

Isoprenoids

by Pavel Drašar

The 22nd Conference on Isoprenoids took place in Prague, Czech Republic, on 7-10 September 2014, and focused on Recent Progress in Chemistry, Biology and Applications. 123 attendees from 25 countries around the world, almost 1/3rd of them students, participated in the conference. There were 57 oral contributions and 53 posters. The scope of the conference was the same as in previous meetings, while the range of scientific topics was broadened by contributions oriented toward biochemistry and biology, successfully linking the conference to the series of "Isoprenoids".

In many cases the very useful sponsorships of IUPAC and EuCheMS were mentioned and acknowledged. Also the exhibition part of the conference which ranged from the publishing houses through speciality chemicals vendors and distributors to the show of highly specialised laboratory equipment enriched the program. The Lord Mayor of Prague, Dr. Hudeček, took the auspices over the meeting.

During the conference student contributions were evaluated by the scientific committee. At the conclusion of the meeting, three prizes were awarded by TEVA Czech Industries pharma company and three prizes by the Phytochemical Society of Europe. Award scrolls were personally handed out by Dr. Dvořák (TEVA) and Prof. Strnad (PSE).

Plenary lectures were given by leading scientists in the field: Giovanni B. Appendino (IT), Harro J. Bouwmeester (NL), Søren B. Christensen (DK), Douglas F. Covey (USA), Anthony P. Davis (UK), Vadim V. Demidchik (BY), Minoru Isoe (JP-TW), Adriaan J. Minnaard (NL), Mosquera Antonio Mouriño (ES), Sergey A. Usanov (BY), and Ludger Wessjohann (DE). Prof. Douglas F. Covey of the Washington University in St. Louis School of Medicine summarized the highlights of the meeting in the closing ceremony, where he underlined the broad spectrum of the topics and noted the wide age range of the scientists present. Prof. Covey stressed the importance of the conference's momentum going forward. This fact was underlined by the attendance of over 40 scientists who took part in the previous conferences. Several, such as Prof. Jerzy Wicha and Dr. Alexander Kasal, attended almost all of them.

Among the most frequent topics discussed at the conference were the synthesis of brassinosteroids



Alexander Kasal, Jerzy Wicha, and Douglas Covey, the doyens of Isoprenoids (photo O. Lapčík)

and ecdysteroids, as well as their analogues and conjugates, and their role in native biological systems and in humans. Great interest was given to numerous terpenes and terpenoids, as cannabinoids, sesquiterpene lactones (thapsigargin and trilobolide, e.g.), juvenoid hormones, paclitaxel (taxol), and also the relatively new group of compounds as strigolactones, etc. Special concern was given to chemical biology, immunoanalysis, and supramolecular chemistry applications of semisynthetic steroid and terpene derivatives and constructs. In the "synthetic" part of the talks the main concern was the stereochemical control, asymmetric catalysis, even by using the enzymatic pathways. Here one of highlights was the presentation of synthesis of ent-progesterone, neurosteroids, steroids heterocyclic analogues and derivatives, dimeric terpenes, and supramolecular synthons containing isoprenoids. Much attention was given to a vast range of physicochemical studies of terpenes, steroids and their synthetic alterations, as well as the utilisation of all kind of isoprenoids in pharmacological studies and the development of drugs.

The book of abstracts printed in the Czech Chemical Society journal *Chemicke Listy* is available at www.vscht.cz/lam/isoprenoids/22th_Isoprenoids.pdf. A special issue of the Elsevier journal *Steroids* devoted to selected conference topics is under preparation.

Historically, the conference was the bridge between scientists from all corners of the then-separated globe. The 23rd Conference on Isoprenoids will take place in Minsk, Republic of Belarus, on 4-7 September 2016.

www.vscht.cz/lam/isoprenoids/Isoprenoids.htm