

Preface

The VIth International Conference "Physical-Technical Problems of Nuclear Science, Energy Generation, and Power Industry" (PTPAI -2014) was organized by National Research Tomsk Polytechnic University in June 5-7, 2014, Tomsk, Russia.

Since 1996 Faculty of Physics (now Institute of Physics and Technology) of Tomsk Polytechnic University periodically organizes international scientific conference "Physical and technical problems of nuclear energy and industry." The previous fifth conference was dedicated to the 60th anniversary of the foundation of the Faculty of Physics.

This year the conference is dedicated to the 60th anniversary of the Department of Electronics and Automation of Nuclear Plants, so it invites industrial specialists and scientists from the field of Atomic Power Industry for discussion of related issues and perspectives of the development.

The conference gathered young scientists, students, experienced researchers, and invited industrial specialists working in nuclear, radiation, physical-chemical, and information technologies, as well as in automation systems, radioactive materials research, plasma and isotopes obtaining, and nuclear medicine in order to facilitate aggregation and sharing interests and results for a better collaboration in atomic power industry and development.

The special issue "Nuclear and Radiation Techniques in Material Science" presents original research articles dedicated to the latest advancement in atomic power industry, materials science, and nuclear medicine. The major topics include:

- 1) Materials Science and Technologies
- 2) Plasma, Microwave, Ion, Electron and Isotope Technologies
- 3) Nuclear Engineering and Fuel Cycles
- 4) Radiation Technologies in Medicine
- 5) Computation, Automation, Information Technologies and Safety Systems in Nuclear Industry.

We want to thank all members of the Organizing Committee, the University and everyone who contributed to the organization of this event, for their contribution towards the conference and for their contributions to this proceeding.

The Organizing Committee of PTPAI -2014

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