



**International network for
"Experimental Science of Non-model Microorganisms"**

Date: May 12th (Tue), 2026
Venue: SYNMIKRO Lecture Hall
Organizer: Jan Schuller, Georg Hochberg, Tomohiro Watanabe
Honored Guest: Prof. Dr. Rudolf Thauer (Professor Emeritus, MPI Marburg),
Dr. Seigo Shima (MPI Marburg)



13:00 Jan Schuller – SYNMIKRO, Philipps-University Marburg
Opening Remarks
Anke Becker – Director of SYNMIKRO, Philipps-University Marburg
Welcome Speech

Session Chair: Jan Schuller

13:15 Tomohiro Watanabe – ILTS, Hokkaido University
Experimental science of non-model microorganisms

13:30 Yueran Zhao – ILTS, Hokkaido University
Proposing a putative protein mega-complex coupling CO₂ Reduction with flavin-based electron bifurcation from a sulfur-disproportionating bacterium

14:00 Erik Zimmer – SYNMIKRO, Philipps-University Marburg
Using integrative structural biology to decipher the dynamic structure of the methanogenic acetyl-CoA decarbonylase/synthase

14:30 Sofia Appelgren – Philipps-University Marburg
Structural phylogenetics to illuminate the origin of respiration

15:00 Coffee Break

Session Chair: Georg Hochberg

15:30 Nozomi Yamauchi – ILTS, Hokkaido University
Sulfur oxidation by Hdr-like system involved in a novel sulfur transferase

16:00 Fidel Ramírez-Amador – Philipps-University Marburg
Atypical binding modes in a sulfur oxidizing Hdr-like system

16:30 Mustafa Rasim Törer – Philipps-University Marburg
Evolution of electron bifurcation and heterodisulfide reduction in the HDR family