



THE BIOCHEMICAL SOCIETY

The Biochemical Society exists to advance the science of biochemistry through meetings and publications. Several meetings a year are held, each at a different place; original papers are presented and special topics are discussed at symposia and colloquia.

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GENE EXPRESSION

— Regulation at the RNA and Protein Levels

Edited by J. Kay, F.J. Ballard and R.J. Mayer

204 pp. ISBN 0 904498 24 7 Price £35 (US \$65) BIOCHEMICAL SOCIETY SYMPOSIUM NO. 55

List of contents and authors: *Gene Expression and Differentiation in F9 Mouse Embryonal Carcinoma* by **Merilyn J. Sleigh**; *Regulation of Genes Associated with Drug Metabolism* by **William H. Elliott, Brian K. May, Michael J. Bawden & Antony J. Hansen**; *Cloning and Expression of the Genes for Calpains and Calpastatins* by **Takashi Murachi, Emiko Takano, Masatoshi Maki, Yoshifumi Adachi & Masakazu Hatanaka**; *Peptide Signals for Protein Degradation within Lysosomes* by **J. Fred Dice & Hui-Ling Chiang**; *Haemopoietic Growth Factor Control of Normal and Neoplastic Cellular Proliferation* by **Antony W. Burgess, Jonathan Cebon & Sandra Smith**; *Nuclear Pre-mRNA Splicing in *Saccharomyces cerevisiae** by **Jean Beggs, Marie Lossky & Gordon J. Anderson**; *Control of mRNA Stability During Development of *Dictyostelium discoideum** by **Giorgio Mangiarotti**; *Effects of Insulin-Like Growth Factors on Protein Metabolism: Why are some Molecular Variants more Potent?* by **F. John Ballard, Geoffrey L. Francis, Christopher J. Bagley, Laszlo Szabo & J. C. Wallace**; *Hormonal Regulation of Gene Expression* by **John W. Funder**; *Mechanisms by which Prolactin and Glucocorticoids Regulate Casein Gene Expression* by **Jeffrey M. Rosen, Patrick Poyet, Heather Goodman & Kuo-Fen Lee**; *Processing of the Polymeric Immunoglobulin Receptor* by **Roberto Solari, Esther Schaerer, Corinne Tallichet, Liliane Racine & Jean-Pierre Kraehenbuhl**; *Experimental Characterization of the Autophagic-Lysosomal Pathway in Isolated Rat Hepatocytes* by **Paul B. Gordon, Gunn Ø. Kisen, Attila L. Kovacs & Per O. Seglen**; *The Molecular Chaperone Concept* by **R. John Ellis, Saskia M. Van Der Vies & Sean M. Hemmingsen**; *Protein Folding and Intracellular Transport: Studies on Influenza Virus Haemagglutinin* by **Mary-Jane Gething & Joe Sambrook**; *Role of Protein Disulphide-Isomerase in the Expression of Native Proteins* by **Robert B. Freedman, Neil J. Bulleid, Hilary C. Hawkins & Jan. L. Paver**; *Intermediate Filament-Ubiquitin Diseases: Implications for Cell Sanitization* by **R. John Mayer, James Lowe, Graham Lennox, Michael Landon, Ken MacLennan & Fergus J. Doherty**; Subject index.



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PLANT MEMBRANES - STRUCTURE, ASSEMBLY AND FUNCTION

Edited by **J.L. HARWOOD** and **T.J. WALTON**

This book records the proceedings of a meeting organized by the Phytochemical Society of Europe, the Membrane Group of the Biochemical Society and the Plant Metabolism Group of the Society for Experimental Biology and held at University College Cardiff in April 1988. Topics covered include membrane structure and its modification by different factors, synthesis of components and membrane assembly, molecular function of membrane components and physiological aspects of membranes.

Contents: Recent structural studies on biomembranes by P.I. Harris & D. Chapman; Identification and isolation of photosystem I and photosystem II pigment-proteins from higher plants by G.F. Peter, O. Machold & J.P. Thornber; Structure, function and biogenesis of nuclear-encoded proteins of photosystem II by B. Andersson & R.G. Herrmann; Lipid topology and the role of lipids in plant membrane structure by W.P. Williams; Use of yeast lipid-synthesis mutants in establishing membrane function by K.D. Atkinson; Surface electrical charges and their role in membrane function by J. Barber; Catabolic regulation of thylakoid membrane structure and function during senescence by H. Thomas; Heat stress and membranes by K.A. Santarius & E. Weis; Glycerolipid synthesis by J.L. Harwood; Processing peptidases of higher plant chloroplasts by P.D. Elderfield, J.E. Musgrove, P.M. Kirwin & C. Robinson; The synergistic effect of light and heat stress on the inactivation of photosystem II by G. Schuster, S. Schochat, N. Adir, D. Even, D. Ish-Shalom, B. Grimm, K. Kloppstech & I. Ohad; The molecular genetics of thylakoid proteins by T.A. Dyer; Properties of the photosystem II quinone binding region by M.C.W. Evans, J.H.A. Nugent, J.A.M. Hubbard, C. Demetriou, C.J. Lockett & A.R. Corrie; A veteran's look at the chloroplast H^+ -ATPase and photosystem I reaction center by N. Nelson; Lipid-protein interactions and membrane function by K. Gounaris, D.J. Chapman & J. Barber; Plasma membrane H^+ -ATPase by R.T. Leonard; Intracellular cannibalism in higher plant cells by R. Douce, R. Bligny, A. J. Dorne & C. Roby; Herbicide action on photosynthetic membranes by A. Trebst; Effects of water stress on photosynthesis and related processes by M. Speer, J.E. Schmidt & W.M. Kaiser; Chilling sensitivity and phosphatidylglycerol biosynthesis by N. Murata, O. Ishizaki & I. Nishida; Calcium, protein kinase and the plasma membrane by S. Gilroy, D. Blowers, M. Collinge, H. Harvey & A.J. Trewavas; Transport across membranes by J.A. Raven.

ISBN 0 904498 23 9 251 pages Price £25.00 (US\$ 50.00)



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VARIATIONS ON A THEME

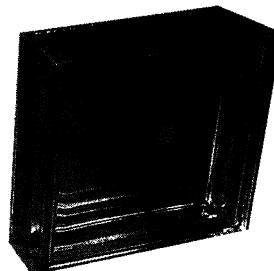


Oldershaw distilling column

Vacuum-jacketed, silvered.

Consists of sealed-in perforated plates, each with a drain tube to direct the distillate to the next lower plate. A weir in each plate maintains uniform liquid level. The jacket has bellows to compensate for differential expansion.

No. of plates	i.d. (mm)	* Joint	Catalog No.	Price
5	19	24/40	Z17,567-6	\$416.00
5	19	29/42	Z17,568-4	419.50
5	28	29/42	Z17,569-2	485.00
10	19	24/40	Z17,570-6	573.00
10	19	29/42	Z17,572-2	576.50
10	28	29/42	Z17,571-4	676.00



TLC developing tank

Glass, with lid.

Inside dimensions (L x H x W)

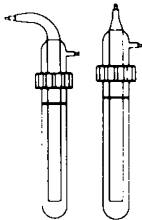
17.5 x 27.5 x 7.5cm	Z12,619-5	\$46.40	17.5 x 11.0 x 6.2cm	Z20,418-8	\$39.70
17.5 x 16.0 x 8.2cm	Z20,415-3	\$40.30	17.5 x 6.2 x 6.8cm	Z20,419-6	\$38.20
17.5 x 16.0 x 6.2cm	Z20,416-1	\$40.10	12.1 x 10.8 x 8.3cm	Z14,622-6	\$39.30
			7.5 x 15.5 x 8.0cm	Z20,422-6	\$36.00

Two-piece vacuum trap

Threaded C45/50 joint.

Constructed for easy removal of condensates.

Hose barsbs at 180° Z17,421-1 \$108.80
Hose barsbs at 90° Z17,423-8 106.60



Vacuum-filtration adapter

Enables filtration (via a Buchner funnel) directly into a single-neck round-bottom flask, such as used on rotary evaporators. Includes rubber adapter.



C Joint	Flange i.d. (mm)	Catalog No.	Price
14/20	23	Z11,561-4	\$27.40
24/40	31	Z11,562-2	34.00
24/40	38	Z11,563-0	37.00
29/26	31	Z12,925-9	40.30

Replacement rubber adapter

Flange i.d. (mm)	Catalog No.	Price
23	Z11,595-9	\$8.60/2
31	Z11,596-7	12.40/2
38	Z11,597-5	13.60/2

Splash-guard adapter

With C24/40 female joint.

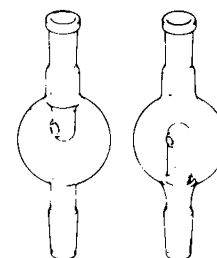
C Joint (male)	Capacity (ml)	Catalog No. (A)	Price
24/40	250	Z16,405-4	\$44.60
24/40	500	Z16,613-8	47.90
14/20	250	Z16,615-4	44.60

Without small return holes (B)

C Joint (male)	Capacity (ml)	Catalog No.	Price
24/40	100	Z17,604-4	\$40.00
24/40	250	Z14,779-6	44.60
24/40	500	Z14,781-8	51.70
14/20	250	Z14,782-6	46.60

With small return holes (B)

C Joint (male)	Capacity (ml)	Catalog No.	Price
24/40	250	Z16,406-2	\$44.60
24/40	500	Z16,614-6	51.70
14/20	250	Z16,616-2	46.60

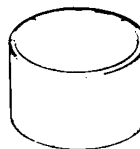


A

B

Dewar flask

For use in reactions requiring low temperatures and stirring. Low form.



Capacity (ml)	Catalog No.	Price
100	Z18,388-1	\$84.00
150	Z15,039-8	98.00
275	Z10,753-0	153.10
600	Z10,754-9	214.60



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