

Thursday, August 27

15.00 - 18.00	<i>Visit to the Ural Center for Shared Use “Modern Nanotechnology” UrFU</i>
19.00 - 21.00	<i>Welcome party at TransHotel (Gogol str. 15E)</i>

Friday, August 28

08.30	Registration
09.00	Opening
09.15	I1. Vladimir Shur (Russia) <i>Ural Center for Shared Use “Modern Nanotechnology”. Achievements and horizons</i>
	Session 1. Microscopy and modern experimental methods I (chair Alexander Krylov)
09.40	I2. Andrei Kholkin (Portugal) <i>Nanoscale piezoelectricity due to symmetry breaking: an Atomic Force Microscopy study</i>
10.05	I3. Alexander Ankudinov (Russia) <i>Application of SPM for precise experiments on nanomechanics</i>
10.30	I4. Dongliang Yang (China) <i>Micromechanical analysis of glass-metal sealing</i>
10.55	Tea break
	Session 2. Microscopy and modern experimental methods II (chair Alexander Ankudinov)
11.10	I5. Alexander Krylov (Russia) <i>Using dynamic temperature mode at temperature investigations by Raman spectroscopy</i>
11.35	O1. Kunqi Xu (China) <i>Local thermal conductivity and Seebeck coefficient characterization by scanning thermoelectric microscopy</i>
11.50	O2. Eugene Mingaliev (Russia) <i>Dispensing of subpicoliter droplets by pyroelectric field</i>
12.05	O3. Yuriy Vysokikh (Russia) <i>Expanding atomic-force microscopy studies to quantitative and high-resolution mapping of local properties</i>

12.20	O4. Vera Neudachina (Russia) <i>Novel imaging techniques in materials characterization: from XPS and Raman to nano-IR and AFM</i>
	Session 3. Domains and periodical poling (chair Vladimir Shur)
12.35	I6. Alexander Korzhenevskii (Russia) <i>Dynamics of domain wall in relaxational matrix</i>
13.00	Lunch
14.30	I7. Marc P. De Micheli (France) <i>Precise control of the index profile of SPE waveguides</i>
14.55	O5. Maxim Neradovskiy (Russia) <i>Nanodomains appeared after creation of proton exchange waveguides in periodically poled LiNbO₃ crystals</i>
15.10	I8. Leo McGilly (Switzerland) <i>Controlling domain wall motion as a route towards new functionalities in Pb(Zr,Ti)O₃ ferroelectric thin films</i>
15.35	O6. Andrey Akhmatkhanov (Russia) <i>Polarization reversal and domain structure evolution in MgO doped congruent and stoichiometric lithium tantalate crystals</i>
15.50	O7. Mikhail Kosobokov (Russia) <i>Formation of nanodomain structures in lithium niobate and lithium tantalate crystals induced by pulse laser heating</i>
16.05	Tea break
	Session 4. Multiferroics, relaxors, and thin films I (chair Igor Raevski)
16.20	I9. Eudes B. Araujo (Brazil) <i>Structural, dielectric and local piezoelectric properties of strontium barium niobate thin films</i>
16.45	I10. Jan Dec (Poland) <i>Local polarization dynamics in uniaxial Sr_xBa_{1-x}Nb₂O₆ single crystals</i>
17.10	I11. Alexey Pugachev (Russia) <i>Second harmonic generation and Raman scattering as a tool for the investigation of inhomogeneities in ferroelectrics and relaxors</i>
17.35 - 19.00	Poster Session

Saturday, August 29

	Session 5. Multiferroics, relaxors, and thin films II (chair Eudes B. Araujo)
09.00	I12. Rinat Mamin (Russia) <i>Locally induced states in manganites</i>
09.25	I13. Igor Raevski (Russia) <i>Electron microscopy, X-ray diffraction, dielectric and Mossbauer studies of $AFe_{0.5}B_{0.5}O_3$ (A - Pb, Ba; B - Nb, Ta) ceramics sintered from mechanically activated nanopowders</i>
09.50	I14. Gerhard Lackner (Germany) <i>Thin films for photovoltaic application</i>
10.15	O8. Yibo Zhou (China) <i>Abnormal light scattering induced by the growth of PNRs in PMN-PT transparent ceramics</i>
10.30	O9. Evgeniya Khomyakova (Slovenia) <i>The influence of substrate on structure and phase composition of $BiFeO_3$ thick films and the resulting local electro-mechanical properties</i>
10.45	O10. Svetlana Raevskaya (Russia) <i>Electron microscopy, XRD, Mossbauer and dielectric studies of $Pb(Fe_{0.5}Nb_{0.5})_{1-x}B_xO_3$ (B - Zr, Sn, Ce) multiferroic ceramics</i>
11.00	Tea break
	Session 6. Bio and organic materials (chair Andrei Kholkin)
11.15	I15. Vladimir Bystrov (Russia) <i>Investigation of the transition region of the polarization switching from extrinsic to intrinsic in the ultrathin polyvinylidene fluoride homopolymer films</i>
11.40	I16. Dmitry Kolker (Russia) <i>FAN-OUT PPLN-OPO Photo-acoustic laser spectrometer for noninvasive medical diagnostics</i>
12.05	O11. Vladimir Shur (Russia) <i>Contribution of UCSU "Modern Nanotechnology" to nanotoxicological research</i>
12.20	O12. Larisa Privalova (Russia) <i>Main results of animal experiments proving a possibility to significantly attenuate adverse effects of metallic nanoparticles</i>

12.35	O13. Alexander Romashchenko (Russia) <i>Time-space patterns of direct nose-to-brain transport of nanoparticle and their effects on catecholamine metabolism of olfactory system</i>
12.50	O14. Pavel Zelenovskiy (Russia) <i>Low- and high temperature phase transitions in diphenylalanine nanotubes</i>
13.05	<i>Closing</i>
13.20	<i>Lunch</i>
15.00	<i>Excursion</i>

Poster session

Friday, August 28

Topic 1. Microscopy and modern experimental methods

P1. Sergei Asselborn

Bessel beam waist scanning by nanoparticles suspended in liquid

P2. Irina Yushina

Thiazoloquinolinium iodides according to Raman spectroscopy data

P3. Dmitry Pelegov

Local characterization of materials for batteries and fuel cells using electrochemical strain microscopy and micro-Raman techniques

P4. Yuriy Vysokikh

Magnetic domain visualization by magnetic force microscopy and near-field polarization microscopy

P5. Andrei Korsakov

Strain patterns inside kimberlitic and metamorphic diamond crystals as revealed by Raman imaging

P6. Liudmila Ivleva

Mechanical properties of β - $\text{Na}_{0.28}\text{V}_2\text{O}_{5-y}$ oxide bronze grown by Czochralski method

Topic 2. Domains and periodical poling

P7. Dmitry Chezganov

Simulation of spatial distribution of electrons and electric field after e-beam irradiation of MgO-doped lithium niobate covered by resist.

P8. Victoria Pryakhina

Formation of charged domain walls in LiNbO_3 and LiTaO_3 with inhomogeneously increased bulk conductivity

P9. Artur Udalov

About lack of the shape of plane domain wall in uniaxial ferroelectric

P10. Arkadi Mandel

Collinear and isotropic diffraction of laser beam and incoherent light on periodically poled domain structures in lithium niobate

P11. Anton Turygin

Self-assembled periodical domain structure appeared on nonpolar cuts of lithium niobate and lithium tantalate crystals

P12. Anton Turygin

Domain study in Sr-doped potassium sodium niobate lead-free piezoelectric ceramics

P13. Anastasia Tyurnina

The domain structure evolution in the congruent lithium niobate with silver nanoparticles on the polar surface

P14. Ekaterina Barabanova

Change the domain structure due to the process of polarization in the multicomponent ceramics

P15. Maria Chuvakova

Formation of quasi-regular domain structures in single crystals of lithium niobate and lithium tantalate during polarization reversal with metal electrodes and artificial dielectric layer

P16. Alexander Esin

The abnormal conduction current induced by formation of charged domain walls in stoichiometric lithium niobate

P17. Vladimir Rogalin

Optical parametric oscillator on the periodically poled MgO:LN crystal generating 70 mW with 4.1 μm wavelength and varied pulse duration

P18. Ulyana Salgaeva

Effect of pre-annealing process on the surface roughness of ridge waveguide formed with wet etching of $-Z$ -cut LiNbO_3

P19. Maxim Neradovskiy

Investigation of domain kinetics in congruent lithium niobate modified by proton exchange

P20. Elizaveta Kolchina

Study of ferroelectric domain structure of barium strontium titanate based glass-ceramics

Topic 3. Multiferroics, relaxors, and thin films

P21. Elizaveta Kolchina

Formation of the domain structure as a result of spontaneous backswitching in relaxor $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$ single crystals

P22. Valentin Afanasjev

Formation and Properties of PZT-PbO Thin Heterophase Films

P23. Dmitry Redka

Optical and structural properties of ZnO thin films after laser treatment

P24. Svetlana Raevskaya

Electron microscopy and XRD studies of the surface phases of Li-doped $\text{PbFe}_{0.5}\text{Nb}_{0.5}\text{O}_3$ ceramics sintered from mechanically activated oxides

P25. Sergei Mushinsky

Protective silicon-silicon oxide magnetron sputtered layer for lithium niobate integrated optical circuits

Topic 4. Bio and organic materials

P26. Gulshakhar Kudaibergen

Study of surface morphology of magnetically active sorbents on the basis of humic acid

P27. Vladimir Bystrov

Glycine nanostructures and the domains in the beta-glycine: Computational modeling and PFM observations

P28. Anna Bystrova

Studies of structure and properties of the surface modified Hydroxyapatite for biomedical applications: computational and experimental data analysis

P29. Dmitry Bykov

Formation of self-assembled island structure in glycine. Experiment and computer simulation

P30. Vladimir Rogalin

Investigation the temperature dependence of the reflection coefficient of triglycine sulfate in the IR region

P31. Alla Nuraeva

Ferroelectric and piezoelectric properties of organic films and organic crystals derived from chiral methoxy and amino acids

P32. Daria Vasileva

Morphology and piezoelectric properties of β -glycine single crystals and micro islands

P33. Semen Vasilev

Investigation of morphology and piezoelectric properties of diphenylalanine microcrystals