

The 20th International Scientific Conference on “Modern Materials, Advanced Manufacturing Technologies, and Associated Equipment”



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From June 30th to July 2nd, 2023, the 20th International Scientific Conference titled "Modern Materials, Advanced Manufacturing Technologies, and Associated Equipment" was held at Peter the Great St. Petersburg Polytechnic University. This conference coincided with the celebration of the 300th anniversary of the Russian Academy of Sciences and the 125th anniversary of the establishment of Peter the Great St. Petersburg Polytechnic University. The co-organizers of the conference included the Ministry of Science and Higher Education of the Russian Federation, the Russian Academy of Sciences (Department of Chemistry and Materials Science), the National Academy of Sciences of the Republic of Belarus (Department of Physical-Technical Sciences), the State Corporation “Rosatom”, and Peter the Great St. Petersburg Polytechnic University.

Prominent representatives from the Russian Academy of Sciences, higher education, and industry delibe-

rated and analyzed a wide array of findings reflecting contemporary trends in the advancement of materials science and cutting-edge manufacturing technologies. Special emphasis was placed on the latest advancements in the production of new metallic, ceramic, and composite materials, as well as the design of technological equipment.

Participants of the conference highlighted the unprecedented technological breakthroughs currently underway, propelled by the adoption of pioneering technologies and a diverse range of materials within the industrial sphere, thus ensuring the requisite standards of performance for high-tech products. It is unsurprising that among the conference speakers were representatives from various industrial enterprises.

This journal issue presents articles derived from the conference materials.