

Special Issue

Molecular Advances in Photosynthesis: Mechanisms of Protein Complex Functioning, Protein Structural Modifications and Protein-Protein Interactions

Message from the Guest Editor

Photosynthesis is one of the most complex biological processes and enables the synthesis of organic compounds from carbon dioxide and water by using solar energy. Energy storage during photosynthesis is a result of the coordinated flow of the many molecular processes. These include photophysical reactions in photosynthetic antennas and reaction centers, conformational rearrangements of proteins and redox reactions inside pigment-protein complexes, electron transfer between photosynthetic complexes and mobile electron carriers.

Computer simulation techniques, such as molecular dynamics, enable the clarification of the fundamental aspects of protein activity that lay the basis for photosynthesis, and enable the prediction of the effects of making modifications to the protein structure on the formation of the complex. We invite authors to submit both original research and review papers on the molecular dynamics of proteins and the protein-protein interactions that are involved in primary photosynthetic processes.

Guest Editor

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