Tuesday May 6th 2025 - Day 1

- 09:00 to 09:20 Registration and Welcome Coffee
- 09:20 to 09:30 Welcome & Introduction

Chair TBA

- 09:30 to 10:10 Wolfgang Zimmermann Biocatalytic degradation of plastics
- <u>10:10 to 10:50 Vicent Moliner Towards to computational assisted (re)design of new</u> enzymes for the recycling and upcycling of synthetic polymers
- 10:50 to 11:20 Coffee Break
- <u>11:20 to 12:00 Georg Künze Computational engineering of polyester hydrolase Leipzig 7</u> for efficient PET depolymerization under low buffer concentrations
- <u>12:00 to 12:40 Federica Bertocchini Plastic degradation by wax worm enzymes:</u> <u>molecular insights from structural analysis</u>
- 12:40 to 14:00 Lunch Break + Poster Set Up

Chair TBA

- <u>14:00 to 14:40 Cristiano Varrone Challenges in scaling up bioprocess for chemo-</u> enzymatic depolymerization and upcycling of plastic waste
- <u>14:40 to 15:20 Belén Taroncher Ruiz Enzymatic Plastic Recycling: From Research to</u> Industrial Application – Opportunities and Success Stories.
- 15:20 to 16:00 Coffee Break + Poster Session
- 16:00 to 17:00 Contributed Talks
- <u>16:00 to 16:20 Ania Di Pede Mattatelli A new life for plastic bottles: Novel</u> <u>computational approaches for the development of new bio-catalysts for plastic-degradation</u>
- <u>16:20 to 16:40 Dominique Rocher Enzymatic Hydrolysis of Bioplastics and Development</u> of Scalable End-of-Life Solutions for Mixed Waste Streams
- <u>16:40 to 17:00 NITISH JEYARAJ SUJA Investigation of Temperature Effects on PETase</u> and its Engineered Variants
- 17:00 to 17:30 Panel Discussion
- 17:30 to 18:30 Aperitif

Wednesday May 7th 2025 - Day 2

Chair TBA

• <u>08:45 to 09:25 - Peter Westh - Can kinetic analyses nourish the meeting of computations</u> and experiments

- <u>09:25 to 10:05 César A. Ramírez-Sarmiento Designing Novel Polyethylene</u> <u>Terephthalate Hydrolases using Deep Learning</u>
- <u>10:05 to 10:45 Diego Jimenez Engineering soil microbiomes to transform polyethylene</u>
 <u>terephthalate</u>
- 10:45 to 11:15 Coffee Break + Poster Session
- <u>11:15 to 11:55 Erik Butenschön Solution- and solid-state NMR approaches to explain</u> <u>enzymatic PET degradation</u>
- 11:55 to 12:35 Guy Lippens NMR studies of an improved PETase

Lunch Break (12:35 to 14:00)

Chair TBA

•	14:00 to 14:40 - Birgit Strodel - Investigating PETase Binding Dynamics for Enhanced PET
	Degradation
•	14:40 to 15:20 - Nicolas Panel - Computer-aided engineering of enzymes for plastic
	depolymerization : the case of PLA-depolymerases
•	15:20 to 16:00 - Coffee Break + Poster Session
•	16:00 to 17:00 - Contributed Talks
•	16:00 to 16:20 - Miquel A. Maria-Solano - An allosteric perspective on PET degrading
	enzymes
•	16:40 to 17:00 - Alessia De Piero - Development of Automated Workflows for
	Biodegradability Modeling
•	16:20 to 16:40 - Registration
•	17:00 to 17:30 - Breakout Sessions
•	20:30 to 00:00 - Social dinner

Thursday May 8th 2025 - Day 3

Chair - Francesco Colizzi

- 09:00 to 09:40 Sierin Lim PET Biodegradation: The Enzyme and the Process
- 09:40 to 10:20 Pedro A. Fernandes Computational studies on plastic biodegradation
- <u>10:20 to 11:00 Eva Garcia Ruiz Harnessing evolution for enhanced PET biodegradation.</u>
- 11:00 to 11:20 Coffee Break
- <u>11:20 to 12:00 Gianluca Molla Beyond Recycling: Harnessing Evolved PET Hydrolases</u> in Enzymatic Cascades to Capture and Upcycle Elusive Plastic Waste

- 12:00 to 12:40 Lucia Gardossi The potential of biocatalysis for the eco-design of new biodegradable sustainable polymers
- 12:40 to 14:00 Lunch Break

Chair TBA

- 14:00 to 14:40 Peter Fojan Plastic depolymerisation with de novo designed proteins
- <u>14:40 to 15:20 Onur Turak Expanding the PETase sequence space</u>
- <u>15:20 to 16:00 Thomas Bayer Identification and engineering of promiscuous amidases</u> for the depolymerization of plastics
- 16:00 to 16:30 Coffee Break
- 16:30 to 17:30 Contributed Talks
- 17:30 to 18:30 Breakout Sessions
- 18:30 to 19:00 Closing Word

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