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News from Journal of Peptide Science
Chemistry in Montpellier
Senn's 50th Anniversary Symposium
Meetings in Budapest
Belgian Peptide Group Meeting
Sándor Bajusz (1931–2014)
33 EPS: A Message from the Organizing Committee

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IN THIS ISSUE

News from Journal of Peptide Science 2
Chemistry in Montpellier 4
Senn's 50th Anniversary Symposium 6
Meeting of the Hungarian Peptide Chemistry Committee 9
Workshop in Budapest 11
2nd Belgian Peptide Meeting .13
Sándor Bajusz, in Memoriam .16
33 EPS: A Message from the Organizing Committee 18
Society News 22
Society Officers 26
Calendar 27

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SOCIETY NEWSLETTER

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News from Journal of Peptide Science

An online only publication

As many of you will have heard, the *Journal of Peptide Science* has made the transition to an online only publication. This, more environmentally friendly, method of distribution reflects the way the Journal's many readers already access its articles. This makes it more important to sign up for the email table-of-contents alerts and to encourage your library to take out an online subscription. We want to make sure the Journal's content reaches everybody that needs to see it.

Beside this historical news there is an additional important change to relay – the retirement of Martin Röthlisberger as Wiley Editor and the appointment of Peter Creaton as the new Wiley Editor of our Journal as of January 2014. It is on this occasion that, on behalf of the European peptide chemist´s community, we would like to express the most sincere thanks to Martin for his long-lasting dedicated involvement in the fates of this official organ of our European Peptide Society. February 1995 saw the publication of the first issue of the *Journal of Peptide Science* which had been developed by the society, in close cooperation with Martin Röthlisberger of John Wiley & Sons and the first editor-in-chief Professor Conrad Schneider, with the intent to publish peer-reviewed papers from all over the world and the create a platform for the top papers of members of the society.

Since these first days Martin contributed decisively to the development of the Journal from the only in print version to the first in print and online version already in 1996 which made it imperative to adapt the style of the Journal to this new reality by making the layout more reader-friendly for the onscreen version. Martin operated with strong impact also on other aspects of the Journal such as introduction of special issues based on the most important topics at the forefront of peptide science – often linked to scientific meetings and workshops. He also helped bring about a Supplementary Issue of the Journal with the abstracts of the biennial European Peptide Symposium and helped create the 'Journal of Peptide Science Best Paper Award' as an incentive to attract and reward some of the top researchers in the field. We deeply appreciate all Martin has done to progress the Journal.

With an instinctive sense of pride, we have all witnessed in the last decade a fascinating renaissance of peptides and peptidomimetics at the forefront of science from chemistry, chemical biology, and innovative biomaterials to drug discovery. As a consequence related scientific work is published constantly and increasingly in the highest ranking

scientific journals leading to an extreme competition for *Journal of Peptide Science*. By taking over the responsibility of the Journal with January 2008, intensive discussions were started with the editorial colleagues and members of the advisory board about new developments required to increase the scientific impact of the Journal to a level that is more attractive for submission of manuscripts of advanced research work by the scientific community.

Changes in publishing policy were performed with the introduction of new types of communications, with an increased number of invited reviews related to award lectures of the European Peptide Society and the Max-Bergmann Society as well as with special issues on particular emerging themes in strategic areas of research in peptide and protein chemistry. The Journal now has a larger readership and more internet traffic is visiting our homepage with a significantly increased number of downloads of abstracts and full papers. This led the Impact Factor of the Journal to reach the threshold value of 2.017 in June 2013, which will help us to compete with higher ranking and well established journals of organic and bioorganic chemistry as well as of biochemistry, chemical biology and immunology that attract many good communications and full papers of our traditional field of research.

We are confident that the Journal of Peptide Science is at the beginning of a period of positive transition and will offer strong competition to the top journals publishing peptide research. We have a good team of Editors and Advisory Board Members working on and contributing to the Journal – their help is invaluable to our success. Ulf Diederichsen provides strong support as the Deputy Editor, a role he has been in since January 2013. The new Wiley Editor, Peter Creaton, also brings several years of editorial experience and a good background in chemistry. Next year the *Journal of Peptide Science* will celebrate its 20th birthday and we would like to ensure that it continues to develop and becomes one of the premier platforms of scientific communication in peptide and protein chemistry, making 2015 another milestone in the Journal's history.

Contributed by Luis Moroder

Luis Moroder
Editor-in-Chief

Ulf Diederichsen
Deputy Editor

Peter Creaton
Wiley Editor

Chemistry in Montpellier (Pôle Chimie Balard)

Institute of Biomolecules Max Mousseron

In January 2007, chemistry in Montpellier reorganized completely into four Institutes: the Institute of Material Sciences Charles Gerhard (ICGM) (~450 people), the European Institute of Membranes (IEM) (~100 people), the Marcoule Institute of Separative Chemistry (ICSM) (~60 people) and the Institute of Biomolecules Max Mousseron (IBMM) (~320 people). This unique organization resulted in December 2007 in the creation of the «Pôle Chimie Balard» (*http://www.polechimie-balard.fr/*), the place where the four Institutes can discuss and mutualize their knowledge, their equipments, their experiences in different fields of chemistry at both the interface of physics, biology and medicine. The ambition in Montpellier is to create a Centre of Excellence, Research and Higher Education in chemistry. It will bring together the region's chemistry community, in the field of Sustainable Development including energy, materials and energy carriers, development of natural resources and sustainable chemistry, health and protection of man's well-being and environment.

The «Pôle Balard» gathers today 750 collaborators including 300 researchers and lecturers, 150 chemical engineers and technicians, over 300 visiting and postdoctoral scientists and PhD students, 1,700 students from bachelor's to doctoral levels, including 720 studying for engineer or master's qualifications.

In 2010, the «Région Languedoc Roussillon», with the support of the French State, decided to invest 103 million Euros devoted to chemistry, and engaged in the construction, in very close proximity on the same site, of a series of buildings including the National School of Chemistry devoted to teaching (about 10,000 m^2), the Institute of Material Sciences Charles Gerhardt (ICGM), the Institute of Biomolecules Max Mousseron (IBMM), the «Platform of Analysis and Characterization» (PAC), and the «Center of Transfer and Innovation», for a total of about 25,000 m^2 devoted to research.

The Institute of Biomolecules Max Mousseron (IBMM) (*http://www.ibmm.univ-montp1.fr)* was created on January 2, 2007 under the auspices of University Montpellier 1, University Montpellier 2 and CNRS. It resulted from the merge of 6 laboratories, each of them specialized and well recognized in the field of a class of essential molecules of life. Accordingly, the institute is divided into 14 teams spread into six scientific departments: (i) Amino acids, Peptides and Proteins; (ii) Nucleosides Constituents and Analogues; (iii) Artificial Biopolymers; (iv) Biomolecular Organization; (v) Bioactive Lipids; Saccharides. IBMM is involved in both fundamental and applied research and teaching, at the interface of chemistry and biology. IBMM activities are closeley connected with private companies in pharmacy, agriculture, cosmetics.

Know How & Competences

Organic Synthesis, Medicinal Chemistry
Molecular and Cellular Pharmacology
Synthesis, Characterisation of Polymers, Biopolymers
Separation and Analysis of Biomolecules
Recombinant Protein Production (RCPG)
Molecular Modelling

Scientific Research Areas: At Interface of Chemistry/Biology/Health

- Transport & Targetting (Anticancer & CNS Agents)
- Ligands for Imaging and Radiotherapy
- Reactivity of Biomolecules
- Molecular Interactions (Protein Interactions, Enzyme Inhibitors, GPCRs …)
- Methodology of Synthesis, Analysis of Biomolecules (MS, CE, RMN)
- Synthesis of Biomaterials

Scientific Organization

IBMM 2013: 6 Departments (14 research teams, 2 Platforms)
1) Saccharides; 2) Nucleosides & Oligonucleotides (2 teams); 3) Artificial Biopolymers; 4) Prebiotic Molecules/Molecular organization (2 teams); 5) Lipids (2 teams); 6) Amino Acids, Peptides & Proteins (6 teams).
172 permanent people (33 researchers, 84 Professors & Assistant-Professors, 4 medical doctors, 51 Engineers/Technicians/Secretaries), 23 Post-doc, 65 PhD students, 45 students. Total 329 people.
IBMM 2015: 6 Departments (17 research teams, 2 Platforms): 1) Saccharides; 2) Nucleosides & Oligonucleotides (2 teams); 3) Artificial Biopolymers; 4) Prebiotic Molecules/Molecular organization (2 teams); 5) Lipids (2 teams); 6) Amino Acids, Peptides & Proteins (9 teams).
2 Internal Councils: (i) Board of Directors ; (ii) Laboratory Council
3 External Councils: (i) Scientific Council ; (ii) Strategic Council ; (iii) Make Value » Committee
12 Internal Commissions

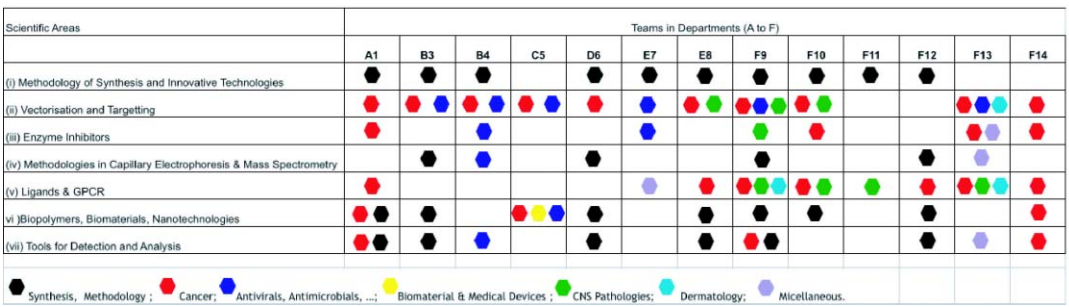
Scientific Activity (since 2008)

884 Original publications.,
53 Patents (7 licenced).
44 chapters in books
200 Invited lectures (Symposiums, ...).
478 Oral communications.
318 collaboration contracts, 15 629 K?.
4 start-up created [COLCOM, HELIXEM, OLEOS, NANOMEDSYM (IBMM/ICGM)].
226 invited lecturers.
34 invited professors

IBMM Highlights

Carnot Label CED2
Labex Labels (CheMiSyst, EpiGenMed)
7 Licenced patents
Telbivudine (B Hepatitis) in the market (Tyzeka® Novartis)
JMV1843-Solorel®-Macimorelin (GH Release) New Drug Application NDA submitted FDA
Elipep «Green Elicitor», trials in field
4 compounds phase 2 clinical trials (malaria, C hepatitis, cachexia, obesity)
24 symposium organized by IBMM

Research at IBMM



Contributed by Jean Martinez

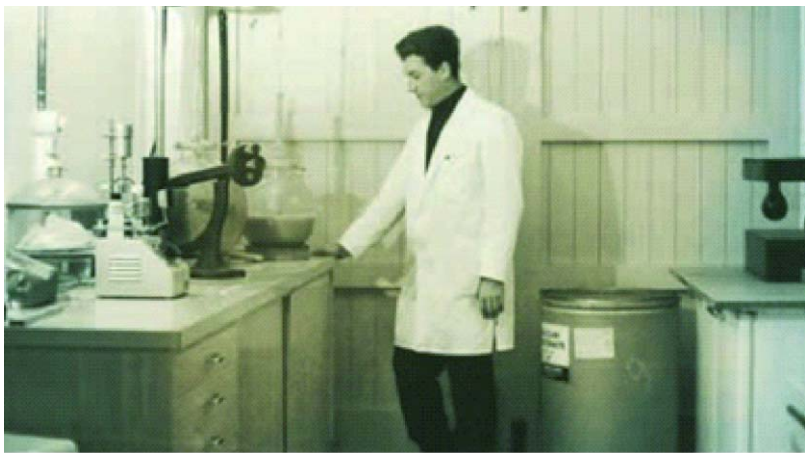
CONFERENCE REPORT

Senn's 50th Anniversary Symposium & Celebration

Zürich, 29–30 August 2013

from the garage to Success

…what began as a "catalog business" for carbohydrates and rare sugars evolved into a global custom peptides manufacturer serving pharmaceutical and biotechnology companies worldwide…



The 50th anniversary of SENN CHEMICAL was celebrated with a two-day event, with an impressive scientific and social character. EPS officers Luis Moroder, Dirk Tourwé and Paul Cordopatis were present.

As it was pointed out by Christoph Schmid (Chairman of the Board Senn Chemicals, M.S. Eng. ETH, MBA), '… 50 years after its foundation, out of the small garage (1963, Guido A. Senn), an internationally reputed and highly successful enterprise has emerged with important market position and great brand recognition in the field of peptide chemistry'.

Today, after a 50 years journey in the path of curiosity-driven industrial development work, the commitment and vision of total quality, of teamwork and total customer focus in the field of organic synthesis, the company grew to a Contract Drug Manufacturing Organization, although never loosing the family character through the participation of the founder sons, Thomas, Michael, Matthias and Christof, in all aspects of its expansion and activities.

The scientific part included a very strong team of invited speakers and covered wide areas of Peptide Chemistry and Industry related topics.

'*Synthetic Peptides and NMR in Structural Biology*' by **Professor Dr. Kurt Wüthrich**; Nobel Laureate in Chemistry, 2002. The Scripps Research Institute, La Jolla, CA, USA and ETH Zürich, Zürich, Switzerland.

'*History and Achievements of Curiosity-Driven Research*' by **Professor Dr. Dieter Seebach**; Laboratorium für Organische Chemie, ETH Zürich, Zürich, Switzerland.

'The Synthetic Peptide AP301 – From Discovery to Clinics' by **Dr. Bernhard Fischer**; CEO of Apeptico Forschung und Entwicklung GmbH.

'A Move from Supply to Partnership' **by Dr. Alain Scarso**; Director of Global Technical Operations of the PolyPeptide Group.

'Peptide Lead Finding & Optimization using Pepscan Technologies' by **Dr. Peter Timmerman**; Chief Scientific Officer at Pepscan Therapeutics.

The scientific part of the Symposium was concluded with the presentation of the three winners of the 'Award for Outstanding Research Work' to students selected on the basis of *Academic Achievements and Commitment to Humanitarian Efforts* and the announcement of the establishment (starting from 2013) of two new SENN Awards (award and a scholarship).

Winners of the Award for Outstanding Research Work: **Rachel MESIA** PhD Student, Lancaster University (UK), **Catherine Oloo** Master's Student, University of California, Los Angeles (USA) and **Suleyman Ari** PhD Student at Anadolu University (Turkey).

The 50th Anniversary Symposium continued with a lovely Gala Dinner and it was concluded next day with a mostly appreciated social event, the city tour of Zürich; Christoph Schmid, Chairman of the Board Senn Chemicals, gave to the participants the opportunity to enjoy and understand the beauty of the city center, even for first time visitors.

The best way to finish the report on this memorable event is to quote some words from the SENN family:

… we are proud today to look back on 50 years of the Senn Chemicals AG.

The two new SENN Awards

1. Guido A. Senn Award for outstanding Research Work in Peptide Chemistry

The Guido A. Senn Award recognizes and encourages out- standing achievements in the chemistry, biochemistry, and biophysics of peptides. This award is intended to recognize original and singular discoveries rather than cumulative or lifetime contributions. The nominee must have made in the opinion of the Senn Chemicals Scientific Advisory Board the most outstanding contributions in the chemistry, biochemistry, or biophysics of peptides at an internationally reputed Technical University. The award will be granted regardless of race, gender, age, religion, ethnicity, nationality, sexual orientation, gender expression, gender identity, presence of disabilities, and educational background. Senn Chemicals AG has established the award in 2013 to honor Guido A. Senn, our founder, for his lifetime support of peptide science and peptide scientists. The successful candidate is selected by Senn Chemicals' Scientific Advisory Board. This award will be presented occasionally.

The 2013 – 50th anniversary – winner is: Ivano PUSTERLA*, MS ETH Zürich,* working in the field of peptide chemistry; he is an assistant to Prof. Dr. Jeffrey W. Bode.

2. Senn Chemicals Scholarship for Academic Achievement and Altruism

Winners shall be selected based on dedication to a scientific discipline, passion for excellence, and commitment to serving the community. The Senn Chemicals Scholarship is made available to current students in an undergraduate, graduate, or post-graduate scientific program at a recognized academic institution in Europe, the United States, or Canada. For consideration, candidates should submit verification of current enrollment in a scientific discipline (chemistry, biochemistry, biology, etc.), a letter of Character Reference (professor, employer, mentor, etc.) and an essay (entitled: Making A Difference). Essays should summarize the candidate's professional goals, current accomplishments, and future vision of themselves within the scientific and global community. In addition to academic accomplishments, candidates should detail the inspiration behind their own humanitarian and altruistic efforts. Senn Chemicals AG has established the award in 2013. The successful candidate will be selected by Senn Chemicals Scientific Advisory Board.

Our Head of the family and the company's founder, Guido A. Senn, brought two fundamental values to the corporate culture that are still its cornerstones today:

1. The focus on the customer must always be authentic, open and honest, meaning that our clients must be able to feel our reliability, integrity, and credibility. We give them products they can count on.

2. The way we treat our employees is humane, caring, and supportive. Their personal development is encouraged so that they can take part in the company's success.

These two values have shaped our company for the past 50 years and will continue to do so in the years to come…

Contributed by Paul Cordopatis

CONFERENCE REPORT

Joint meeting of the Hungarian Peptide Chemistry Committee and the Hungarian Coordination Chemistry Committee

Budapest, October 2013

In the late October a special meeting organized by two chemical committees of the Hungarian Academy of Sciences was held. The Hungarian Peptide Chemistry Committee (lead by Prof. Gábor Mezö, Eötvös Loránd University) and the Hungarian Coordination Chemistry Committee (lead by Prof. Etelka Farkas, University of Debrecen) developed a joint, one-day mini-symposium to submit some research topics worked on the members of the committees. The main goal of the meeting was to find some joint projects on which the researchers can work together in the future. There were close to 80 participants on the mini-symposium that was held at the Eötvös Loránd University in Budapest. Fifteen lectures were presented in three sections and three lead scientists (Prof. Ferenc Hudecz, the president of the European Peptide Society, Prof. Botond Penke the National representative of EPS and Prof. Imre Sóvágó, chair of international advisory committee of International Symposium on Applied Bioinorganic Chemistry series) were asked to chair the sections.

The Organizers G. Mezö and E. Farkas

In the first part, the speakers presented results and strategies of targeted tumour therapy including different peptides as targeting moieties as well as peptide-drug conjugates. Among the possible drug molecules metal complexes e.g. ferrocene derivatives were also mentioned. In addition, the application of peptide-chelator conjugates for complexing radio metal ions was demonstrated as an effective tumour labelling procedure for PET. The kinetic of the deamidation of labile NGR peptides as targeting moieties, and their rearrangement to *iso*DGR peptides were indicated by NMR studies. Further potential carriers like foldamers with sugar amino acid derivatives and semisynthetic lipoproteins with fluorescent cholesterol anchor were also presented.

In the second section the complexation properties of peptide ligands were summarized. The metal binding characteristics of hydroxamic acid containing peptides were also demonstrated. The structural studies of metal complexes with electron spin resonance spectroscopy and chiroptical methods were outlined. At the end of this part the representative of ABL&E-JASCO Hungary Kft. that sponsored the meeting introduced new CD instruments developed by the company.

In the final section an overview of the connection between metals, proteins and coordination chemistry was given followed by some special area of metal-protein interactions. Interesting lectures about the potential binding sites of ZnT3 zinc transporter protein, and regulation of artificial protein based metallonucleases could be listened by the audience. Finally some results in the area of the interaction of toxic metal ions with metal binding sites of metal-dependent regulatory proteins and the influence of metal ions on β-amyloid aggregation were presented.

Contributed by Gábor Mezö and Etelka Farkas

WORKSHOP REPORT

Peptidomimetics, Foldamers and Structure Analysis by Chiroptical Spectroscopy

Budapest, 2 December 2013

In early December 2013, a special workshop entitled "Peptidomimetics, foldamers and structure analysis by chiroptical spectroscopy", organized by Dr. Zsuzsa Majer, was held at the Institute of Chemistry, Eötvös Loránd University, Budapest, Hungary. This workshop was a closing event of two projects, namely DAAD – MÖB[1] (principal investigators Dr. Zsuzsa Majer and Prof. Dr. Norbert Sewald) and PAN – HAS[2] (principal investigators Dr. Zsuzsa Majer and Prof. Dr. Jadwiga Frelek.

Cisplatin is one of the widely used antitumor agent. The relatively high toxicity and resistance of tumor cells have prompted us to search for non-platinum anticancer complexes: metal-metal bonded rhodium, rhenium and ruthenium. Among these metal-complexes dirhodium carboxylates, also dirhodium tetraacetate – Rh2(OAc)4 – exhibit significant antitumor activity, bind to DNA, polymerases, proteins inhibiting their synthesis. So, some dinuclear rhodium complexes were designed where the ligands are amino acid, amino acid derivatives, and some building blocks of peptidomimetics and foldamers. The rhodium complexes of the different ligands were synthetized, separated and characterized by complex spectroscopic methods.

Prof. Ferenc Hudecz during the Opening Session

The workshop program started with inspiring opening words of Prof. Ferenc Hudecz (Chairman of the EPS, Eötvös Loránd University, Budapest) who gave a short overview about the history of the University which was founded in 1635. Márk Szabó (Eötvös Loránd University, Budapest) told about his work on the field of asymmetric synthesis using chiral dirhodium complexes for stereoselective insertion and cyclopropanation reactions. Tanja Fröhr (Bielefeld University) and Oliver Kracker (Bielefeld University) presented their efforts to synthesise and analyse peptidomimetics based on 1,4-disubstituted 1H-1,2,3-triazoles and 1,5-disubstituted 1H-1,2,3-triazoles, respectively. Matthias Wünsch (Bielefeld University) developed and analysed peptidomimetics based on building blocks synthesised via Sonogashira cross

[1] DAAD: German Academic Exchange Service; MÖB: Hungarian Scholarship Board

[2] PAN: Polish Academy of Sciences; HAS:

coupling. Anikó Nemes, PhD (Eötvös Loránd University, Budapest) talked about the stabilization of secondary structures via disulfide bridges, elucidation of the active conformations and fluorescence labeling of peptides. Gábor Stefán (ABL&E-JASCO Hungary Ltd) outlined advantages of the new JASCO CD spectrometers.

The second part of the workshop was dedicated to biological effects of metal containing compounds and structure elucidation by chiroptical methods. The design of new ferrocene derivatives as potential drug candidates was presented by Szilvia Bösze, PhD (Eötvös Loránd University, Budapest) giving details about the *in vitro* evaluation of the compounds on human tumor cell cultures. Elemér Vass, PhD (Eötvös Loránd University, Budapest) gave a resume about VCD spectroscopy of peptides and proteins. Marcin Górecki, PhD (Polish Academy of Sciences) presented his work on molecular structure elucidation of thymine derivatives and spirostane saponins using several chiroptical methods. The synthesis, structure elucidation and chiroptical spectroscopic interpretation of a new ferrocene-based scaffold was reported by Gábor Báti (Eötvös Loránd University, Budapest). Márk Kleineisel (Eötvös Loránd University, Budapest) told about the synthesis of chiral *N*-aryl amino acid based dirhodium complexes, determination of the absolute configuration via VCD spectroscopy and examination via ECD spectroscopy.

First part of session was chaired by Dr. Elemér Vass

The workshop provided a good overview on actual research topics concerning the synthesis of petidomimetics and foldamers. Different opportunities for the use of chiroptical methods in analytics were presented. Special emphases were given on the training of younger scientists (diploma students, graduate students) in the frame of both bilateral programmes to learn new methodologies and technologies. Furthermore, we had the possibility regularly (once a year) to discuss the results and pose new research targets on the frame of a workshop. In order to intensify the collaboration (mainly DAAD-MÖB) and to benefit from the knowledge of the others, several students spent several months in one and other laboratory of the network.

Both bilateral collaborations could help also the young scientists in the future to build up new international co-operations. The workshop was sponsored by the above written projects and ABL&E-JASCO Hungary Ltd.

Contributed by Tanja Fröhr and Krisztina Knapp

CONFERENCE REPORT

2nd Belgian Peptide Group Meeting

Ghent, 10–11 February 2014

After the successful first Belgian Peptide Group Meeting (BPGM) which was hosted by Peptisyntha on the Solvay campus in Brussels, the second BPGM was organized in the conference center Het Pand in the heart of the beautiful historic city of Ghent. This conference was organized by Dr. Mimoun Ayoub (Peptisyntha), Prof. Annemieke Madder (UGhent), Prof. Steven Ballet (VUBrussels), Prof. Jose Martins (UGhent) and Prof. Dirk Tourwé (VUBrussels) under the auspices of the European Peptide Society and with the support of The Research Foundation – Flanders (FWO).

The organisers intend the BPGM to be an international conference covering several topics in the peptide field, including therapeutics and materials, from research and discovery, development, identification and characterization as well as peptide manufacturing. With this meeting they hope to further stimulate the interactions between scientists in the field and help identify new opportunities for the future. It is the aim to have participants from academia and industry and help bridging the gap between them.

As a response to the interests expressed by many participants of the 2012 BPGM, the organisers have now provided space for exhibiting, and for poster presentations.

A view of the conference room in Het Pand and the attendants

Participants viewing the posters

Next to four invited speakers, twenty oral communications were selected from the submitted abstracts. The aspiration of the organisers was to have a significant international component. This was reflected in a balanced contribution by Belgian and international speakers. One third of the oral presentations came from industrial groups. There were 43 posters presentations, with a proportion of 74% Belgian and 26% international. These proportions nicely reflect the composition of the audience. 160 Participants were registered, with a proportion of 66% Belgian and 34% international delegates. The larger part of the non-Belgian delegates came from neighbouring countries France (15), Germany (12), the Netherlands (7), and the United Kingdom (8). The delegates from academic institutions and from industry were in about a 2/1 proportion.

The organizing committee: Jose Martins, Dirk Tourwé, Mimoun Ayoub, Annemieke Madder and Steven Ballet (left to right)

Four plenary lectures were given by the invited speakers: Gilles Subra (IBMM Montpellier): "*Peptide-based materials: a bottom up approach",* Helma Wennemers (ETH Zürich): *"Bioinspired chemistry with proline-rich peptides"*; M. Teixido (IRB Barcelona): "*BBB-shuttle peptides for CNS drug delivery"* and P. Alewood (UQ Brisbane): "*Toxin disulfide mimetics"*. The presentations were organized in sessions Peptide self assembly and materials, Peptide design and synthesis, Peptide drug delivery, and Peptide structure and characterization. Two poster presentation sessions, with 43 posters, were held during the lunch breaks, which resulted in a very busy program.

Industrial contributions treated peptide-based nanofibres for cell culture and slow release (L. Jeannin, Peptisyntha), nanoparticle-based combinatorial drug discovery (R. New, Proxima Concepts), next generation microwave SPPS (G. Marini, CEM), synthesis of non-natural amino acids using electrochemistry (R. Callens, Ecolec), mass spectrometric characterization of therapeutic peptides, focusing on a bicyclic peptide and a pegylated one (T. De Vijlder, Janssen Pharma), and strategies and tools for studying the metabolism of peptide drug candidates (F. Cuyckens, Janssen Pharma).

Academic contributions covered a wide area of peptide research. M. Bibian (UBrussel) presented the development of new peptide-based hydrogels for drug delivery applications and D. Sinnaeve (UGhent) and J. Crowet (ULiège) discussed self-assembly of cyclic lipopeptides. In the afternoon session, M. Galibert (CNRS Orléans) described the synthesis of long glycopeptides through

solid phase chemical ligations and enzymatic glycosylations, S. Cobb (UDurham) described diketopiperazines as chemotaxis inhibitors and an approach to the synthesis of the 78-amino acid CCL2 protein and H. Ovaa (NCI Amsterdam) discussed chemical ubiquitination. Dr. J. Cochrane (UMelbourne and ENS Lyon) reported a new method for amide bond formation suitable for N to C peptide assembly. He was replacing P. Timerman (Pepscan) who, at the last minute, was unable to attend the meeting. The second day, A. Giordano (UBochum) discussed biodegradable esters to render peptides cell permeable and K. Féher (UGhent) presented an NMR study of lipid encapsulation. P. Thévenet (ISERM, Paris) described peptide modeling: from conformations in solution to conformation in complexes? K. Maes (UBrussels) discussed a study on the adsorption of peptides to tube and vial walls in a nano HPLC-EIS-MS/MS method for the *in vivo* monitoring of neuropeptides in the rat hippocampus. In the last session, F. Cavelier (IBMM Montpellier) reported the development of NTS2 selective neurotensin analogues for analgesic activity and as the last speaker, L. Walrave (UBrussels) discussed the role of Connexin43 hemichannels in spatial memory and mechanisms of mesial temporal lobe epilepsy.

During coffee and lunch breaks, the participants could visit the exhibition booths of CordenPharma, Bachem, Iris Biotech, Biosolve, Biotage, BRS/CEM, Chemie Ueticon, Merck/Millipore and Protein Technologies. Furthermore the conference was sponsored by Corden Pharma, Bachem, Ecolec and Senn.

At the end of the first day, the participants had the opportunity to further network in a relaxing athmosphere during a reception offered by the Department of Organic Chemistry of Ghent University.

Given the success of the meeting, the organizing committee decided that the third BPGM will be organized at the same location in March 2016.

Contributed by Dirk Tourwé

In Memoriam

Sándor Bajusz (1931–2014)

Sándor Bajusz (Magyaróvár, 24 August, 1931) from the beginning of his scientific carrier was engaged with the world of peptides. Sándor completed his studies in chemistry, physics and pedagogy at the Faculty of Natural Sciences, Szeged University in 1954, where he was later appointed to honorary professor of medicinal chemistry (1986). After a year of teaching at secondary school in Körmend, Hungary, he joined the peptide group of Miklós Bodánszky at the Institute of Drug Research (GYKI, later IVAX Institute of Drug Research) in Budapest, where he led the peptide group from 1958 until his retirement in 2005.

Since the 50's the scientific interest of Sándor has been focused on the synthesis of peptides for structure elucidation of natural substances, then to understand biological activity of peptide hormones by structure – function studies. Beside his own special projects, a fruitful collaboration was developed and together with Dr. Lajos Kisfaludy (Richter G. Chemical Works, Budapest) and Dr. Kálmán Medzihradszky (Eötvös Lorand University, ELTE, Budapest) resulted in the first chemical synthesis of human corticotropin (*Bajusz S., Medzihradszky K., Paulay Z., Láng Zs.:* Totalsynthese des menschlichen Corticotropins (alpha-ACTH). Acta Chim. Acad. Sci. Hung. 52 (1967) 335–341).

From the 70's Sándor and his colleagues achieved the synthesis of the first enkephalin analogue possessing analgesic activity upon systematic administration (*Bajusz, S. et al.:* A superactive antinociceptive pentapeptide, [D-Met^2, Pro^5]enkephalinamide, *FEBS Lett.* **76**, 91-92 (1977). He received the D.Sc. degree from the Hungarian Academy of Sciences in 1980.

The following period of peptide research in Hungary was highlighted by results from laboratory of Sándor Bajusz at Institute of Drug Research. Thrombin inhibitors (*Bajusz, S. et al.:* Peptide aldehyde inhibitors of the fibrinogen-thrombin reaction. In: *Peptides: Chemistry, Structure and Biology* (R. Walter and J. Meienhofer, eds.), Michigan, USA, 1975, pp. 603–608; *Bajusz, S. et al.:* Highly active and selective anticoagulants: D-Phe-Pro-Arg-H, a free tripeptide aldehyde prone to spontaneous inactivation, and its stable *N*-methyl derivative: D-MePhe-Pro-Arg-H, *J. Med. Chem.* **33**, 1729–1735 (1990) led to the development of

Efegatran. It should be mentioned that thrombin inhibitor (GYKI-14166) was named as „Bajusz inhibitor" in Burger's Medicinal Chemistry and Drug Discovery (6th Edition, Vol.3, p. 312, Wiley, 2003).

Between 1985 and 1988 Sándor Bajusz was invited by Prof. A.V. Schally, as visiting Professor at the Endocrine, Polypeptide and Cancer Institute, Department of Medicine, Tulane University School of Medicine, New Orleans, LA, USA. The collaboration with Dr. Schally resulted in the discovery of LHRH antagonist and made possible the introduction of Cetrorelix (*Bajusz, S. et al.* Highly potent antagonists of luteinizing hormone-releasing hormone free of edematogenic effects, *Proc. Natl. Acad. Sci. USA* **85**, 1637–1641 (1988)) and identification of other potent and promising compounds for drug development (*Bajusz, S. et al.:* New antagonists of LHRH. II. Inhibition and potentiation of LHRH by closely related analogues. *Int. J. Peptide Protein Res.* **32**, 425–435 (1988); and Bajusz, S. *et al.*: Highly potent metallopeptide analogues of luteinizing hormone-releasing hormone, *PNAS USA.* **86,** 6313–6317 (1989)).

The achievements in the field of peptide aldehyde research in relation with caspase inhibitors and coagulation are just further keywords to indicate the greatly successful efforts (*Bajusz, S. et al.:* Peptidyl β-homo-Aspartals: Specific Inhibitors of Interleukin-1β Converting Enzyme and Its Homologues (caspases). *Bioorg. Med. Chem. Lett.* **8**, 1477–1482 (1998); *Bajusz, S.:* Peptide arginals and methods for treating disseminated intravascular coagulation. *IPN WO 03/016273 A2 (27.02.2003).* He was the author of about 200 scientific papers and holds 40 patents.

In addition to the scientific achievements outlined briefly, but not completely, the role of Sándor Bajusz in the development of Hungarian peptide research has to be mentioned here. From 1969 he was an active member and from 1991 to 2002, the Chairman of the Hungarian Peptide Committee of the Hungarian Academy of Sciences, guided the activity of peptide chemists and educated younger generations at Szeged University and later at ELTE.

Sándor Bajusz was highly engaged in establishing scientific links with colleagues in the West even from the 50's. He was a founding member of the American Peptide Society in 1990. Sándor was the National Representative of Hungary in the Council of the European Peptide Society (1990–1998), member of the Scientific Committee of EPS (1998–2002) and served as the Chairman of the 25th European Peptide Symposium (Budapest, 1998). In 2000 together with K. Medzihradszky he established the "Foundation for Hungarian Peptide and Protein Research" providing help to young scientists in the field.

Among other distinctions from the Hungarian Government (National Prize of Hungary, 1970 and Széchenyi Award, 1992), from the Hungarian Academy of Sciences (1962 and 1979) and from the Hungarian Pharmaceutical Society (2010) he was the recipient of the Josef Rudinger Memorial Award (European Peptide Society, 2002).

Sándor was an intellectual human being with critical, but positive thinking, loving family, history, companions and life, but above all he had a life-long passion for peptides.

Contributed by Ferenc Hudecz

33EPS: A Message from the Organizing Committee

European Peptide Symposium, Sofia 2014

Dear Colleagues,

It is our pleasure, on behalf of the Organizing Committee, to invite you to the 33rd European Peptide Symposium which will be held at the National Palace of Culture in Sofia, Bulgaria from August 31st till September 5th 2014.

Sofia is one of the oldest cities in Europe. Seven thousand years old cultural monuments – Thracian and Roman remains can be seen mainly in the city center – in the subway in front of the Presidency, behind the Military Club, etc. There are lots of thermal springs inside and around Sofia: in the center – Central Bath, and in suburbs – Gorna Banya, Bankya, Pancharevo. The city is located at the foot of one of the most beautiful Bulgarian mountains Vitosha.

The National Palace of Culture – Congress Centre Sofia is the largest multifunctional complex in South Eastern Europe, perfectly equipped for realizing prestigious events of cultural, scientific and social-economic life.

We hope to keep the tradition of a diverse scientific program of the Symposium and to make sure that the best peptide scientists come to Bulgaria.

Our preliminary scientific program includes outstanding scientists as:

Plenary Speakers – *Prof. Ada E. Yonath*, Nobel laureate in chemistry 2009, Structural Biology Department, Weizmann Institute of Science, Israel, *Prof. D. Sc. Evgeny V. Grishin*, Shemiakin-Ovchinnikov Institude of Bioorganic Chemistry, Moscow, Russia, *Prof. Jean Martinez*, University of Montpellier, France, *Prof. Victor J. Hruby*, University of Arizona, USA.

Invited Speakers – *Prof. Dr. Annette G. Beck-Sickinger*, University of Leipzig, Germany, *Prof. Dr. Vassilios Tsikaris*, University of Ioannina, Greece, *Prof. Frédéric Checler*, University of Nice-Sophia-Antipolis, France, *Prof. Krzysztof Rolka*, University of Gdansk, Poland.

Click the photos for more about Sofia . . .

We'll do our best to encourage the participation of young scientists by special sessions and awards. The young scientists can attend in the Dr Bert L. Schram Young Investigator Mini Symposium and the Networking events.

The symbol of our capital is part of the Symposium logo. We do believe that the motto of our city "Grows up but does not grow older" concerns also the peptide chemistry.

A traditional football game is also included in the social program of the Symposium. During social events there will be an opportunity to visit places like National Museum of History, which is one of the largest history museums in the Balkans, that has more than 650,000 exhibits concerning Bulgarian history from the prehistory to present.

Other places of interest that can be visited include the old capital of Bulgaria – Veliko Tarnovo, Rila Monastery and one of the oldest towns of Bulgaria – Plovdiv.

We look forward to seeing you in Sofia during the 33rd European Peptide Symposium. Additional information could be found on the official site of the event http://33eps2014.com/.

Contributed by Ivanka Stoineva



Journal of Peptide Science publishes *online only* from 2014

From January 2014 onwards the *Journal of Peptide Science* publishes only an online edition and the print edition will be discontinued. 95% of the readers have already been using the online edition, so only very few subscribers will notice a change. This move brings advantages to authors and readers: no charges for unlimited numbers of colour illustrations will mean a more colourful journal and faster publication speeds.

The *Journal of Peptide Science* has now an impact factor of 2.071!

Society News

A new Agreement between EPS and Wiley for the Journal of Peptide Science

The publication of the first issue of the *Journal of Peptide Science* was in February 1995. The journal had been developed by the society, in close cooperation with Martin Röthlisberger (Wiley) and the first editor-in-chief Conrad Schneider (Institut für Klinische Immunologie, Bern). The current editor-in-chief, Luis Moroder, together with the deputy editor-in-chief Ulf Diederichsen, and the editorial team, Michael Bienert, Michael Chorev, Ernest Giralt, Yoshiaki Kiso, Paolo Rovero and John Wade, supported by a large international advisory board, are responsible for the scientific management of the journal. Thanks to their efforts the impact factor of the Journal has steadily increased to 2.071.

Wiley and EPS as co-owners of the Journal had an agreement in which profits and (initial) losses were equally shared. The contract ended in December 2013, and during 2013 negotiations were conducted between Martin Rothlisberger and Ray Boucher for Wiley and Anna Maria Papini (treasurer) and Dirk Tourwé (secretary) for EPS to discuss the terms of a new Agreement. At the final meeting in Brussels the EPS President Ferenc Hudecz joined the discussions, and an agreement on the new contract was reached. Whereas in the previous contract, the hosting of the EPS website was included in the Journal Agreement, there are now two separate contracts for the Journal and for the EPS website. The new journal contract provides a royalty as a percentage of the Journal income, whilst retaining joint ownership, instead of a profit (and possible loss) share model. Under the new terms the EPS have no liabilities and will also receive an annual income based on the success of the Journal.

These negotiations were the last task for Martin Röthlisberger, who retired shortly afterwards. EPS want to express its appreciation for the work of Martin, with whom collaboration has always been a pleasure.

After the two-day discussion: D. Tourwe, M. Rothlisberger, A.M. Papini, F. Hudecz, R. Boucher (left to right)

Dr. Katarina Krskova elected as the Effective Member of Slovakia

The Effective Member representing Slovakia at the General Assembly of EPS, Dr. Jan Bakos, of the Institute of Experimental Endocrinology of the Slovak Academy of Sciences, resigned recently. As required by the EPS Statutes, a call to all Slovak EPS members was launched by the EPS Secretary to nominate a candidate for replacing Dr. Bakos. Dr. Katarina Krskova, of the Institute of Experimental Endocrinology of the Slovak Academy of Sciences was nominated. She was subsequently elected by the majority of the Slovak EPS members. Dr. Krskova is a physiologist and molecular biologist working in the Laboratory of Metabolic Regulation. The laboratory is focused on the study of the role of peptide hormones – ANP, insulin, angiotensin II and oxytocin in mechanisms of tissue metabolic regulations, mainly in adipose tissue. The role of local renin-angiotensin system in the regulation of adipose tissue physiology and the effect of angiotensin II and oxytocin on adipogenesis and insulin sensititvity in obese rats and also in hypertensive patients is studied.

We welcome Dr. Krskova as the new Effective member, and we thank Dr. Jan Bakos for his efforts for EPS during his term.

Contributed by Dirk Tourwé, EPS Secretary

New Online Magazine

HORIZON

The new online magazine HORIZON (http://horizon-magazine.eu/) is designed to reach a wide range of readers interested in the latest developments in EU funded research and innovation and the impact they have on our everyday lives. HORIZON will also feature opinion pieces from leading researchers, innovators and policy makers.

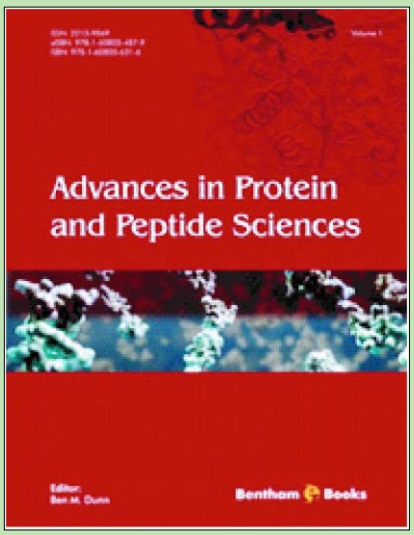
The magazine will be regularly refreshed with new articles and multimedia content, which can also be viewed on mobile devices. Links to social media networks will allow readers to express their own views and give feedback on the featured articles.

The journalists who write for HORIZON draw on many sources and could even make direct contact with you as a project coordinator; this will provide you a unique opportunity to highlight your successes and the importance and impact of your work.

Horizon replaces the popular research*eu monthly publication magazine but being web-based it will be much more responsive and reach a far larger audience.

If you have ideas for articles or comments or questions, please send them to the editor at *RTD-PUBLICATIONS@ec.europa.eu*

E-Book Review



Advances in Protein and Peptide Sciences Volume 1

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Advances in Protein and Peptide Sciences is a book series focused on leading-edge research on the structure, physical properties, and functions of proteins and peptides. The series presents highly cited contributions first published in the journal *Current Protein and Peptide Science*. Authors of these contributions have updated their work with new experimental data and references following their initial research. Each volume highlights a number of important topics in current research in the field of protein and peptide chemistry and molecular biology, including membrane proteins and their interactions with ligands, computational methods, and proteins in disease and biotechnology.

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CALENDAR of Forthcoming Events

PEPTIDE CONGRESS
Novotel London West, UK
3–4 April 2014
Website:
http://www.globaleventslist.elsevier.com/events/2014/04/ peptides-congress-2014/

7th ANNUAL PROTEIN AND PEPTIDE CONFERENCE
Dalian Hi-tech Industrial Zone, China
25–28 April 2014
Website: http://bitlifesciences.com/pepcon2014

4th CONFERENCE OF POLISH MASS SPECTROMETRY SOCIETY
Trzebnica, Poland
12–15 May 2014
Website: http://ptsm.ibch.poznan.pl/

14th NAPLES WORKSHOP ON BIOACTIVE PEPTIDES
Naples, Italy
12–15 June 2014
Website:
http://www.14naplesworkshop.org

33rd EUROPEAN PEPTIDE SYMPOSIUM
National Palace of Culture, Sofia, Bulgaria
31 August – 5 September 2014
Website: www.33eps2014.com

34th EUROPEAN PEPTIDE SYMPOSIUM
Leipzig, Germany, 2016