



Contents lists available at ScienceDirect

Journal of Organometallic Chemistry

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

Foreword

Foreword to the ISBOMC'08 special issue



Gérard Jaouen

This special issue on Bioorganometallic Chemistry is dedicated to Professor Gérard Jaouen on the occasion of his 65th birthday in February 2009. Most of the contributions come from presentations made at the International Symposium on Bioorganometallic Chemistry that was held in Missoula, Montana in July of 2008. Professor Jaouen was a cofounder of the conference series which has been held biannually since 2000.

Gérard Jaouen was born in 1944. His undergraduate studies were carried out at the University of Brest, after which he did graduate work at the University of Rennes, defending his doctoral thesis in organic chemistry in 1969 and earning a Doctorat d'Etat in Physical Sciences in 1973 in the laboratory of Professor R. Dabard. He spent the year 1973–1974 at Cambridge working with Professor Jack Lewis (now Lord Lewis), and on a number of occasions since has spent extended periods in Canada, collaborating with Dr M.J. McGlinchey at McMaster University and with Dr I.S. Butler at McGill. He became a member of the CNRS in 1970, was appointed Maître de Recherche (Directeur de Recherche) in 1976, and became Professor at the Ecole Nationale Supérieure de Chimie in Paris in 1983, where in 1984 he set up the CNRS URA (Associated Research Unit) No. 403, and the UMR 7576 in 1997, of which he is the director. He is now appointed as “classe exceptionnelle” professor and has been elected as a member of the CNRS national Committee in 1991 and 1995 and as a member of the CNU (French National Committee for Universities) in 2001.

His research interests were at first centred on establishing a series of new concepts in the use of organometallics on organic synthesis, particularly the arene chromium tricarbonyl series (1971). This work takes advantage of the differences in reactivity between free and complexed aromatics in synthesis, including organometallic syntheses of chiral molecules. At the time this theory was in its infancy and had not reached the level of development that it has today. These groundbreaking studies are now found in most organometallic chemistry textbooks. This aspect of his research has been particularly well recognized, it led to an invitation for Prof. Jaouen to present his work before the New York Academy of Sciences in 1976, and an invitation to write a section of the book edited by H. Alper (Academic Press) in 1978. He was also awarded the Prize of the Chemical Society in France (Prize of the Organic Chemistry Division) in 1975.

After some work on asymmetric complexes (chromium) and reaction mechanisms (metallic hydrides), in 1979 Dr. Jaouen decided to focus his interests in a new direction: that of bioorganometallics, which offers a vast potential for organometallic chemistry. His recent studies include:

- Synthesis of suicide organometallic substrates for the study of the active site of proteins (receptors)
- Establishment of new “cold” (i.e. non-reactive) method for immuno assay, termed Carbonyl Metallo Immuno Assay (CMIA)

- Development of new concepts in multi-immunoassay
- The synthetic enantioselective generation by conversion of organometallic complexes
- The synthesis of organometallic radiopharmaceuticals with exceptional affinity for receptor proteins, for use in the treatment of breast cancer
- The synthesis of antitumor organometallic reagents which are at the same time both antiestrogenic and cytotoxic.
- The organometallic activation of polyphenols and the bioavailability of these anticancer species.

This field appears rich in promise and many other world firsts are expected in the years to come.

These novel ideas have been presented in lectures at IUPAC meetings all over the world (Organometallics, OMCOS, Natural Products, ICCO) at North American conferences (Gordon, ACS, Canada) as well as in Europe (UK, Italy, Czech Republic, Poland, Switzerland, Russia, etc.).

Professor Jaouen is the author of 320 papers and 17 reviews, and holds 10 patents. His achievements in bioorganometallic chemistry

have been recognized by an award from the French Academy of Sciences in 1996. Moreover he has been elected to the prestigious and elitist "Institut Universitaire de France" in 1997. His election was to recognize that he has demonstrated a very high level of originality and creativity in pioneering this remarkable new area of bioorganometallic chemistry, one of the beautiful examples of interdisciplinary science. He received in 2001 a von Humboldt award in Berlin and was elected by the Royal Society of Chemistry as the Centenary Lecturer 2002 and has received a Pioneer Award from Amer. Inst. Chem in 2002, the Bioorganometallic Award in Zurich (2004) and several name lectures (e.g. Dublin, Montreal).

Richard D. Adams
*University of South Carolina,
Department of Chemistry and Biochemistry,
Columbia, SC 29208,
United States*
E-mail address: Adams@mail.chem.sc.edu

Available online 8 January 2009