Program The 5th LPMO Symposium, Vienna

Thursday, 19 November 2026

08:30 - 09:00	**Registration and refreshments**
09:00 - 09:10	**Welcome and organizational remarks**
09:10 - 11:20	**SESSION 1: Catalytic mechanisms and functional characterization**
09:10 - 09:50	Keynote lecture: **On the functional characterization of LPMOs** Vincent G.H. Eijsink (Norwegian University of Life Sciences, Ås, Norway)
09:50 - 10:20	**Catalase-like reaction by LPMOs enables reductant independent degradation of cellulose** Priit Väljamäe (Tartu University, Estonia)
10:20 - 10:40	**Early stages of the peroxidase reaction of the NcAA9C LPMO studied by stopped-flow and rapid freeze-quench** Gabriele Deplano (Max Planck Institute, Mühlheim an der Ruhr, Germany)
10:40 - 11:00	**Remote but ruling: LPMO reactivity under the control of second sphere residues** Nathan Montmailler (Norwegian University of Life Sciences, Ås, Norway)
11:00 - 11:20	**Insights into how LPMOs protect themselves from self-destruction: hole hopping routes and histidine methylation** Tom Z. Emrich-Mills (Norwegian University of Life Sciences, Ås, Norway)
11:20 - 12:30	**Coffee break and poster session**
12:30 - 12:45	**Group photo**
12:45 - 13:45	**Lunch break**
13:45–15:45	**SESSION 2: Biotechnological applications and polysaccharide modification**
13:45 - 14:15	Session opening lecture: **Advancing the use of LPMOs in biomass valorisation: leveraging redox control and substrate specificity** Aniko Varnai (Norwegian University of Life Sciences, Ås, Norway)
14:15 - 14:45	**AA17 lytic polysaccharide monooxygenases: oxidative cleavage of methyl-esterified homogalacturonan** Mirjam Kabel (Wageningen University, The Netherlands)
14:45 - 15:15	**Characterizing the oxidative repertoire of the model green alga *Chlamydomonas reinhardtii*** Aidan Salter (University of York, United Kingdom)
15:15 – 15:45	**Integrating electrochemistry into the LPMO enzyme discovery toolkit** Connor Miles (University of York, United Kingdom)

15:45 - 16:15 **Coffee break**

16:15 - 17:45 **SESSION 3: Theoretical and computational insights into LPMO catalysis**

16:15 - 16:45 Session opening lecture: **Computational exploration of LPMO polysaccharide oxidation: pitfalls and conclusions so far**
Erik D. Hedegård (University of Southern Denmark, Odense, Denmark)

16:45 - 17:15 **Unravelling the LPMO reaction mechanism using QM MM simulations**
Dominik Hörtnagel (BOKU University, Vienna, Austria)

17:15 - 17:45 **Computational approaches to characterize LPMOs: from family-wide overview to active site details.**
Katarzyna Szleper-Shendy (Silesian University of Technology, Gliwice, Poland)

19:00 **Conference dinner and poster awards**

Friday, 20 November 2026

08:30 - 09:00	**Refreshments**
09:00 - 11:10	**SESSION 4: Structural insights into LPMOs**
09:00 - 09:40	Session opening lecture: **Not just for biomass: structure and function of the *Cryptococcus neoformans* virulence factor Cel1, a lytic polysaccharide monooxygenase** Leila Lo Leggio (University of Copenhagen)
09:40 - 10:10	**Structure-guided deep learning reveals five novel LPMO-like families and the first cellulose-active LPMO in algae** Daniel Leadbeater (University of York, United Kingdom)
10:10 - 10:40	**Exploring the structural mechanism of the lytic polysaccharide monooxygenase reaction: reaction priming and substrate binding** Christos Kosinas (University of Copenhagen, Denmark)
10:40 - 11:10	***De novo* designed β-hairpin peptides as LPMO mimics** Luisa Ciano (University of Nottingham, United Kingdom)
11:10 - 11:40	**Coffee break**
11:40–12:40	**SESSION 5: LPMO Architecture: Modularity, CBMs and non-catalytic domains**
11:40 - 12:10	Session opening lecture: **Insight into the function of disordered C-terminal regions in LPMOs** Jean-Guy Berrin (INRAE, Aix-Marseille Universtiy, France)
12:10 - 12:40	**Copper beyond the active site: discovery of metal-binding domains in LPMOs** Zarah Forsberg (Norwegian University of Life Sciences, Ås, Norway)
12:40 - 13:40	**Lunch break**

13:40 - 15:40 **SESSION 6: LPMOs in plant–pathogen interactions and plant cell wall degradation**

13:40 - 14:10	Session opening lecture: **Exploring the role of AA10 LPMOs in fungal plant pathogens** Bastien Bissaro (INRAE, Aix-Marseille Universtiy, France)
14:10 - 14:40	**From AA17 LPMOs to oxidative glycan editing: exploring the interplay of *Phytophthora* enzymes** Federico Sabbadin (University of York, United Kingdom)
14:40 - 15:10	**Not all LPMOs are made equal: secretome adaptation to scavenge ROS in *N. crassa* grown under photoredox stress** Constance Padoan (Université Libre de Bruxelles, Belgium)
15:10 - 15:40	**Functional diversification of AA17 LPMOs reveals multiple polysaccharide-oxidising activities in plan-pathogenic oomycetes** Sune Fjermedal (The Technical University of Denmark, Lyngby, Denmark)

15:40 **Closing remarks**