PRINCETON UNIVERSITY PRESS

Physical Chemistry from Ostwald to Pauling

The Making of a Science in America

John W. Servos

John Servos explains the emergence of physical chemistry in America by presenting a series of lively portraits of such pivotal figures as Wilhelm Ostwald, A. A. Noyes, G. N. Lewis, and Linus Pauling, and of key institutions as well.

"This is one of the most intellectually exciting books I have read in years. Historians have written and argued about disciplines as organizing elements in Intellectual and academic life since the pioneering studies of Charles Rosenberg and Russell McCormmach.... But few have succeeded in providing rigorous, richly textured studies of specific cases to illustrate the social processes by which disciplines are constructed, maintained, and superseded. John Servos has done this brilliantly. We have here the best account I know of for a given discipline."

-Jeffrey Sturchio

Cloth: \$49.95 ISBN 0-691-08566-8

A World Ruled by Number

William Stanley Jevons and the Rise of Mathematical Economics

Margaret Schabas

If any single characteristic differentiates current, neoclassical economics from the classical economics of Adam Smith and David Ricardo, it is the use of mathematics. Pointing to the critical role of William Stanley Jevons, Margaret Schabas demonstrates that the advent of mathematical economics in late Victorian England resulted more from new currents in logic and the philosophy of science than from problems specific to classical economic theory.

"This is an absolutely first-rate book—careful, judicious, and persuasive. I truly believe that specialists in the field will never look at the 'marginal revolution' in economics in quite the same way again after reading it. The work will be required reading for historians of economics, and I think that both historians of science and intellectual historians will find it an extremely valuable window into the history of economics."—Craufurd D. Goodwin

Cloth: \$29.95 ISBN 0-691-08543-9

New in paperback

The Edge of Objectivity

An Essay in the History of Scientific Ideas

Charles Coulston Gillispie

With a new foreword by the author

From Galileo's analysis of motion to the theories of evolution and relativity, Charles Gillispie takes readers on a masterly tour of the world of scientific ideas. He portrays the history of modern science as the development of objectivity through the study of nature.

"Gillispie has written a bold, penetrating, and very personal book. . . . All told, this is an exciting book, based on wide and often deep scholarship, a pleasure to read and to meditate upon. It is sure to be widely read, often quoted, and interminably discussed."

—Henry Guerlac, The New York Times Now in paper: \$14.95 ISBN 0-691-02350-6



Cambridge

The Correspondence Between Sir George Gabriel Stokes and Sir William Thomson, Baron Kelvin of Largs

Edited by DAVID B. WILSON

Stokes and Kelvin corresponded for over fifty years, amassing what is easily the largest extant correspondence between two Victorian physicists. The letters range widely over the people, ideas and institutions of the age, and provide an invaluable insight into a period of major historical importance.

Sold as a two-volume set £125.00 net Hardback 0 521 32831 4 853 pp. 1990

Now in paperback

Australian Science in the Making

Edited by R. W. HOME

In this volume, the Australian Academy of Science celebrates two centuries of Australian science. Authors with different fields of interest present a group of general surveys and case studies on the development of scientific understanding and research in Australia. £15.00 net Paperback 0 521 39640 9 443 pp. 1990

Redirecting Science

Niels Bohr, Philanthropy and the Rise of Nuclear Physics

FINN AASERUD

An important study for understanding the complex interconnections between basic science and its sources of economic support in the period between the two world wars. In the process, Dr Aaserud places the emergence of nuclear physics in a larger historical context. £35.00 net Hardback 0 521 35366 1 369 pp. 1990

The Scientific Letters and Papers of James Clerk Maxwell

Volume 1: 1846–1862 Edited by P. M. HARMAN

The first volume of a comprehensive edition, which illuminates the development of Maxwell's scientific work. Documents are reproduced which describe Maxwell's greatest period of scientific innovation, including his announcement of the electromagnetic theory of light.

£125.00 net Hardback 0 521 25625 9 776 pp.

Reappraisals of the Scientific Revolution

Edited by DAVID C. LINDBERG and ROBERT S. WESTMAN

A state-of-the-art compendium offering broad reflections on the Scientific Revolution of the 16th and 17th centuries, from a wide spectrum of eminent scholars. The overall theme of the book is 'reappraisal': of questioning what has become the basic background to the entire discipline of the history of science.

£35.00 net Hardback 0 521 34262 7 581 pp. £14.95 net Paperback 0 521 34804 8 1990

The Correspondence of Charles Darwin

Volume 6: 1856-7

Edited by F. BURKHARDT and, the late, SYDNEY SMITH

Darwin's fascinating letters to his correspondents provide a unique survey of what was – and was not – believed about the nature and origin of species in the mid-19th century. This remarkable book provides a valuable insight into the life of an outstanding naturalist and controversial scientist at work. £35.00 net Hardback 0 521 25586 4 708 pp. 1990

For a copy of the new History and Philosophy of Science leaflet, please contact Susan Chadwick at the address below



The Edinburgh Building, Cambridge CB2 2RU, UK.

THE BRITISH SOCIETY FOR THE HISTORY OF SCIENCE

Membership of the Society, which normally includes a subscription to *The British Journal for the History of Science*, is open to all persons approved by the Council of the Society and elected at an ordinary meeting. The annual subscription for the membership year 1991 is £18.50 (\$40.00) or £9.25 (\$25.00) for associate membership, which includes students at centres of higher education. There is an Introductory Offer for ordinary members who pay £14.00 (\$30.00) for the first year. Applications for membership should be made on a form which is available from the Society's Executive Secretary at the address below.

Meetings: The Society mounts an ambitious programme of meetings. The pattern is flexible, but includes a three-day summer meeting, usually held at a different British University or Polytechnic each year. About four other meetings, lasting for between one and three days, are held during the year, sometimes devoted to a clearly defined theme or an important anniversary, and often arranged in conjunction with other scholarly societies.

The British Journal for the History of Science is the official organ of the Society. All correspondence on the contents of the Journal should be addressed to the Editor, Dr J. H. Brooke, Department of History, University of Lancaster, Lancaster LA1 4YG, England. Books for review should be sent to the Reviews Editor, Dr John Henry, Science Studies Unit, University of Edinburgh, 34 Buccleuch Place, Edinburgh EH8 9JT.

Advertising: Contact the Journals Advertising Manager, Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU.

Other publications: BSHS Monograph Series is designed to allow the publication of monographic studies in the history of science quickly and cheaply. All correspondence on the subject of monographs, and any new suggestions for titles, should be sent to the Series Editor, Dr P. Weindling, Wellcome Unit for the History of Medicine, 45–47 Banbury Road, Oxford OX2 6PE, England. Monographs are available to members at a special price, post-free from the Society's Executive Secretary. Non-members may obtain them through bookshops, or post-free from the Executive Secretary. Titles are as follows:

- 2. The Letters of Georges Cuvier: A Summary Calendar. Ed. by Dorinda Outram. 1980. £4.50/\$10.00 (£3.50/\$8.00 to members).
- 3. Rationality and Ritual: The Windscale Inquiry and Nuclear Decisions in Britain. By Brian Wynne. 1982. £7.00/\$15.00 (£5.00/\$11.00 to members).
- 4. The Royal Society and Its Fellows 1660-1700: The Morphology of an Early Scientific Institution. By Michael Hunter. 1982, reprinted 1985. £9.00/\$19.00 (£6.50/\$14.00 to members).
- 5. Francis Bacon's Natural Philosophy: A New Source. A Transcription of Manuscript Hardwick 72A with Translation and Commentary. By Graham Rees, assisted by Christopher Upton. 1984. £7.90/\$17.00 (£5.60/\$12.00 to members).
- 6. Archives of the British Chemical Industry, 1750–1914: A Handlist. By Peter J. T. Morris and Colin A. Russell. Contributing editor John Graham Smith. 1988. £14.50/\$31.00 (£9.00/\$19.00 to members).

Each year, the Society publishes a List of Theses in History of Science in British universities. This is available free to members, and at £3.00 (\$6.00) to non-members on request to the Executive Secretary. Standing orders are accepted from members or non-members who wish to receive the list regularly.

The Society's Newsletter, an informal publication edited by Dr Frank A. J. L. James, RICHST, The Royal Institution, 21 Albemarle Street, London W1X 4BS, appears in January, May and September each year. It is free to members, £6.00 (\$12.00) for institutions and non-members.

Administrative business of the Society is handled by The Executive Secretary, Wing-Commander G. Bennett, 31 High Street, Stanford in the Vale, Faringdon, Oxfordshire SN7 8LH. The Society is registered in England as a Limited Company (No. 562208) and is a Registered Charity (No. 258854).

Copying: This journal is registered with the Copyright Clearance Center, 27 Congress Street, Salem, MA 01970. Organizations in the USA who are also registered with the C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per-copy fee of \$5.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0007-0874/91 \$5.00 + .00.

ISI Tear Sheet Service, 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

For all other use, permission should be sought from Cambridge or the American branch of Cambridge University Press.

The British

Journal

for the

History of

Science

Part 1 No. 80 March 1991

- 1 Editorial note
- 3 Industrial recruitment of chemistry students from English universities: a revaluation of its early importance JAMES DONNELLY
- 21 Darwin faces Kant: a study in nineteenth-century physiology 8, P. FULLINWIDER
- The rhetoric of Eugenics: expert authority and the Mental Deficiency Bill

 KDWARD J. LARSON

Review article

61 History of science in the National Science Curriculum: a critical review of resources and their aims
STEPHEN PUMFREY

Essay reviews

- 79 How Christiaan Huygens mathematized nature H. FLORIS COHEN
- 85 Energy and Empire JED Z. BUCHWALD
- 95 A life with enzymes MIKULÁŠ TEICH
- 101 Book reviews
- 129 Books received



Published for The British Society for the History of Science by Cambridge University Press