



BIANNUAL MEETING

December 14-15, 2021 – LRCS, Amiens, FRANCE

ALISTORE-ERI academic and industrial club members will meet to present the scientific progress, activities, and highlights of the last six months. All challenges, technologies and techniques are to be discussed within a two-day program, together with the Kick-Off of the DESTINY Marie Curie Cofund PhD programme.

Program Day 1: Tuesday December 14, 2021

09:30 Welcome Address

Mathieu MORCRETTE & Christian MASQUELIER, from LRCS

09:40 ALISTORE-ERI Activities

Reporting by Robert DOMINKO, Patrik JOHANSSON and Administrative Team

10:00 Research funded by ALISTORE-ERI: Current PhD students and Post-Docs

10:00 – Noura RAHBANI, 2nd Year PhD, between Amiens and Copenhagen
“Exploring Iron-based Complexes for RFB Applications”

10:15 – Abdokhaled MOHAMMADI, 2nd Year PhD, between Montpellier and Uppsala
“Unraveling the role of counter electrode in the nucleation overpotential in lithium metal batteries”

10:30 – Phuong Nam LE PHAM, 2nd Year PhD, between Montpellier and Chalmers
“Prussian Blue Analogue: How X-ray tells my chemistry”

10:45 Coffee Break

11:15 Research funded by ALISTORE-ERI: Current PhD students and Post-Docs

11:15 – Marc DUQUESNOY, 1st Year PhD, between Amiens and CIDETEC
“Manufacturing Optimization through Physics-Based Simulations”

11:30 – Hassna EL-BOUSIYDY, 3rd Year PhD, between Amiens and Chalmers
“Text Mining for Battery Information Extraction: Challenges and Opportunities ”

11:45 – Jon SERRANO, Post-Doc, between ICMCB and CIC-Energigune
“Characterization of Li₃PO₄-coated LNMO spinel and its effect on electrochemistry”

12:00 – Charlotte BODIN, Post-Doc, between ICMAB, Pau and Amiens
"Engineering of the Solid Electrolyte Interphase in Calcium Metal Batteries"

12:15 – Lea Celine MEYER, 1st Year PhD, between Jena and Chalmers
"Development of glyoxal electrolytes for potassium ion batteries and ion capacitors"

12:30 – Antonio CARNEVALI, 1st Year PhD, between LRCS, ICMAB-CSIC and Cambridge
"Machine Learning-guided discovery of new batteries for "Internal of Things" autonomous sensors"

12:45 Group Photo and Buffet Lunch

14:00 KICK-OFF of the DESTINY Project

Welcome Addresses by **Philippe JACQUES (SOLVAY & EMIRI)**, Kristina EDSTRÖM (UPPSALA & BATTERY 2030+) and **Alexandre LEGRIS (INC du CNRS)**

14:30 The DESTINY Project: Initial goals, achievements, short- and long-term agenda
Christian MASQUELIER, Coordinator

15:00 13 DESTINY PhD Students, Elevator pitches (1' each)

KRITI, between LRCS, Synchrotron SOLEIL, Synchrotron ALBA and ICMCB
Mohammed AL-ADALI, between LRCS and UMICORE
Duy Linh PHAM, between LRCS and SOLVAY
Dimitrios CHATZOIANNAKIS, between ICMAB-CSIC, UMICORE and CIC Energigune
Sona GULUZADE, between BATH and LRCS
Anastasia GREBENSHCHIKOVA, between ICMCB, CEA and LRCS
Jazer Jose TOGONON, between Synchrotron SOLEIL, ICMCB and LRCS
Neil HAYAGAN, between ICMCB and LRCS
Sam NORWOOD, between DTU and CAMBRIDGE
Kaouther TOUIDJINE, between IEK Julich, TU Delft and TWENTE
Kevin VATTAPPARA, between CIDETEC and IEK Julich
Metin ORBAY, between JENA, CIRIMAT and IMN Nantes
Hafiz Ahmad ISHFAQ, between NIC and CHALMERS

15:30 Coffee Break

16:00 13 DESTINY PhD Students, Elevator pitches (1' each)

Mariana VARGAS ORDAZ, between NIC and DISAT Italy
Armando AVILA CARDENAS, between ICGM and CEA
Abbas KHAN, between IMN, JENA and CIRIMAT
Boluwatife IGBAROLA, between IMN Nantes and CIDETEC
John BROWN, between Collège De France and CHALMERS
Muath RADI, between IPREM and ICMAB-CSIC
Sanjay SUNNY, between CIRIMAT, JENA and IMN Nantes
Sana ASLAM, between LGC, CIRIMAT and UMICORE
Brigitte FORTUIN, between CIC Energigune and UPPSALA
Pedram GHORBANZADE, between CIC Energigune and WUT
Claudia Janeth LIMACHI NINA, between WUT and CIC Energigune

Yu Sheng CHEN, between WUT and NIC
Aginmariya KOTTARATHIL, between WUT and CHALMERS

16:30 ALISTORE invited talks

16:30 Sarah Drvarič Talian (NIC Ljubljana)

"EIS investigations of metal anodes: transmission line model simulations and dynamic impedance"

17:00 Stefan FREUNBERGER (IST Austria)

"Bulk and interface processes in main group redox chemistry: chemistry, dynamics, and structure"

17:30 Closure of day 1

19:30 Dinner at Restaurant "O'Jardin", in the middle of the "Hortillonages"



BIANNUAL MEETING

Program Day 2: Wednesday December 15, 2021

09:30 ALISTORE invited Talks

09:30 Lorenzo STIEVANO (ICG Montpellier)

"The rise of X-ray spectroscopies for unveiling the functional mechanisms in batteries"

09:55 Arnaud DEMORTIERE (LRCS Amiens)

"3D quantification of microstructural properties and spatiodynamics of lithium composition within NMC cathode"

10:20 Alejandro A. Franco (LRCS Amiens)

"Assisting Battery R&D with Holograms in Mixed Reality"

10:45 Philipp Adelhelm (Helmholtz-Zentrum Berlin)

"Electrodes for sodium-ion batteries and insights from dilatometry"



11:10 Coffee break

11:40 ALISTORE-ERI co-shared Post-Doc/PhD student proposals (5+5 min. /topic).

- 1) 1.
- 2) 2.
- 3) 3.

- 4) 4.
- 5) 5.
- 6) 6.

12:20 Parallel sessions

Industrial Club members, Academic members

12:40 Scientific Council

13:00 Closure & Lunch