



Cumulative Contents

Information for Contributors

vii

Information for Contributors

v

Net charge oscillation and proton release during water oxidation in photosynthesis. An electrochromic band shift study at pH 5.5–7.0

H. Kretschmann, E. Schlodder and H.T. Witt (Germany)

1

Axial heme ligation in the cytochrome bc_1 complexes of mitochondrial and photosynthetic membranes. A near-infrared magnetic circular dichroism and electron paramagnetic resonance study

M.G. Finnegan, D.B. Knaff, H. Qin, K.A. Gray, F. Daldal, L. Yu, C.-A. Yu, S. Kleis-San Francisco and M.K. Johnson (USA)

9

Functional organization of the photosynthetic apparatus of the primitive alga *Mantoniella squamata*

B. Hecks, C. Wilhelm and H.-W. Trissl (Germany)

21

Size-distributions of antenna and acceptor-pool of Photosystem II

P.W. Hemelrijk and H.J. Van Gorkom (The Netherlands)

31

The nature of uncoupling by *n*-hexane, 1-hexanethiol and 1-hexanol in rat liver mitochondria

M. Canton, F. Gennari, S. Luvisetto and G.F. Azzone (Italy)

39

Plant glyoxysomal but not mitochondrial malate dehydrogenase can fold without chaperone assistance

C. Gietl, C. Seidel and I. Svendsen (Germany, Denmark)

48

The in vitro kinetics of mitochondrial and cytosolic creatine kinase determined by saturation transfer ^{31}P -NMR

F.A. Van Dorsten, R. Furter, M. Bijkerk, T. Wallimann and K. Nicolay (Netherlands, Switzerland)

59

Interactions of the F_1 -ATPase subunits from *Escherichia coli* detected by the yeast two-hybrid system

C. Moritani, K. Sawada, K. Takemoto, Y. Shin, S. Nemoto, T. Noumi and H. Kanazawa (Japan)

67

Selective and specific cleavage of the D1 and D2 proteins of Photosystem II by exposure to singlet oxygen: factors responsible for the susceptibility to cleavage of the proteins

K. Okada, M. Ikeuchi, N. Yamamoto, T.-a. Ono and M. Miyao (Japan)

73

Review

Metabolic control and metabolic capacity: two aspects of creatine kinase functioning in the cells

V.A. Saks, R. Ventura-Clapier and M.K. Aliev (France, Estonia, Russia)

81

Regular papers

Effect of inorganic phosphate and ADP on the myofilament sliding induced by laser flash photolysis of caged ATP

H. Wada, T. Yamada and H. Sugi (Japan)

89

Chloroplast ATP synthase: the clutch between proton flow and ATP synthesis is at the interface of subunit γ and CF_1

O. Fritsche and W. Junge (Germany)

94

The ATP synthase of *Streptomyces lividans*: characterization and purification of the F_1F_0 complex

M. Hensel, H. Achmus, G. Deckers-Hebestreit and K. Altendorf (Germany)

101

The reduced *minus* oxidized difference spectra of cytochromes a and a_3

G.-L. Liao and G. Palmer (USA)

109

Photosynthetic characteristics of a mutant of *Chlamydomonas reinhardtii* impaired in fatty acid desaturation in chloroplasts

N. Sato, K. Sonoike, M. Tsuzuki and A. Kawaguchi (Japan)

112

The utilisation of creatine and its analogues by cytosolic and mitochondrial creatine kinase

E.A. Boehm, G.K. Radda, H. Tomlin and J.F. Clark (UK)

119

A soluble-form of pro-oxidant lumazine isolated from cyanobacterial cells generates superoxide anion under near-UV irradiation

H. Shibata, T. Noda, Y. Ogura, K. Suganaka, Y. Matsui, Y. Ozoe, Y. Sawa and Y. Kono (Japan)

129

Functional reconstitution of photosystem II with recombinant manganese-stabilizing proteins containing mutations that remove the disulfide bridge

S.D. Betts, J.R. Ross, K.U. Hall, E. Pichersky and C.F. Yocum (USA)

135

Dielectric properties of yeast cells as simulated by the two-shell model <i>V. Raicu, G. Raicu and G. Turcu (Romania)</i>	143	<i>L. Degrève, S.M. Vechi and C. Quintale Jr. (Brazil)</i>	149
The hydration structure of the Na ⁺ and K ⁺ ions and the selectivity of their ionic channels		<i>Cumulative Contents, Vol. 1274</i>	157
		<i>Author Index</i>	159