



Structure and Energy Transfer of Algae Photosynthetic Antenna Organism Crystals

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Message from the Guest Editors

Dear Colleagues,

Algal light-harvesting antenna complexes (LHCs) are vital apparatus for energy capture and transfer in algal photosynthesis. Within the past years, structures of the antenna complexes have been elucidated with the help of technological development in structural biology, and the structural analysis of algal LHC tends to "low resolution in situ / single particle structure - high resolution single particle / in situ structure". Furthermore, the antennas transfer the absorbed energy at almost 100% efficiency to the reaction centers that perform the photochemical electron transfer reactions required for the conversion of the light energy into useful and storable chemical energy. The antenna complex has a broad cross-section of absorption and mainly transfers the absorbed energy to photosystem II. They can, however, function as an antenna of photosystem I, and their composition can be altered as a result of changes in the environmental light quality.

We invite researchers to contribute to this Special Issue to collect broad aspects of structural and functional characteristics of the photosynthetic antenna complex and the energy transfer mechanism in the complex.





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Message from the Editor-in-Chief

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