ELSEVIER

Contents lists available at ScienceDirect

Coordination Chemistry Reviews

journal homepage: www.elsevier.com/locate/ccr



Preface[☆]

This is the 39th and latest in a series of international conferences that began informally at the ICI, Butterwick Research Laboratories, ¹ Welwyn, UK, in 1950. Over the years, this series of conferences has grown to be THE venue to meet coordination chemists/inorganic chemists interpreted very broadly, from around the world.

In this event there were over 400 delegates from 40 countries, 178 oral presentations and over 200 poster presentations. The range of chemistry presented was wider than ever, and the enthusiasm of all, particularly the up and coming young delegates, was infectious.

This conference, organised by Stephen Lincoln (Chair) and Kevin Wainwright (Deputy Chair) was opened by the Governor of South Australia, His Excellency Rear Admiral Kevin Scarce AC CSC RANR, who emphasized, in his opening address, the importance of science and science education to national and global well-being.

During the conference a memorial Plenary lecture for Stanley Kirschner, who passed away in July 2008, was presented by Prof. Susumu Kitigawa. Prof. Kirschner was the permanent secretary of the ICCC conferences from 1961 to 1989. Jan Reedijk took over the post of Executive Secretary from Stanley, and in the closing session of this conference Prof. Reedjik (Leiden) announced that he will hand over his duties in 2012 (Valencia) to Prof. Chris Orvig (University of British Columbia). A memorial session was also held in honor of Alan Sargeson and Hans Freeman; both Alan and Hans were Australian inorganic chemists of worldwide renown.

There were eight Plenary speakers.

Prof. David Parker, University of Durham, UK
Plenary Title: Lanthanide complexes as cellular probes and diagnostic agents
David provided an insightful and entertaining discussion of 75 lanthanide(III)
complexes designed to report on the local environment through modulation
of their spectroscopic responses.

Prof. Kenneth Raymond, University of California, Berkeley, USA Plenary Title: A supramolecular enzyme mimic: 10⁶-fold rate enhancement and chiral selectivity in a self-assembled host

Ken presented, in his usual immaculate style, the self-assembly of a supramolecular anionic host, $[Ga_4L_6]^{12-}$ which binds cationic guests very strongly and selectively. This work elegantly cast new light on the possibilities of catalysis design.

Prof. Susumu Kitigawa, Kyoto University, Japan

Plenary Title: Evolution of porous coordination compounds. This was also the Stanley Kirschener memorial lecture

Prof. Kitigawa explored the rapidly developing field of porous coordination polymers also known as metal organic frameworks, through which he elegantly demonstrated the extraordinary structural possibilities in this area.

Prof. Nils Metzer-Nolte, University of Bochum, Germany Plenary Title: A bioinorganic journey from peptide bioconjugates to novel metal-based antibiotics

In a masterly exposition, Nils explored the use of organometallics for modification of the chemistry of bioactive peptides and peptide conjugates in solid phase syntheses.

Prof. Daniel Nocera, Massachusetts Institute of Technology, USA
Plenary Title: Personalized energy for the non-legacy world
Dan presented a highly informative and entertaining account of the
development of a new catalyst which, using solar power, captures many of
the functional elements of photosynthesis to produce hydrogen from water.

Prof. Vivian W-W Yam, University of Hong Kong, PRC Plenary Title: The versatility of metal-ligand building blocks – from design to assembly and photofunctions

Vivian enthusiastically presented research covering a broad spectrum of novel photofunctional materials built systematically from a carefully designed selection of building blocks.

Prof. Polly Arnold, University of Edinburgh, UK
Plenary Title: Bond activation with uranium complexes
A stimulus for Polly's study of unusual uranium and f-block element
complexes is the developing necessity to decommission a large number of
ageing nuclear reactors in the coming years.

Prof. Anthony Wedd, University of Melbourne, Australia Plenary Title: How does biology cope with copper? It is toxic but essential [Burrows Award Lecture of the Inorganic Division of The Royal Australian Chemical Institute]

Tony enthusiastically explored the essential nature of copper as a trace element in the metabolism of all organisms through redox enzymes. However, above trace concentrations, copper is toxic and bacteria protect themselves from copper in a similar manner to the way they develop antibiotic resistance.

This special issue of Coordination Chemistry Reviews contains a selection of review articles based on work presented at the 39th ICCC.

The 40th ICCC will be held in Valencia, Spain, in September 2012.

A.B.P. Lever* York University, Toronto, Canada

*Tel.: +1 416 736 2100; fax: +1 416 736 5936. *E-mail address*: blever@yorku.ca

> 12 June 2011 Available online 6 July 2011

¹ ICI = Imperial Chemical Industries.