

## LOCATION

### Fraunhofer-Forschungscampus

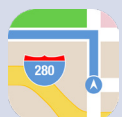
Fraunhofer-Platz 1  
Vorstadt 21  
91344 Waischenfeld



## DIRECTIONS

From the A73, take the Forchheim-Süd exit, follow the B470 towards Muggendorf. In Muggendorf, turn left, follow the main road, then turn left towards Doos. In Doos, turn left towards Waischenfeld, and in Waischenfeld follow the signs for „Fraunhofer IIS“.

From the A9, take the Trockau exit, follow the St2184 towards Ahorntal, and in Frei-ahorn turn left towards Waischenfeld. The research campus is 50 meters on the right after entering the town.



## CONTACT

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Friedrich-Alexander-Universität  
Erlangen-Nürnberg

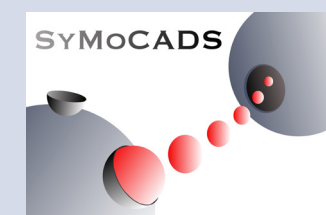
### RTG 2950 SyMoCADS

**Synthetic Molecular Communications Across Different Scales: From Theory to Experiments**

## 1<sup>st</sup> RTG RETREAT

July, 15–16 2024

Fraunhofer-Forschungscampus,  
Waischenfeld



# PROGRAM

Monday, July 15<sup>th</sup>

09:00–09:30 CHECK IN

09:30–10:30 **Opening and SyMoCADS Introduction**  
*Prof. Robert Schober*  
*Prof. Kathrin Castiglione*  
*PD Dr. Anna Maria Becker*

## Cluster 1

10:30–10:50 **P1: Nanodevices for MC-Based Sensing and Control in Microliter-scale Bioreactors**  
*Lea Erbacher*

10:50–11:10 **P2: Design and Characterization of Protein Modules for MC-Based Sensing and Control in Microliter scale Bioreactors**  
*Silvana Smilla Zurmühl*

11:10–11:30 **P3: MC-based Modelling, Monitoring, and Control of Microliter-scale Bioreactors**  
*Teena tom Dieck*

## Cluster 2

11:30–11:50 **P4: Forces, Limitations, and Concepts for SPION Steering**  
*Keyu Xiao*

11:50–13:00 LUNCH BREAK

13:00–13:20 **P5: Lumped-Parameter Model for and Optimization of SPION Steering in Highly Branched Vascular and Tissue Structures**  
*Luiz Wille*

13:20–13:40 **P6: Development of Tumor Models for MC based on Additive Manufacturing Approaches**  
*Daniel Fleischhauer*

## Cluster 3

13:40–14:00 **P7: Transmitter Systems for Releasing and Sending Airborne MC Signals as “Odor Objects”**  
*Sümeyye Yilmaz*

14:00–14:20 **P8: Receiver Architectures for Information Recovery from Airborne MC Signals**  
*Kaikai Zhu*

14:20–14:40 **P9: Theoretical Modelling, Design, and Analysis of Olfaction-inspired Molecule-Mixture Communications**  
*Bastian Heinlein*

## Cross-cluster Postdoctoral Project

14:40–15:00 **P10: Task-oriented and Environment-dependent Modelling, Analysis, and Design of MC Systems**  
*Dr.-Ing. Sebastian Lotter*

15:00–15:30 COFFEE BREAK

15:30–17:00 **Poster Session – Connected Research Projects**  
*SyMoCADS Associates*

17:00–18:00 **Election of Young Researchers’ Spokesperson and Women’ Representative/PA Meeting**

19:00 DINNER

# PROGRAM

Tuesday, July 16<sup>th</sup>

08:00–09:00 BREAKFAST

09:00–10:00 **SyMoCADS Research Data Management**  
*Prof. Vahid Jamali*  
*Prof. Jens Kirchner*  
*Prof. Heinrich Sticht*

10:00–12:00 Team Building

12:00–13:00 LUNCH BREAK

13:00–16:00 SyMoCADS Hike

16:00–16:30 COFFEE BREAK

16:30 DEPARTURE

