

New Frontiers in Natural Product Chemistry

7-8 May 2025, IAMO, Halle (Saale)

Wednesday, May 7, 2025

16:00 - 17:00 Registration, Coffee and Snacks

EVENING LECTURE

Chair: Ludger Wessjohann

17:00 - 18:00 **Young Hae Choi**, Leiden University, The Netherlands
NMR-based metabolomics for chemical fingerprinting and profiling of medicinal plants: a platform for bioactivity-prediction

Thursday, May 8, 2025

Session I BIOSYNTHETIC ENZYMES

Chair: Martin Dippe

09:00 - 09:45 **Robert Kourist**, Graz University of Technology, Austria
Enzyme engineering for the synthesis of biobased olefins

09:50 - 10:35 **Rebecca Goss**, University of St. Andrews, UK
Precision modification of natural products: Engineering biology meets synthetic chemistry

10:35 - 11:00 Coffee Break

Session II SPECIALIZED METABOLISM

Chair: Mohamed Nagia

11:00 - 11:45 **Fanny Roussi**, CNRS Paris-Saclay, France
Specialized plant metabolites: an invaluable gem for medicinal chemistry and chemical biology

11:50 - 12:35 **Lena Barra**, University of Konstanz, Germany
Natural product and enzyme discovery in non-canonical biosynthetic pathways

12:35 - 13:30 Lunch Break

Session III NATURAL PRODUCT DISCOVERIES IN THE SPOTLIGHT OF AI

Chair: Mehdi Davari

13:30 - 14:15 **Nadine Ziemert**, University of Tübingen, Germany
Deciphering bacterial natural product diversity through computational genomics

14:20 - 15:05 **Eric Helfrich**, University of Frankfurt, Germany
Artificial intelligence-based expansion of natural product biosynthetic space

15:05 - 15:30 Coffee Break

Session IV NATURAL PRODUCT SYNTHESIS

Chair: Bernhard Westermann

15:30 - 16:15 **Philipp Heretsch**, Leibniz University Hanover, Germany
Navigating the landscape of cycloartane-derived carbocations

16:20 - 17:05 **Fabian Pfrengle**, BOKU University Vienna, Austria
Synthetic carbohydrate chemistry as a basis for plant cell wall biosynthesis

