

**1<sup>st</sup> International Workshop “Nanoscale Electromechanical phenomena in functional materials. Piezoresponse Force & Electrochemical Strain Microscopies”**

**Monday, 15<sup>th</sup> of September, 2014**

<b>8:30 – 9:00</b>	Registration and welcome session
<b>9.00 – 9.45</b>	Jiangyu Li, <i>The mechanisms of electromechanical coupling in strain based scanning probe microscopes</i>
<b>9.45 – 10.30</b>	Sergei V. Kalinin, <i>Electrochemical strain microscopy: challenges and opportunities</i>
<b>10.30 – 11.00</b>	Coffee break
<b>11.00 – 11.45</b>	Brian Sheldon, <i>Electrochemically Induced Stresses in Energy Storage Materials</i>
<b>11.45 – 12.15</b>	Petro Maksymovych, <i>To switch or not to switch: a probe microscopy perspective</i>
<b>12.15 – 1.30</b>	Lunch
<b>1.30 – 2.15</b>	Alexander Tselev, <i>Novel near-field scanning impedance microscopy in applications to semiconductors, ferroelectrics, and electrochemical materials</i>
<b>2.15 - 2.35</b>	Jennifer Black, <i>Ionic layering in in double layers</i>
<b>2.35 - 2.55</b>	Evgheni Strelcov, <i>Probing lateral ionic transport and electrochemical reactions by Kelvin probe of active devices</i>
<b>2.55 – 3.15</b>	Coffee break
<b>3.30 – 5.30</b>	<b>Laboratories</b>

**Tuesday, 16<sup>th</sup> of September, 2014**

<b>8:30 – 9:00</b>	Registration and announcements
<b>9.00 – 9.45</b>	Roger Proksch, <i>Towards Metrological Electromechanical AFM</i>
<b>9.45 – 10.30</b>	Bilge Yildiz, <i>In situ Scanning Tunneling Microscopy to Understand Electrochemical Phenomena on Oxides at Elevated Temperatures</i>
<b>10.30 – 11.00</b>	Coffee break
<b>11.00 – 11.45</b>	Rishi Raj, <i>Interfacial ElectroChemoMechanical Potentials: Theory and Experiment</i>
<b>11.45 – 1.00</b>	Lunch
<b>1.00 – 1.45</b>	Sreekanth Pannala, <i>Multiscale modeling for performance and safety of lithium-ion batteries</i>
<b>1.45 – 2.15</b>	Alex Belianinov, <i>Spatially resolved current-voltage measurements in electrochemical systems</i>
<b>2.15 – 2.35</b>	Anton Ievlev, <i>Coupling between ionic transport and physical functionalities</i>
<b>2.35 – 2.55</b>	Rama Vasudevan, <i>Electrochemistry on single atom level</i>
<b>3.00 – 5.30</b>	<b>Laboratories</b>