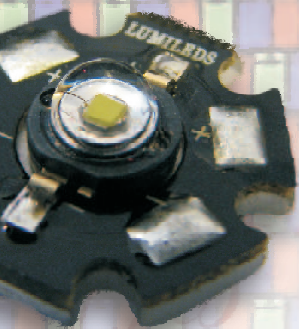


# Kronach Impedance Days 2012



## Photons

&

## Electrochemistry



### Theory

- Mathematical and physicochemical basics of EIS
- Impedance Models
- Modelling Photo-Electrochemical Transfer Functions
- Models for Processes with Mass Transport
- Basics of the Kramers-Kronig- and the Z-Hit algorithms

further topics: **batteries, supercaps,  
fuel cells, coatings, ...**

Seminar language: **English**

### Practical Courses

- Course 1:** EIS-Measurements and Data Processing Applied on a Fuel Cell Model
- Course 2:** From Measurements to Physical Parameters - Interpretation and Modelling of Electrochemical Impedance Spectra on the Example of a Battery Model
- Course 3:** Coating & Laminate Testing by Means of Combined AC & DC Methods
- Course 4:** Understanding Alternative Solar Cell Concepts – The Application of Intensity Modulated Photo Spectroscopy in Combination with EIS + FIT
- Course 5:** Appearance and Reality in Impedance Spectroscopy - Detection and Prevention of Artefacts in Impedance Measurements
- Course 6:** Combination and Automation of Electrochemical Techniques and Measurement Data Analysis by the Means of Script
- Course 7:** Extending the Scope of Electrochemical Experiments - Remote Control and the Implementation of Virtual Instruments
- Course 8:** Battery Cycling
- Course 9:** Photo Current Spectroscopy (CIMPS-pcs) on the Example of a Photoinduced Hydrogen Evolving Electrode
- Course 10:** Dynamic Electrochromic Transmittance / Reflectance (CIMPS-dtr)