

Special Issue

Ultrafast Dynamics in Chemical Processes

Message from the Guest Editors

Explorations of the short-timescale dynamics of chemical systems are pivotal for advancing our understanding of the detailed electronic/nuclear processes. Recent advances in femtosecond time-resolved spectroscopy have enabled detailed studies of the early time dynamics in complex (supra)molecular systems that are important in many biological and chemical processes. The concurrent state-of-the-art computational methods have offered invaluable information on the mechanisms, thermochemistry, kinetics and timescales associated with chemical systems.

This Special Issue is dedicated to cutting-edge research in theoretical and experimental studies of ultrafast processes in chemical dynamics occurring in organic, inorganic, biological, and supramolecular systems. We encourage submissions of research articles covering all relevant topics spanning, e.g., light-driven processes for energy conversion to photochemical reactions of biochemical relevance. We are excited at the prospect that this Special Issue will bring together an interdisciplinary and comprehensive overview of state-of-the-art research addressing ultrafast dynamics in chemical systems.

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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