September 15 – 18, 2016

Suzdal, Russia

1<sup>st</sup> International Conference of Young Scientists **"TOPICAL PROBLEMS OF MODERN ELECTROCHEMISTRY AND ELECTROCHEMICAL MATERIALS SCIENCE"** 



Skolkovo Institute of Science and Technology



# **CONFERENCE PROGRAM**











1<sup>st</sup> International Conference of Young scientists **"TOPICAL PROBLEMS OF MODERN ELECTROCHEMISTRY** AND ELECTROCHEMICAL MATERIALS SCIENCE"



### **Thursday, September 15**

12.00 – 16.00 – Registration 16.00 – 16.15 – Opening (K. Stevenson) 16.15 – 17.00 – J.-M. Tarascon (Collège de France, Paris) From Volta to Li-ion and beyond 17.00 – 17.45 – E.V. Antipov (Moscow State University) Crystal chemistry of battery materials 17.45 – 18.00 – Coffee break 18.00 – 18.45 – K. Stevenson (CEE CREI, Skoltech) Fundamentals of electron transfer in electrochemical reactions 18.45 – 19.30 – Yu. Dobrovolskii (Institute of Solid State Physics RAS) Low temperature electrochemical devices 19.30 - 20.30 - Dinner

#### Friday, September 16

09.00 - 10.00 - Breakfast 10.00 – 11.00 – Y. Shao-Horn (Massachusetts Institute of Technology, USA). Materials for energy conversion 11.00 – 12.00 – E.R. Savinova (University of Strasbourg) Theory and mechanisms of electrocatalysis 12.00 – 12.15 - coffee break 12.15 – 13.15 – G.A. Tsirlina (Moscow State University) Electrodeposition kinetics for metals, alloys and compounds 13.15 – 14.45 – lunch 14.45 – 15.45 – D. Itkis (Moscow State University) Advanced characterization techniques for electrode materials 15.45 – 16.45 – S. Fedotov (tutorial) (CEE CREI, Skoltech) Crystal chemistry approaches toward design of cathode materials for rechargeable batteries 17.00 - 19.00 - Poster session 19.30 - 20.30 - Dinner

## Saturday, September 17

09.00 - 10.00 - Breakfast

10.00 – 11.00 – J.-M. Tarascon (Collège de France, Paris) The richness of Li electrochemistry: insertion, conversion, alloying and

displacement reactions

11.00 – 12.00 – A.M. Abakumov (CEE CREI, Skoltech) Transmission electron microscopy for catalysts and battery electrodes

12.00 – 12.15 – Coffee break

12.15 – 13.15 – K. Stevenson (CEE CREI, Skoltech) **Organic Electrode Materials for Redox-Flow and Rechargeable Batteries** 

13.15 – 14.45 – lunch

14.45 – 15.45 – A. Ivanischev (CEE CREI, Skoltech) Modern electrochemical methods of kinetic studies of the Li-ion transport

in intercalation compounds

15.45 – 16.45 – V. Nikitina (tutorial) (CEE CREI, Skoltech) Cyclic voltammetry of intercalation systems: investigation of the kinetic regimes

16.45 – 17.00 – Coffee break

17.00 – 18.00 – S. Luchkin (tutorial) (CEE CREI, Skoltech) Scanning probe microscopy for Li-ion batteries 18.00 - 19.00 - Dinner

# Sunday, September 18

8.00 - 9.00 - Breakfast 9.00 – Departure to Moscow

#### Suzdal, Russia September 15 – 18, 2016



Skolkovo Institute of Science and Technology





BRUKER





