

HITEC Methods Day

Title: In-situ/Operando Characterization of materials and processes

Date: 7 November 2017

Time: 9:00 – 17:00

Location: [Forschungszentrum Jülich](#) ► will be announced

A current major trend in analytics is the so called “in-situ” (under operation conditions) or “operando” (during real world operation) characterization of materials and processes. Also at the Forschungszentrum Jülich different groups develop and establish advanced technologies for in-situ/operando characterization.

This training course will provide basic information on the analytical techniques available in Jülich and its external laboratories and will discuss challenges and possibilities.

You will learn about:

- A basic understanding of the characterization techniques with their application range
- First basic ideas on the possibility of application of in-situ/operando characterization in your project will be discussed and may be initiated.

Contents:

- In-situ TEM
- In-situ LEEM-PEEM
- Neutrons for energy for operando characterization
- In-situ NMR
- Possibilities of JOSEPH
- AP-XPS

Who should attend:

HITEC Ph.D.-fellows;
Postgraduate-, Ph.D.- and postdoctoral fellows from the fields of energy and climate research

HITEC Days

HITEC Days are an inherent part of the graduate school Helmholtz Interdisciplinary Doctoral Training in Energy and Climate Research (HITEC). They devote a whole day to a method or a scientific topic with lectures and discussions. The methodological days serve to encourage scientific interdisciplinarity and will enable the PhD students to extend their range of methods with respect to their own scientific work. HITEC Days always end with a ‘Get together’, some snacks and drinks. HITEC Days are open for HITEC Ph.D. students and other interested young scientists.