CONTENTS OF VOLUME 123, No. 2, 1971

Sporulation in Bacillus subtilis 168. Comparison of alkaline phosphatase from sporulating and vegetative cells.
By A. R. Glenn and J. Mandelstam . 129

The number of catalytic sites in acetylcholinesterase.
By W. Leuzinger . . . . . . . 139

The compartmentation of non-esterified and esterified cholesterol in the supernovulated rat ovary.
By A. P. F. Flint and D. T. Armstrong 143

Protease and ribonuclease activities in bovine pituitary lobes.
By J. C. Pickup and D. B. Hope . . . 153

The active centre of rabbit muscle triose phosphate isomerase. The site that is labelled by glyceraldehyde phosphate.
By J. C. Miller and S. G. Waley . . 163

The effects of salicylate on the activity of rat liver tryptophan pyrrolase in vitro and in vivo.
By A. A.-B. Badawy and M. J. H. Smith 171

Evidence for ethylation of rat liver deoxyribonucleic acid after administration of ethionine.
By P. F. Swann, A. E. Pegg, A. Hawks, E. Farber and P. N. Magee . . . 175

Specificities of haemagglutinating antibodies evoked by members of the cephalosporin C family and benzylpenicillin.
By J. M. T. Hamilton-Miller and E. P. Abraham . . . . . . . 183

Studies on the high-sulphur proteins of reduced Merino wool. Amino acid sequence of protein SCMBK-111B3.
By T. Haylett, L. S. Swart and D. Parris 191

By L. S. Swart and T. Haylett . . . . 201

A simulation study of brain compartments. Metabolism of glutamate and related substances in mouse brain.
By C. J. Van den Berg and D. Garfinkel 211

The effect of salts on catecholamine fluxes and adenosine triphosphatase activity in storage vesicles from the adrenal medulla.
By G. Taugner . . . . . . . . . . . 219

The number and location of genes for 5S ribonucleic acid within the genome of Drosophila melanogaster.
By R. V. Quincey . . . . . . . . . . 227

The molecular integrity of chloroplast ribosomal ribonucleic acid.
By G. J. Leaver and J. Ingle . . . . 235

The requirement for the protonated α-amino group for the transport of peptides in Escherichia coli.
By J. W. Payne . . . . . . . . . . 245

The utilization of prolyl peptides by Escherichia coli.
By J. W. Payne . . . . . . . . . . 255

Metabolism of sodium oestrone [35S]sulphate in the rat.
By J. O. Dolly, C. G. Curtis, K. S. Dodgson and F. A. Rose . . . . 261

Uptake of tetracycline by membrane preparations from Escherichia coli.
By T. J. Franklin . . . . . . . . 267

SHORT COMMUNICATIONS

Studies on the control of cholesterol biosynthesis: the adenosine 3':5'-cyclic monophosphate-dependent accumulation of a steroid carboxylic acid.
By D. P. Bloxham and M. Akhtar . . 275

The mitochondrial ribosome of baby-hamster kidney cells.
By J. L. Coote, T. H. Rabbitts and T. S. Work . . . . . . . . . . . . 279

A slow transient kinetic process of yeast hexokinase.
By J. P. Shill and K. E. Neet . . . . 283

Enzymic N-acetylation of N-hydroxy-2-aminofluorene by liver cytosol from various species.
By P. D. Lotlikar and L. Luha . . . . 287

Molecular specificity associated with alleviation of actinomycin D inhibition of protein synthesis.
By N. N. Durham and D. V. Ferguson . 291
Aspects of the chemistry of vegetable starches. By C. T. Greenwood 1P
The structures of amylpectins and glycogens. By W. J. Whelan 1P
Some industrial aspects of the enzymic degradation of starch. By D. J. Manners 1P
Chemical derivatives of starch and their industrial use. By G. A. Barber 3P
Control by light of starch degradation and cell-wall biosynthesis in Platynomas tetrate. By G. W. Gooday 3P
The amino acid composition of a wheat-based brewing syrup. By J. I. Groat 3P
The reaction of malonaldehyde with wheat flour proteins. By J. Taggart 4P
The isolation of plant root protoplasts and their use in the separation of subcellular components. By F. A. Williamson and R. G. W. Jones 4P
L-Tyrosine decarboxylase from barley roots. By J. R. Gallon and V. S. Butt 5P
The isolation and some properties of a factor causing gelling in the phloem sieve-tube exudate of the squash plant (Cucurbita pepo). By T. S. Walker 6P
The effects of depletion of unsaturated fatty acids on the energy-dependent reactions of yeast mitochondria. By J. M. Haslam 6P
Dietary carbohydrate and fatty acid synthetase activity in rat liver and adipose tissue. By K. R. Bruckdorfer, I. H. Khan and J. Yudkin 7P
Decreased thermal stability of alcohol dehydrogenase in the presence of oxidized nicotinamide–adenine dinucleotide or oxidized nicotinamide–adenine dinucleotide phosphate. By A. Wiseman, H. O. Hanley and N. J. Williams 8P
Effect of inducers of drug-metabolizing enzymes on diethylnitrosamine metabolism and toxicity. By S. Magour and J. G. Nieuvel 8P
Interaction of nitrite with mammalian mitochondrial cytochromes. By I. H. Burger, C. L. Walters and D. V. Parke 9P
Induction of a new hepatic microsomal haemoprotein by safrole and isosafrole. By D. V. Parke and H. Rahman 9P
The deacetylation of N-arylacetamides in vitro. By J. W. Gorrod 10P
A new form of N-acetyl-β-glucosaminidase present in pregnancy serum. By J. L. Stirling 11P
Activation of coagulation Factor X by insoluble trypsin. By R. M. Howell and R. J. Dupe 11P
Separation and structural analysis of vinyl and isovinyl azobilirubin derivatives. By F. H. Jansen and M. S. Stoll 12P

INDEX TO AUTHORS

<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abraham, E. P.</td>
<td>183</td>
</tr>
<tr>
<td>Akhtar, M.</td>
<td>275</td>
</tr>
<tr>
<td>Armstrong, D. T.</td>
<td>143</td>
</tr>
<tr>
<td>Badawy, A. A.-B.</td>
<td>171</td>
</tr>
<tr>
<td>Barber, G. A.</td>
<td>2P</td>
</tr>
<tr>
<td>Bloxham, D. P.</td>
<td>275</td>
</tr>
<tr>
<td>Bruckdorfer, K. R.</td>
<td>7P</td>
</tr>
<tr>
<td>Burger, I. H.</td>
<td>9P</td>
</tr>
<tr>
<td>Butt, V. S.</td>
<td>5P</td>
</tr>
<tr>
<td>Coote, J. L.</td>
<td>279</td>
</tr>
<tr>
<td>Curtis, C. G.</td>
<td>261</td>
</tr>
<tr>
<td>Dodgson, K. S.</td>
<td>261</td>
</tr>
<tr>
<td>Dolly, J. O.</td>
<td>261</td>
</tr>
<tr>
<td>Farber, E.</td>
<td>175</td>
</tr>
<tr>
<td>Ferguson, D. V.</td>
<td>291</td>
</tr>
<tr>
<td>Flint, A. P. F.</td>
<td>143</td>
</tr>
<tr>
<td>Franklin, T. J.</td>
<td>267</td>
</tr>
<tr>
<td>Gallon, J. R.</td>
<td>5P</td>
</tr>
<tr>
<td>Garfinkel, D.</td>
<td>211</td>
</tr>
<tr>
<td>Glenn, A. R.</td>
<td>129</td>
</tr>
<tr>
<td>Gooday, G. W.</td>
<td>3P</td>
</tr>
<tr>
<td>Gorrod, J. W.</td>
<td>10P</td>
</tr>
<tr>
<td>Greenwood, C. T.</td>
<td>1P</td>
</tr>
<tr>
<td>Groat, J. I.</td>
<td>3P</td>
</tr>
</tbody>
</table>