



*Gérard Jaouen  
Chaire de Bioorganométabolique  
Institut Universitaire de France*

## A TRUE RENAISSANCE MAN

**In occasione del III International Symposium on Organometallic Chemistry (ISBOMC'06), tenutosi presso l'Università di Milano lo scorso luglio e organizzato da Stefano Maiorana,** il comitato organizzatore ha deciso di raccogliere i contributi scientifici degli oratori del convegno in un numero speciale del Journal of Organometallic Chemistry, e di dedicare questo numero a Stefano Maiorana in occasione del suo 70° compleanno. Il Professor Gérard Jaouen, dell'Ecole Nationale Supérieure de Chimie de Paris, pioniere nel campo della Chimica Bioorganometallica, ha voluto scrivere la nota introduttiva di questo numero speciale che pubblichiamo di seguito.

**T**he Third International Symposium on Bioorganometallic Chemistry (ISBOMC'06), first held in Paris in 2002, was held this year in Milan from 5-8 July 2006, under the chairmanship of Professor Stefano Maiorana, ably assisted by Emanuela Licandro and Clara Baldoli. Thanks to the Journal of Organometallic Chemistry (Professor Rick Adams) this special issue gives a taste of the scientific approach of the meeting. For the participants, this was a magical experience, the result of perfect harmony between the spirit of the place, the flow of new ideas and the orchestration provided by Maestro Maiorana himself. The decision to hold the Congress in Milan, that is, in one of the most imaginative, fascinating and creative cities in Europe, was an opportunity for this new discipline, which is still finding its place in the scheme of things, to make its mark. Not only the city, but the conference

location in the Central University, the former Ospedale Maggiore - one of the most beautiful buildings in Milan dating from 1456 - as well as an evening of opera at La Scala and a guided tour to see the Last Supper of Leonardo da Vinci, all contributed to the intellectual and aesthetic tenor of the event. But perhaps the most emblematic event in the non-scientific program, perfectly integrating the conference into the glories of the historical past, was the banquet in the Palazzo Serbelloni, where the rich culinary resources of Lombardy provided a wonderful celebration of the birth of the new discipline of Bioorganometallic Chemistry. This magnificent Palazzo, where Napoleon and Josephine stayed for several months in 1796 before the establishment of the cisalpine Republic, was an exceptional backdrop for the meeting. Only the banquet at Le Clos Vougeot in Burgundy for the 1979 Organometallic Chemistry meeting, left me with such a vivid impression.

With such a setting, the scientific meeting could only aspire to reach similar heights, an aspiration that was met through the quality of the participation. It was shown that, in the area of metals in medicine, the genomic route is no longer the only one to follow, and that a proteomic approach, underpinned by the flexibility of organometallic chemistry, also offers interesting possibilities. The participants resonated with the presentation on metal carbonyl mediators, and shivered at the report on environmental problems. We also assessed the importance of organometallic enzymes and their models in terms of the energy needs of the future. And Roger Alberto, recipient of the international prize for bioorganometallic chemistry, went nuclear with his presentation on radiopharmaceuticals. All these presentations showed that the discipline promises to have an extremely rich future with so much more still to be achieved.

The chief architect of the success of ISBOMC'06 was the chairman Stefano Maiorana, to whom this special issue is dedicated. His story reflects that of a whole generation who have been lucky enough to work in the golden age of organometallic chemistry. After training as a synthetic chemist on biologically-active heterocyclic compounds (dihydro-1,4-thiazine), he discovered organometallic chemistry (iron tricarbonyl complexes of substituted cyclopentadienes) while pursuing NATO research fellowships (1969 and 1973) with Professor Leo A. Paquette at Ohio State University. In 1975, he was appointed Professor of Organic Chemistry at the (now) Department of Organic and Industrial Chemistry of the University of Milan. His research interests extended to new synthetic and organometallic methodologies, asymmetric synthesis using organometallics and solid-phase organometallic synthesis. In this context, he used in particular chromium tricarbonyl derivatives and Fischer-type carbene complexes of group 6 transition metals. In the area of bioorganometallic chemistry, he published his first paper in 1988, in collaboration with our group in Paris, dealing with the enantioselective reduction of arene tricarbonyl chromium aldehyde complexes by baker's yeast. This was followed by the study of Fischer carbene labelling of proteins and, recently, metal-conjugated peptide nucleic acid (PNA) monomers and oligomers, with the aim of providing new molecules that can act as spectroscopic or electrochemical diagnostic markers.



Stefano Maiorana has been the coordinator of a European network, appointed as a visiting professor in Spain (Oviedo), France (Paris), Japan (Tokyo) and honoured in 2004 as the GICO Senior recipient (Organometallic Chemistry Group of the Italian Chemical Society) for his important contributions to the field.

Professor Maiorana has also played an important role in the Italian Chemical Society as President of the Editorial House of «La Chimica e l'Industria» (1990-1993), of the Organometallic Chemistry Group (1995-1997), creator of the school in Organometallic Chemistry held every two years in Camerino, President of the SCI's Division of Organic Chemistry (2001-2004) and as a member of the University Scientific Committee for Research (2000-2005). Since 2003, he has been a member of the «Senato Accademico» of the University of Milan and Coordinator of the research line «New Technologies for High Throughput Synthesis (HTS)», which forms part of the University's excellence Centre, the «Interdisciplinary Centre for Biomolecule Studies and Industrial Applications».

Stefano has developed an intensive collaboration over the last thirty years with Italian pharmaceutical companies and the custom synthesis industry. The results here led to the registration of 25 patents, most of which have been extended to the leading industrial countries where some are being applied industrially.

This full, successful and visionary career is a perfect example of what can be achieved at this time of international integration. It would make a good reference point for our societies.

I should also add that the personality of the man himself is at least as interesting as his curriculum vitae. He is imaginatively and creatively open to ideas, while at the same time he is friendly,

efficient, and respectful of others' opinions. I have been in a position to appreciate his cultured, diplomatic and tolerant approach, tempered with firmness when it comes to essential points, in meetings of the scientific committee of ISBOMC'06. He was always able to resolve even heated debates in a spirit of constructive compromise. For me, this was a real lesson in what a man of letters, raised in the spirit of enlightenment and culture that was the ideal of Europe at its height, can achieve. In his private life, he is an aesthete with a love of art and of Milanese design. All in all, a real Renaissance man who made an ideal guide and patron for ISBOMC'06.