Conference Call

Trans-Mediterranean Colloquium on Heterocyclic Chemistry

by Saverio Florio and Anouar Alami

The IX Trans-Mediterranean Colloquium on Heterocyclic Chemistry (TRAMECH IX) was held from 22-25 November 2017 in Fes (Morocco), which had been the capital city of modern Morocco until 1925 and now capital of the Fès-Meknès administrative region. The city has two old Medina quarters, and is listed as a World Heritage Site. The University of Al Quaraouiyine, founded in 859, is the oldest university in the world. The city has been called the "Mecca of the West" and the "Athens of Africa."

The Fes meeting was particularly successful both from the scientific point of view and as a social and friendly gathering thanks to the excellent work of the local organizers who were able to create a friendly atmosphere around the participants.

The TRAMECH IX meeting was attended by 258 participants from 30 Countries and 53 Universities and research Centers, including 8 Moroccan Universities. The opening conference was given by Professor Ei-ichi Negishi (Nobel Prize Winner for Chemistry in 2010). The scientific program included also 16 plenary lectures, 12 invited lectures, 27 short talks and 193 poster presentations. Two short talks and two posters were awarded with a certificate.

The chemistry presented by speakers at TRAMECH IX involved developed and underdeveloped countries, and focused on the synthesis, reactivity, and applications of heterocyclic compounds of interest in the fields of medicinal chemistry, new materials, green chemistry, bioorganic chemistry, medicinal chemistry, pharmacology, structural and materials sciences, environmental chemistry, nanotechnologies, and biotechnologies by using innovative methodologies. During the meeting, there were pertinent discussions that sometimes continued at the coffee breaks with the participation of young people. Live discussions took place at the crowded poster sessions.

The IUPAC support was bestowed in order to facilitate interactions and collaborations among the countries of the Mediterranean area through meetings, conferences, and exchanges between researchers and various stages of young people in advanced laboratories for their PhD studies and research training. The conference lived up to expectations due to a large number of attendees, high level of speakers, and good quality of presented results. Moreover, one could

observe moments of socialization among participants.

At the end of the TRAMECH IX there was a discussion about the location of the TRAMECH X meeting in 2019. Several countries were proposed, including Monastir (Tunisia), Nilehavre (France), Hurghada (Egypt), and some cities of Spain. The definitive selection will be made as soon as possible by the International Scientific Committee (ISC) so that the interested countries can be informed.

Again, the involvement of very distinguished speakers will be pursued and the participation of young, motivated people will be facilitated. IUPAC will provide financial support within the project 2015-027-1-300. As in the Rabat, Antalya, and Fes meetings, the interactions among participants are expected to promote scientific collaborations and give young people the chance for research experience in well-established laboratories, either as PhD students or as visiting researchers.

Saverio Florio <saverio.florio@uniba.it> is Chair of the International Scientific Committee for TRAMECH IX. **Anouar Alami** is the Chair of the Local Organizing Committee.

Potential Impact of Pesticides on Environment and Human Health

by Sreenivasa Rao Amaraneni

Pesticides are routinely used in agriculture throughout the world to kill pests and to increase food production. They are also used for domestic, forestry, and public health purposes. India is one of the largest manufacturers of pesticides and consumption is increasing every year. Indiscriminate use of pesticides doesn't just kill the targeted pests; it also affects non-target organisms and the environment including water, soil, air, and plants and it leads to the contamination of food, such as vegetables, fruits, fish, prawns, and more.

Humans are exposed to pesticides via the food chain throughout the world. Some recent research suggests that the presence of pesticides can be detected, not only in the environment, but also in human milk, tissues, and blood. This is evidence of the magnitude of pesticides' impact on the environment and human health. Pesticide exposure has been linked to diseases, such as cancer, as well as to neurotoxicity and neurodegenerative disorders. The principle neurotoxicity after exposure to pesticides is presumed to result from protein interaction with pesticides: for example

organophosphorous pesticides inhibit acetylcholineEsterase (AChE) via the formation of a covalent protein adduct to pesticides.

The International Conference on Potential Impact of Pesticides on Environment and Human Health (ICPIPEHH 2017) was organized in Bangalore from 2-4 November 2017. The conference was sponsored and promoted by the German Academic Exchange Service (DAAD) with funds from the Federal Ministry for Economic Cooperation and Development (BMZ), from the Royal Society of Chemistry (RSC) in the UK, and by the Department of Science and Technology (DST), the Indian National Science Academy (INSA), Dayananda Sagar University (DSU) and Braquachems in India. The Conference was endorsed by IUPAC.

The main objective of the conference was to bring together domain experts from within India and abroad, including policy makers, to deliberate on the state of the art on the impact of pesticides on human health and environment and also to discuss future trends and actions. The conference discussed how pesticides and other chemicals affect non-target organisms, including humans, fish, prawns, etc, through the interactions of pesticides with biomolecules, proteins, and DNA, as well as the associated link to diseases. The conference addressed biotechnological, nanotechnological, biopesticides, and environmental biotechnology methods to avoid the impact of pesticides on the environment and to find remedies for pesticide pollution.

The inaugural ceremony was attended by over 200 scientists, faculty, and students. The conference was inaugurated by the eminent personality Dr. K.K. Narayanan, Founder of Metahelix Life Science Limited and Former President of ABLE. Prof. A. Srenivas, Dean of School of Engineering, DSU, welcomed the guests and delegates to the conference. Prof. A.N. Murthy, Vice Chancellor, DSU, delivered the presidential address. Dr. Sreenivasa Rao Amaraneni, Associate Professor, Department of Chemistry, DSU and the convener of the conference, gave a brief introduction. A vote of thanks was proposed by Prof. Anand Soloman, Chairman of Chemistry, DSU.

Prof Hugh D. Burrows, Editor of *Pure and Applied Chemistry (PAC)*, sent a message wishing success for the conference and has agreed to publish the selected papers of the conference in *PAC* after a formal peer review.

The conference, owing to its high quality in the form of research papers, as well as plenary and invited talks, attracted the attention of academicians, scientists, research scholars, and students. The delegates included

professors from Germany, UK, and Thailand, as well as from reputed institutes in India. The conference received 100 abstracts from delegates representing reputed institutes abroad and in India. The conference created an interdisciplinary platform for researchers to address the issues relating environmental pollution and its effect on environment and human health. The conference programme spanned 3 days, with 2 plenary talks, 10 invited talks, 42 oral presentations, and 40 poster presentations.

Prof. Gerrit Schiirmann, Helmholtz Centre for Environmental Research, Leipzig, Germany and Technical University Bergakademie Freiberg, Germany delivered the plenary talk on the first day of the conference: Predictive Assessment of the Human and Environmental Toxicity of Chemical Substances. Plenary speaker Prof. Wayne G. Carter, School of Medicine, University of Nottingham, presented research work on the detection and utilization of secondary pesticide targets as biomarkers of pesticide exposures.

Prof. E. Arunan, Indian Institute of Science (IISc) gave a brief introduction to IUPAC on the last day of the conference. Papers were chosen for the best oral and poster presentations. Most of the invited speakers were from reputed institutes in India. One of the highlights of the conference was a spectacular and graceful 'Kathak" Dance performance by Vid. Poorna Acharya and her Disciples, followed by a banquet dinner.

Owing to the elaborate preparations both in terms of quality papers and technical sessions, the ICPIPEHH-2017 conference established itself as a high-standard forum for the dissemination of high-quality interdisciplinary research on all aspects of the impact of pesticides on the environment and human health. The conferences was effective at fostering the exchange of ideas.

The following key themes of the conference are broadly related to the environment and human health and any interdisciplinary research work:

- Pesticide pollution, water, soil and air pollution,
- Environmental contamination, control, prevention, analytical & environmental chemistry and environmental science
- Emerging pollutants and methods of analysis
- Chemicals interaction with bio-molecules, proteins, and DNA, and also neurotoxicity and toxicology
- Biotechnology and environmental biotechnology, nanotechnology, biopesticides and phytochemistry.
- Human health effects of water quality, etc.

Conference presenters included the following:

- Prof Wayne Carter, Nottingham University, UK
- Prof. Dr. Gerrit Schüürmann, Head HCER,UFZ, Germany
- Dr. D. Ramaiah, Director, CSIR-NEIST, Jorhat, Assam
- Dr. Rao V. Jayathirtha, IICT, Hyderabad
- Dr. Mohan S. Venkat, IICT, Hyderabad
- Prof. S. Gourinath, JNU, New Delhi
- Dr. Madava Sharma, IICT, Hyderabad,
- Dr. M. Chandraseharan, IICT, Hyderabad
- Prof. P. K. Joshi, JNU, New Delhi
- Prof. D. E. Babu, Andhra University, Visakhapatnam
- Prof. G. R. Naidu, SVU, Tirupathi
- Prof. Vibha Tandon, JNU, NEW Delhi
- Prof. A. L. Ramanathan, JNU, New Delhi
- Prof. P. Rajendra Prasad, Andhra University, Visakhapatnam
- Dr. G. Parthasarathi, NGRI, Hyderabad
- Dr. I. Gurappa, DMRL, Hyderabad
- Prof. K. Sreeramulu, Gulberga University, Gulberga
- Dr. Surender Singh, Scientist, IARI, New Delhi
- Dr. Suresth Yadav, Scientist, ICMR, Ahmedabad
- Prof. M. Pandurangappa, Bangalore University, Bengaluru
- Prof. Rajendra, Former VC, SVU, Tirupathi
- Prof. S. V. Krishna Murthy, Kuvepu University
- Dr. T. N. V. Rao, CEO, Aquamark, Bengaluru
- Dr. K. N. Rao Aurigene, Reddy Laboratories, Bengaluru

In conclusion, the conference provided the right platform to discuss the impact of environmental pollution, including pesticides and more, on the environment and human health. The conference also deliberated on remedial methods and technology for reducing environmental pollution and its effect on the environment. These efforts could protect the environment for the well-being of human beings in the years to come.

The convener would like to thank all the funding agencies for their financial support and encouragement. The untiring support of the management of Dayananda Sagar University (DSU) resulted in a successful, high quality conference. Special Thanks to Prof. A.N. Murthy, Vice Chancellor, and Prof. A. Srinivas, Dean of the School of Engineering of DSU as well as the other administrators there.

The organizing committee, faculty and student volunteers of DSU offered timely help and

encouragement. Without the support and contributions of the plenary and invited speakers and the delegates of the conference, it could not have been successful.

The conference has allowed for the development of a very good network in terms of experts, resources, and researchers, both from within India and abroad. The exposure and experience gained through the conference organization has created the motivation to organize the conference in the years to come, with the support of research labs and organizations of national and international importance.

Sreenivasa Rao Amaraneni sramaraneni@yahoo.com is Associate Professor in Dept. of Chemistry, School of Engineering, Dayananda Sagar University.

Croatian Meeting of Chemists and Chemical Engineers

Ana Šantić, D. Kovačević and Marijana Đaković

The 25th Croatian Meeting of Chemists and Chemical Engineers with international participation (25HSKIKI), organized jointly by the Croatian Chemical Society and Croatian Society of Chemical Engineers, was held from 19-22 April 2017 in Valamar Diamant Hotel in Poreč, Croatia.

The Meeting was organized under the auspices of Ministry of Science and Education and Ministry of Environment and Energy of the Republic of Croatia, University of Zagreb, Croatian Engineering Association, and Croatian Chamber of Economy. For the first time, the Meeting was endorsed by IUPAC and supported by more than 20 chemical and pharmaceutical companies.

25HSKIKI in numbers

25HSKIKI gathered more than 400 scientists, researchers, and university and school teachers working in various fields of chemistry from 21 countries all around the world. The scientific programme covered all domains in chemistry through nine thematic sessions: Analytical and Structural Chemistry, Medicinal Chemistry and Biochemistry, Physical, Theoretical and Computational Chemistry, Synthesis and Catalysis, Supramolecular Chemistry, Chemical and Biochemical Engineering, Materials, Environment, and Education. The scientific highlights of the meeting included seven cutting-edge plenary lectures by internationally renowned chemists and 27 invited lectures on various current topics in chemistry. In addition, 40 oral contributions and almost 180 posters were presented and discussed at the meeting.