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Professor Miroslav J. Gašić
On the occasion of his 70th birthday

This issue of the Journal of the Serbian Chemical Society is dedicated to Professor Miroslav J. Gašić and to his main scientific activities in the field of organic chemistry, on the occasion of his 70th birthday. Professor Gašić certainly made very important contributions to the development of organic chemistry, particularly at the University of Belgrade. Therefore, it is my privilege and great pleasure, as his colleague and close friend for many years, to give a short professional summary of Professor Gašić on the occasion of his life jubilee.

Professor Miroslav J. Gašić was born on December 30, 1932, in Belgrade to his father Dr. Jovan and mother Ljubica (nee Djordjević). He received his secondary school and university education in Belgrade, graduating from the Faculty of Science, University of Belgrade (B. Sc. in Chemistry) in 1959. In 1964 he obtained a Ph.D. in Chemistry from the same faculty. After graduation, he became permanent member of the staff at the Faculty of Science, University of Belgrade, starting as a research assistant (instructor) in 1960, and then gradually passing through all the teaching positions (Assistant Professor in 1970, Associate Professor in 1976), to full Professor in Organic Chemistry (1983). He was teaching Organic Chemistry, Organic Reaction Mechanisms, Natural Product Chemistry and Industrial Organic Chemistry to chemistry students at the Department of Chemistry, as well as Organic Chemistry to molecular biology students at the Department of Biology. At the Faculty of Science, University of Belgrade, where he spent almost 40 years until his retirement, becoming Professor Emeritus in 1998, Professor Gašić held the Chair (Division) of Organic Chemistry for a long time (1985–1996) and was Dean of the Department of Chemistry and Physical Chemistry in the period of 1982 to 1984.

Since 1981, Professor Gašić has been project coordinator and research leader in the Center of Chemistry of the Institute of Chemistry, Technology and Metallurgy in Belgrade, and since 1998 its scientific advisor. Besides, he was research associate of the Montenegrin Institute of Biological Investigations in Kotor. He coordinated (or still coordinates) six complex projects financed by the Republican Ministry of Science (1981–1985, 1986–1990, 1991–1995, 1996–2000, 2001–2003, and 2001–2004), and two projects financed by the Federal Ministry of Science (1993, and 1995–1997). He was also coordinator of a series of projects in the area of marine chemistry and biochemistry (1981–91), as part of a Yugoslav-German cooperation in research and technology, as well as co-leader of the project on Mediterranean ecology, financed by FAO.

Professor Gašić was a postdoctoral fellow of the Worcester Foundation for Experimental Biology in the USA (1965–66), research associate at the University of California, Los Angeles, USA (1966–67), visiting scientist at Indiana University, Bloomington, USA (1972–73), and visiting scholar at the National Academy of Sciences, Washington, D.C., in 1983 and 1990.

For his contributions to science, Professor Gašić was elected to the Serbian Academy of Sciences and Arts in 1985 as a corresponding member, and in 1994 as a full member. For his scientific achievements, Professor M. Gašić also received the Annual Award of the City of Belgrade (1987) and the Serbian Chemical Society Award for outstanding contributions to chemistry (1998).

For a long time Professor Gašić has been a very active member of the Serbian Chemical Society, acting as its general secretary (1970–1972), and later as president, in the period of 1998–2001. He has been a long time member of the Editorial Board of the Journal of the Serbian Chemical Society. Moreover, he was a member

of the Executive Committee of the Union of Yugoslav Chemical Societies and its president in the period 1993–1997, a member of the American Chemical Society and the German Chemical Society (GDCh), as well as a member of the Organic Chemistry Commission of the International Union of Pure and Applied Chemistry.

Professor Gašić's main scientific interest is in the field of organic chemistry, more specifically organic reactions and natural product chemistry, and recently, in the field of biochemistry as well. His research activity covered a wide range of areas and topics. Chronologically, it began with the partial synthesis and transformations of steroids resulting in the preparation of a new structural type of steroids containing a ten-membered ring. The positions and stereochemistry of functional groups within this modified steroidal framework provided very stable and suitable models for the study of the reactivity of and stereoelectronic effects in medium-sized rings, a topic which at the time was difficult to approach.

After a few years of involvement in reaction mechanisms, he revived his interest in steroids by using 5,10-seco-steroids containing a ten-membered ring for the study of the nature of carbocationic intermediates in solvolysis reactions.

A series of papers by Professor Gašić represented local pioneer contributions to the application of spectroscopic ^{1}H and ^{13}C-NMR methods in structural elucidation of organic compounds (stereochemical relationship between functional groups in α-substituted polycyclic δ-lactones, effects of substituents on the chemical shift of sp^2 hybridized carbon atom signals, structure of alkaloids isolated from local plants, structure elucidation and quantification of kerogen in oil shales, *etc*.).

In more recent years, he turned his attention thoroughly to natural products from marine organisms, their isolation, structure elucidation, reactivity and biological activity evaluation. In this respect his interest was primarily focused on compounds with antitumor activity based on redox processes and on those showing specific interactions with tumor tissues. In this respect, the investigation of the biological activity of the sesquiterpene avarol, isolated from the sponge *Dysidea avara*, should be particularly mentioned. This compound and a few of its derivatives were found to have marked cytostatic and antibacterial activity.

Most of Professor Gašić's work with his colleagues and coworkers was published in more than a hundred papers in international journals and a few monographs and patents, or presented at scientific meetings in Europe and the USA, mostly as plenary, section or visiting professor lectures. In addition to the Science Citation Index, his papers were cited in various monographs, annual reviews and monograph series, such as Steroid Reaction Mechanisms (Elsevier), Reagents for Organic Syntheses (John Wiley & Sons), Alicyclic Chemistry, Terpenoids and Steroids, and Annual Reports on the Progress of Chemistry (The Chemical Society, London), Marine Natural Products and Synthesis (Academic Press), International Review of Science (Butterworths), Modern Synthetic Reactions (Benjamin), Synthetic Reagents (Elis Horwood Ltd.), Bioorganic Chemistry (Springer Verlag).

In conclusion, through his diverse activities, teaching and scientific work, Professor Gašić became one of the leading figures of the Belgrade University school of Organic Chemistry, thus significantly contributing to its traditionally high and internationally recognized level.

Dragomir Vitorović