

Outsourcing-services provided to the departments of Department of Materials Science, Nanotechnology and Engineering Physics and Metallurgy and Mineral Processing for the use of specialties 6B07109, 7M07103, 8D07103 - Materials Science

	Outsourcing services within the country		
	№	Organization	Laboratories
PhD student of all years of study	1	K. I. Satpayev Institute of Geological Sciences JSC “National Scientific and Technical Holding “Parasat” Ministry of Education and Science of the Republic of Kazakhstan	Research methods: optical microscopy; emission spectroscopy; X-ray diffractometry; wet chemistry methods (gravimetry; complexometry, titrimetry, etc.); electron probe microanalysis; optical emission spectroscopy with inductively coupled plasma; atomic absorption spectrophotometry; X-ray fluorescence spectral analysis; spectrophotometry; thermographic analysis; flame photometry; transmission and raster electronic microscopy; petrophysical analysis of core and sludge.
	2	D.V. Sokolsky Institute of Organic Catalysis and Electrochemistry of the Ministry of Education and Science of the Republic of Kazakhstan	Department of Catalysis. Department of Electrochemistry: -laboratory of electrochemical technologies -laboratory of applied research -laboratory of physical research methods. Department of Petrochemistry and Fuel.
	3	Institute of Nuclear Physics RSE	Department of Solid State Radiation Physics; Analytical Center; Laboratory of Ion-plasma Technologies; Laboratory of Nuclear Gamma-resonance Spectroscopy; Laboratory of Applied and Theoretical Materials Science; Laboratory of Radiation Materials Science; Laboratory of radiation Diffusion. Center for Integrated Environmental Research: Laboratory of Environmental Technologies; Nuclear Magnetic Resonance Laboratory; Laboratory of Nuclear Physical Methods of Analysis; Laboratory of Mass and Electron Spectroscopy; Laboratory of Environmental Engineering;

			Geoinformation Systems Group;
	4	Physics and Technology Institute of the Ministry of Education and Science of the Republic of Kazakhstan	technological design laboratory; Yu.V. Gorelkin'sky EPR Laboratory; laboratory of Thin-film Materials and Nanostructures; Laboratory of High-energy Physics; Laboratory of Cosmic Ray Physics; Laboratory of Nuclear Physics and Radiation Ecology.

The departments of Materials Science have laboratories of leading research institutes at their disposal:

– Institute of Physics and Technology of the Ministry of Education and Science of the Republic of Kazakhstan;

**Director of the Mining
and Metallurgical Institute**

K.B. Rysbekov