

Researcher profile (portfolio) form for potential research supervisors of postgraduate track participants in the Global Universities Association International Olympiad for graduate and postgraduate applicants.

University	Tomsk Polytechnic University
English language proficiency	B2
Applicant's postgraduate program	Physical chemistry
List of possible research topics	Inorganic dispersed materials Waste recycling
 <p>Research supervisor: Andrei V. Mostovshchikov, Doctor of Science (Tomsk Polytechnic University)</p>	Supervisor's research interests (detailed description of research interests):
	Nanomaterials
	Functional composite materials
	Supervisor's specific requirements:
	<ul style="list-style-type: none"> • Knowledge of physical and chemical methods of analysis • Possession of basic methods of inorganic synthesis • Knowledge of solid state physics
Supervisor's main publications (specify a total number of publications in journals indexed by Web of Science, Scopus, RSCI for the last 5 years, list up to 5 most significant publications with the publication details):	<ul style="list-style-type: none"> • Mostovshchikov, A.V., Goldenberg, B.G., Nazarenko, O.B. Effect of synchrotron radiation on thermochemical properties of aluminum micro- and nanopowders // <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i>, 2022, 285,115961 • Mostovshchikov A., Gubarev F., Chumerin P., Arkhipov V., Kuznetsov V., Dubkova Y. Solid Energetic Material Based on Aluminum Micropowder Modified by Microwave Radiation // <i>Crystals</i>, 2022, 12(4), 446 • Li L., Gubarev F., Mostovshchikov A. Synchronized Two-Camera Laser Monitor for Studying Combusting Powder Systems // <i>Symmetry</i>, 2022, 14(4), 656.
	In 2018, RF patent No. 2637732 "Aluminum nanopowder activation method" was included in the list of "100 best inventions of Russia for 2017" (Rospatent order No. 35 dated March 1, 2018).