

Branka Mihaljević

(Ruđer Bošković Institute, Radiation Chemistry and Dosimetry Laboratory)

Branka Mihaljević is a Senior Research Associate in the Ruđer Bošković Institute, Division of Material Chemistry. She is a Head of Radiation Chemistry and Dosimetry Laboratory. During her professional career, she was a leader of several domestic and international scientific projects as well as industrial projects.

Her main research interests are the study of ionizing and non-ionizing radiations and their damaging effect on certain biomolecules. She has been investigator in a number of studies on the nature and fate of the reactive short-lived species formed under controlled conditions in the radiolysis/photolysis. Research interests in radiation chemistry can be grouped into several narrower research fields: (1) applications and evaluation of analytical methods for lipid peroxidation products determination; (2) free radicals-induced modifications of lipids; (3) characterization of reactive intermediates in the photochemical reactions with biological significance; (4) kinetics and mechanisms of reactions of short-lived reactive species; (5) the development and application of time-resolved irradiation techniques; (6) research of potential applications in different industries. B. Mihaljević is a person responsible for the application of gamma radiation for the purpose of biological decontamination of cultural heritage objects and sterilization of medical and pharmaceutical products.

B. Mihaljević was a supervisor for several Diploma theses PhD theses, also teaches Radiation chemistry at postgraduate level in Chemistry at the University of Zagreb, Faculty of Natural Sciences and Mathematics. Her scientific results have been published in over 140 papers, also 90 conference abstracts and 2 book chapters.