

**COST TO BE FALL MEETING 2017**  
**11-13 September, 2017**  
**Institute of Solid State Physics, University of Latvia (ISSP, UL)**  
**(Kengaraga street 8, Riga, Latvia)**

**POSTER SESSION**

Tuesday, 12th September, 16:40 - 18:30

| WG1 Fundamental Understanding of oxides for electronics: Theory and Experiments |                        |                     |   |
|---|------------------------|---------------------|---|
| WG1-1   | <b>Beanland</b>        | <b>Richard</b>      | Probing oxide crystal structure using 'digital' electron diffraction  |
| WG1-2   | <b>Chromik</b>         | <b>Štefan</b>       | Preparation and study of MoO <sub>3</sub> thin films for realization of MoS <sub>2</sub> 2D systems   |
| WG1-3   | <b>Do</b>              | <b>Minh-Thanh</b>   | Instabilities in functional properties of epitaxial ferroelectric thin films  |
| WG1-4   | <b>Eglitis</b>         | <b>Roberts</b>      | Novel Carbon Nanotubes Rolled from 6,6,12-Graphyne: Double Dirac Points in 1D Material  |
| WG1-5   | <b>Eglitis</b>         | <b>Roberts</b>      | First principles calculations of PbTiO <sub>3</sub> /SrTiO <sub>3</sub> (001) heterostructures  |
| WG1-6   | <b>Eglitis</b>         | <b>Roberts</b>      | Theoretical prediction of the 5 Volt rechargeable Li ion battery using Li <sub>2</sub> CoMn <sub>3</sub> O <sub>8</sub> as a cathode                      |
| WG1-7   | <b>Eglitis</b>         | <b>Roberts</b>      | Ab initio calculations of BaTiO <sub>3</sub> bulk and BaO-terminated (001) surface F-centers  |
| WG1-8   | <b>Feteira</b>         | <b>Antonio</b>      | Band gap engineering in KNbO <sub>3</sub> -based ferroelectric solid solutions  |
| WG1-9   | <b>Jonane</b>          | <b>Inga</b>         | Temperature-dependent X-ray absorption spectroscopy study of CuMoO <sub>4</sub>   |
| WG1-10  | <b>Keeble</b>          | <b>David</b>        | Point Defect Characterization in Complex Oxides   |
| WG1-11  | <b>Kuzmin</b>          | <b>Alexei</b>       | Temperature-dependent EXAFS study of cupric oxide   |
| WG1-12  | <b>Mironova-Ulmane</b> | <b>Nina</b>         | Raman, FTIR and EPR Spectroscopy of Nano-Sized Zinc Peroxides   |
| WG1-13  | <b>Mironova-Ulmane</b> | <b>Nina</b>         | Influence of 3d ions on radiation damage of MgAl <sub>2</sub> O <sub>4</sub>  |
| WG1-14  | <b>Moshopoulou</b>     | <b>Evagelia</b>     | Synchrotron X-ray diffraction studies of NdMn <sub>2</sub> O <sub>5</sub>   |
| WG1-15  | <b>Narducci</b>        | <b>Elisabetta</b>   | NFFA-Europe: the widest range of tools for research at the nanoscale  |
| WG1-16  | <b>Niu</b>             | <b>Wei</b>          | Tunable electron gas at the non-isostructural oxide interface of gamma-Al <sub>2</sub> O <sub>3</sub> /SrTiO <sub>3</sub> by electric-double-layer gating |
| WG1-17  | <b>Patru</b>           | <b>Roxana Elena</b> | PVDF polymer composites with enhanced electrical properties   |
| WG1-18  | <b>Pentjuss</b>        | <b>Evalds</b>       | THERMAL DECOMPOSITION OF TRONA OF CARBONISED GLASS FIBER FABRICS  |
| WG1-19  | <b>Popov</b>           | <b>Anatoli</b>      | TSL and Cathodoluminescent studies of ScF <sub>3</sub> single crystals at 80 – 300K   |
| WG1-20  | <b>Skvortsova</b>      | <b>Vera</b>         | Role of Defects in Functional Properties of Irradiated Simple and Complex Oxides Containing Transition Metal Ions   |
| WG1-21  | <b>Talacko</b>         | <b>Marcel</b>       | Channels modification using low energy electron irradiation for potential coherent vortex motion applications in YBaCuO thin films superconductors        |
| WG1-22  | <b>Trinkler</b>        | <b>Laima</b>        | Polarised Luminescence of LiGaO <sub>2</sub> Crystal  |
| WG1-23  | <b>Turcan</b>          | <b>Ina</b>          | Towards novel functional properties by interface reaction in BaTiO <sub>3</sub> -ferrite composites   |
| WG1-24  | <b>Vavilova</b>        | <b>Evgeniia</b>     | Spin dynamics in the frustrated system CoAl <sub>2</sub> O <sub>4</sub>   |
| WG1-25  | <b>Vilarinho</b>       | <b>Rui</b>          | Unraveling the magnetoelectric enhancement of TbMnO <sub>3</sub> by Fe <sup>3+</sup> doping   |
| WG1-26  | <b>von Soosten</b>     | <b>Merlin</b>       | Nanoscale devices and low temperature transport properties at the   |
| WG1-27  | <b>Yulin</b>           | <b>Gan</b>          | Tuning the ground state of polar LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface by an electron sink   |
| WG1-28  | <b>Zhang</b>           | <b>Yu</b>           | Tuning the Two-Dimensional Electron Gas at the TiO <sub>2</sub> -based Surfaces/Interfaces by Ti-O-Ti Configurations                                      |
| WG1-29  | <b>Zhukovskii</b>      | <b>Yuri</b>         | Morphology and Properties of 1D Transition Metal Oxide Nanostructures: First Principles Simulations   |

| <b>WG2 Oxides Growth and Fabrication Methods</b> |                     |                    |   |
|--|---------------------|--------------------|---|
| WG2-1  | <b>Cintins</b>      | <b>Arturs</b>      | Formation of oxide nanoparticles in STARS ODS steel material manufacturing process  |
| WG2-2  | <b>Gomes</b>        | <b>Maria</b>       | Microstructural, optical and glucose sensing characteristics of pulsed laser deposited silver nanoparticles               |
| WG2-3  | <b>Groenen</b>      | <b>Rik</b>         | Recent advances in large area Pulsed Laser Deposition; epitaxial growth of complex oxides on silicon                      |
| WG2-4  | <b>Iljinis</b>      | <b>Aleksandras</b> | Electrical, optical and structural properties of ITO thin films deposited by reactive plasma assisted thermal evaporation |
| WG2-5  | <b>Jovanović</b>    | <b>Sonja</b>       | Magnetic properties of Zn-doped cobalt ferrite nanoparticles: influence of magnetic structure                             |
| WG2-6  | <b>Knoks</b>        | <b>Ainars</b>      | Transition Metal Oxide Heterostructures with Photo-Catalytic Activity   |
| WG2-7  | <b>Marcinauskas</b> | <b>Liutauras</b>   | Influence of temperature on structure and properties of lead titanate and bismuth titanate films                          |
| WG2-8  | <b>Polyakov</b>     | <b>Boris</b>       | A comparative study of heterostructured CuO/CuWO4 nanowires and thin films  |
| WG2-9  | <b>Silva</b>        | <b>José</b>        | Resistive switching in 0.5Ba(Zr0.2Ti0.8)O3-0.5(Ba0.7Ca0.3)/ZnO heterostructures   |
| WG2-10   | <b>Stein</b>        | <b>Wolfgang</b>    | TwinBeam PLD - new possibilities for advanced functional films  |

| <b>WG3 Oxide-based applications and devices</b> |                      |                 |  |
|---|----------------------|-----------------|--|
| WG3-1   | <b>Alkoy</b>         | <b>Sedat</b>    | MiniTonpilz : Device Application of Crystallographically Textured Piezoceramics  |
| WG3-2   | <b>Baiutti</b>       | <b>Federico</b> | Towards full-ceramic microdevices for oxygen sensing applications integrated in silicon  |
| WG3-3   | <b>Bajars</b>        | <b>Gunars</b>   | Reduced Graphene Oxide - LiFePO4 Composite Electrodes for Li-Ion Batteries   |
| WG3-4   | <b>Cogal</b>         | <b>Sadik</b>    | Electrocatalytic Activities of TiO2 and TiO2/Graphene Oxide Obtained by RF-Plasma Method towards Dopamine  |
| WG3-5   | <b>Cohen-Azarzar</b> | <b>Dana</b>     | Band offsets at the amorphous Al2O3 – SrTiO3 interface   |
| WG3-6   | <b>Eren</b>          | <b>Esin</b>     | Electrochromic properties of WO3 hybrids and their applications in a flexible complementary device   |
| WG3-7   | <b>Ferreira</b>      | <b>Nuno</b>     | Laser processing and its effect on thermoelectric materials based on CaMnO3  |
| WG3-8   | <b>Kandidatova</b>   | <b>Irina</b>    | Sb3+ ion as Effective Sensitizer of Blue, Green and Red Emission of LaInO3-based Oxide Phosphors doped with Pr3+, Ho3+ ions                      |
| WG3-9   | <b>Kandidatova</b>   | <b>Irina</b>    | Thermoelectric Properties of Layered Cobaltates and Perovskite Plumbates   |
| WG3-10  | <b>Kandidatova</b>   | <b>Irina</b>    | Properties of Layered Bismuth Titanate with Aurivillius Phase Structure Doped by La or Pr  |
| WG3-11  | <b>Kaprans</b>       | <b>Kaspars</b>  | Nanostructured Fe2O3 , TiO2 and reduced graphene oxide with excellent electrochemical performance as anode material for lithium ion batteries    |
| WG3-12  | <b>Kleperis</b>      | <b>Janis</b>    | Historical Summary about Researches of TMO in Electrochromic and Photoelectrochromic devices at ISSP UL  |
| WG3-13  | <b>Lok</b>           | <b>Ramazan</b>  | The radiation response of the high dielectric-constant hafnium silicate  |
| WG3-14  | <b>Macan</b>         | <b>Jelena</b>   | Calcium manganite coatings for energy conversion   |
| WG3-15  | <b>Mechin</b>        | <b>Laurence</b> | Anisotropic magnetoresistance in La0.7Sr0.3MnO3 thin films   |
| WG3-16  | <b>Mensur Alkoy</b>  | <b>Ebru</b>     | FABRICATION AND CHARACTERIZATION OF CRYSTALLOGRAPHICALLY TEXTURED TERNARY PIN-PMN-PT PIEZOELECTRIC CERAMICS FOR NOVEL PIEZOELECTRIC APPLICATIONS |
| WG3-17  | <b>Mousdis</b>       | <b>George</b>   | Resistivity sensors of metal oxides with metal nanoparticles as catalysts  |
| WG3-18  | <b>Senol</b>         | <b>Kaya</b>     | Investigation of Gamma Irradiation Response on Interface State and Series Resistance of Y2O3 MOS Capacitors for Future Radiation Sensors         |
| WG3-19  | <b>Tavares</b>       | <b>Carlos</b>   | Design of transparent ZnO:Ga,Al,Bi thin film electrodes with thermoelectric properties   |