Kpeming 2014 Si

«SILICON-2014»

X Conference and IX School for Young Researchers dedicated to critical issues of physics, materials, technology and diagnostics of silicon, nanometer structures and siliconbased devices

The Conference «Silicon-2014» is part of series of scientific meetings dedicated to silicon research. Its history dates back to 1999, when the first silicon-devoted conference was held at MISIS. Since 2000 this conference has been coupled with conducting the School for Young Researchers. Through the indicated time span such meetings have turned to be the primary forum, where academic scientists, university scholars and industry representatives from Russia and CIS countries report and discuss hot points on production of metallurgical and multi-crystalline silicon, materials for growing voluminous crystals and thin films of silicon and related stuff, as well as physics, technology and diagnostics of silicon, nanometer structures and silicon-based devices.

For School participants and students a course of subject-associated lectures will be delivered, so that future researchers could be acquainted with the most essential and paramount issues somehow linked with the production of silicon and Si-based modern devices. The conference will welcome invited speakers, the leading scientists involved in silicon materials applications, as well as participants with oral and poster presentations. At the conferences held in Irkutsk it is traditional to include into the conference programme the issues on production and purification of metallurgical silicon, production of solar battery material, the other aspects of alternative power engineering using transformation of direct solar radiation into electric power.

Registration and abstract submission are to be accomplished only via the conference website http://conf.nsc.ru/si2014/ru/registration or by e-mail si2014@igc.irk.ru.

The official languages of Conference are Russian and English.

Conference organizer:

Institute of Geochemistry SB RAS, Irkutsk, Russia

Topics to discuss:

- 1. Techniques to produce and purify metallurgical silicon;
- 2. Production of solar silicon and problems of solar power engineering;
- 3. Processes of growth from melt;
- 4. Growth and material science of bulk single crystals of silicon and related materials, e.g. Ge and SiGe;

- 5. Manufacturing of silicon and Si-based structures for photo voltaics;
- 6. Growth and material science of thin (including epitaxial) films on silicon, silicon-on-insulator, strained structures and low/high-k dielectrics;
- 7. Physics of silicon low-dimensional structures for solid-state electronics including nano- and optoelectronics, spintronics and photonics;
- 8. Nanotechnologies of silicon electronics: ion implantation, lithography, the quantum dots and buried layers manufacturing technologies;
- 9. Diagnostics of silicon and silicon-based devices;
- 10. Novel devices comprising elements of micromechanics, optoelectronics, power electronics, light-emitting structures and photo detectors.
- 11. Methods and equipment for growth and of silicon and its study.

Venue

The conference will be conducted from July 7 to 12 at the tourist camp located at a picturesque site close to Lake Baikal. All participants will be met at the airport and train station in Irkutsk and transported to the venue.

Important dates:

Abstract Submission Deadline	31 March
Individual notification on presentation acceptance	14 May
Conference program dispatch	9 June

Abstract submission is open from February 3, 2010 till March 31, 2014. Abstracts should be submitted electronically only. The design and format of abstracts will be available at the conference site http://conf.nsc.ru/si2014/. The conference proceedings will be published in a special volume.

The registration fee 200 euros includes participation, abstract volume, 2 coffee breaks and 3 meals a day, welcome and farewell parties. The fee can be paid in cash at registration desk upon arrival.