

## Seminar organized by FunMat-II

### Characterization and modelling of materials for batteries and fuel cells

Date: December 10, 2020  
Time: 13.00-16.00  
Place: Teams

#### Program

- |       |                                                                                                                                               |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 13.00 | Welcome, short presentation of FunMat-II<br><i>Magnus Odén (Linköping University)</i>                                                         |
| 13.05 | Optimisation of electrochemical devices via <i>in situ</i> measurement and modelling<br><i>Gareth Hinds (National Physical Laboratory)</i>    |
| 13.40 | Corrosion resistant HEA thin films for fuel cells<br><i>Maria Paschalidou (Uppsala University)</i>                                            |
| 14.00 | Break                                                                                                                                         |
| 14.10 | Material characterisation and modelling in an industrial context<br><i>Björn Mårlid (SAFT)</i>                                                |
| 14.30 | MH PCT curves – Making the connection between metal hydride characteristics and battery behavior<br><i>Jenny Börjesson Axén (Nilar/KTH)</i>   |
| 14:50 | Coffee break                                                                                                                                  |
| 15:10 | <i>In operando</i> methods for non-destructively probing changes inside devices during operation<br><i>William Brant (Uppsala University)</i> |
| 15.30 | Modelling tools for analysis and characterization of batteries<br><i>Tommy Zavalis (RISE)</i>                                                 |
| 15.50 | Summary and conclusion                                                                                                                        |
| 16.00 | End of seminar                                                                                                                                |

**For any questions regarding the seminar, please contact:**

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Register here >>

**No later than December 7.**

Participation is free of charge for all participants, but registration is required.

*FunMat-II (Functional Nanoscale Materials) is a second generation competence center in material science. FunMat-II is focusing its efforts to three application areas: functional surfaces for cutting tools, fuel cells, and batteries. We obtain basic knowledge about materials behavior and the physics and chemistry of the synthesis processes, and design new materials with unique properties. Besides this, we study how the materials perform in specific applications. We study all aspects using combinations of theory, modeling, experiments, and field tests. The information obtained is generic and can be applied to a wide range of applications, which makes FunMat-II a true competence center in functional surfaces optimized at the nanoscale. For more information about FunMat-II: [www.funmat-ii.se](http://www.funmat-ii.se).*