

## OBITUARY

### Zvonimir Maksić (1938 – 2011)



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Professor Zvonimir Maksić, PhD, scientist emeritus of the Ruđer Bošković Institute (RBI), passed away on March 27, 2011 in Zagreb at the age of 73. Colleagues at the RBI were deeply saddened to learn of his sudden and untimely death and the end of his 48-year-long active and prolific scientific career. His death left the Croatian scientific community without a *spiritus movens* of scientific progress.

He was born on September 11, 1938 in Bitola, (Republic of Macedonia). His academic career started after graduation in theoretical physics from the Faculty of Science, University of Zagreb. He then in 1962 joined the Theoretical Chemistry Group headed by Milan Randić at the Ruđer Bošković Institute. In 1968, under the mentorship of Milan Randić, he earned a

doctorate in theoretical chemistry with the thesis entitled “Some problems of the electronic structure of complexes”. That same year he married Mirjana Eckert, an IRB scholar in the Organic Chemistry Division. The future showed that they were a perfect match both personally and professionally, having a harmonious marriage. Their relationship brought together a theoretical physicist and a talented physical-organic chemist, who started an exchange of scientific ideas and results. Over the years 76 papers were jointly prepared and subsequently published. According to WoS, Professor Mirjana Eckert-Maksić is now one of the leading physical-organic chemists. Zvonimir Maksić did postdoctoral studies at the University of Tennessee in Knoxville with John E. Bloor (1970–1971) and at the University of Texas at Austin working with the famous theoretical chemist Michael J. S. Dewar (1972–73). After returning to Croatia, he got quickly promoted through scientific ranks. In 1973 he became a research associate at the RBI and in 1975 assistant professor at the Department of Chemistry, University of Zagreb. In 1978 he became a senior scientist (research adviser) and then in 1979 full professor at the University of Zagreb, lecturing on quantum chemistry, molecular symmetry and computational chemistry. Until his retirement in 2004, he worked at both institutions, successfully combining his research experience with the duties and responsibilities of teaching at undergraduate and graduate levels. He established and headed the Quantum Organic Chemistry Group in the Organic Chemistry and Biochemistry Division of the RBI. Following retirement, he continued with scientific research and wrote with unchanged enthusiasm. In 2005 he was appointed scientist emeritus of the RBI. His outstanding achievements in science were recognized by both the Croatian and international scientific communities. Professor Maksić was the recipient of many scientific awards in Croatia: the City of Zagreb Award for Outstanding Achievements in Scientific Research (1976), the Ruđer Bošković Award for Scien-

tific Excellence (1987), the Medal of the Chemistry Department of the Faculty of Science (2005), the National Lifetime Achievement Award in the field of natural sciences (2008), and a plaque "for his pioneering contribution to the understanding of chemical bonds" on the occasion of his delivery of the Charles A. Coulson lecture at the University of Georgia in Athens (2008). As a recipient of the prestigious Alexander von Humboldt fellowship, he spent the period from 1979 to 1981 as a visiting professor at the Institute of Organic Chemistry at the University of Heidelberg. He also served as a visiting professor and scientist at the University of Münster and the University of Madrid in Cantoblanco, and was invited to lecture at many other universities and institutes across Europe and beyond. Professor Maksić served as the President of the Croatian Chemical Society (1988–1990), head of the Department of Chemistry at the RBI (1995–1997), Deputy Director General of the RBI (1997–1999) and a member of the board of governors of the RBI for two terms in office. He was the promoter of the *Honoris causa* doctorate for the two-time Nobel laureate Linus Pauling at the University of Zagreb (1988). Professor Maksić's important contribution to international recognition of the newly established Croatian state is his involvement in the "Appeal for Peace in Croatia", written in September 1991, for which he secured the signature of Linus Pauling, the first to sign it, followed by 126 Nobel laureates and the "Appeal for Peace in Bosnia and Herzegovina and Stability in the Balkans," written in May 1992 and signed by 84 Nobel laureates. Among them were Abdus Salam, Vladimir Prelog and Linus Pauling, with whom Professor Maksić shared a long collegial friendship. During his 48-year-long scientific career, Professor Maksić published over 250 original research papers, 23 review articles and chapters in monographs, cited (according to Web of Science) over 4000 times. He wrote two books: *Kvantna kemija* [Quantum Chemistry] (Liber, Zagreb, 1976) and *Simetrija u kemiji* [Symmetry in Chemistry] (Školska knjiga, Zagreb, 1979, in collaboration with N. Trinajstić and L. Klasinc).

The areas of research in which Professor Maksić achieved significant results include molecular physics, theoretical chemistry and computational chemistry. He also worked on the modelling of hybridization in molecules, the electron-correlation problem in quantum chemistry, the nature of chemical bonding, chemistry of organic superacids and superbases, and the design of new molecules with targeted chemical properties.

He conveyed his enthusiasm, creativity, perseverance in work and scientific excellence to students and junior colleagues, which resulted in a large number of bachelor's, master's and doctoral theses. He organized international scientific conferences in Croatia and elsewhere, was a member of the editorial boards of distinguished scientific journals, and edited the following series: *Modelling of Structure and Properties of Molecules* (1987), *Theoretical Models of Chemical Bonding* (4 volumes, published in 1990–91), and together with P. Politzer *Theoretical and Computational Chemistry* (16 volumes from 1994 to the present).

As an advocate of promotion of excellence in natural sciences, Professor Maksić was actively involved in the introduction and implementation of internationally accepted criteria of excellence in the Croatian scientific community.

The view that scientists should take a more active part in scientific issues and global problems faced by the World (such as disarmament and preservation of the planet for future generations) is given in the Cavtat Declaration, of which he wrote the initial version and which was signed by participants of the 1988 Symposium on the Electronic Structure of Molecules.

The special issue of *Croatica Chemica Acta* "From Conceptual to Computational Chemistry and Back" (2009) was dedicated to Prof. Zvonimir Maksić at the occasion of his 70<sup>th</sup> birthday and 45 years of his presence in science. That issue offers a detailed scientific biography of Zvonimir Maksić.

*Davor Margetić*