CH-700(2)

Advanced electroanalytical chemistry (II session)

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Cursus	Sem.	Type
Chemistry and Chemical Engineering		Obl.

Language of teaching	English
Credits	1
Session	
Exam	Project report
Workload	30h
Hours	**28**
TP	28
Number of positions	

Frequency

Every year

Remark

Next time: November 2018

Summary

Experimental work: Preparation and characterization of electrodes by using inkjet printing. Scanning electrochemical microscopy with soft probes for reactivity imaging of electrodes and electrocatalysts.

Content

The practical work will be focused on the preparation of electrodes and electrocatalysts by using inkjet printing. The requirements for ink formulation and stable droplet jetting will be taught. The printed electrodes will be characterized by using standard electrochemical methods and scanning electrochemical microscopy with soft linear microelectrode arrays for high-throughput analysis.

Note

Next session: **November 2017 (block Sion)**

Keywords

Voltammetry, Electrochemical Sensors, Inkjet Printing, Electrodes, Electrocatalysts

Learning Prerequisites

Important concepts to start the course

Fundamental electrochemistry

Resources

Ressources en bibliothèque

- Analytical and physical electrochemistry / Girault

Notes/Handbook

Textbook recommended:"Analytical and Physical Electrochemistry" by H.Girault, EPFL Press, 2004.