



Warsaw Biannual meeting
13-14 December 2016
Warsaw University of Technology
Center for Advanced Materials (CEZAMAT)
Poleczki street, Warsaw

Tuesday 13th December – morning session

9:30 *Welcome address by Director of CEZAMAT, Tomasz Skotnicki*

9:45 *ALISTORE-ERI Activities*

- Results of Scientific Council (June 2016)
- Post-Doc and PhD's new applications
- H2020 calls
- Next White Papers, Upcoming Summer schools
- Erasmus Mundus update
- New Scientific Direction and Presidency
- Prospective business activities
- Updates on the patent portfolio and legal matters – by C. Chazel

10:30 *Lithium-ion batteries: positive electrode presentations*

Robert Armstrong – introduction, 5 min

- 1) **Athmane Boulaoued (Montpellier):** "Operando spectroscopic study of the electrochemical mechanism of SiGe anode materials for Li batteries" - 20 min.

Questions, discussion

11:00 *Coffee break*

11:20 *Lithium-ion batteries: positive electrode presentations*

- 2) **Robert Armstrong (USTAN):** "Operando diffraction studies of high voltage materials for Li batteries" - 15 min.
- 3) **Theo Famprikis (LRCS/Bath)** "Lisicon and thio-Lisicon solid electrolytes" - 15 min.

Questions, discussion

11:55 *Electrolytes and Interfaces presentations*

Marek Marcinek – introduction, 5 min

- 1) **Pierre Ranque (TUDelft/Pau):** "New active polymer binders for Li-ion batteries" – 15 min.



- 2) **Pieter Magusin (U- Cambridge):** "Composition of the solid electrolyte interphase on silicon electrodes for lithium ion batteries investigated by use of NMR" – 15 min.

Questions, discussion

12:30 - 14:00 Lunch (on site)

Tuesday 13th December – afternoon session

14:00 Electrolytes and Interfaces presentations

- 3) **Viktor Nilsson (Chalmers/Uppsala):** "Reduction stability of concentrated acetonitrile/LiTFSI electrolytes in graphite/LiFePO₄ cells" – 15 min.
- 4) **Tomek Trzeciak (Warsaw):** "New salts for modern battery electrolytes" – 15 min.
- 5) **Maciej Dranka (Warsaw):** "Single-crystal X-ray diffracton as a tool for developing new electrolyte systems" – 15 min.

Questions, discussion

14:50 Theory

Alejandro Franco – introduction, 5 min

- 1) **Piotr Jankowski (Warsaw/Chalmers):** "Predictive DFT calculations for the design of SEI-forming additives"- 15 min.
- 2) **Rasmus Andersson (Chalmers):** "Structure and dynamics of ionic clusters within highly concentrated electrolytes" – 15 min.
- 3) **Amangeldi Torayev (Amiens/Cambridge):** "Multiscale modeling of Li-O₂ batteries" – 15 min.
- 4) **Vigneshwaran Thangavel (Amiens):** "Mathematical and stochastic modeling of Li-S batteries" – 15 min.
- 5) **Alejandro Franco (Amiens):** "Using Virtual Reality for Teaching and Data Analysis in the field of Energy Storage & Conversion" – 15 min.

Questions, discussion

16:15 - 16:35 Coffee break

16:35 Platform session

- 1) **Mathieu Morcrette (Amiens):** "Update of the Benchmarking platform"- 15 min.
- 2) **Maria Alfredsson (U-Kent):** "XAS update – and introduction of new PDRA" - 10 min.
- 3) **Nanami Yokota (U-Kent):** "What you can do at Xmas" – 15 min.



- 4) **Lorenzo Stievano (Montpellier):** "Update of the Mössbauer platform" – 15 min.
- 5) **Mattia Giannini (Amiens):** "Electron Microscopy on Li-S batteries" – 15 min.

Questions, discussion

17:45 – 18:15 *Presentation of ERI co-shared Post Doc, PhD's proposals (5 min/ topic)*

Questions, discussion

18:15 *Closure*

19:30 *Dinner: Siwy Dym – Pulawska street*

Wednesday 14th December

9:00 *Presentation of the white paper:* "Update on solid state electrolytes: evolution since 2012". *By Christian Masquelier and Philippe Knauth.*

Questions and discussion

10:00 *Coffee Break*

10:30 *Parallel session for the Industrial Club members*

Parallel session for the Academic members

11:15 *Scientific Council. Scientific group leader representatives and Industrial club members:*

PhD/Post Doc topics

- White Papers
- Others
- Voting session:

12:00 *The Industrial Feedback*

12:30 *Closure and visit of CEZAMAT*

The summary of industrial feedback and concluding remarks will be sent by email after the meeting.