

# Chemistry

South Ural State University

Degree or qualification is awarded: **Postgraduate studies**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **3 years**

Availability of free education: **no**

Price: **169 800 rubles**

Programme webpage at the university website:

<https://www.susu.ru/en/education/phd-degree-programs/040601-chemistry-physical-chemistry>

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The postgraduates gain the skills in independently conducting research on obtaining and studying the physical and chemical properties of new functional inorganic materials. The main objects of research are metal-oxide materials with (photo)catalytic and sorption properties. The materials are produced using the available and new methods, their morphology and composition of elements are modified and studied, along with the distribution of the functional groups on the surface, crystalline phases, texture and thermal properties, including the kinetics of the thermolysis processes, catalytic, sorption and other properties.

These materials are used for the (photo)catalytic treatment of water off persistent organic pollutants, targeted production of substances important for industry, and for selective extraction of heavy metals from water. The postgraduates get to publish 5-6 scientific articles, including 2-3 in journals indexed in Scopus and Web of Science global citation databases, and they also gain the skills of operating modern scientific equipment.

## **Specializations within this programme**

### **Chemistry (Physical Inorganic Chemistry)**

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