

Special Issue

Radiation and Photochemical Modifications in Proteins: Mechanistic Aspects and Applications

Message from the Guest Editors

Proteins are highly abundant cellular biomolecules and therefore are a major target when biological systems are irradiated or illuminated. Radiation- and photo-induced modifications in proteins are associated with changes in their structure and functions. Radiolysis (the initiation of reactions by high-energy radiation) and photolysis (the initiations of reactions by UV and visible light) were found as very valuable and powerful chemical tools for inducing and studying radical processes that are of particular interest in biology and life sciences. The use of the methods of radiolysis and photolysis has provided a wealth of data, especially about the kinetics of the oxidation by various free radicals and their mechanisms, the identification of transients formed, their lifetimes and the possibility to repair them by the so-called antioxidants.

Guest Editors

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