

## Kata Mlinarić-Majerski – *Curriculum Vitae*

**P**ROF. DR. Kata Mlinarić-Majerski was born in 1949 in Skočaj (Bosnia and Herzegovina). She completed elementary and high school in Bihać and in 1968 she enrolled to the Faculty of Science at the University of Zagreb where she completed her undergraduate study of chemistry and defended her diploma thesis in 1972. From 1973 she was employed at the Ruđer Bošković Institute where she completed her Master of Science thesis in 1976 and her Ph.D. thesis in 1979, both in the field of chemistry. From June 1984 until the end of 1985 she stayed at the University of Minnesota as part of her postdoctoral research activities in the group of Prof. Paul G. Gassman, a renowned expert in the field of small strained molecules.

Prof. Mlinarić-Majerski got a position of a Research Associate at the Ruđer Bošković Institute in 1986, Senior Research Associate in 1991, Senior Scientist in 1998 and Senior Scientist Tenure in 2003. She was also awarded with a position of Full Professor at the Department of Biotechnology of the University of Rijeka in 2008 and of Adjunct Full Professor at the Division of Organic Chemistry of the Faculty of Science at the University of Zagreb in 2012.

Her main research fields of interest include synthetic, physical organic and supramolecular chemistry. More specifically, she made scientific contribution to the topics of preparation and reactivity study of highly strained polycyclic molecules, synthesis of bioactive polycyclic compounds, synthesis of crown ethers, cryptands and anion receptors combined with the study of their molecular recognition capabilities, and study of binding of polycyclic molecules with cucurbituril hosts.

From 1990 Prof. Mlinarić-Majerski was the Head of the Laboratory for Synthetic and Physical Organic Chemistry, later renamed to the Laboratory for Synthetic Organic Chemistry, and she had run it until her retirement in 2015. She was a principal investigator of numerous domestic (12) and international (8) research projects. Prof. Mlinarić-Majerski also made significant contributions to education and mentoring of young researchers that resulted in 16 diploma theses, 7 Master of Science theses and 12 doctoral theses. She has published to date over 170

original scientific papers (including 19 review papers) that have been cited over 1700 times. In addition, she has more than 150 contributions to domestic and international meetings, has 8 patent applications and she wrote 3 book chapters. In recognition for her scientific work, she was awarded in 2004 with the State award for Science of the Republic of Croatia.

With an expertise in synthetic organic chemistry, Prof. Mlinarić-Majerski was over the years active not only in teaching but also as an invited speaker on many scientific meetings both in Croatia and abroad. She was a Visiting Professor at numerous universities: University of Toledo, Ohio, USA (1988), University of North Texas, Denton, Texas, USA (1998, 2000, and 2003), Polish Academy of Science, Institute of Physical Chemistry, Warsaw, Poland, The South Africans Universities: RAU, Johannesburg, University of Port Elizabeth, Port Elizabeth, Natal University, Durban, Lanzhou University, College of Chemistry and Chemical Engineering, Lanzhou, China, University of Utah, Salt Lake City, USA, and State University of New York, Stony Brook, USA.

During her productive scientific career, Prof. Mlinarić-Majerski was a reviewer for many high quality scientific journals (*J. Org. Chem.*, *Tetrahedron*, *Tetrahedron Lett.*, *Eur. J. Org. Chem.*, *ChemMedChem.*, *ARKIVOC*, *Heterocycles*, *Molecules*, *Chem. Rev.*, etc.) and evaluator for scientific projects (Ministry of Science and Sports of the Republic of Croatia, Croatian Science Foundation, Slovenian Research Agency, Polish Research Agency, National Science Foundation, USA, National Research Foundation of South Africa, Research Foundation Flanders (FWO), Belgium, etc.).

Aside from her scientific activity, Prof. Mlinarić-Majerski was entrusted with many official duties, both at the Ruđer Bošković Institute (RBI) and at other institutions. She was a member of the Election Committee of the Scientific Board of Chemistry, RBI from 1989 to 1994, the president of the Scientific Council of the Division of Chemistry, RBI from 2002 to 2005, member of the board and later president of the Board for young researchers of the Scientific Council of the RBI from 2002 to 2004. She was also the Head of the Division of Organic Chemistry and

Biochemistry, RBI, from 2004 to 2005 and from 2008 to 2014. Additionally, she was an advisor of the Director General of the RBI for the topics concerning science and education from 2005 to 2009 and a member of the Scientific Council of the RBI from 2005 to 2014.

Prof. Mlinarić-Majerski is a member of the Croatian Chemical Society and from 1993 to 2016 she was a member of the Editorial Board of its journal *Croatica Chemica Acta*. She was also the president of the Section for Nomenclature in Organic Chemistry of the Croatian Chemical Society and the Croatian Society of Chemical Engineers from 1992 to 1998. In addition, she was a member of the Scientific and Organizing Committee of the XVIII Croatian Meeting of Chemists and Chemical Engineers, Zagreb in 2003 and a member of the Organizing Committee of the 13<sup>th</sup> European Symposium on Organic Chemistry, Cavtat in 2003. Prof. Mlinarić-Majerski was a president of the Section for Organic Chemistry of the Croatian Chemical Society from 2006 to 2009 and a Croatian representative of the Croatian Chemical Society in the European Association for Chemical and Molecular Science (EuCheMS), Division of Organic Chemistry from 2009 to 2015. She was also a member of the Study Council of the Doctoral Study in Chemistry at the Faculty of Science, University of Zagreb from 2005 to 2019. Prof. Mlinarić-Majerski was also entrusted with the position of the president of the Council for Natural Sciences (field chemistry) of the Croatian Agency for Science and Higher Education from 2009 to 2017. From 2013 to 2017 she was a member of the Accreditation Council of the same agency. In 2017 she was named a member of the Committee for Additional Monitoring in Reaccreditation Procedures (Committee of the Accreditation Council of the Croatian Agency for Science and Higher Education). Prof. Mlinarić-Majerski was also a member of the Panel for Chemistry of the Croatian Science Foundation from 2015 to the end of 2019.

The Laboratory for Synthetic Organic Chemistry (LSOC) continued the tradition of the former Laboratory for Synthetic and Physical Organic Chemistry in studying the chemistry of cage molecules. Research in the laboratory dealt with the synthesis of new cage molecules, study of the reaction mechanisms performed on cage molecules, as well as the use of cage molecules as building blocks in construction of supramolecular assemblies. Covering various synthetic, analytical and spectroscopic techniques on a wide range of substrates, the research activities in the LSOC were ideal for training young researchers in graduate and post-graduate education (B. Sc., M. Sc., and Ph. D. theses). On Figures 1–3 some of the many past and present members of the LSOC are shown.

Research activities of the LSOC covered a broad spectrum of studies, primarily in the field of synthetic organic chemistry, photochemistry, supramolecular chemistry and physical organic chemistry. The most significant part of the

work was related to the development and application of new methods and techniques in the synthesis of polycarbocyclic molecules, as well as towards incorporation of these molecules in more complex molecular structures and assemblies.



**Figure 1.** Members of the LSOC in 2002 (from left to right: Goran Kragol, Tatjana Šumanovac, Dunja Šafar-Cvitaš, Marijana Vinković, Dragica Petračija, Lada Klaić, Renato Margeta and Danko Škare; sitting: Jelena Veljković, Kata Mlinarić-Majerski and Ines Vujasinović).



**Figure 2.** Members of the LSOC in 2006 (from left to right, behind: Renato Margeta, Nikola Basarić, Oliver Franković and Marija Matković; middle: Marija Alešković, Ines Vujasinović, Jelena Veljković, Kata Mlinarić-Majerski and Dragica Petračija).



**Figure 3.** Members of the LSOC in 2010 (from left to right, behind: Ines Vujasinović, Margareta Sohora, Vesna Blažek Bregović, Nikola Basarić, Tatjana Šumanovac and Damir Bobinac; middle: Marija Alešković, Jelena Veljković, Kata Mlinarić-Majerski, Enidija Lukša, Marina Šekutor and Nikola Cindro; down: Marija Matković).