

THE COLLECTED PAPERS OF ALBERT EINSTEIN

VOLUME 3

The Swiss Years: Writings, 1909-1911

EDITED BY

**MARTIN J. KLEIN, A. J. KOX,
JÜRGEN RENN, AND ROBERT SCHULMANN**

This volume presents Einstein's writings for the two-year period starting in October 1909. The initial date marks the beginning of his first academic appointment, at the University of Zurich. The volume concludes with the masterful report that Einstein gave to the original Solvay Congress. Almost half of this volume consists of the previously unpublished notes he wrote in preparation for his lectures.

264 line illustrations.

Cloth: \$85.00 ISBN 0-691-08772-5

Paperback translation: \$29.95 ISBN 0-691-10250-3

VOLUME 5

The Swiss Years: Correspondence,
1902-1914

EDITED BY

**MARTIN J. KLEIN, A. J. KOX,
AND ROBERT SCHULMANN**

This volume begins when Einstein went to work at the Swiss Patent Office and closes as Einstein left Switzerland to take up his appointment as a member of the Prussian Academy of Sciences in Berlin. The great majority of the more than 500 letters from and to Einstein presented here have never been published before.

Cloth: \$85.00 ISBN 0-691-03322-6

Paperback translation: \$27.95 ISBN 0-691-00099-9

*Each document in these volumes appears in the language in which it was written.
The introduction and notes are in English. An English translation of the documents is available.*

PRICES ARE IN U.S. DOLLARS • ORDER FROM YOUR BOOKSELLER OR FROM
PRINCETON UNIVERSITY PRESS
PHONE ORDERS: (609) 883-1759 U.S. • (+243) 829121 U.K./EUROPE

DO NOT PRINT THIS INFORMATION BRIT J. HIST. OF SCI. 12/93 10 94-221

DISTINGUISHED

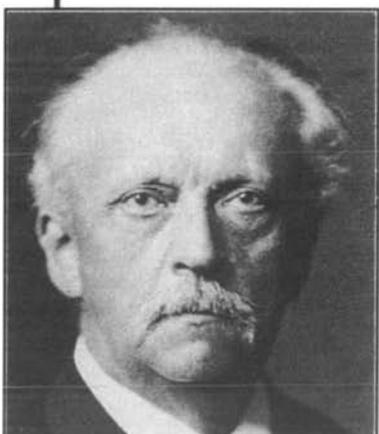


A Mind Always in Motion

The Autobiography of Emilio Segrè

The renowned physicist Emilio Segrè (1905-1989) left his memoirs to be published posthumously because, he said, "I tell the truth the way it was and not the way many of my colleagues wish it had been." This compelling autobiography offers a personal account of his fascinating life as well as candid portraits of some of this century's most important scientists, such as Enrico Fermi, E. O. Lawrence, and Robert Oppenheimer.

£25.00 cloth, illustrated



Hermann von Helmholtz and the Foundations of Nineteenth-Century Science

Edited by DAVID CAHAN

Hermann von Helmholtz (1821-1894) was a polymath of dazzling intellectual range and energy. Cahan has assembled an outstanding group of scholars for this intellectual biography of Helmholtz, the first ever to critically assess both his published and unpublished writings.

California Studies in the History of Science, £47.50 cloth, illustrated



The Quiet Revolution

Hermann Kolbe and the Science of Organic Chemistry

ALAN J. ROCKE

Organic chemist Hermann Kolbe (1818-1884) is the subject of this vigorously contextualized biography, which combines the approaches of cognitive and social history of science.

"This is one of the most important studies of 19th-century chemistry produced during the past two decades."—Frederic L. Holmes, Yale University

California Studies in the History of Science, £37.50 cloth, illustrated

Phone orders (+243) 829121.

SCIENTISTS

UNIVERSITY OF CALIFORNIA PRESS

Galileo, Courtier

The Practice of Science in the Culture of Absolutism

Mario Biagioli

"Biagioli presents a convincing argument for Galileo as the courtly gentlemen whose patronage goals drove his scientific work. This superb book is a joy to read and provides new insight into the history of science."—*Library Journal*

"[A] brilliantly original reexamination of Galileo. . . . Biagioli observes that Galileo's undoing fitted a pattern common to the fall of court favorites, and suggests that his condemnation was as much a product of court tensions as of the theological threat of his scientific doctrines."—*The New Yorker*

Cloth \$29.95 £23.95 416 pages

Science and Its Conceptual Foundations series



Men among the Mammoths

Victorian Science and the Discovery of Human Prehistory

A. Bowdoin Van Riper

Van Riper recreates the first arguments for human antiquity and shows how they forced Victorians to redefine their assumptions about human evolution and the relationship of science to Christianity.

***Paper \$16.95 £13.50 282 pages**

Science and Its Conceptual Foundations series

Now in Paper

From Mineralogy to Geology

The Foundations of a Science, 1650-1830

Rachel Laudan

"We have waited a long while for a brand new English-language survey of the development of geology from the Scientific Revolution to its maturity as a science in the mid-nineteenth century. The wait proves to have been worthwhile, for this gap has now been filled by a volume that is assured, original, and highly stimulating. . . . It will surely become the basic survey of the rise of geology."—Roy Porter, *ISIS*

Paper \$15.95 £12.75 290 pages illus.

Science and Its Conceptual Foundations series

Research Schools

Historical Reappraisals

Edited by Gerald L. Geison and Frederic L. Holmes

This collection of interpretive essays and case studies focuses on research schools—those communities of scientists and students that have helped to shape contemporary science both within and outside the laboratory. Whether conceived of as "research groups," "knowledge factories," or "invisible colleges," the research schools examined in this volume are observed in the historical and cultural contexts of their disciplines, their institutional settings, their national traditions, and scientific styles.

***Paper \$25.00 £19.95 280 pages**

Osiris, Volume 8

* Cloth edition available

The University of Chicago Press

5801 S. Ellis Ave., Chicago, IL 60637

The Golem

What Everyone Should Know About Science

H. M. COLLINS and T. PINCH

'... it succeeds extraordinarily well in this task of portraying and assessing the real fabric of scientific research, based on the insights of modern scholarship.'

New Scientist

'... perverse but entertaining book ... the writing is deft, the stories are good and there is not a boring page.'

Nature

£10.95 net HB 0 521 35601 6 192 pp.

Collected Papers of Lewis Fry Richardson

Volume 1: Meteorology and Numerical Analysis

Volume 2: Quantitative Psychology and Studies of Conflict

Edited by O. M. ASHFORD, H. CHARNOCK, P. G. DRAZIN, J. C. R. HUNT, P. SMOKER and I. SUTHERLAND

As a scientist and as an eminent historical figure Lewis Fry Richardson's collected papers covering Meteorology in Volume I and Quantitative Psychology in Volume II, will be of great interest to historians of science.

Volume 1 £95.00 net HB 0 521 38297 1 1032 pp.

Volume 2 £95.00 net HB 0 521 38298 X 800 pp.

Now in paperback

Power from Steam

A History of the Stationary Steam Engine

R. L. HILLS

Power from Steam is the first comprehensive history of the steam engine in 50 years. It covers its history from its earliest form to the beginning of the twentieth century when it was replaced by the steam turbine.

This book will be indispensable to steam power enthusiasts as well as historians of technology.

£17.95 net PB 0 521 45834 X 338 pp.

Now in paperback

German National Socialism and the Quest for Nuclear Power 1939-1949

M. WALKER

'... an outstanding book ... superbly researched, convincingly argued and attacking the questions that matter.'

The Financial Times

£13.95 net PB 0 521 43804 7 300 pp.

Science in Russia and the Soviet Union

A Short History

L. R. GRAHAM

A study of the shaping of scientific theories and institutions in Russia and the former Soviet Union by social, economic, and political factors.

'... the first comprehensive account of Russian science from Tsarist to post-Gorbachev times.'

Ronald Hoffman, Nobel Laureate

£30.00 net HB 0 521 24566 4 350 pp.

Cambridge History of Science

Early Physics and Astronomy

O. PEDERSEN

A concise exposition of the development of the scientific ideas of the universe from the ancient Greeks to Copernicus.

'... recommended to anyone interested in the history of science ...'

Journal of the British Astronomical Society

£50.00 net HB 0 521 40340 5 423 pp.

£19.95 net PB 0 521 40899 7

Fits, Passions and Paroxysms

Physics, Method, and Chemistry and Newton's Theories of Colored Bodies and Fits of Easy Reflection

A. E. SHAPIRO

Professor Shapiro analyses the experimental development of these theories and shows the essential role that Newton's philosophy of science played in the formulation and reception of them.

£45.00 net HB 0 521 40507 6 416 pp.

The Correspondence of Charles Darwin

Volume 8: 1860

Edited by F. BURKHARDT, D. M. PORTER, J. BROWNE and M. RICHMOND

This volume is dominated by the response to the publication of Darwin's *Origin of Species*. It includes much previously unpublished correspondence, revealing how the Victorians coped with a theory that would revolutionise thinking about the organic world and human ancestry.

£40.00 net HB 0 521 44241 9 818 pp.

The Correspondence of Charles Darwin 8

For further information please contact Giulia Williams at the address below.
To order direct using your credit card phone (0223) 325970 or fax (0223) 325959.



CAMBRIDGE
UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU

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 1993 is £22.00 (\$45.00) or £11.00 (\$25.00) for associate membership, which includes students at centres of higher education. There is an Introductory Offer for ordinary members who pay £17.00 (\$35.00) 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. Other sterling rates may apply to overseas members.

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, Professor 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, 21 Buccleuch Place, Edinburgh EH8 9LN.

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. Reprint with additional material (expected mid 1993).
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).
7. *Index to the Scientific Correspondence of John William Dawson*. By Susan Sheets-Pyenson. 1992. £20.00/\$44.00 (£12.00/\$26.00 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. The Society's Education Section also has a regular *Newsletter, Education Forum*, edited by Peter Ellis, 12 Belvedere Street, Ryde, Isle of Wight, PO33 2JW.

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 CCC may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to CCC of the per-copy fee of \$5.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0007-0874/93 \$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.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

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

Back volumes are obtainable as follows: Volumes 1-23: Wing-Commander G. Bennett, 31 High Street, Stanford in the Vale, Faringdon, Oxon SN7 8LH. For volume 24 onwards, apply to Cambridge University Press.

The British
Journal
for the
History of
Science

BJHS

Volume 26
Part 4, No. 91

December 1993

The Big Picture

A special issue

Guest Editor: James A. Secord

- 387 Introduction
JAMES A. SECORD
- 391 Aurora, Nemesis and Clio
J. R. R. CHRISTIE
- 407 De-centring the 'big picture': *The Origins of Modern Science* and the
modern origins of science
ANDREW CUNNINGHAM AND PERRY WILLIAMS
- 433 Ways of knowing: towards a historical sociology of science,
technology and medicine
JOHN V. PICKSTONE
- 459 The history of measurement and the engineers of space
ANDREW BARRY
- 469 Gender and the historiography of science
LUDMILLA JORDANOVA
- 485 Book reviews
- 497 Books received
- 499 Books reviewed
- 505 Index of authors
- 507 Report of Council for the year 1992

BSHS
THE BRITISH
SOCIETY FOR
THE HISTORY
OF SCIENCE

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

CAMBRIDGE
UNIVERSITY PRESS



0007-0874(199312)26:4;1-1