

Electron and Proton Transfer in Cryptochrome Photoreceptors

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Cryptochromes are a diverse and ubiquitous family of blue and red light receptors carrying a flavin as a cofactor. They control a variety of responses such as plant development, the biological clock of insects, and magnetoreception. We have studied the light-induced electron and proton transfer processes and the concomitant conformational changes of the receptors. I will give an overview of the current status of our research on different kinds of cryptochromes and will present recent results from time-resolved infrared spectroscopy.