

B I O G R A P H Y

IVAN GUTMAN was born on September 2, 1947 in Sombor. His father Dr. Mirko Guttman was attorney-at-law, and his mother Katarina worked in the husband's office.

I. G. attended elementary school and high school (gymnasium) in Sombor. In the period 1966–1970 he studied chemistry at the Faculty of Science, University of Belgrade, and graduated in 1970 with an average mark 10.0. After that he worked a short time as Teaching Assistant at the Chemistry Department of the Faculty of Science in Belgrade.

Between 1971 and 1977 I. G. was member of the Theoretical Chemistry Group of the Department of Physical Chemistry of the “Ruđer Bošković” Institute in Zagreb, where he was Research Assistant and Senior Research Assistant. In 1973 he obtained a M. Sc. degree at the University of Zagreb, in the area of theoretical organic chemistry. In the same year he obtained his Ph. D. degree in chemistry at the Faculty of Science, University of Zagreb, by defending a thesis entitled “*Studies of Topological Properties of Conjugated Hydrocarbons*”. His supervisor was Nenad Trinajstić.

Between 1977 and 2012 I. G. was employed at the Faculty of Science, University of Kragujevac, responsible for teaching Physical Chemistry. He was Assistant Professor, Associate Professor, and – from 1984 – Full Professor. After retirement, in October 2012, he is Emeritus Professor at the same Faculty.

In 1990 he was elected Full Professor of Physical Chemistry at the Faculty of Physical Chemistry, University of Belgrade, but did not accept the position. In 1995 he habilitated at the József Attila University in Szeged (Hungary). Eventually – in 1996 – he was elected Full Professor in the Institute of Physical Chemistry of the same University, but did not accept the position.

I. G. held various courses in the field of physical, computer and theoretical chemistry. In addition to “Physical Chemistry”, what he was teaching continuously from 1977 to 2012, he taught the following courses: “Chemical Thermodynamics”, “Quantum Chemistry and Molecular Structures”, “Quantum Chemistry”, “Theoretical Organic Chemistry”, “Elaboration of Experimental Data in Chemistry”, “Informatics for Chemists”, “Programming in Chemistry”, “Computer Chemistry”, “History of Chemistry”, and “History and Philosophy of Chemistry”. At the Faculty of Science in Kragujevac he organized a seminar “*Mathematical Methods in Chemistry*” that was continuously active between Spring 1981 and Spring 2006, and on which over 1000 seminars were held.

Since 1975 I. G. is member of the Mathematical Institute of the Serbian Academy of Sciences in Belgrade. In 1981 he obtained a Ph. D. degree in mathematics, at the Faculty of Electrical Engineering, University of Belgrade, by defending a thesis entitled “*Contribution to the Spectral Theory of Trees*”. His supervisor was Dragoš Cvetković.

Since 1988 I. G. is member of the Serbian Academy of Sciences and Arts; full member is since 1997.

Since 2005 I. G. is member of the International Academy of Mathematical Chemistry.

Since 2006 I. G. is member of the Academy of Nonlinear Sciences (Moscow).

Since 2012 I. G. is member of Academia Europaea (London).

Since 2023 I. G. is member of Ke Rui (Core) Academy (Hong Kong); Ke = science, Rui = wisdom [International Core Academy of Sciences and Humanities].

On several occasions I. G. stayed abroad as research fellow or visiting professor. Five times he was fellow of the Alexander von Humboldt Foundation, and worked at the Institute for Quantum Chemistry of the Free University in West Berlin (1977), at the Max-Planck-Institute for Radiation Chemistry in Mülheim, Germany (1980 and 1985), at the Institute for Organic Chemistry and Biochemistry, University of Freiburg, Germany (2000), at the Mathematical Institute, University of Bayreuth, Germany (2000), and at the Computer-Chemistry Center, University of Erlangen (2003). In 1988 he was at the University of Trondheim, Norway, as fellow of the Royal Norwegian Council for Scientific and Industrial Research. In 1989 and 1990 he was (on two occasions) at the Vanderbilt University, Nashville, USA, as a Fulbright fellow. In 1989 he was also fellow of the Japan Society for Promotion of Science, staying at the Ochanomizu University, Tokyo. In 1995 he was, as Lady Davis fellow, visiting professor at the Hebrew University in Jerusalem, Israel. In 1996 he was at the Institute of Advanced Studies of the Hebrew University in Jerusalem. In 1997, as fellow of the Third World Academy of Science, he was at the University of Santa Clara, Cuba. In 1996 and 2001, as DAAD fellow, he stayed at the Technical University Ilmenau, Germany. He was visiting professor also at the Technical High School Ilmenau, DR Germany (1982), University of South Carolina, Columbia, USA (1983), Academia Sinica, Taipei, Taiwan (1992/93), József Attila University, Szeged, Hungary (1994–96), University of Montreal, Canada (1998), Johannes Kepler University, Linz, Austria (1999), Andean University, Mérida, Venezuela (2000), University of Bielefeld, Germany (2001 and 2002), University of Malta, Msida, Malta (2004), Nankai University, Tianjin, China (2005 and 2007), National Autonomous University of Mexico, Mexico City, Mexico (2006), Catholic University of the Nord, Antofagasta, Chile (2009), State University of Novi Pazar, Serbia (2014–2016). In 2012/13 he was distinguished adjunct professor at the King Abdulaziz University, Jeddah, Saudi Arabia. He also visited a number of other universities and research institutions and lectured on many of them.

I. G. is (+) or was (x) member of the editorial boards of *Advances in Systems Science and Applications* (x), *Applicable Analysis and Discrete Mathematics* (+), *Axioms* (+), *Bulletin of Society of Mathematicians Banja Luka* (x), *Collection of Scientific Papers*

of the Faculty of Science Kragujevac (x,**E**), *Dijalektika* (x), *Discrete Mathematics Letters* (+), *Communication in Combinatorics and Optimization* (+), *Flogiston* (x), *Gazi Universitesi Journal of Science* (x), *Glasnik hemičara i tehnologa Bosne i Hercegovine* (+), *Global Journal of Mathematics and Mathematical Science* (+), *Graph Theory Notes (New York)* (x), *Hemijski pregled* (+), *Indian Journal of Chemistry A* (x), *International Journal of Applied Graph Theory* (+), *International Journal of Chemical Modelling* (x), *International Journal of Pure and Applied Mathematical Sciences* (x), *Iranian Journal of Mathematical Chemistry* (+), *Iranian Journal of Mathematical Sciences and Informatics* (+), *Journal of Discrete Mathematics and Its Applications* (+), *Journal of Mathematical Chemistry* (x), *Journal of Mathematical Nanoscience* (x), *Journal of the Argentine Chemical Society* (x), *Journal of the Serbian Chemical Society* (+), *Kragujevac Journal of Mathematics* (+), *Kragujevac Journal of Science* (+,**E**), *MATCH Communications in Mathematical and in Computer Chemistry* (+,**E**), *Mathematics Interdisciplinary Research* (+), *Mediterranean Journal of Chemistry* (+), *Military Technical Courier* (+), *Open Journal of Discrete Applied Mathematics* (+,**E**), *Polycyclic Aromatic Compounds* (+), *Prirodoslavlje* (+), *South East Asian Journal of Mathematics and Mathematical Sciences* (+), *Transactions on Combinatorics* (+), *Universal Library of Chemistry* (+).

He is or was Editor-in-Chief of the journals marked by **E**. He is Editor of the book series “Mathematical Chemistry Monographs”.

Since 1971 I. G. published over 1520 scientific papers and is author of a few books (published by Springer, Berlin 1977, 1986, 1988, and 1989, North Holland, Amsterdam 1988, Nova, Huntington, New York, 2001, 2002, Springer, New York 2012). His works are quoted over 40,000 times in scientific papers by other authors, and over 5200 times in more than 460 books and textbooks.

I. G. is interested also in problems of teaching chemistry in elementary and secondary schools, as well as in history of natural sciences and mathematics. He published numerous articles and held scores of lectures on popular science.

I. G. was awarded by the Cultural Council of Kragujevac (1980), the Meritorious Citizen award of the city of Kragujevac (2006), the annual award (for science) of the city of Kragujevac (2007), the annual award of the city of Sombor (2019), received the Vojislav K. Stojanović award of the Society of University Professors and Scientists of Serbia (1993), medals (of various ranks) of the Serbian Chemical Society in 1987, 1997, and 2001, medal in the field of natural and technical sciences of the Serbian Academy of Science and Arts (2021), plaque for results in scientific work of the University of Kragujevac (2023), and the Josip Andrić award for contribution to Croatian culture of the Croatian National Council of the Republic of Serbia (2021). Since 2015 he is honorary member of the Serbian

Chemical Society. Together with Boris Furtula he was awarded by the Serbian Ministry of Science for the best scientific monograph in year 2010. In 2015 he became Outstanding Friend of the “Veljko Petrović” gymnasium in Sombor. He is Doctor Honoris Causa of Óbuda University, Budapest (2017). Awarded for lifetime achievements by the University of Kragujevac (2019).

Since 1972 he is married with Magda (1948), has a daughter Barbara (1974), and had a son Matija (1976–1999). In 2023 he relocates to his native town Sombor.

Last update: April 2024