



Agenda MC and WG meeting

April 24-26, Zagreb, Croatia

| Time | Thu / 25.4 | Fri / 26.4 |
|-------------|---|---|
| 9.00-9.30 | Registration | |
| 9.30-10.00 | Welcome by the Action Chair and LO | |
| 10.00-10.30 | | WG3 |
| 10.30-11.00 | WG1 | |
| 11.00-11.30 | Coffee break | Coffee break |
| 11.30-12.00 | WG1 | Brainstorming session |
| 12.00-12.30 | WG2 | |
| 12.30-14.00 | Lunch | Lunch |
| 14.00-14.30 | | Brainstorming session: conclusions |
| 14.30-15.00 | WG2 | |
| 15.00-15.30 | | STSM session (research done during STSMs) |
| 15.30-16.00 | | |
| 16.00-16.30 | Poster Session (with coffee/biscuits) | |
| 16.30-17.00 | | Closure (Action Vice Chair and LO) |
| 17.00-17.30 | | Social drinks and departure |
| 17:30-19:30 | | |
| 19.30-22.00 | Dinner | |

| Speaker | Title |
|---------------------------------------|---|
| WG1 Session | Chair: Dr. Sérgio Marques (WG1 leader) |
| Dr. Giulia Morra (20+10) | <i>Modelling protein allostery for in silico drug discovery</i> |
| Dr. Vladimir Sladek (10+5) | <i>Fast ranking of residues in (bio)molecular interfaces by topological relevance</i> |
| Dr. Mehmet Ozbil (10+5) | <i>Interpreting the Effect of Mutations on Complexation and Ion Binding in Enzymes</i> |
| Dr. Miguel Machuqueiro (20+10) | <i>Constant-pH MD simulations as a tool to unveil the effects of pH on proteins: the case of DyP-type peroxidases</i> |
| WG2 Session | Chair: Prof. Lucia Gardossi (WG2 leader) |
| Prof. Mélanie Hall (20+10) | <i>Making Enzymes Fit for Process with Enzyme Engineering: Unveiling Challenges and Promises</i> |
| Prof. Vincent Eijsink (15+5) | <i>Recent insights into the catalytic properties of enzymes known as lytic polysaccharide monoxygenases (LPMOs)</i> |
| Dr. Gemma Kinsella (15+5) | <i>Cutinase from <i>Amycolatopsis mediterranei</i>: Modelling, biocatalytic applications and solvent activation.</i> |
| Dr. Artur Góra (15+5) | <i>Water as a key player – investigation of the proteolytic cleavage of TLR8 Z-loop by furin protease, and the impact of water models for water transport inside enzymes.</i> |
| WG3 Session | Chair: Prof. Jürgen Pleiss (WG3 leader) |
| Prof. Nur Basak Surmeli (15+5) | <i>Enhancing Biocatalytic Potential: Engineering CYP119 for Industrial Applications</i> |
| Dr. Heather Jameson (15+5) | <i>The hunt for artificial reactivities in biocatalysis: Metalloproteins as mediators for pericyclic reactions</i> |
| Dr. Gábor Tasnádi (15+5) | <i>Implementation and application of biocatalysis at Servier</i> |
| Dr. Emilio Parisini (15+5) | <i>Engineering of a fructosyl peptide oxidase enzyme for biomedical applications</i> |

Brainstorming SessionChairs: **Prof. Ligia Martins and Dr. Bettina Nestl***Topics: TBA*

STSM SessionChairs: **Dr. Nataša Božić and Prof. Anamaria Todea**

Vsevolod Viliuga (15+5)*Understanding ProteinMPNN: in-depth analysis of a deep learning-based method for protein design***Saniye Gul Kaya (15+5)***Tuning biophysical properties of LOV domains by flavin-fixing***András Telek (15+5)***Computational design of KIREd variants for enzymatic reductive aminations***Nayanika Das (15+5)***Molecular Dynamics Exploration of the Conformational Landscape of Glutathione Peroxidase 6 (GPX6)***Konstantinos Grigorakis (15+5)***Computational design and experimental validation of mutations to stabilize DmPETase, a thermophilic enzyme for PET depolymerization*
