

# CERIC

Central European  
Research Infrastructure  
Consortium

## SCIENCE@CERIC 2021 ENERGY

Live on ZOOM on  
January 28 and 29

Register at:  
[www.https://www.ceric-eric.eu](https://www.ceric-eric.eu)

### Day 1, 28<sup>th</sup> January 2021

09:00 - 09:10	<b>Opening,</b>  <b>Jana Kolar</b> , Executive Director CERIC-ERIC
09:10 - 09:30	<b>Challenges of the solid-state Li-ion battery research - Investigation of the electro-chemo-mechanical ageing of all-solid-state Li-ion batteries</b> (TBC)  <b>Robert Kun</b> , Lóránd Eötvös Research Network
09:30 - 09:50	<b>Nanoscale phase evolution in beyond intercalation-type energy storage systems</b> (TBC)  <b>Christian Prehal</b> , Graz University of Technology/ETH Zürich
09:50 - 10:10	<b>Operando characterization of batteries using x-ray absorption spectroscopy: advances at the beamline XAFS</b> (TBC)  <b>Giuliana Aquilanti</b> , Elettra Sincrotrone Trieste
10:10 - 10:30	<b>Operando x-ray diffraction: looking inside working batteries at MCX@Elettra</b> (TBC)  <b>Jasper Plaisier</b> , Elettra Sincrotrone Trieste
10:30 - 10:40	<b>BREAK</b>
10:40 - 11:00	<b>In-situ and operando studies on batteries with the powerful tool of neutrons</b>  <b>Ralph Gilles</b> , Neutron FRM2 Munich

<b>11:00 - 11:20</b>	<b>Fuel cell materials under accelerated stress tests</b> (TBC) <b>Ivan Khalakhan</b> , Charles University of Prague
<b>11:20 - 11:40</b>	<b>Solid-state NMR spectroscopy of energy-storage materials</b> <b>Gregor Mali</b> , National Institute of Chemistry (SLO)
<b>11:40 - 12:00</b>	<b>Efficiency enhancement of proton exchange membrane water electrolyzers through utilization of thin-film technologies</b> <b>Peter Kus</b> , Charles University Prague

### Day 2, 29<sup>th</sup> of January 2021

<b>09:00 - 09:20</b>	<b>2D materials as efficient active platforms for catalyzing the hydrogen evolution reaction</b> (TBC) <b>Levente Tapasztó</b> , Lóránd Eötvös Research Network
<b>09:20 - 09:40</b>	<b>Photovoltaic materials</b> (TBC) <b>Thomas Rath</b> , Graz University of Technology
<b>09:40 - 10:00</b>	<b>Materials for the energy studies</b> (TBC) <b>Marcin Sikora</b> , Solaris
<b>10:00 - 10:10</b>	<b>BREAK</b>
<b>10:10 - 10:30</b>	<b>Operando synchrotron methods for the study of batteries: application to alloy and conversion reactions</b> (TBC) <b>Lorenzo Stievano</b> , Institut Charles Gerhardt Montpellier
<b>10:30 - 10:40</b>	<b>Students' presentations</b>
<b>10:40 - 11:00</b>	<b>Long-term battery research roadmap at EU level</b> (TBC) <b>Robert Dominko</b> , National Institute of Chemistry (SLO)
<b>11:00 - 11:20</b>	<b>Fuel cells</b> (TBC) <b>Benedetto Bozzini</b> , Politecnico di Milano
<b>11:20 - 11:50</b>	<b>Panel discussion</b> moderated by <b>Robert Dominko</b>
<b>11:50 - 12:00</b>	<b>Closing</b>

## Program Committee

<b>Heinz Amenitsch (Chair)</b>	Graz University of Technology- Austria
<b>Milko Jakšić</b>	Ruđer Bošković Institute- Croatia
<b>Vladimir Matolin</b>	Charles University Prague- Czech Republic
<b>Tamás Belgya</b>	Hungarian Academy of Sciences- Hungary
<b>Marco Marazzi</b>	Elettra Sincrotrone Trieste- Italy
<b>Marek J. Stankiewicz</b>	Solaris- Poland
<b>Ionut Enculescu</b>	National Institute of Material Physics- Romania
<b>Janez Plavec</b>	National Institute of Chemistry- Slovenia