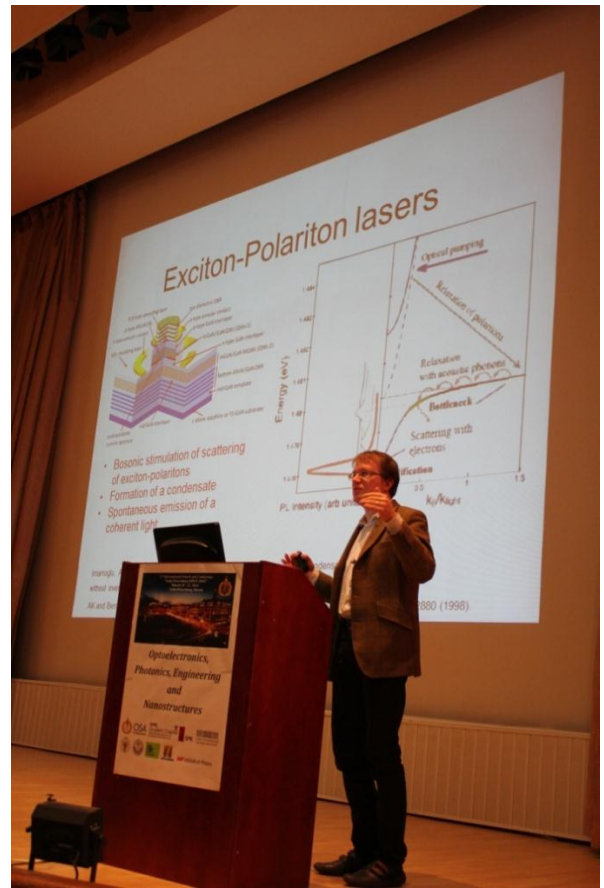
Nikita A. Pikhtin (*Ioffe Physico-Technical Institute RAS, Russia and "Elfolum" Ltd., Russia*)

Dmitry A. Firsov (*Saint-Petersburg State Polytechnical University, Russia*)

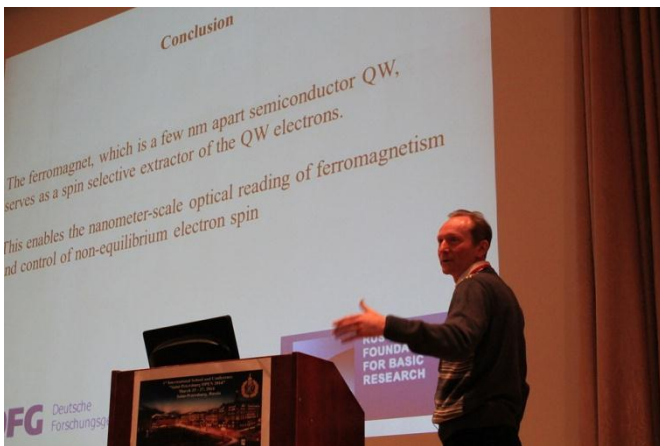




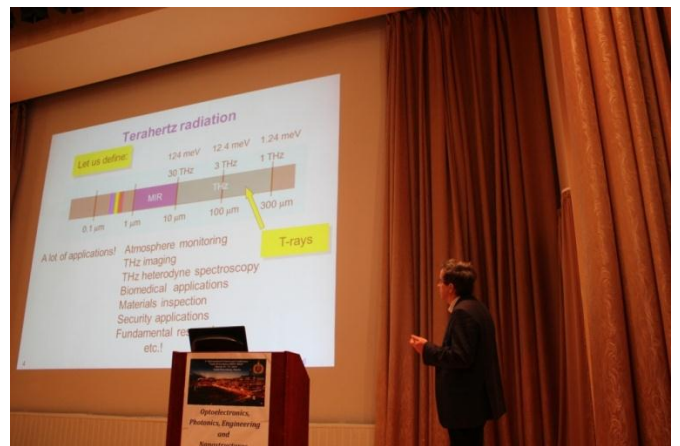
The Conference Stage



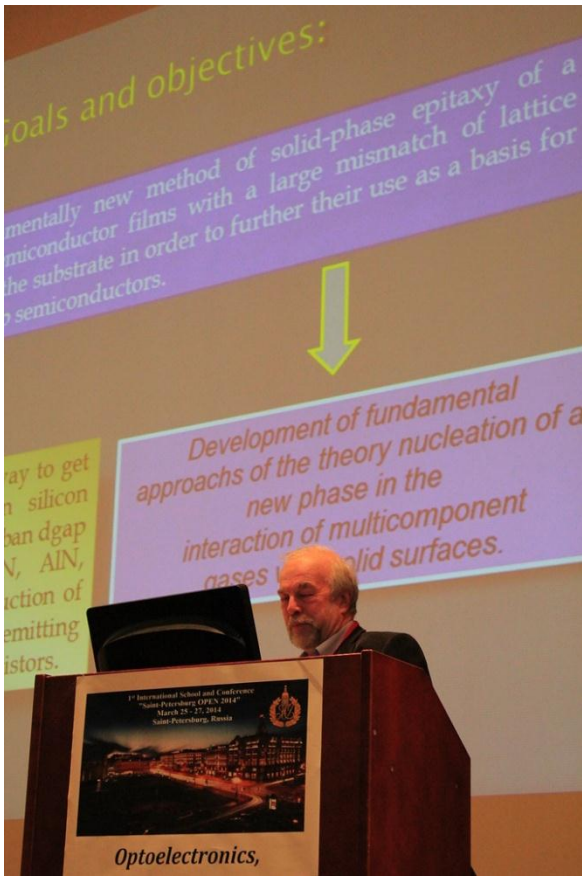
Prof. Alexey Kavokin from the University of Southampton delivers his talks on exciton-polariton lasers



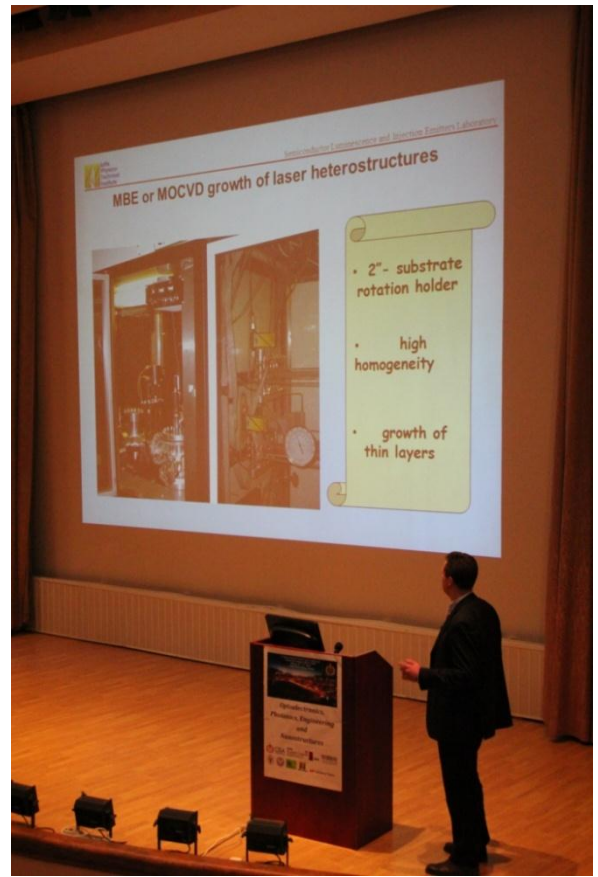
Prof. Vladimir Korenev explains basics of ferromagnetic-based memory



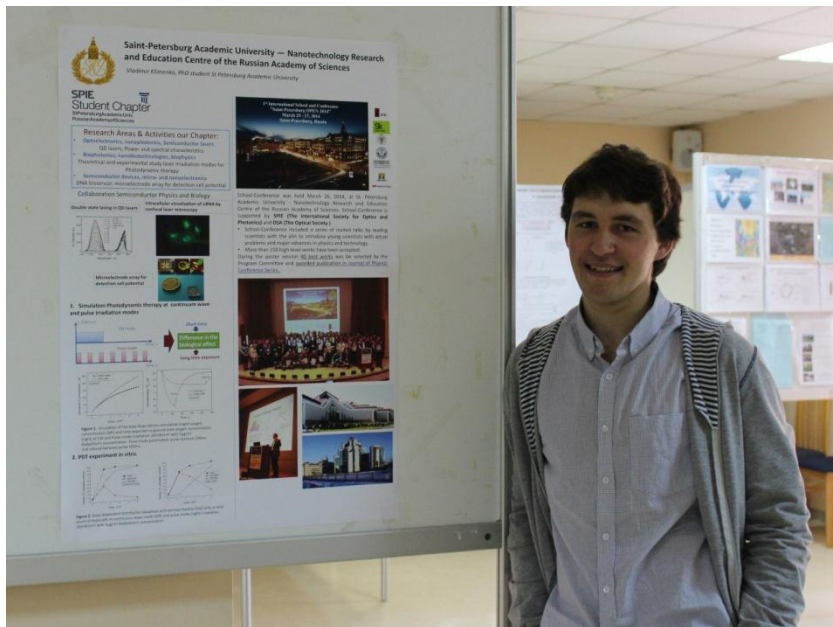
Prof. Dmitry Firsov explains the objectives of studying terahertz lasers



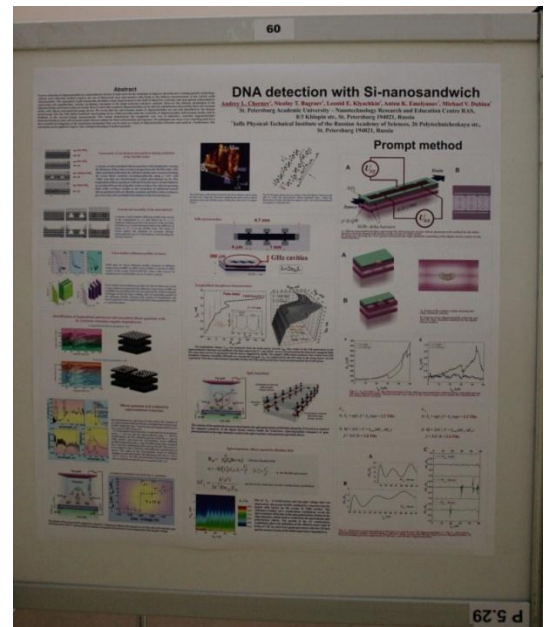
Prof. Sergey Kukushkin explains the features of SiC production



Prof. Nikita Pikhtin is talking on semiconductor lasers



Poster Session





**Award Ceremony. Prof. Vladimir Dubrovskii and students**



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During the lectures



Conference Group Photo

PhD student of Saint-Petersburg Academic University Vladimir Klimenko attended SPIE Photonics Europe 2014 (14-17 April 2014, Brussels, Belgium) as a representative of our Student Chapter.



**Vladimir Klimenko (third from the left) – representative of Saint-Petersburg Academic University Student Chapter at SPIE Photonics Europe 2014**