

10TH INTERNATIONAL PEPTIDE CONFERENCE OF THE BULGARIAN PEPTIDE SOCIETY

Scientific Programme

Friday, September 1st 2023

14:00	Registration of participants	Faculty of Pharmacy, MU Varna, Auditorium
18:00	Opening Ceremony	Faculty of Pharmacy, MU Varna, Banquet hall 9 th floor
19:30	Welcome Cocktail	Faculty of Pharmacy, MU Varna, Banquet hall 9 th floor

Saturday, September 2nd 2023

Session 1

Session Chair: Prof. Reni KALFIN *Institute of Neurobiology, BAS, Bulgaria*

9:00	PL01 From peptide-based drug and diagnostics to cosmetics to inspire next generation EU researchers to transfer academic results into the market Prof. Anna Maria PAPINI <i>University of Florence, Italy</i>
9:35	PL02 How peptides help to understand transient heme binding to proteins Prof. Diana IMHOF <i>University of Bonn, Germany</i>
10:10	IL01 Fe(III) heme-peptide complexes with peroxidase-like activity as heterogeneous biocatalysts Dr. Toni KÜHL <i>University of Bonn, Germany</i>

10.40 COFFEE BREAK

Session 2

Session Chair: Assoc. Prof. Tamara PAJANOVA *IMB, BAS, Bulgaria*

11:00	PL03 Peptides and sex regulation: NAP (DAVUNETIDE) as a case study Prof. Illana GOZES <i>Tel Aviv University, Israel</i>
11:35	PL04 Neurotensin-based GPCR ligands Prof. Peter GMEINER <i>Friedrich-Alexander University Erlangen-Nürnberg, Germany</i>
12:10	IL02 Targeting the tumor microenvironment in gliomas Prof. Andreas TZAKOS <i>University of Ioannina, Greece</i>

12:40 LUNCH, NETWORKING & EXHIBITION

Session 3

Session Chair: Dr. Toni KÜHL *University of Bonn, Germany*

13:40	IL03 "Green" navigation in trillions of on-demand compounds Dr. Marcus GASTREICH <i>BioSolveIT, St. Augustin, Germany</i>
14:10	IL04 The international natural product sciences taskforce (INPST), an open innovation platform to invigorate the research field of natural compounds and peptides in the era of digital communication Prof. Atanas ATANASOV <i>Medical University of Vienna, Austria</i>
14:40	L01 Design, synthesis, and biological evaluation of neurotensin(8-13) analogs as dual NTS1 and NTS2 receptor ligands Assoc. Prof. Nikolay TZVETKOV <i>Institute of Molecular Biology, BAS, Bulgaria</i>

15:10 COFFEE BREAK

15:30 **WORKSHOP by BioSolvelT**
Dr. Marcus GASTREICH *BioSolvelT, St. Augustin, Germany*

17:30 End of the day

20.00 Invited Speakers Dinner

Sunday, September 3rd 2023

Session 4

Session Chair: Assoc. Prof. Nikolay TZVETKOV *Institute of Molecular Biology, BAS, Bulgaria*

9:00 **IL05 G protein peptidomimetics to stabilize active GPCR conformations**
Prof. Steven BALLEET *Vrije Universiteit Brussels, Belgium*

9:30 **L02 Effect of peptidases on the action of enkephalin analogues**
Assoc. Prof. Tatyana DZIMBOVA *South-West University "Neofit Rilski", Blagoevgrad, Bulgaria*

10:00 **L03 Synthesis, biological study and mathematical calculations on anticancer peptides**
Prof. Dancho DANALEV *University of Chemical Technology and Metallurgy Sofia, Bulgaria*

10:30 COFFEE BREAK

Session 5

Session Chair: Prof. Dancho DANALEV *University of Chemical Technology and Metallurgy Sofia, Bulgaria*

11:00 **L04 Ameliorating action of standardized extract from *Helix aspersa* in Parkinson's disease model**
Prof. Reni KALFIN *Institute of Neurobiology, BAS, Bulgaria*

11:30 **L05 Metabolite profiling and structure of peptides in *Helix aspersa* mucus, *Helix lucorum* hemolymph, and *Rapana venosa* hemolymph using ¹H NMR and mass spectrometry**
Prof. Nikolay VASSILEV *Institute of Organic Chemistry with Centre of Phytochemistry, BAS, Bulgaria*

12:00 **L06 Biological effects of standardized *Helix aspersa* extract in Alzheimer's type dementia**
Prof. Lyubka TANCHEVA *Institute of Neurobiology, BAS, Bulgaria*

12:30 LUNCH

Session 6

Session Chair: Prof. Nikolay VASSILEV *Institute of Organic Chemistry with Centre of Phytochemistry, BAS, Bulgaria*

14:00 **L07 Glutathione peroxidase-4 modulation in gentamicin-induced kidney disease model in mice**
Assoc. Prof. Tsvetelin GEORGIEV *Trakia University, Stara Zagora, Bulgaria*

14:30 **L08 Impact of arginine mimetics in the discovery and development of biologically active peptides**
Assoc. Prof. Tamara PAJANOVA *Institute of Molecular Biology, BAS, Bulgaria*

15:00 COFFEE BREAK

15:30 **Poster session, Networking & Exhibition**

17:00 End of the day

20:00 **Gala Dinner**

Monday, September 4th 2023

Session 7: YOUNG SCIENTISTS LECTURES

Session Chair: Assoc. Prof. Tamara PAJPANOVA *IMB, BAS, Bulgaria*

9:30 **YL01** Synthesis and characterization of new analogues of (KLAKLAK)₂ with unnatural analogues of Lys

Dr Sirine JABER *University of Chemical Technology and Metallurgy Sofia, Bulgaria*

9:50 **YL02** Synthesis and biological studies of new peptides and bioconjugates with analgesic and anti-inflammatory activity

Boryana BORISOVA *University of Chemical Technology and Metallurgy Sofia, Bulgaria*

10:10 **YL03** Advanced study of antibacterial and antitumor effects of structurally different small molecules as potential cytotoxic agents against *Paenibacillus larvae*

Martina PEEVA *Institute of Molecular Biology, BAS, Bulgaria*

10:30 **YL04** Novel milk-derived peptides as potential natural ACE inhibitors

Dr Boryana YAKIMOVA *Institute of Organic Chemistry with Centre of Phytochemistry, BAS, Bulgaria*

10:50 COFFEE BREAK

Session 8: YOUNG SCIENTISTS AWARDS

Session Chair: Organizing Committee *Bulgarian Peptide Society*

11:30 Round table scientific discussion: Scientific committee

12:00 Awards Ceremony

12:30 **CLOSING REMARKS**

13:00 The End of Conference