# Hochschule trifft Industrie 2024

Olivier Loiseleur (Syngenta), Patrick Isenegger (Syngenta), Franziska Thomas (Heidelberg University), Adrián Gómez Suárez (Wuppertal University), Golo Storch (Technical University of Munich)

### Wednesday, September 25th 2024

Until 11:30 am: Check-In at Hotel Goldener Knopf, Rathausplatz 9, 79713 Bad Säckingen

- **11:30** Walk from Hotel → Syngenta
- 12:00 Registration
- 12:30 Lunch/Get-together
- 13:30 Welcome

### Session 1 (Chair Michel Rickhaus)

- **13:35 Jaspreet Kaur, Barham Lab** Autophotocatalysis: unveiling a self-synthesizing library of generally applicable reductive organophotoredox catalysts
- 14:00 Oleg Borodin, Boehringer Ingelheim Pharma GmbH & Co. KG Illuminating Medicinal Chemistry: Exploration of the Parameter and Chemical Space in Photoredox C(sp2)-C(sp3) Cross-Coupling Reactions
- 14:25 Coffee Break

## Session 2 (Chair Dmitry Katayev)

- **14:40** Yu Zhang , Jessen-Trefzer Lab Engineering encapsulins for targeted enzyme prodrug therapy in cancer treatment
- **15:05 Timo Heinrich, Merck KGaA** TEAD Selectivity Investigations – A Structure Guided Approach

### Session 3 (Chair Adrián Gómez Suárez)

- 15:30 Subrata Patra, Katayev Lab Molecular Design Using Catalytic Radical Nitration
- 15:55 Stefan Eissler, Bachem AG Large-Scale Peptide Manufacturing at Bachem
- 16:20 Coffee Break

### Session 4 (Chair Cathleen Zeymer)

- **16:35 Marius Werner, Thomas Lab** Engineering MHC recognition and biological kinetics of peptides by novel chemistry
- **17:00 Jan Schütz, DSM-Firmenich** Advancing Flow Chemistry in the Fine Chemical Industry: A Photocatalytic Perspective
- **17:25 Tim Langschwager, Storch Lab** Photocatalytic addition reactions of masked functional groups to dehydroalanines by flavin catalysis
- **18:00** Walk from Syngenta  $\rightarrow$  Hotel
- 19:00 Dinner

### Thursday, September 26th 2024

- 8:30 Walk from Hotel → Syngenta
- **9:00** Rebecca Buller, Zurich University of Applied Sciences Engineering protein catalysts for synthetic applications
- 9:50 Coffee Break

### Session 5 (Chair Jola Pospech)

# 10:05 Benedikt Nißl, Konrad Lab A biomimetic synthesis of tetrodotoxin enabled by high-throughput C-H functionalization screenings 10:30 Denis Gribkov, Syngenta Crop Protection PLINAZOLIN® technology. Striving for sustainable future Session 6 (Chair Agnieszka Nowak-Król)

- **10:55** Jannik Thaens, Pospech Lab C-H bond oxygenation through photo-mediated oxidative radical-polar cross-over
- **11:20 Hergen Schultze and Bernd Schäfer, BASF SE** Artificial Intelligence for Reaction Optimization
- 11:45 Lunch

### Session 7 (Chair Johannes Wahl)

- 13:00 Patrick Geppert, Nowak-Król Lab Azaborole-containing diarylethene photoswitches
- 13:25 Claudio Bomio, Novartis Adventures in Atropisomerism Identification and Optimization of a Novel Class of KRASG12C Inhibitors: Discovery of JDQ443
- **13:50 Sebastian Govaerts, Gómez Suárez Lab** Synthesis of C(sp3)-rich Amine-Containing Building Blocks via Electrophilic (Spiro)cyclopropanes
- 14:20 Site Visit (#1)
- 15:00 Site Visit (#2)
- 16:30 Poster Session
- 18:00 Dinner
- **20:00 Helma Wennemers, ETHZ, Switzerland** Asymmetric Peptide Catalysis – From Simple to Complex Environments
- 22:15 Walk from Syngenta → Hotel

### Friday, September 27th 2024

8:30 Walk from Hotel → Syngenta

### Session 8 (Chair David Konrad)

- **9:00** Marlene Arnold, Wahl Lab Synthesis and application of axially chiral cyclobutanone oxime esters for the preparation of chiral cyclopropanes
- 9:25 Elisabeth Speckmeier, Sanofi High-Throughput Approaches in Modern Medicinal Chemistry

### Session 9 (Chair Claudia Jessen-Trefzer)

- 9:50 Srishti Ballabh Bahukhandi, Zeymer Lab Expanding the enzymatic photoredox repertoire with PQQ-dependent dehydrogenases
- **10:15 Paolo Tosatti, F. Hoffmann-La Roche** Second-generation manufacturing process of Migoprotafib
- 10:40 Coffee Break

### Session 10 (Chair Joshua Barham)

- **10:55 Ludmilla Sturm, Rickhaus Lab** Unlocking Supramolecular Synthesis? The Strategic Design of Curved Polyaromatics For Self-Assembly
- **11:20** Dr. Frank Wetterich, Bayer AG Development principles for Pharmaceutical Drug Substance Manufacturing with Rogaratinib as case study
- 11:45 Poster Prize HTI 2024
- 12:00 HTI 2026 Announcement and Closing Remarks
- 12:15 Lunch to Go
- 12:30 Walk from Syngenta → Hotel