

Editorial

65th Birthday of Professor Bogdan Marciniec



It has come surprisingly quick and too soon as usual, but in this year Prof. Bogdan Marciniec celebrates his 65 birthday. It is at the same time an opportunity to look back on the achievements of the leader of a group working on organosilicon chemistry and organometallic catalysis who has won a stable position among the best in the world in this area of research.

Bogdan Marciniec was born in Secemin (Poland), in 1941, but all his life and carrier is connected to Poznań and the Adam Mickiewicz University, UAM. In 1986 he was conferred the title of Professor. Prof. Marciniec passion, ambition and hard work soon won him a recognition in research circles. After coming back from a training at the Kansas University, USA (1970–1971), he initiated the research in organosilicon chemistry in Poznań. Thirty-five years ago he started organizing a unique Poznań centre devoted to this area soon winning the status of his school. At present the fields of research developed by Prof. Marciniec are covering:

- Hydrosilylation of C=C and C≡C bonds, new catalysts and precursors.
- Cross-metathesis and silylative coupling of olefins with vinyl-silicon compounds catalyzed by transition metal (Ru, Rh, Ir, Co) complexes.
- Silylative coupling polycondensation and ADMET polymerization versus ring-closure metathesis of silicon containing dienes (Ru, Rh complexes).
- New transition metal complexes with organosilicon ligands (siloxides, π -complexes, silylenes, carbenes)—synthesis, structure, reactivity and application to catalysis.
- Synthesis and technology of molecular and macromolecular organosilicon compounds via transition metal catalysis as well their application as fine chemicals and precursors of new materials.

- Functionalized silsequioxanes.
- Polymers and cyclic compounds containing Si, N and C as pre-ceramics.
- Activation of vinylic =C–H bond by M–Si, M–B, M–Ge, M–Sn and M–H complexes (M = Ru, Rh, Ir, Fe, etc.).

Over the years Prof. Marciniec interests evolved from the reactivity of the Si–H bond (mainly in the process of hydrosilylation) in the presence of transition metal complexes to a new area he called “silicometallic” and generally inorganometallic chemistry, covering transformations of complexes mainly 13 and 14 groups elements, usually in the presence organometallic complexes of platinum group metals, towards precursors of new materials (including polymers) of special, physico-chemical or optoelectronic properties. Hence the fields of Prof. Marciniec expertise include inorganic chemistry, coordination chemistry, organometallic chemistry and catalysis as well as recently their application to organic syntheses.

He is an author and editor of 13 books, over 230 papers in journals of international circulation, monographs, and chapters in books, over 80 lectures he delivered at symposia and conferences in 20 countries.

He has been invited to seat in Editorial Boards of a few renowned scientific journals (e.g. Organometallics, Applied Organometallic Chemistry, Clean Products and Processes, Polish version of Encyclopaedia Britannica), a permanent membership of the Advisory Board of International Symposia (Int. Symp. on Olefin Metathesis and Polymerization, Int. Symp. on Organosilicon Chemistry, European Silicon Days). Since 1994 he has been a corresponding member of the Polish Academy of Sciences, since 1996, a President of the Committee of Chemistry of the Polish Academy of Science and the National Committee of IUPAC. Since 1999 he has been a member of the American Chemical Society.

He is known as a talented organiser accepting a number of functions at his Alma Mater, he was a Dean of the Faculty of Chemistry AMU in the years 1985–1988, and then a Rector of the University in 1988–1990. In the years 1994–2000 he was appointed a member of the State Committee for Scientific Research in Poland and in the 1997–2000 its vice Chairman. Last year he was appointed a vice Chairman of the Committee of Scientific and Technological Policy.

From the very beginning of his carrier, Prof. Marciniak has been interested in the applications of his scientific results. He is a co-author of 90 patents and patent applications (including two USA patents), which made grounds for 11 licence agreements. Some of them have become fundamental for implementation of new technologies. Prof. Marciniak often says that the motto of his work is to combine the highest possible level of fundamental studies with the possibility of application of its results. Developing the organosilicon chemical industry in Poland has always been his ambition. The great number of grants related to implementation of technologies from KBN, application study within the COST initiative, cooperation with NATO, General Electric Silicones, USA and other chemical concerns have proved the application of his work by the world industry. In 1996 he opened the first in Poland and so far the only one Poznań Science and Technology Park whose development and success have been ever since his great ambition.

The X International Symposium on Organosilicon Chemistry held in Poznań (1993), organised by Prof. Marciniak, was a long remembered scientific event of world significance. Last year Prof. Marciniak organised in Poznań another International Symposium on Metathesis and Olefin Polymerisation. Two of the keynote lecturers Prof. Schrock and Prof. Grubbs a few months later received the Nobel Awards in Chemistry.

Another area in which he is well known is teaching and training. He has promoted 75 M.Sc. theses and 18 Ph.D. ones. Some of the doctors he promoted have since then achieved the title of doctor habilitatus and have been working successfully in research. From 1992 to 2005 Prof. Marciniak organised five international schools on Molecular Catalysis, which have enjoyed great interest among young scientists from Europe and to which the best lecturers have been invited.

The achievements of Prof. Marciniak as a researcher, teacher and organiser have been highly appreciated, in 2001 he was granted the Award of Prime Minister of the Republic of Poland and in 2002 he received the J. Śniadecki Medal—the highest award of the Polish Chemical Society to mention the two of a large number of awards and distinctions. We would not describe this fascinating personality not mentioning the joy of living and cheerfulness, so characteristic of Prof. Marciniak. He represents the optimistic pragmatism along with great social skills (it is not a surprise to find in his CV music and dancing as his hobbies). According to some people “those who know him are protected against the evil and gain splendour”. One of us (Jacek Guliński) had an opportunity of working in close cooperation with him for over 30 years and can confirm this opinion. Let us on behalf of all his co-workers and friends express our best wishes of health and success; we believe, after the Chinese that “only wine and wise men grow in worth with time”. As a present to honour Prof. Marciniak we have decided to publish this special issue of the Journal of Molecular Catalysis A: Chemical. As a guest editor (J.J.Z.) of this special issue I want to express my great thanks to all Bogdan Marciniak friends who decided to publish their recent papers in this volume and special thanks to Professor Anna M. Trzeciak for help in realization of my editor duties.

Józef J. Ziółkowski*

Faculty of Chemistry, Wrocław University, Wrocław, Poland

Jacek Guliński

*Faculty of Chemistry, Adam Mickiewicz University,
Poznań, Poland*

* Corresponding author.

*E-mail address: jjz@wchuwr.chem.uni.wroc.pl
(J.J. Ziółkowski)*

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