

BALTIC SEA CATALYSIS INSTITUTE

Dinner Lecture:

**Prof. Jan-Dierk
Grunwaldt
(KIT)**

**“Tracking Catalysts
in Action”**

Block Course C

**“Analytics &
Spectroscopy
in Catalysis”**

Confirmed Speakers

Prof. Ralf Ludwig (Uni Rostock / IfCh)
Prof. Stefan Lochbrunner (Uni Rostock / IfPh)
Prof. Klaus Neymeyr (Uni Rostock / IfM)
Prof. Evgenii Kondratenko (LIKAT)
Prof. Robert Francke (LIKAT)
Prof. Torsten Beweries (LIKAT)
Prof. Raimund Horn (TU Hamburg)
Prof. Malte Behrens (Uni Kiel)
Prof. Udo Kragl (Uni Rostock / IfCh)
Dr. Ali Abdel-Mageed (LIKAT)
Prof. Björn Corzilius (Uni Rostock / IfCh)
Dr. Ibrahim Sadiek (INP Greifswald)
Dr. Marcel Wetegrove (INP Greifswald)
Dr. Christoph Kubis (LIKAT)
Dr. Stephan Bartling (LIKAT)
Dr. Maximilian Poller (Uni Hamburg)
Dr. Stefan Jopp (Uni Rostock / IfCh)
Michael Liebau (Uni Leipzig)
Dr. Oliver Vogt (Metrohm)



Lecture Hall 1

**Institute of
Chemistry**

**Rostock
University**

PROGRAM

Block Course C: “Analytics & Spectroscopy in Catalysis”

- Lectures and tutorials on *in situ*- and *operando* spectroscopic methods, characterization of catalysts, analysis of photo and electrocatalytic reactions, chemometric methods, process analytics
- Dinner lecture by a renowned scientist
- Excursion to *APEX Energy* in Laage
- BBQ Reception

Supported by:

IPI InProcess
Instruments

Analytical Solutions. Tailor-made.



Agilent



Metrohm

H2/APEX



Schedule



Monday, 26.8.

- 9:00 - 10:15 Arrival & registration
- 10:15 - 10:30 Welcome
- 10:30 - 11:45 **Prof. Torsten Beweries**, NMR Reaction Monitoring in Organometallic Chemistry and Homogeneous Catalysis: An Old Dog with New Tricks (LIKAT)
- 11:45 - 13:15 Lunch Break
- 13:15 - 13:30 Group Photo in front of Lecture Hall
- 13:30 - 14:45 **Prof. Björn Corzilius**, Solid State NMR Spectroscopy (Uni Rostock, IfPh)
- 14:45 - 15:00 Break
- 15:00 - 16:15 **Prof. Udo Kragl**, The need of good analytical data for process development of (bio)catalytic reactions (Uni Rostock, IfCh)
- 16:15 - 17:00 Break
- from 17:00 Barbeque Reception at LIKAT

Tuesday, 27.8.

- 9:00 - 10:15 **Prof. Ralf Ludwig**, IR-spectroscopic Analysis and Computational Modeling of Catalytic Intermediates (Uni Rostock, IfCh)
- 10:15 - 10:30 Break
- 10:30 - 11:45 **Dr. Christoph Kubis**, *In-situ* & *Operando* Raman Spectroscopy for the Study of Catalytic Reactions (LIKAT)
- 11:45 - 13:15 Lunch Break
- 13:15 - 14:30 **Prof. Raimund Horn**, Analytics & Spectroscopy in Catalytic Reactors (TU Hamburg)
- 14:30 - 14:45 Break
- 14:45 - 16:00 **Dr. Ibrahim Sadiq**, Advances and Challenges in Optical Diagnostics: From Single Wavelength to Frequency Comb Lasers (INP)
- 16:00 - 16:45 **Dr. Oliver Vogt**, Metrohm Spectroelectrochemical Instrumentation – How to Unite Electrochemistry and Spectroscopy
- 16:45 - 17:30 Break
- 17:30 - 20:00 Dinner Lecture: **Prof. Jan-Dierk Grunwaldt**, Tracking Catalysts in Action (KIT)

Wednesday, 28.8.

- 9:00 - 10:15 **Prof. Stefan Lochbrunner**, Investigation of Photosensitizers and Photocatalytic Processes Using Time-Resolved Spectroscopy (Uni Rostock, IfPh)
- 10:15 - 10:30 Break
- 10:30 - 11:45 **Prof. Klaus Neymeyr**, Spectral Data Analysis by Multivariate Curve Resolution Methods (Uni Rostock, IfM)
- 11:45 - 13:15 Lunch Break
- 13:15 - 14:30 **Prof. Malte Behrens**, Diffraction Methods for Catalyst Characterization (Uni Kiel)
- 14:30 - 15:45 **Prof. Robert Francke**, Combination of Spectroscopic and Electroanalytical Tools for the Analysis of Electrocatalytic Processes (LIKAT)
- 15:45 - 16:15 Coffee Break
- 16:15 - 18:00 **Dr. Stefan Jopp** (Uni Rostock) & **Michael Liebau** (Uni Leipzig), NFDI4Cat – Introduction to RDM in Catalysis-related Sciences

Thursday, 29.8.

- 9:00 - 10:15 **Dr. Stephan Bartling**, X-ray Photoelectron Spectroscopy: Theory, Experiment, and Practical Examples (LIKAT)
- 10:15 - 10:30 Break
- 10:30 - 11:45 **Dr. Ali Abdel-Mageed**, X-ray Absorption Spectroscopy - Fundamentals and Applications in Catalysis (LIKAT)
- 11:45 - 13:15 Lunch Break / Networking
- 13:15 - 14:30 **Dr. Marcel Wetegrove**, Analysis of Thin Films from High-entropy Alloys as Catalysts for AEM Electrolysis (INP)
- 14:30 - 15:45 **Prof. Evgenii Kondratenko**, Transient Methods in Heterogeneous Catalysis (LIKAT)
- 15:45 - 16:15 Coffee Break
- 16:15-17:30 **Dr. Maximilien Poller**, Combined Application of Analytical Methods for the Investigation of Homogeneous Catalysts Using the Example of Polyoxometalates (Uni Hamburg)

Friday, 30.8.

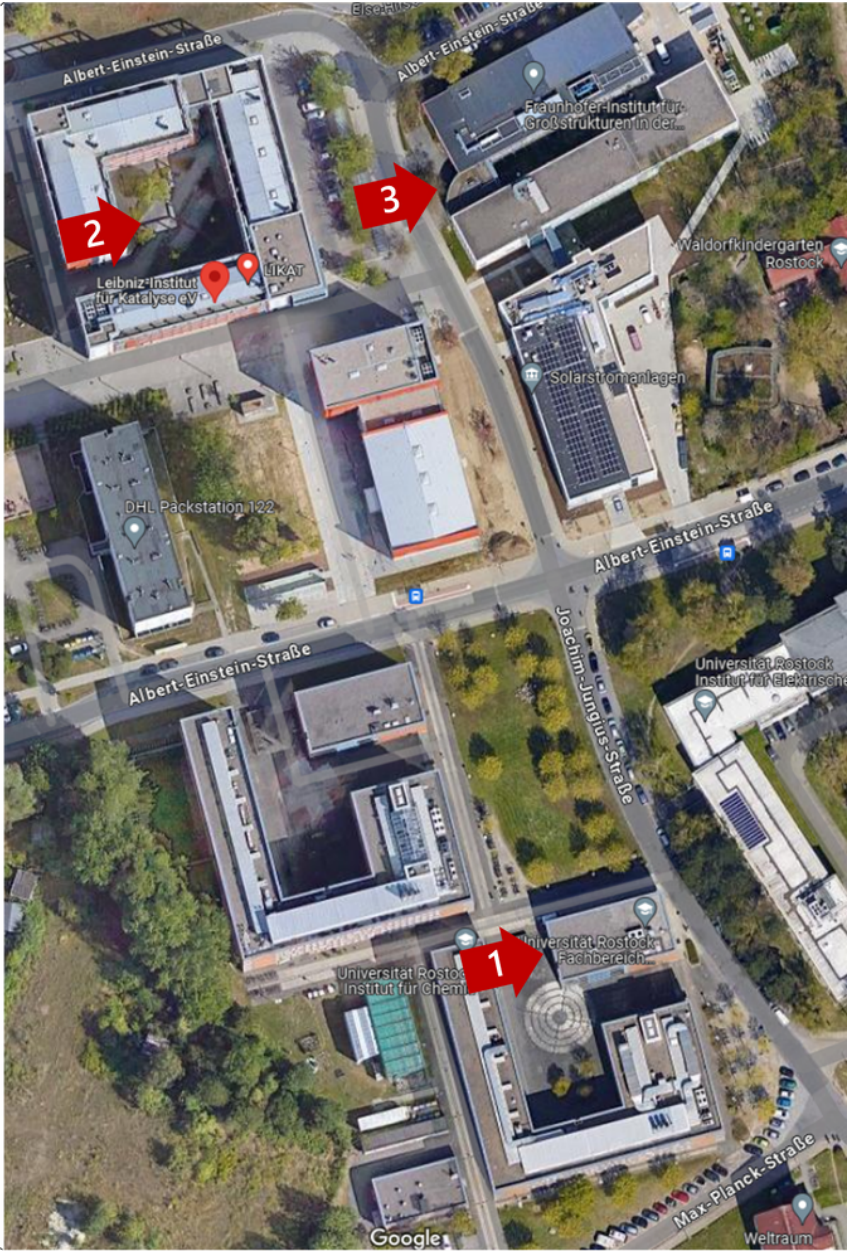
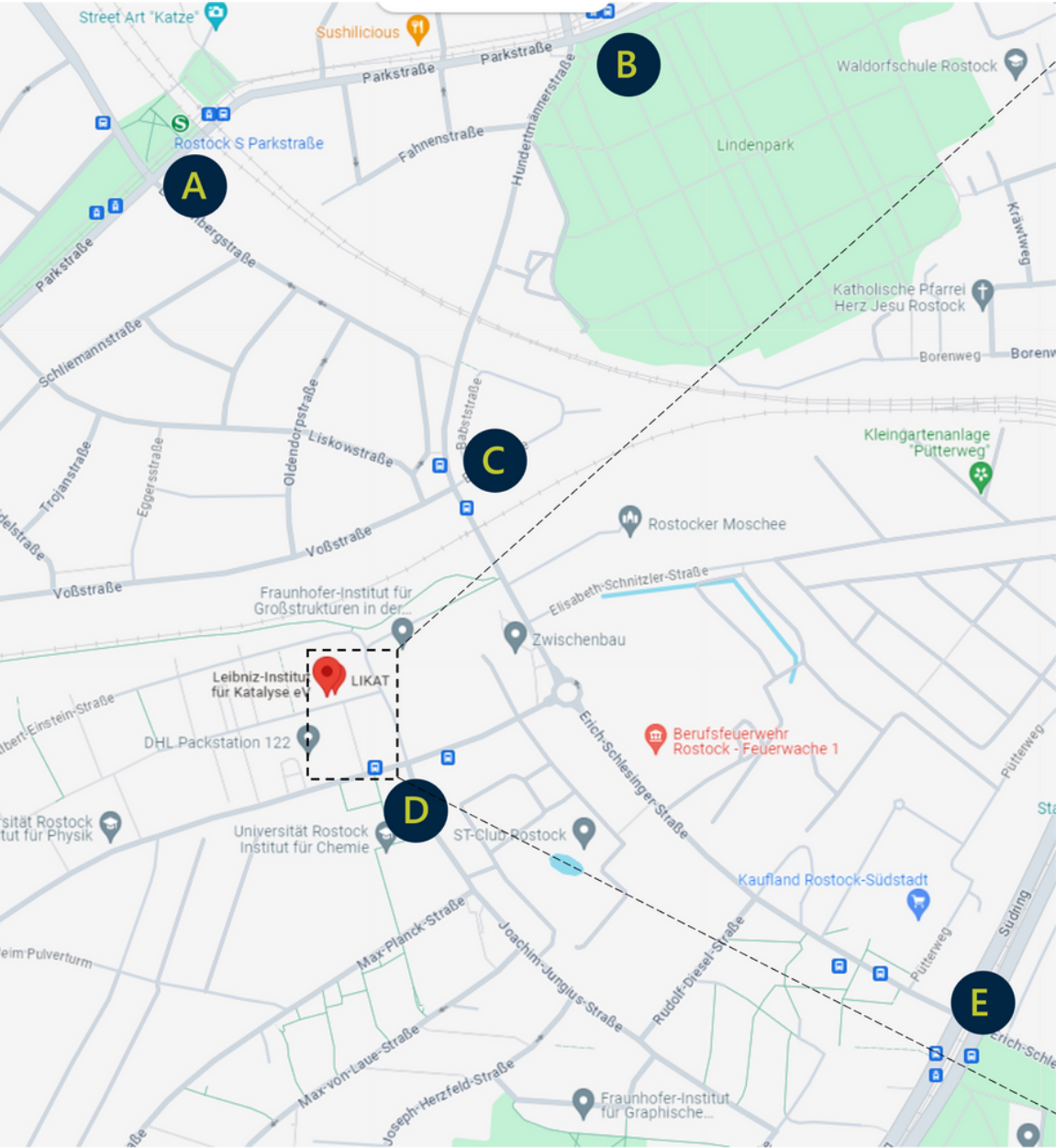
- 9:00 - 14:00 Excursion to APEX Energy, Laage
- 14:00 - 14:45 Departure



catalysis.de/ostseelehrverbund

	Monday 26.8.	Tuesday 27.8.	Wednesday 28.8.	Thursday 29.8.	Friday 30.8.
9:00 - 10:15	Arrival & Registration	Prof. R. Ludwig	Prof. S. Lochbrunner	Dr. S. Bartling	Excursion to APEX Energy in Laage
	Welcome	Break	Break	Break	
10:30 - 11:45	Prof. Torsten Beweries	Dr. C. Kubis	Prof. K. Neymeyr	Dr. A. Abdel-Mageed	
	Lunch Break & Networking		Lunch Break & Networking		
13:15 - 14:30	Photo Prof. B. Corzilius	Prof. R. Horn	Prof. M. Behrens	Dr. M. Wetegrove	Departure
	Break	Break			
14:45 - 16:00	Prof. U. Kragl	Dr. I. Sadiek	Prof. R. Francke	Prof. E. Kondratenko	
	Break	Dr. O. Vogt	Coffee Break	Coffee Break	
16:15 - 17:30		Break	Dr. S. Jopp & M. Liebau	Dr. M. Poller	
18:00 - 20:00	Barbeque	Dinner Lecture			

BALTIC SEA CATALYSIS INSTITUTE - BLOCK COURSE C



A Parkstraße
S-Bahn (1), Tram (3, 6), Bus (25, 27, 39)

B Saarplatz
Tram (3, 6), Bus (25, 27)

C Bei der Tweel
Bus (27)

D Joachim-Jungius-Str.
Bus (39)

E Erich-Schlesinger-Str.
Tram (3, 6), Bus (25, 27, 39)

- 1** Lectures: Lecture Building / IfCh
- 2** BBQ Reception: LIKAT (Center Court, Building 1)
- 3** Dinner Lecture: Fraunhofer IGP

Location

