

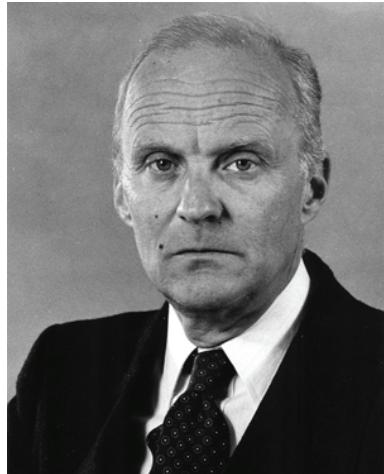


IN MEMORIAM
Miroslav J. Gašić (1932–2022)

Miroslav Gašić, a longtime professor of Organic Chemistry at the Faculty of Chemistry, University of Belgrade, member of the Serbian Academy of Sciences and Arts, and former president of the Serbian Chemical Society passed away in March 2022.

Miroslav Gašić was born in Belgrade in December 1932. He graduated at the Chemistry Department, Faculty of Natural Sciences and Mathematics, University of Belgrade in 1959, and was appointed as an assistant at the same department in 1960. He defended his PhD Thesis „Acetoxylation of steroid hormones“, supervised by Milutin Stefanović and Mihailo Mihailović, at the Faculty of Natural Sciences and Mathematics, University of Belgrade, in 1964. Immediately after getting his PhD, he did his post-doctoral research on oxidation of steroid ketones with Eliahu Caspi at the Worcester Foundation for Experimental Biology, Shrewsbury, Massachusetts, and on non-classical homoallylic carbocations with Saul Winstein at the University of California, Los Angeles. In 1970 he was appointed as an assistant professor at the Chemistry Department, Faculty of Natural Sciences and Mathematics, University of Belgrade, in 1976 as an associate professor, and in 1983 as a full professor. He spent a year (1972/73) as a visiting professor at the University of Indiana, Bloomington. In 1985, Miroslav Gašić was elected as the corresponding member of the Serbian Academy of Sciences and Arts, and in 1994 as the full member.

Research activity of Miroslav Gašić is very varied, encompassing diverse areas of Organic Chemistry and Biochemistry. He published 120 papers, mostly in the most outstanding journals, and several monographs. He was an invited lecturer at many universities in USA and Europe, as well as at many scientific conferences. His principal research fields were: chemistry of steroids; physical organic chemistry, spectroscopy and organic electrochemistry; isolation, chemical and biological characterization of natural products. A large part of his res-



earch activities was dedicated to partial synthesis and synthetic transformations of steroids: synthesis and reactions of 5,10-seco steroids, oxidation of steroid 3-ketones, acetoxylation of steroid lactones using lead tetraacetate, and oxidation of estrogen-type steroids. Since the beginning of his scientific career, Miroslav Gašić was very interested in physical organic chemistry. At the University of California he investigated a hot topic at that time, non-classical carbocations. This work is interesting both from a mechanistic and a synthetic point of view. Very early he realized huge possibilities of ^{13}C -NMR spectroscopy and published many works in this area, including very useful review articles. His studies in organic electrochemistry were mainly focused on redox behaviour of biologically active quinones and hydroquinones as well as on electrochemical synthesis of drugs. During the late seventies Miroslav Gašić started research on isolation and characterization of natural products, both from terrestrial plants and marine organisms. He was the pioneer of marine natural product chemistry in Serbia, studying principally marine invertebrates (sponges, corals, ascidians), but also marine algae and seagrasses. His research was mostly focused on terpenes, steroids, fatty acids, halogen-containing lipids, but also on nucleosides and proteins (lectins, enzymes). Especially interesting are his publications on sponge sesquiterpene hydroquinone avarol and its derivatives, which show strong and selective antineoplastic activity. His papers on avarol and related compounds have been cited in more than 600 publications. He had a very intense collaboration with scientists from all over the world (USA, Germany, Italy, Montenegro, Greece, Bulgaria), and was a leader and participant at many international and national scientific projects.

Miroslav Gašić was an outstanding teacher. He drafted a very modern curriculum in organic chemistry for students of the new group of molecular biology and physiology, adapted for students of this group. His erudition and profound knowledge of various areas of chemistry and biology contributed to the high quality of his lectures. He supervised a great number of PhD theses. As a mentor, he was allowing a lot of freedom to his students, stimulating their creativity and supporting their ideas. Many of his PhD students pursued a successful scientific career.

Miroslav Gašić held several important positions: President of the Serbian Chemical Society, President of the Union of Chemical Societies of Yugoslavia, member of the Chemical Nomenclature Division of IUPAC, Secretary of the Department of Chemical and Biological Sciences of the Serbian Academy of Science, Head of the Department of Chemistry and Physical Chemistry of the Faculty of Science and Mathematics, University of Belgrade, Head of the Department of Organic Chemistry of the Faculty of Chemistry, University of Belgrade, member of the Crown Council of the Royal Family of Serbia, *etc.*

He was awarded the Order of Labour with the Red Flag (1988), the October Award of the City of Belgrade (1988), the Medal of the Serbian Chemical Society for lasting and outstanding contribution to science (1997) and was elected as honorary president of the Serbian Chemical Society in 2006.

Miroslav Gašić will be remembered and respected as an outstanding scientist and teacher, with broad interests, brilliant intelligence and problem-solving ability, but also for his erudition, tact, benevolence, sense of humour and other human qualities.

Prof. Dušan Sladić