



Photochemistry in Molecular Clusters

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Message from the Guest Editor

The photochemistry of single-molecule systems is already a well-established field of research, where both experimental methods based on laser spectroscopy and theoretical methods derived from advanced quantum chemical models provide exhaustive descriptions of photochemical phenomena. At the same time, much less is known about the photochemistry of systems where multiple molecules in cluster or aggregate forms are collectively involved in the light-induced electronic excitation and relaxation processes. Phenomena such as thermally activated delayed fluorescence, formation of excimer or exciplex structures, light-induced charge transfer in donor–acceptor complexes, fluorescence resonance energy transfer, and triplet–triplet annihilation upconversion still require specially designed experimental setups and a carefully established theoretical methodology, and involve entities with multi-molecular characters.

Both original research articles and reviews in the fields of photochemistry, laser spectroscopy, light-induced molecular processes, molecular self-assembly, and photochemistry of molecular ensembles adsorbed on a surface or interface are highly welcome.





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Message from the Editor-in-Chief

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