

Improving the Energy Efficiency and Safety of Nuclear Power Plants

Ural Federal University named after the first President of Russia B.N. Yeltsin

Degree or qualification is awarded: **Candidate of Sciences**

Language of study: **Russian, English**

Mode of study: **full-time**

Duration: **4 years**

Availability of free education: **no**

Price: **For non-CIS countries: 305,200 RUB (Year 1). Discounts apply. Please consult the curator for more details**

Programme webpage at the university website:

<https://urfu.ru/en/international/programs-and-courses/doctoral-programs-in-english/>

Programme curator: **Anna Oykher**

Tel.: **+7 (343) 389-97-95**

E-mail: postgrad@urfu.ru

Research supervisor:

Associate Professor Oleg L. Tashlykov, Candidate of Science

View profile at [UrFU Research Portal](#)

Research goal:

The study is aimed at training specialists in the field of upgrading energy efficiency of nuclear power plants, radiation protection optimization (optimization of homogenous radiation protection materials content, optimization of transitions and work sequence in radiation fields).

Aspects studied:

- Modeling of heat transfer processes in stationary and transient operation of the NPP
- Mathematical modeling and optimization of radiation loads at all stages of the life cycle of nuclear power plants
- Improving the energy efficiency of NPP

Research highlights:

- Designing the composition of homogenous radiation protection materials applicable to planned radiation environment characteristics
- Route optimization of works in unconventional radiation fields

Career opportunities:

Application of obtained knowledge in the field of radiation protection optimization and improving energy efficiency of NPP.

Specializations within this programme