



Cumulative Contents

<i>Information for Contributors</i>	vii	ture – difference spectrum of P680 ⁺ Q _A ⁻ /P680 Q _A at 77 K	
<i>Review</i>		<i>B. Hillmann and E. Schlodder (Germany)</i>	76
Molecular biology of nicotinamide nucleotide trans-hydrogenase – a unique proton pump		Energy migration in <i>Rhodobacter sphaeroides</i> mutants altered by mutagenesis of the peripheral LH2 complex or by removal of the core LH1 complex	
<i>T. Olausson, O. Fjellström, J. Meuller and J. Rydström (Sweden)</i>	1	<i>H. Kramer, M.R. Jones, G.J.S. Fowler, C. Francke, T.J. Aartsma, C.N. Hunter and J. Ames (The Netherlands, UK)</i>	89
<i>Regular Papers</i>		Kinetics of ATP hydrolysis by the F ₁ -ATPase from <i>Bacillus</i> PS3: a reappraisal of the effects of ATP and Mg ²⁺	
Determination of the pigment stoichiometry of the photochemical reaction center of Photosystem II		<i>S. Pezennec, G. Berger, S. Andrianambinintsoa, N. Radziszewski, G. Girault, J.M. Galmiche and E. Bäuerlein (France, Germany)</i>	98
<i>C. Eijkelhoff and J.P. Dekker (The Netherlands)</i>	21		
Cadmium-induced luminescence of recombinant photoprotein obelin		<i>Rapid Report</i>	
<i>V.S. Bondar, A.G. Sergeev, B.A. Illarionov, J. Vervoort and W.R. Hagen (Russia, The Netherlands)</i>	29	Raman detection of a peroxy intermediate in the hydroquinone-oxidizing cytochrome aa ₃ of <i>Bacillus subtilis</i>	
Energy transfer in the photosynthetic antenna system of the purple non-sulfur bacterium <i>Rhodospseudomonas cryptolactis</i>		<i>C. Varotsis, G.T. Babcock, M. Lauraeus and M. Wikström (Greece, USA, Finland)</i>	111
<i>H. Kramer, G. Deinum, A.T. Gardiner, R.J. Cogdell, C. Francke, T.J. Aartsma and J. Ames (The Netherlands, UK)</i>	33		
UV-B-induced degradation of the D1 protein in isolated reaction centres of Photosystem II		<i>Short Sequence-Paper</i>	
<i>G. Friso, I. Vass, C. Spetea, J. Barber and R. Barbato (UK)</i>	41	The coding sequence of the bovine ferrochelatase gene	
A two-electron reaction at the catalytic site of water oxidation in manganese-depleted Photosystem II vesicles in the presence of an electron donor. Coupled electron and proton transfer processes		<i>H. Shibuya, D. Nonneman, M. Tamassia, O.L. Allphin and G.S. Johnson (USA)</i>	117
<i>M.J. Delrieu (France)</i>	47		
Initial spectroscopic characterization of the ciliate photoreceptor stentorin		<i>Erratum</i>	
<i>R. Dai, T. Yamazaki, I. Yamazaki and P.-S. Song (USA, Japan)</i>	58	Erratum to "Inhibition by Ca ²⁺ of the hydrolysis and the synthesis of ATP in Ehrlich ascites tumour mitochondria: relation to the Crabtree effect" [Biochim. Biophys. Acta 1228 (1995) 261–266]	
Force-velocity relations of rat cardiac myosin isozymes sliding on algal cell actin cables in vitro		<i>K. Bogucka, V.V. Teplova, L. Wojtczak and Y.V. Evtodienko (Poland, Russian Federation)</i>	121
<i>S. Sugiura, H. Yamashita, M. Sata, S.-i. Momomura, T. Serizawa, K. Oiwa, S. Chaen, T. Shimmen and H. Sugi (Japan)</i>	69		
Electron transfer reactions in Photosystem II core complexes from <i>Synechococcus</i> at low tempera-		<i>Publisher's Note</i>	v

Review

- The dynamics of proton exchange between bulk and surface groups
M. Gutman and E. Nachliel (Israel) 123

Regular Papers

- Expression of the wild-type and the Cys-/Trp-less $\alpha_3\beta_3\gamma$ complex of thermophilic F_1 -ATPase in *Escherichia coli*
T. Matsui and M. Yoshida (Japan) 139
- Exciton equilibration in the light-harvesting complex of Photosystem II of higher plants
G. Kehrberg, J. Voigt, T. Schrötter and G. Renger (Germany) 147
- The electron transfer from hydrogenase and formate dehydrogenase to polysulfide reductase in the membrane of *Wolinella succinogenes*
A. Jankielewicz, O. Klimmek and A. Kröger (Germany) 157
- Comparison of the transport characteristics of ceftibuten in rat renal and intestinal brush-border membranes
I. Naasani, K. Sato, K. Iseki, M. Sugawara, M. Kobayashi and K. Miyazaki (Japan) 163
- Phosphorylation of the light-harvesting polypeptide LHI α of *Rhodobacter capsulatus* at serine after membrane insertion under chemotrophic and phototrophic growth conditions
M. Brand, A.F. Garcia, N. Pucheu, A. Meryandini, N. Kerber, M.H. Tadros and G. Drews (Germany, Argentina) 169
- The in vivo regulation of hepatic and renal glucose-6-phosphatase by thyroxine
M.W. Voice, E.B. Borthwick, M.W.H. Coughtrie and A. Burchell (UK) 176
- Electric parameters of Na^+/K^+ -ATPase by measurements of the fluorescence-detected electric dichroism
D. Porschke and E. Grell (Germany) 181
- Phycobilisome core mutants of *Synechocystis* PCC 6803
G. Ajlani, C. Vernotte, L. DiMagno and R. Haselkorn (France, USA) 189
- Photoacoustic diagnostics of laser-induced processes in reaction centers of *Rhodobacter sphaeroides*
O.V. Puchenkov, Z. Kopf and S. Malkin (Israel) 197

Erratum

- Erratum to: *Bradyrhizobium japonicum* hydrogen-ubiquinone oxidoreductase activity: quinone specificity, inhibition by quinone analogs, and evidence for separate sites of electron acceptor

reactivity [Biochim. Biophys. Acta 1229 (1995) 334-346]

D.M. Ferber, B. Moy and R.J. Maier (USA) 213

Short Sequence-Papers

- Cytochrome *b*-558 α -subunit cloning and expression in rat aortic smooth muscle cells
T. Fukui, B. Lassègue, H. Kai, R.W. Alexander and K.K. Griendling (USA) 215
- Molecular cloning and sequencing of cytochrome *c'* from the phototrophic purple sulfur bacterium *Chromatium vinosum*
M.T. Even, R.J. Kassner, M. Dolata, T.E. Meyer and M.A. Cusanovich (USA) 220

Review

- Reconstitution of membrane proteins into liposomes: application to energy-transducing membrane proteins
J.-L. Rigaud, B. Pitard and D. Levy (France) 223

Regular Papers

- In vivo spectroscopic study of photoreceptor pigments of *Blepharisma japonicum* red and blue cells
N. Angelini, R. Cubeddu, F. Ghetti, F. Lenci, P. Taroni and G. Valentini (Italy) 247
- NADPH oxidase activity of cytochrome *P*-450 BM3 and its constituent reductase domain
A.W. Munro, J.G. Lindsay, J.R. Coggins, S.M. Kelly and N.C. Price (UK) 255
- Three-dimensional crystallization of the light-harvesting complex from *Mantoniella squamata* (Prasinophyceae) requires an adequate purification procedure
C. Welte, R. Nickel and A. Wild (Germany) 265
- Analysis of time-dependent change of *Escherichia coli* F_1 -ATPase activity and its relationship with apparent negative cooperativity
Y. Kato, T. Sasayama, E. Muneyuki and M. Yoshida (Japan) 275
- Stimulation of oxidative phosphorylation by electrophoretic K^+ entry associated to electroneutral K^+/H^+ exchange in yeast mitochondria
S. Manon, X. Roucou, M. Rigoulet and M. Guérin (France) 282
- Granal Photosystem II complexes contain only the high redox potential form of cytochrome *b*-559 which is stabilised by the ligation of calcium
V.P. McNamara and K. Gounaris (UK) 289
- The mechanism of hydride transfer between NADH and 3-acetylpyridine adenine dinucleotide by the

pyridine nucleotide transhydrogenase of <i>Escherichia coli</i> <i>N.A. Glavas and P.D. Bragg (Canada, V6T 1Z3)</i>	297	Phosphorylation of thylakoids and isolated subthylakoid vesicles derived from different structural domains of the thylakoid membrane from spinach chloroplast <i>H. Stefánsson, L. Wollenberger, S.-G. Yu and P.-Å. Albertsson (Sweden)</i>	323
Cyclic reactions catalysed by detergent-dispersed and reconstituted transhydrogenase from beef-heart mitochondria; implications for the mechanism of proton translocation <i>L.A. Sazanov and J.B. Jackson (UK)</i>	304	Amino acid residues involved in functional interaction of vegetative cell ferredoxin from the cyanobacterium <i>Anabaena</i> sp. PCC 7120 with ferredoxin:NADP reductase, nitrite reductase and nitrate reductase <i>S. Schmitz and H. Böhme (Germany)</i>	335
Triplet states in reaction center, light-harvesting complex B875 and its spectral form B840 from <i>Rubrivivax gelatinosus</i> investigated by absorbance-detected electron spin resonance in zero magnetic field (ADMR) <i>V. Jirsakova, F. Reiss-Husson, I. Agalidis, J. Vrieze and A.J. Hoff (France, The Netherlands)</i>	313	<i>Cumulative Contents, Vol. 1231</i>	342
		<i>Author Index</i>	345