

From 15.06.14 to 29.06.14 **Tomsk Polytechnic University (TPU)** in collaboration with **Baden-Wuerttemberg Cooperative State University (DHBW)** with the support of G-RISC organizes a **Summer School “Resource-efficient technologies: experience of Russia and Germany”**.

The program of the Summer School includes lectures, seminars, discussions, individual work and group work. Specifically, it is about:

1. Ecology and innovation: ways of the sustainable usage of energy and raw materials.
2. Process quality: methods of industrial processes optimization.
3. Robotics: methods of automation in extraction, processing and manufacturing of products.
4. Energetics: techniques of the alternative energy sources usage, its conversion and distribution.
5. Materials: techniques of design, manufacturing and processing of new materials.

Summer school will be held in a period of 2 weeks. Within this time 10 professors from TPU and 3 professors from DHBW will give lectures and practical trainings for the topics given above.

The summer school includes in total 51 hours and also assumes existence of the cultural program. The program of a seminar includes visiting of industrial and state enterprises of Tomsk region. Tomsk refers to innovative regions of Russia and the program of a stay of participants will include visits to laboratories of TPU and high technology enterprises of Tomsk, which have implemented joint Russian-German projects.

Summer school participants will be accommodated in the dormitory for foreign students: a room for two people with all amenities, Internet access. Seminar participants will be provided with meals three times a day (breakfast, lunch and dinner).

Summer school “Resource-efficient technologies: experience of Russia and Germany” is open for external applicants from Germany and Russia (who work outside the consortium TPU-DHBW).

Travel expenses for external participants are reimbursed at a rate of no more than 600 Euros for applicants from Germany and 300 Euro for applicants from Russia.

External participants as well as students of TPU and DHBW HDH will be provided with accommodation in a dormitory for foreign students and meals three times a day.

Competitive selection procedure

Following documents must be sent to a focal person (Oleg Alexandrov aleksandrov@tpu.ru):

- completed registration form
- curriculum vitae (CV)
- recommendation letter from a supervisor (signed)
- letter of application (one page in English)

Application deadline is 10th of March 2014.

All applicants must arrive at the Summer School venue by date of 15.06.2014.

Acceptance notification will be sent out after 20.03.2014.

Applicants who do not comply with these terms will not be allowed to participate in the Summer School.

Language of instruction – English.

On the results of participation in Summer school all participants will collect certificates.

Key dates:

Day of arrival: 15.06.2014

Beginning of classes: 16.06.2014

End of classes: 27.06.2014

Day of departure: 29.06.2014

Idea and relevance of the project:

The idea of resource efficiency is one of the top-priority for the countries of the European Union (see strategy "Europe 2020"). In recent years Russia also began to take steps on realization of policy of resource efficiency as the most important factor of sustained economic growth. Formation of global system approach to problematics of effective resources usage demands an exchange of experience in this area and development of the joint directions of further researches. In this regard carrying out specialized international actions for resource efficiency is an actual task.

Innovation of the offered project is that the summer school in comparison to other international actions for similar subject is focused first of all on young scientists and student audience. The summer school is the first free international educational space where students and young scientists under the guidance of professionals in the field of renewable energy source and resource efficient technologies can communicate actively, exchange experience and search for new directions of researches.

Tomsk Polytechnic University (<http://tpu.ru/en/>) has a high academic and scientific potential: TPU ranks among 15 leading universities of Russia. By the year 2020 TPU intends to become one of the leading world universities/ top-100 world universities. In the scientists' developments of TPU the resource efficient subject plays a key role. The network of innovative scientific and educational centers and international laboratories works at the university focused on the solution of the problems of the increasing resource efficiency. The university cooperates with the world leading centers in this area. Tomsk Polytechnic University (TPU) and Baden-Wuerttemberg Cooperative State University (DHBW HDH) have been cooperating in exchange of individual students since 2006.