

## HITEC Methods Day

**Title:** Spectroscopic Applications in Energy and Climate Research

**Date:** 29 October, 2014

**Time:** 9:00 – 16:30  
afterwards *get together* with snacks and drinks

**Location:** [Forschungszentrum](#) ► **Buildg. 2.16, Technikum (IEK-5)**

|               |                                                                                                                                                                                            |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00 – 9:05   | Welcome and Introduction                                                                                                                                                                   |
| 9:05 – 9:50   | Fundamentals of Optical Absorption and Emission Spectroscopy<br><i>Dr. Andreas Hofzumahaus, Forschungszentrum Jülich, IEK-8</i>                                                            |
| 9:50 – 10:35  | Ground Based Detection of Tropospheric Hydroxyl Radicals by Absorption and Fluorescence Spectroscopic Methods<br><i>Dr. Hendrik Fuchs, Forschungszentrum Jülich, IEK-8</i>                 |
| 10:35 – 11:05 | <b>Coffee break</b>                                                                                                                                                                        |
| 11:05 – 11:50 | Tomographic Retrieval of Atmospheric Trace Gas Concentrations from Infrared Spectra Taken by the Airborne Limb Imager GLORIA<br><i>Dr. Jörn Ungermann, Forschungszentrum Jülich, IEK-7</i> |
| 11:50 – 13:00 | <b>Lunch-break – at own costs for docs</b>                                                                                                                                                 |
| 13:00 – 14:00 | Lab Tour: Laser-Induced-Fluorescence and Laser-Absorption Instruments at the Atmosphere Simulation Chamber SAPHIR<br><i>Dr. Hans-Peter Dorn, Forschungszentrum Jülich, IEK-8</i>           |
| 14:00 – 14:30 | Coffee-break                                                                                                                                                                               |
| 14:30 – 15:10 | Spectroscopic Methods to Investigate Optoelectronic Properties of Solar Cell Materials<br><i>Thomas C.M. Müller, Forschungszentrum Jülich, IEK-5</i>                                       |
| 15:10 – 15:40 | Characterization of Plasma Spray Coating Processes by Optical Emission Spectroscopy<br><i>Dr. Georg Mauer, Forschungszentrum Jülich, IEK-1</i>                                             |
| 15:40 – 16:10 | Plasmaspectroscopy in Fusion Experiments<br><i>Dr. Wolfgang Biel, Forschungszentrum Jülich, IEK-4</i>                                                                                      |
| afterwards    | Get-together with snacks                                                                                                                                                                   |

### 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.