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The II International (XV Regional) Scientific Conference “Technogenic Systems and Environmental Risk”

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**The II International (XV Regional) Scientific Conference
"Technogenic Systems and Environmental Risk"**

(TSER-2018)

April 19-20, 2018

Obninsk, Kaluga Region, RUSSIAN FEDERATION

Accepted, peer reviewed papers from the 2nd TSER-2018

Edited by

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The scientific conference "Technogenic Systems and Environmental Risk" is held annually from 2004 to 2017 at Obninsk Institute for Nuclear Power Engineering, NRNU MEPhI. The main participants of the conference are students, graduate students and young scientists, including representatives of research institutes, universities, scientific and industrial associations and enterprises. Since 2017, the meeting has officially been recognized as an international conference.

The II International (XV Regional) Scientific Conference "Technogenic Systems and Environmental Risk" 2018 (TSER-2018) was held in Obninsk, Kaluga Region, Russian Federation on April 19-20 2018. It was organized by National Research Nuclear University "MEPhI" (NRNU MEPhI)

The conference addresses current scientific problems related to the study of man-made factors in the human environment, the evaluation of the effect of these factors on humans and natural systems, ensuring the ecological safety of the biosphere. The meeting contributes to raising the level of knowledge of young scientists and teachers, sharing experience in conducting research and teaching activities, establishing links between organizations, regions and countries.

The Proceedings consists of accepted papers that are categorized under six topics, namely:

- 1) Nuclear and Thermal Power Engineering,
- 2) Modern Ecological Technologies. Waste Management,
- 3) Technogenic and Environmental Risks. Radiation Safety,
- 4) Biotesting and Bioindication of the Environment,
- 5) Ecological and Pharmaceutical Chemistry,
- 6) Effects of Non-Ionizing and Ionizing Radiation: Ecological Issues.

In 2018, the conference attracted a record number of participants. The organizing committee received more than 240 applications for participation from research and educational institutions of Obninsk, Kaluga, Moscow and the Moscow region (Dimitrovgrad, Pushchino, Mytishchi), Bryansk, Volgodonsk, Voronezh, Irkutsk, Yoshkar-Ola, Kazan, Kirov, Kursk, Murmansk, Nizhny Novgorod, Novocherkassk, Orel, Perm, Rostov-on-Don, Samara, Saratov, Sergach, Simferopol, Syktyvkar, Tomsk, Cherepovets, and also Minsk, Mogilev, Gomel (Belarus), Kurchatov, Ust-Kamenogorsk (Kazakhstan), Bishkek, Karakol (Kyrgyzstan), Kiev (Ukraine) and Baku (Azerbaijan), Alexandria (Egypt). About 170 participants attended the venue, and 105 oral presentations were delivered (including 21 in the school section).

We sincerely hope the 2nd THER-2018 Conference would provide a good opportunity to share experiences and ideas as well as to establish new academic collaborations among participants leading to exchange program and joint research and publication for the benefit of all.

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Chairman

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KEYNOTE SPEAKERS

- S.A. Maskevich, Professor, Director, International Sakharov Environmental Institute of Belarusian State University, Minsk, Belarus, 'Radiation monitoring of the environment: innovative technologies and informatization'
- Yu.A. Kazanskiy, Professor, Obninsk Institute for Nuclear Power Engineering, NRNU MEPhI, Obninsk, Russia, 'Is the transmutation of heavy nuclei and fission fragments worthwhile?'
- V.M. Shershakov, Professor, Director, RPA "Typhoon" of Roshydromet, Obninsk, Russia, 'Some results of determining the source and reasons for the appearance of ^{106}Ru on the territory of Russia in September-October 2017'