Conference Report:

10th Austrian Peptide Symposium, online with live studio host, 2nd of December 2021

As with other conferences in the past 2 years, the 10th Austrian Peptide Symposium (2nd of December 2021) faced the trouble of last-minute change from an on-site event in Vienna to a virtual meeting. At the very least the co-organizer Christian Gruber (Medical University of Vienna) and Christian Becker (Austrian representative to the EPS, University of Vienna) were able to chair the event from a live studio via an online WebEx meeting. As usual, the Austrian Peptide Symposium was held as one-day symposium; this time without the dinner/networking sessions, but including invited lectures given by renowned national and international speakers, short oral presentations mainly from Austrian early career investigators, which were selected from the submitted abstracts, and a virtual poster session with prerecorded 3-min flash talks, covering manifold aspects of peptide research. Overall, we had over 100 participants attending the virtual meeting. As one of the highlights, we presented the very first "Bachem AtPS Award for Peptide Science" – for details, please check below.

The first morning session focused on the chemistry and biology of peptides and included the following speakers: Alexander Hauser (University of Copenhagen, Denmark) "From physiological peptide hormones to a better understanding of human genetic variations" and Ashraf Brik (Technicon Haifa, Israel) "Metals in peptide and protein synthesis and beyond".

The second morning session focused on peptide pharmacology and we had talks from Dagmar Zweytick (University of Graz, Austria) "Multiple effects of antitumor peptides in treatment of melanoma" and Peter Gmeiner (University of Erlangen-Nürnberg, Germany) "Neurotensin-based GPCR ligands".

The poster session, which was held after the lunch break, featuring 23 pre-recorded 3-min poster flash talks that were presented by early-career researchers. There was also a poster award competition and awards were given away based on online voting of all meeting participants (for winners see end of this article).

The first afternoon session included six excellent short oral contributions selected from the submitted abstracts. Talks were given by Somnath Mukherjee (University of Vienna, Austria), Khadija Daoudi (Pasteur Institute of Morocco), Roland Hellinger (Medical University of Vienna, Austria), Bernhard Jandl (University of Vienna, Austria), Stavroula Melina Sakellakou (University of Vienna, Austria) and Julia Kriegesmann (University of Vienna, Austria).

The final session of this meeting focused on "Peptide Synthesis and Structural Analysis" addressed by four speakers, including two short talks by industry (see below) and the first presentation of the Bachem AtPS Award for Peptide Science in D/A/CH. The first speaker, Dennis Kurzbach (University of Vienna, Austria) reported on advances in NMR technology to elucidate structural

dynamics in peptides and intrinsically disordered proteins. The last session was concluded by a presentation of the first Bachem AtPS Awardee Nina Hartrampf (University of Zurich, Switzerland) discussing her contributions to developing flow-based methods for the synthesis of peptides and proteins. The Bachen AtPS Award was announced for the first time in 2021 and is aimed at early career scientists (postdocs or junior group leaders) who have made outstanding contributions to the chemistry and/or biology of peptides in the three years preceding the date of selection and who have worked in or originate from the D/A/CH region (Germany, Austria, Switzerland). The field of applicants in 2021 were excellent and we decided to also honor the runner-up Alexander Hauser (University of Copenhagen, Denmark). Now we are already looking forward to the 2022 call.

The scientific part of the symposium ended with the announcement of four winners of the poster award competition: Thomas Kremsmayr (University of Vienna, Austria) - "Development of oral gut-specific peptide drug leads", Jasmin Gattringer (Medical University of Vienna, Austria) - "Cyclotides isolated from violet plants are inhibitors of human prolyl oligopeptidase", Alanca Schmid (University of Vienna, Austria) – "Synthesis of Homogeneously Glycosylated Soluble Fas Ligand Variants" and Judith Görlich (University of Vienna, Austria) – "Semisynthesis of alpha-Synuclein with nPTM implicated in Neurodegenerative Disease".

In addition, we had short company presentations from selected sponsor's throughout the day, including Christian Baumann (ABSciex) about the Sciex Xeno TOF, Monika Swiontek (CEM GmbH) about advancements in peptide synthesis and purification, Luisa Aguiar (Gyros Protein Technologies) about the Symphony X and Victoire Laude (Vapourtec) about continuous flow-based peptide synthesis.

Last but not least, we concluded the event with a virtual social hour, which was fun, and announcement of the next symposium to be held on the 1st of December in 2022, hopefully this time again and as usual as on-site event in Vienna.

We are grateful to everyone, in particular to our sponsors, who helped making the online event of the Austrian Peptide Symposium 2021 possible, despite all difficulties during the Covid pandemic. Sponsors of the symposium are: Bachem, Bruker, CEM, CEM, Vapourtec, Gyros Protein Technologies, Sciex, Almac, Rieger-Industrievertretungen GmbH, and the European Peptide Society. Without their generous financial support, all this would not have been possible!

Contributed by Christian W. Gruber and Christian Becker

Figures:

Photograph 1: Screenshot of selected participants attending the 10th Austrian Peptide Symposium online.



Photograph 2: Screenshot of the Bachem award winner 2021 (Nina Hartrampf, top-middle) and runner-up (Alexander Hauser, top-right); the award is sponsored by Bachem AG (Switzerland) and was presented by the company representative Caroline Lechner (bottom-right). Co-hosts of the meeting were Christian Gruber and Christian Becker (top-left).



Photograph 3: List of poster award winners by online voting.

