

Guest Editorial

These Proceedings contain a collection of papers based on the invited, oral, and poster presentations at the **International Conference “Scanning probe microscopy” (SPM-2018)** combined with the **International Workshop “Modern Nanotechnologies” (IWMN-2018)**, which was held in Ekaterinburg, Russia, August 26-29, 2018.

International Conference SPM-2018 covered a wide range of scientific topics:

- SPM in materials science
- PFM, MFM, KPFM, SNOM, ESM, SEM, and related techniques
- Tip-enhanced phenomena
- Probe lithography and nano-indentation
- Biocompatible & organic materials
- Multiferroic phenomena and magnetoelectric coupling
- Interface and domain engineering
- Ferroelectrics, piezoelectrics, and ionic conductors
- 1D and 2D nanostructured materials
- Theory, modeling, and data processing

The conference was organized by the School of Natural Sciences and Mathematics and Ural Center for Shared Use “Modern Nanotechnology” of the Ural Federal University.

The objective of SPM-2018 was to provide an international and interdisciplinary exchange of information on a wide range of topics related to modern state-of-the-art and future development of various Scanning Probe Microscopy techniques in different fields of science in order to ensure effective cooperation among scientists and specialists from universities, research institutions and industry.

More than 150 participants from 11 countries: Belarus, Belgium, Brazil, China, France, India, Ireland, Korea, Poland, Portugal, and Russia presented their results. The conference comprised 169 presentations, including 18 invited, 43 oral, and 108 poster ones.

The organizers are very grateful to the conference sponsors and exhibitors: Taylor & Francis Group, Russian Foundation for Basic Research, NT-MDT Spectrum Instruments, Promenergolab, Ostec ArtTool, OPTEC, INTERTECH Corporation, Merck, IMC Systems, and Alexander Lukanin.

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International Conference
SCANNING PROBE MICROSCOPY (SPM-2018)
August 26-29, 2018

International Youth Conference
FUNCTIONAL IMAGING of NANOMATERIALS

International Workshop
MODERN NANOTECHNOLOGIES

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