

International Conference on Fast Reactors and Related Fuel Cycles FR22:  
Sustainable Clean Energy for the Future (CN-291)

Contribution ID: 167

Type: ORAL

# TRAINING OF NEW GENERATION SPECIALISTS IN THE FIELD OF FAST NEUTRON REACTORS AND NUCLEAR FUEL CYCLE CLOSURE

*Thursday, 21 April 2022 13:40 (12 minutes)*

The Strategy is based on the formation of a two-component nuclear energy based on a closed nuclear fuel cycle with fast neutron reactors.

The solution of long-term tasks of creating a two-component nuclear power with a closed NFC based on fast reactors is associated with the need to create a system for training, attracting and developing young professionals based on new principles.

Replenishment of the industry with young qualified personnel is a fundamental task that allows us to maintain the strategic direction of development.

Russia has a strong scientific and educational engineering and physical school. Russian nuclear education is one of the most advanced in the world. Currently, the formation of a two-component nuclear energy based on a closed nuclear fuel cycle with fast reactors poses for the profile educational system the task of training a new generation of researchers based on interdisciplinary knowledge, with fundamental training and practical skills. In addition, a new generation of specialist researcher should have a broad scientific outlook and modern management skills in science (principal investigator, etc.).

In order to solve the large-scale scientific and technological problems associated with fast reactors and closed NFC, a system of long-term planning for training qualified personnel, attracting and continuous development is also necessary, based on close cooperation of the industry with specialized universities.

The report discusses a comprehensive approach to the preparation and implementation of a program for the development of scientific and technical competencies for two-component nuclear power with a closed NFC based on fast neutron reactors. The key components of the program are considered, including the formation of a target plan for the training and retraining of personnel, improving the quality of educational programs, developing network interaction with specialized universities, and international cooperation in the field of education. The report describes the experience of NRNU MEPhI in the creation and implementation of interdisciplinary educational programs aimed at training a new generation researchers, as well as creating conditions for the development of university internationalization and the export of nuclear education.

## Country/Int. organization

Russian Federation

## Speaker's email address

GVTikhomirov@mephi.ru

## Speaker's title

Mr

## Affiliation/Organization

National Research Nuclear University (MEPhI)

**Primary authors:** Mr TIKHOMIROV, Georgy (NRNU MEPhI); PERSHUKOV, Vyacheslav (ROSATOM); Mr SUSHKOV, Pavel ("Proryv"JSC)

**Presenter:** Mr TIKHOMIROV, Georgy (NRNU MEPhI)

**Session Classification:** 9.1 Education, Professional Development, and Knowledge Management

**Track Classification:** Track 9. Education, Professional Development, and Knowledge Management