

Special Issue

Electron and Radical Induced Chemistry and Related Applications

Message from the Guest Editor

New biomedical applications of radiation based on charged particle beam interactions, both for therapy and diagnostics require specific studies on their radiobiological effects. In such applications, secondary species determine these effects through chemical reactions induced to the sensitive molecules that constitute the medium. The scope of this Special Issue (in terms of theory, experiments and simulations) includes:

- Primary proton and ion beam interactions in biologically relevant media around the Bragg Peak.
- Chemical reactions induced by low-energy electrons and positrons to biomolecular systems both in the gas and condensed phases.
- Radical generation and subsequent interactions with molecular-sensitive molecules (DNA, RNA constituents and analogue molecules).
- Evaluation and characterization of molecular radiosensitizers and their role in specific treatments.
- Living cell radiobiological studies and comparison with predicted models.

Due to your expertise in the field, we are pleased to invite you to contribute to this Special Issue on Electron and Radical Induced Chemistry and Radiobiological Applications.

Guest Editor

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Message from the Editor-in-Chief

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