



DNA



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Physics and Chemistry of Radiation Damage to DNA and Its Consequences

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Deadline for manuscript submissions:

closed (30 June 2025)

Message from the Guest Editor

Experimental evidence indicates that damage to DNA molecules is the most important cause of cell death, mutation and transformations induced by ionizing radiation.

Keeping this in mind, during the ACS CERM 2022 meeting (EMU, Ypsilanti), Prof. Amitava Adhikary (Chemistry Department, Oakland University) is organizing a symposium entitled "Physics and Chemistry of Radiation Damage to DNA and its consequences (oral)" on 7th June. This symposium presents the current knowledge on this topic, starting from physical, physicochemical, and biochemical events involved in radiation-mediated DNA and RNA damage formation, and its biochemical processing, including the role of cerium oxide nanoparticles as effective radiomodifiers.

A Special Issue of the journal *DNA* (MDPI) will emerge from this symposium.

Prof. Dr. Amitava Adhikary
Guest Editor



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Special Issue



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Message from the Editor-in-Chief

Since the first human and mouse genome sequence assemblies over 20 years ago, hundreds of species are now complete, impacting on diagnostics, medicine, agriculture and the environment. Taking a “sequence to consequence” and “structure to nature” philosophy with clearly written, accessible manuscripts, *DNA* will publish novel research findings, reviews and communications in DNA-related technologies, genome structures, DNA-targeted therapies, bioinformatics and cytogenomics. As pioneers in DNA technology, we owe it to the next generation to take the lead in carving a new path that the enigmatic double helix at the core of our essence shows us. We look forward to hearing from you and distributing your insights to the community.

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