

Contents

Volume 1, Part 6, 1973

LECTURE

The Tenth Colworth Medal Lecture

	PAGE
Studies on cell differentiation in the cellular slime mould <i>Dictyostelium discoideum</i> . By J. M. Ashworth	1233

ABSTRACTS OF COMMUNICATIONS

542nd Meeting, Southampton

The cell-free synthesis of immunoglobulin chains. By N. J. Cowan, T. M. Harrison, G. G. Brownlee & C. Milstein	1247
Studies on the structure and function of a <i>Neurospora</i> glutamate dehydrogenase and its mutant forms. By J. C. Wootton	1250
Crystallographic studies of triose phosphate isomerase. By G. C. Phillips	1252
Vitamin B ₁₂ : enzyme-catalysed isomerizations. By D. Arigoni	1252
Multiple forms of cyclohexanone oxygenase from <i>Nocardia globerula</i> CL1. By D. B. Norris & P. W. Trudgill	1252
The purification of cyclopentanone oxygenase from <i>Pseudomonas</i> N.C.I.B. 9872. By M. Griffin & P. W. Trudgill	1255
Negative co-operativity in the benzoylformate decarboxylase of <i>Acinetobacter calcoaceticus</i> N.C.I.B. 8250. By M. Jamaluddin & C. A. Fewson	1258
Purification and properties of an inducible β -lactamase from <i>Pseudomonas aeruginosa</i> N.C.T.C. 8203. By M. McPhail & A. J. Furth	1260
Phosphoglucose isomerase in teleostean fish. By N. Carter & P. Dando	1263
Comparative properties of rodent phosphoglucose isomerases. By M. R. Hill & N. D. Carter	1264
Activation by ferrous ions of an α -mannosidase in rat testis and liver. By S. M. Snaith	1266
Inhibitors of inositol cyclase (D-glucose 6-phosphate-1L-myoinositol 1-phosphate cycloaldolase) from rat testis. By J. E. G. Barnett, A. Rasheed & D. L. Corina	1267
The role of histidine residues of yeast alcohol dehydrogenase. By C. J. Dickenson & F. M. Dickinson	1270
Inactivation of thiolase by alk-3-ynoyl-coenzyme A and bromoacyl-coenzyme A esters: evidence for a basic group at the active site. By D. P. Bloxham, M. G. Clark & P. C. Holland	1272
Glycinaldehyde, an inhibitor directed towards the C ₁ -unit-binding site of serine transhydroxymethylase. By H. A. El-Obeid & M. Akhtar	1274
Kinetics and binding of difluoro-oxoacetate to aspartate amino-transferase. By P. A. Briley, R. Eisenthal & R. Harrison	1276
Studies on the reactivity towards pyridoxal 5'-phosphate of a <i>Neurospora</i> glutamate dehydrogenase. By M. G. Gore, J. C. Wootton & J. R. S. Fincham	1278

	PAGE
Influence of substituents of the 11-position on the utilization of 20-oxo steroid substrates by cortisone reductase. <i>By</i> I. H. White & J. Jeffery	1279
Protection by reduced nicotinamide-adenine dinucleotide against the inactivation of sorbitol dehydrogenase (L-idoitol-nicotinamide-adenine dinucleotide oxidoreductase) by bromopyruvate. <i>By</i> J. E. G. Barnett & G. R. S. Atkins	1280
The effects of pH and temperature on covalently immobilized glucose 6-phosphate dehydrogenase. <i>By</i> M. A. Goheer, B. J. Gould & D. V. Parke	1282
Use of the gradientless recirculation reactor system to investigate the kinetics of covalently immobilized glucose 6-phosphate dehydrogenase. <i>By</i> B. J. Gould & M. A. Goheer	1284
The effect of aflatoxin B ₁ on isocitrate dehydrogenase activity of rat liver <i>in vitro</i> . <i>By</i> E. A. Bababunmi, O. Obidoa & O. Bassir	1286
The metabolism of cyclohexane-1,2-diols by <i>Nocardia globerula</i> CL1. <i>By</i> N. A. Donoghue & P. W. Trudgill	1287
Specific activities of enzymes of the serine pathway of carbon assimilation in <i>Pseudomonas aminovorans</i> and <i>Pseudomonas</i> MS grown on methylamine. <i>By</i> P. J. Large & R. H. Carter	1291
Dextranucrase from <i>Streptococcus sanguis</i> 804: characterization of the products. <i>By</i> J. A. Beeley & P. M. Ayres	1293
Some preliminary observations on the production and properties of a cellulolytic enzyme elaborated by <i>Bacillus polymyxa</i> . <i>By</i> W. M. Fogarty & P. J. Griffin	1297
Ease of invertase (β -fructofuranosidase) solubilization in disruption of brewer's yeast by Vibro Mill. <i>By</i> N. J. Williams & A. Wiseman	1299
Loss of yeast flocculence after release of extracellular invertase (β -fructofuranosidase) and acid phosphatase by a modified osmotic shock procedure that maintains viability. <i>By</i> N. J. Williams & A. Wiseman	1301
The effects of metabolic inhibitors on insect epoxide hydratases. <i>By</i> G. T. Brooks	1303
Arylamidases in human muscle. <i>By</i> A. F. Bury & R. J. Pennington	1306
Peptide hydrolase activities in denervated muscle. <i>By</i> M. G. Pluskal & R. J. Pennington	1307
Rat brain acetylcholinesterase: automated regional activity measurements after various behavioural treatments. <i>By</i> T. P. Durkin & G. A. Kerkut	1310
The relationship between carbohydrate metabolism and the incorporation of [³ H]leucine into insulin of rabbit islets of langerhans incubated <i>in vitro</i> . <i>By</i> D. G. Parry, K. C. Pedley & K. W. Taylor	1313
Non-transported competitive inhibitors of sugar transport in the human erythrocyte. <i>By</i> J. E. G. Barnett, G. D. Holman & K. A. Munday	1314
Reversibility of hepatic changes caused by ethoxyquin. <i>By</i> D. V. Parke, A. Rahim & R. Walker	1316
The control of tetrahymanol biosynthesis by <i>Tetrahymana pyriformis</i> . <i>By</i> A. S. Beedle, K. A. Munday & D. C. Wilton	1319
Depressed hepatic uptake and low biliary excretion of certain foreign organic compounds during oral administration of carbon tetrachloride or chloroform to rats. <i>By</i> M. Z. Barakat & M. M. Abou-el-Makarem	1322
Isomerization of all- <i>trans</i> -retinal to 11- <i>cis</i> -retinol in isolated frog retinae. <i>By</i> S. Amer & M. Akhtar	1323
Oestrogen-stimulated cholesterol and lipid synthesis in <i>Xenopus laevis</i> liver. <i>By</i> A. H. Merry, T. M. Penning, K. A. Munday & M. Akhtar	1326
BOOK REVIEWS	1329
INDEX	1333
	1973