mission 10000 conference

Interreg España - Portugal
Fondo Europeo de Desarrollo Regional
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UNIÓN EUROPEA
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nano GATEWAY

Mission 10 000: BATTERIES

October 10th - 11th of 2019 | INL, Braga, Portugal

NOTE: This is a tentative schedule, times listed are subject to change. The Poster exhibition will happen during all the event.
Check back often for updates or subscribe to our newsletter at our website: https://nanogateway.eu/en/mission-batteries/

PROGRAMME | October 10th, 2019

8h00 - 9h00 Registration

OPENING SESSION

9h00 **Lars Montelius,** Director-General INL

09h10 **Welcome Message**

:: The Mission 10.000 series of International Conferences, an initiative of the nanoGateway project

Monike Rocha, Business and Strategic Relations, INL

:: The European Battery Landscape

Charles Amos, Research Fellow, Research Group of Atomic Structure-Composition of Materials, INL

:: Competence centers as key actors in the European Battery strategy: an overview by INL and IST

Lifeng Liu, Group Leader, Nano Materials for Energy storage and conversion, INL

Alberto Adán Más, Researcher, Department of Chemical Engineering, IST

09h45 **Video Interview with the lithium-ion battery pioneer John Goodenough,** Professor, Department of Electrical & Computer Engineering, University of Texas at Austin

MORNING SESSION

INVITED TALK

10h00 ***:: European Battery Alliance - Building the European Battery Industry*** Policy

Thore Sekkenes, Program director for European Battery Alliance, InnoEnergy Scandinavia AB

10h45 Poster Session Presentations - Break

CONTRIBUTED TALKS

11h15 ***:: High Power Blue Lasers, a disruptive technology for battery welding ::*** **Victor Blanco, Laser 2000 SAS / NUBURU**

11h35 ***:: High-Capacitance Negative Electrode based on Cobalt Phosphide Nanocrystals ::*** **Nan Zhang, INL**

INVITED TALK

11h55 ***:: European Partnership on Advanced materials for batteries*** Policy / Science

Joaquín Villar, Head of Department, Internationalisation and Forsight, Andalusian Energy Agency

ROUNDTABLE DISCUSSION

Funding & Collaboration Opportunities

12h20 **Luís Maia**, Horizon 2020 National Delegate and Contact Point, GPPQ - Portuguese Framework Promotion Office
Joaquín Villar, Head of Department, Internationalisation and Forsight, Andalusian Energy Agency
Juliana Restrepo Sintes, Director General, AEPIBAL | BatteryPlat
Moderator: Paula Galvão, Chief Business and Strategic Relations, INL

INL WORLDWIDE NETWORK & PARTNERS ANNUAL CONFERENCE

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13h20 Networking Lunch — Networking Opportunity

AFTERNOON SESSION

INVITED TALK

14h50 ***:: Fast Charging of Lithium-Ion Batteries*** — Science

Daniel Abraham, Senior Materials Scientist, Argonne National Laboratory

CONTRIBUTED TALKS

15h35 *:: Free-Standing N-Graphene as Conductive Matrix For Ni(OH)2 based Supercapacitive Electrodes ::* **Kush Upadhyay,** IST

15h55 *:: Compositional mapping of LiNixCoyMnzO2 cathode materials ::* **Cristiana Alves,** INL

16h15 Coffee break

INVITED TALK

16h45 ***:: Techology Transfer within the EU Batteries Ecosystem: our experience*** — Innovation / Industry

Oscar Miguel, Director, CIDETEC Energy Storage

INVITED TALK

17h30 ***:: Structural Characterization of Li-ion Battery Materials Using Advanced Electron Microscopy Techniques*** — Science

Karalee Jarvis, Research Engineering/Scientist Associate, Univeristy of Texas at Austin

18h15 INL Tour

18h45 Happy Networking Hour

PROGRAMME | October 11th, 2019

8h30 - 9h00 Registration

MORNING SESSION

INVITED TALK

9h00 ***:: Batteries: Industrial Initiatives and Opportunities in Iberia*** — Policy

Mikel Lasa, CEO, InnoEnergy Iberia

CONTRIBUTED TALKS

9h45 *:: How relevant is for asset operators to access cell data in large scale stationary Li-ion battery projects: the case of 2nd life batteries ::* **Mario Simões,** EDP Inovação

10h05 *:: Sizing of an Energy Storage System to Maximize the Integration of Renewable Generation in Isolated Power Systems ::* **Alejandro Marano,** University of Sevilla

10h25 Coffee break

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INVITED TALK

10h55 — ***:: From thermal harvesting to electrical storage in Li/Na devices*** — Science

Maria Helena Braga, Associate Professor, Department of Engineering Physics, University of Porto

CONTRIBUTED TALKS

11h40 — ***:: Nanoconfined ionic Liquids and hybrid ionogels: Tuning the Electrolyte-Electrode Interface ::*** **Luis Miguel Varela,** University of Santiago de Compostela

12h00 — ***:: Ionic Liquids: next generation electrolytes ::*** **Oscar Cabeza,** University of Coruña

INVITED TALK

12h20 — ***:: Printed and solid-state batteries: materials, challenges and opportunities***

Senentxu Lanceros-Mendez, Scientific Director and Professor, Basque Center for Materials, Applications, and Nanostructures — Technology/Innovation

13h05 — Networking Lunch — Networking Opportunity

AFTERNOON SESSION

INVITED TALK

14h35 — ***:: Batteries interfaces for renewable energies and electric vehicles*** — Technology/Innovation

Enrique Romero-Cadaval, Professor, Power Electric and Electronic Systems R&D Group, University of Extremadura

INVITED TALK

15h20 — ***:: Redox flow batteries: present and future perspectives*** — Science

Adélio Mendes, Professor, Department of Chemical Engineering, University of Porto

16h05 — Coffee break

ROUNDTABLE DISCUSSION

:: Scaling Battery Innovations: now and tomorrow
Opportunities and challenges for the lithium ion battery value chain

16h30

Mikel Lasa, CEO, InnoEnergy Iberia
Jorge Magalhães, Senior VP, Vestas
António Silva, Geologist, Lusorecursos
Mario Simões, Technology Expert in Energy Storage, EDP Innovation

Moderator: Fátima Montemor, IST

18h15 — **AWARDS SESSION**
Lars Montelius, Director-General INL

18h30 — **CLOSING REMARKS**
Fátima Montemor, Professor, Department of Chemical Engineering, Vice-President of IST

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POSTER LIST

	AUTHOR	POSTER TITLE
01	Alberto Adan Mas	From bench-scale to prototype: case study on a hybrid energy storage device
02	Alvaro Caballero	Advances in sustainability for Lithium-Sulfur battery technology: Biomass-derived carbon electrodes
03	Alvaro Caballero	Advances in safety for Lithium-Sulfur battery technology: alternative anodes and electrolytes
04	Alvaro Caballero	Advances in performance for Lithium-Sulfur battery technology: Graphene-based electrodes
05	Ana Mafalda Macatrao	Effect of Magnetic Field on the Electrodeposition of Copper-Iron Nanofoams
06	Bruno Xavier	Synthesis of nanostructured transition metal phosphides via a one-step vapor-solid reaction method for electrochemical energy storage
07	Carlos Miguel Costa	Metal–organic framework reinforced poly(vinylidene fluoride) membranes for lithium-ion battery separators
08	Eduardo Lopez	Testing and evaluation of battery technologies for commercial and residential applications in AGERAR project
09	Kamil Jasso	Application of carrageenans in lithium-sulfur batteries
10	Mario Andre Madeira de Almeida	Manganese Sulfide Crystallites - Development and Supercapacitor application
11	Rajesh Thomas	Improved lithium storage performance of Bi2Se3 electrode with effective surface modification via conductive coating
12	Zhixin Tai	High-shear exfoliation technology to produce ultrathin 2D nanosheets for high capacity and long-life alkali-ion batteries
13	Ziyu Lu	Tips-covered anode achieving uniform lithium deposition for stable lithium metal batteries
14	Ziyu Lu	Plasma assisted sponge-like carbon coating towards stable lithium anodez