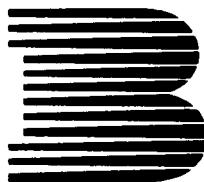


BIOCHEMICAL SOCIETY TRANSACTIONS



London: The Biochemical Society © 1981

Managing Editor D. C. WATTS

Book Reviews Editor R. EVANS

Contents Volume 9, Part 3, June 1981

BIOCHEMICAL REVIEWS

Carbohydrate Antigens: Tribute to Walter Morgan	185
Blood group antigens and the enzymes involved in their synthesis: past and present	W. M. WATKINS, A. D. YATES & P. GREENWELL
Bacterial lipopolysaccharide and its lipid A component: some historical and some current aspects	O. WESTPHAL, O. LÜDERITZ, E. TH. RIETSCHEL & C. GALANOS
	186
	191

THE EIGHTH KEILIN MEMORIAL LECTURE

Molecular geometry of cytochrome c and its peroxidase: a model for biological electron transfer	J. KRAUT
	197

THE TENTH JUBILEE LECTURE

Current concepts of molecular organization in cell membranes	S. J. SINGER
	203

593rd MEETING, SOUTHAMPTON

Colloquium: Mechanistic and Regulatory Studies involving Phosphoryl Transfer	
Enzymic mechanisms of phosphoryl transfer	G. LOWE
Catalytic groups in relation to the structure of hexokinase	E. A. BARNARD, N. M. BARRON, A. DELL & A. J. W. GRAY
The structure and function of pyruvate kinase	H. MUIRHEAD, J. P. GRANT, M. A. LAWTON, C. A. MIDWINTER, J. C. NOCTON & D. I. STUART
Phosphorus-31 nuclear-magnetic-resonance studies on energy metabolism in intact mammalian tissue	G. K. RADDA
	207
	209
	212
	213

Communications

The pH-dependent intramolecular rearrangement of glucuronic acid conjugates of xenobiotics	K. A. SINCLAIR & J. CALDWELL
The fate of caffeine in three non-human primates	J. CALDWELL, J. O'GORMAN & R. H. ADAMSON
Reaction of Schiff's reagent with the partially-oxidized forms of metallothionein and other polypeptides rich in cysteine residues	J. OVERNELL & P. T. GRANT
Partial amino acid sequence of metallothionein from the plaice (<i>Pleuronectes platessa</i>)	J. OVERNELL, C. BERGER & K. J. WILSON
A high-molecular-weight enzyme from skeletal muscle which hydrolyses chymotrypsin substrates	M. F. HARDY, D. MANTLE, T. EDMUND & R. J. T. PENNINGTON
Calcium-activated proteinases in human skeletal muscle	M. F. HARDY, D. MANTLE & R. J. T. PENNINGTON
	215
	215
	216
	217
	218
	219

Importance of the enteroinsular axis for the insulin-secretory response to glucose in obese hyperglycaemic (<i>ob/ob</i>) mice	P. R. FLATT & C. J. BAILEY	220
Effect of age on the plasma glucose and insulin responses to glucagon in mice	C. J. BAILEY & P. R. FLATT	221
Plasma albumin: recent progress in the understanding of its biological function	S. A. SAEED, P. A. DENNING-KENDALL, M. DREW & H. O. J. COLLIER	222
Computer programs for on-line data analysis, including amino acid and multi-channel auto-analysis	I. G. GILES	223
An excision-reinsertion step in pre-replication repair of ultraviolet-irradiated DNA, isolated from the nuclei of human placental cells	L. HAMILTON	224
The α -amantin-binding subunits of eukaryotic RNA polymerase II	E. BATEMAN & B. NICHOLSON	225
Sulphated-glycosaminoglycuronan-collagen interactions in developing rat tail tendon	J. E. SCOTT, C. R. ORFORD & E. W. HUGHES	226
Brain regional manganese distribution after chronic manganese treatment	J. C. K. LAI, M. J. MINSKI, A. W. K. CHAN, L. LIM & A. N. DAVISON	228
Manganese concentrations in rat organs: effect after life-long manganese treatment	A. W. K. CHAN, J. C. K. LAI, M. J. MINSKI, L. LIM & A. N. DAVISON	229
Studies on squalene synthetase from <i>Tetrahymena pyriformis</i>	C. F. WARBURG & D. C. WILTON	230
Anaerobic metabolism of aromatic compounds by microbial associations isolated from saltmarsh sediment	M. T. M. BALBA, E. SENIOR & D. B. NEDWELL	230
Porphobilinogen deaminase: involvement of stable covalent enzyme intermediate complexes in the enzyme from <i>Rhodopseudomonas sphaeroides</i>	A. BERRY & P. M. JORDAN	231
5-Aminolaevulinate dehydratase: zinc-65 binding and exchange with the enzyme from human erythrocytes	P. N. B. GIBBS & P. M. JORDAN	232
Rapid measurement of blood oxygenation and flow by high-field ^1H n.m.r.	K. R. THULBORN, J. C. WATERTON, P. STYLES & G. K. RADDIA	233
The effects of re-perfusion on the ^{31}P n.m.r. spectrum of ischaemic rat hearts	I. A. BAILEY & A.-M. SEYMOUR	234
A ^{31}P n.m.r. study of metabolism in the hypoxic perfused rat heart	P. M. MATTHEWS, G. K. RADDIA & D. J. TAYLOR	236
^{31}P n.m.r. studies of energy metabolism and tissue pH in the ischaemic rat leg	K. R. THULBORN	237
Does enzyme organization in the glycogen particle have a role in regulating phosphorylase α concentrations during transient activation?	S. R. WILLIAMS & P. M. MATTHEWS	238
Study of rat kidney <i>in vivo</i> during hypovolaemic shock by ^{31}P n.m.r.	L. CHAN, J. C. WATERTON & G. K. RADDIA	239
Inhibition of adenosine 3',5'-cyclic monophosphate phosphodiesterase in lymphocytes by cortisol	S. A. SAEED, N. M. BUTT, D. J. EDWARDS & W. A. TAYLOR	240
Phosphate-group turnover on histones from transcriptionally active liver chromatin	M. G. ORD & L. A. STOCKEN	242
Thermal uncoupling of ATP hydrolysis from calcium transport in sarcoplasmic reticulum	P. J. QUINN, T. D. MADDEN & M. D. KING	243
A new method for monitoring the preparation of erythrocyte vesicles to yield improved activity of Na^+/K^+ -ATPase	B. M. CHARALAMBOUS & M. A. MIR	244
The purification and properties of human hexokinase	A. A. HARITOS & M. A. ROSEMAYER	245
The phosphonic analogue of tyrosine: a tool in metabolic studies	A. IRON, M. RUART, J.-P. DUBOY, M. BERANGER, A. CASSAIGNE & E. NEUZIL	246
Phosphonic analogues of neuroactive biomolecules	E. DE TINGUY-MOREAUD, B. BIOULAC & E. NEUZIL	246
591st MEETING, NEWCASTLE UPON TYNE		
Communication		
Aspartate uptake in <i>Parauronema acutum</i>	H. A. KAREEM & A. M. ABAELU	249
		251
BOOK REVIEWS		