

Preparation and Characterization of Organic Thin Films

When: Mo., 20.7.2015 – Fr., 24.7.2015, 9:15 – 17:00

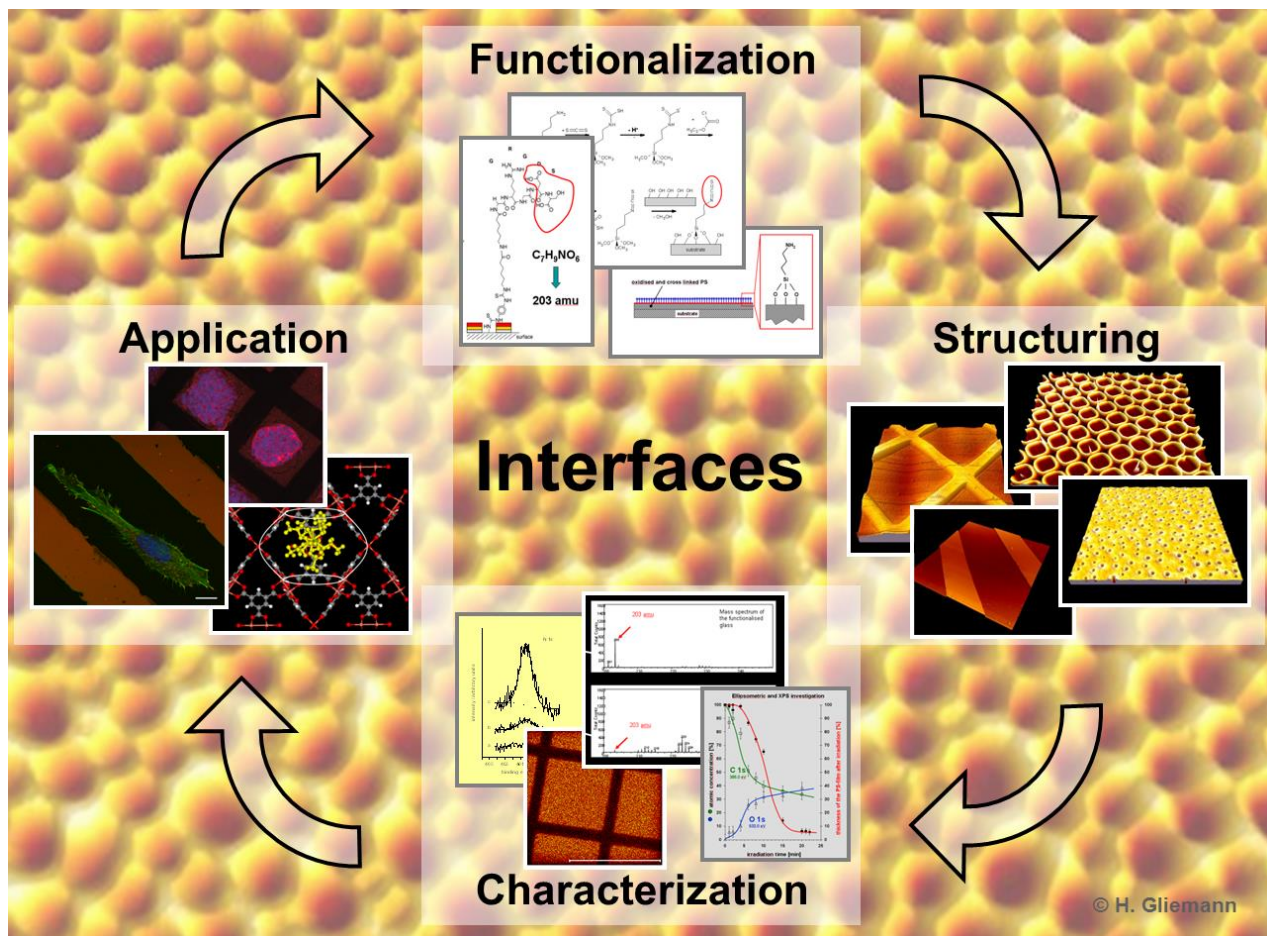
Where: 9:15 a.m. – 12.20 p.m. **CS / AOC 201 (theoretical part)**
2:00 p.m. – 5:00 p.m. **CN / Building 330 (practical part)**

Please notice the changed location for the theoretical part!!

The course is designed for advanced students with a Bachelor in chemistry. Different methods for the preparation and structuring of organic thin films on metal and oxidic surfaces as well as different techniques for the (site-selective) surface characterization will be discussed. The theoretical introduction in the morning will be followed by a practical part in the afternoon. The course will be given in English language.

Registration via e-mail is necessary! Please contact : hartmut.gliemann@kit.edu

Registration deadline: Friday, 10.7.2015



Preliminary programm

Please notice the change in the location for the theoretical part

Lectures will be given at Camus South / Room 201 / Building 30.45

The Practical part will take place in the labs of IFG / Campus North

| Monday, 20.7.2015 | | |
|-------------------|--|--|
| Morning (CS) | Introduction Self Assembled Monolayers (SAMs) Structuring of substrates and SAMs | |
| Afternoon (CN) | P: (preparation of stamps), SAMs on Au samples, μ CP | |

| Friday, 24.7.2015 | | |
|-------------------|-------------------------------------|--|
| Morning (CS) | XPS ToF-SIMS | |
| Afternoon (CN) | P: XPS P: ToF-SIMS | |

| Tuesday, 21.7.2015 | | |
|--------------------|---|--|
| Morning (CS) | QCM-D, SPR Vibrational spectroscopy methods | |
| Afternoon (CN) | P: loading, or SAM formation with QCM-D / evaluation | |

| Wednesday, 22.7.2015 | | |
|----------------------|--|--|
| Morning (CS) | STM, AFM, SEM Ellipsometry | |
| Afternoon (CN) | P: AFM and IR on (patterned) SAMs | |

| Thursday, 23.7.2015 | | |
|---------------------|---|--|
| Morning (CS) | Metal-Organic Frameworks XRD | |
| Afternoon (CN) | P: Preparation of SURMOFs (spray) P: XRD on SURMOFs / evaluation | |

Time table:

Seminar room AOC 201 (CS)

1 st morning session 9:15 - 10:45

Break: 10:45 – 11:00

2nd morning session 11:00 – 12:20

KIT shuttle CS → CN 12:30 – 12:50

Lunch break: 12:50 – 14:00

Seminar room IFG (CN)/Building 330/Room 356

Practical Part: 14:00 – 17:00