

## METHOD COURSE ON "CHEMICAL PHOTOCATALYSIS"

### COURSE INSTRUCTORS:

**Prof. Dr. Bernhard Dick** (Institute of Physical Chemistry)  
**Prof. Dr. Ruth Gschwind** (Institute of Organic Chemistry)  
**Prof. Dr. Burkhard König** (Institute of Organic Chemistry)  
**Prof. Dr. Axel Jacobi von Wangelin** (Inst. of Organic Chemistry)  
**Dr. Robert Kretschmer** (Institute of Inorganic Chemistry)  
**Prof. Dr. Arno Pfitzner** (Institute of Inorganic Chemistry)  
**Prof. Dr. Oliver Reiser** (Institute of Organic Chemistry)  
**Prof. Dr. Robert Wolf** (Institute of Inorganic Chemistry)

### COURSE PROGRAM:

*all lectures and talks will take place in seminar room CH 21.1.14*

### MONDAY, OCTOBER 24<sup>TH</sup>

- 9:00 Reception** / International Office  
'Welcome to the Universität Regensburg!'  
(meeting point: Welcome Centre UR)
- 11:00 Lecture 1**  
Prof. Dr. Burkhard König:  
'Basic Concepts in Photophysics'
- 12:00 Lunch Break**
- 14:00 Guided Tour through the Department**  
PhD students of the department:  
'Welcome to the Chemistry Department of the UR'  
(meeting point: foyer of the chemistry building)
- 15:15 Lecture 2**  
Prof. Dr. Bernhard Dick:  
'Flash Photolysis and Transient Spectroscopy'
- 16:15 Lecture 3**  
Prof. Dr. Burkhard König:  
'Classics Reactions in Photochemistry'
- 18:00 Guided Tour through the City Centre and Dinner**  
International Office:  
'Welcome to Regensburg'  
(meeting point: to be announced)

### TUESDAY, OCTOBER 25<sup>TH</sup>

- 9:00 Lecture 4**  
Prof. Dr. Burkhard König:  
'Basic Concepts and Practical Issues in Photoredox Catalysis'
- 10:00 Short Talks of the Student Participants**
- 12:00 Lunch Break**
- 14:00 Practical Course (2 groups)**  
Prof. Dr. Robert Wolf / Dr. Robert Kretschmer:  
'Spectro-Electrochemistry' or 'EPR- Spectroscopy'  
(Seminar Room CH 13.1.80 or CH 13.3.12)
- 16:30 Lecture 5**  
Prof. Dr. Burkhard König:  
'Proton-Coupled Electron Transfer in Photoredox Catalysis'
- 17:30 Lecture 6**  
Prof. Dr. Robert Wolf:  
'Coupled Photoredoxcatalysis'

### WEDNESDAY, OCTOBER 26<sup>TH</sup>

- 9:00 Lecture 7**  
Prof. Dr. Ruth Gschwind:  
'Mechanistic Aspects of Photocatalysis by NMR-Spectroscopy'
- 11:00 Lecture 8**  
Prof. Dr. Burkhard König:  
'Photooxidation of Alkenes and Inorganic Anions'
- 12:00 Lunch Break**
- 14:00 Short Talks of the Student Participants**
- 16:15 Lecture 9**  
Prof. Dr. Axel Jacobi von Wangelin:  
'Industrial Photochemistry & Reactor Design'
- 17:15 Lecture 10**  
Prof. Dr. Axel Jacobi von Wangelin:  
'Photon Up-conversion and Two-photon Processes'

### THURSDAY, OCTOBER 27<sup>TH</sup>

- 9:00 Lecture 11**  
Prof. Dr. Oliver Reiser:  
'Controlling Selectivity in Photocatalytic Processes'
- 10:00 Practical Course (2 groups)**  
Prof. Dr. Robert Wolf / Dr. Robert Kretschmer:  
'Spectro-Electrochemistry' or 'EPR- Spectroscopy'  
(Seminar Room CH 13.1.80 or CH 13.3.12)
- 12:00 Lunch Break**
- 14:00 Lecture 12**  
Prof. Dr. Arno Pfitzner:  
'Heterogeneous Photocatalysis for Organic Synthesis'
- 15:00 Individual interviews with professors**
- 16:30 Lecture 13**  
Prof. Dr. Burkhard König:  
'Photocatalytic sp<sup>2</sup>-sp<sup>2</sup> Cross-Coupling Reactions'

### FRIDAY, OCTOBER 28<sup>TH</sup>

- 9:00 Lecture 14**  
Prof. Dr. Oliver Reiser:  
'Non noble Metal Photocatalysts'
- 10:00 Lecture 15**  
Prof. Dr. Burkhard König:  
'Future Challenges in Photocatalysis'
- 11:00 Closing Remarks**



The **international PhD program at the University of Regensburg (iPUR)** aims to establish a structured and international post-graduate training at the **Faculty of Biology and Pre-clinical Medicine** and at the **Faculty of Chemistry and Pharmacy** of the University of Regensburg (UR).

The essential goal of the **iPUR** project is to stimulate and foster research stays of foreign PhD students at the participating faculties at the UR and of PhD students from the UR abroad. By means of customized information and recruitment we intend to rise the percentage of excellent foreign students who successfully accomplish their PhD at the University of Regensburg.



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Further information and latest news on the program can be found here:

[www.ipur-regensburg.de](http://www.ipur-regensburg.de)



**2ND iPUR METHOD COURSE**

ON

**„CHEMICAL PHOTOCATALYSIS“**



**OCTOBER 24<sup>TH</sup> – 28<sup>TH</sup>, 2016**

**UNIVERSITÄT REGENSBURG / GERMANY**

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