

Michel-Beyerle, M.-E. (ed.): **The Reaction Center of Photosynthetic Bacteria. Structure and Dynamics.** - Springer, Berlin - Heidelberg - New York - Barcelona - Budapest - Hong Kong - London - Milan - Paris - Santa Clara - Singapore - Tokyo 1996. ISBN 3-540-61075-8. 426 pp., DM 148.00, öS 1080.40, sFr 130.50.

An international workshop on the reaction centres (RCs) of photosynthetic bacteria took place in Germany in March 1995 and the papers presented at this workshop were published one year later. The book is a typical proceedings volume, composed of camera-ready manuscripts (mostly original communications) that deal with two main topics: the crystallographic and electronic structure of RCs (12 papers of Part 1), and the dynamics of primary events and the role of proteins in them (20 papers of Part 2).

The papers of Part 1 deal with the crystallisation of RCs and phycobilins from wild type and mutant photosynthetic bacteria, their X-ray structure,  $Q_B$  site models, electron transfer in RCs, EPR/ENDOR investigation methods, RC triplet states, models for excitation, estimates of RC energetics, electron transfer in proteins, stabilisation of charge separated state in RCs, *etc.*

The topics of Part 2 are: the initial electron transfer reaction, kinetics of RC bleaching, charge separation in RCs, RC heterogeneity testing, pressure dependence of energy and electron transfer in photosynthetic antenna and photosystem complexes, infrared spectroscopy of RCs, quantum beats as probes of primary events, alternate RC acceptors, quinones in bacterial RCs, *etc.* For experiments, various genetically modified RCs were often used.

The chapters are supplemented with a brief subject and organism index and an index of 126 authors of the presented contributions. An interesting volume for researchers dealing with photosynthetic bacteria.

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