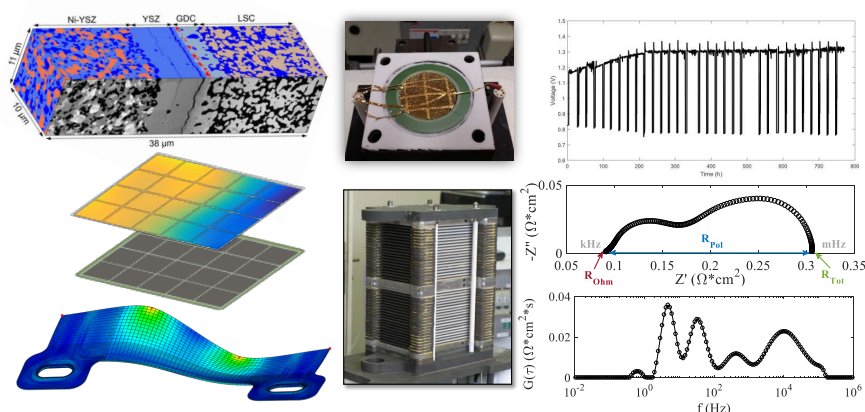


17th Symposium on Modeling and Experimental Validation of Electrochemical Energy Technologies



20-22 April 2021

100% online

Organised by EPFL-Valais

Sion, Switzerland

email : modval17@epfl.ch

website : <https://modval17.epfl.ch>

EPFL



Scope

The 3-day symposium is the 17th of an established annual event, initiated in 2004 by the Swiss Federal Energy Office. Taking place yearly in March/April, it alternates locations mostly between Switzerland and Germany, and is hosted by a local academic institution. The focus of the venue is to present advances in modelling and in experimental work for model validation, for fuel cells, batteries and electrolyzers. Attendance is ~120, from academia and industry, from Europe and overseas. The symposium provides good opportunity to create new proximity collaborations. (Due to covid-19 this symposium will be 100% online)

Programme

Covered topics:

- Modeling on all scales, 0-D to 3-D, nano to macro: kinetics, electrode and transport processes, microstructures, cells, repeating units, stacks, systems; steady state, dynamic; design, degradation, performance. Contributions highlight the result or application, or the simulation approach and methodology.
- Validation experiments: for model parameter determination; in situ / ex situ / post-test characterisation techniques; 3D-microstructure quantification; data analysis (e.g. impedance spectroscopy); advanced measurements (segmentation, local diagnostics).
- Application areas: flow and thermal management, water management, degradation, reliability, control, stress, fuel processing.

Presentations

Only oral presentations are scheduled – no posters. The Symposium also allows to present modeling and validation efforts carried out in EU-funded projects such as in the Fuel Cell & Hydrogen Joint Undertaking (FCH-JU).

Confirmed invited talks: *Prof. S. DeCaluwe (Colorado, USA), Dr C Fink (AVL Graz, AUT), Prof. U. Krewer (Braunschweig, D), Dr J Laurencin (CEA Grenoble, F), Prof J Lin (Beijing, CN), Dr M Mamlouk (Newcastle, UK), Dr G Offer (IC London, UK), Prof. M-C Péra (Belfort, F).*

Abstract submission & registration timeline

1-page abstracts for talks:	1st March 2021
Author notification:	17th March 2021
Programme notification	31st March 2021
Registration deadline to the event:	9th April 2021

Fee

Online registration 100.- CHF (90€)

Registration

Online : <https://modval17.epfl.ch>

Deadline : **9th April 2021**

Organisation

Ecole Polytechnique Fédérale de Lausanne (EPFL)
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Group of Energy Materials (GEM)
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