

promoted the historical study of experimental practices by focusing on the conduct and reporting of experiment, on the process of social negotiation leading to consensus regarding experimental results and, to a lesser but increasing extent, on the technical skills deployed in experimentation. In the present volume Harry Collins and Steven Shapin argue that the precepts of this historical methodology can be applied with profit in science education, especially the laboratory component of secondary school science. A paper by David Gooding on Michael Faraday's electromagnetic experiments of 1821 demonstrates the obvious point made by Collins and Shapin that students may acquire a more sensitive understanding of experimentation by studying actual practices than by relying on the reconstructed images appearing in textbooks.

There is much to be said for the benefits to science pedagogy that could result both from studying historical exemplars of scientific experimentation closely and from enhancing skill acquisition. But in two respects the claims made by Collins and Shapin are overstated. They call the historical literature whose utility they advocate the "new history and sociology of science" (even conferring on it an acronym, "NHS"). Yet in some respects neither their history nor their sociology is all that new. To be sure, this British group has produced some of the most historiographically mature studies of experimentation, but their efforts have not been entirely without precedent. American audiences need only think of the work of Henry Guerlac on Lavoisier, of L. Pearce Williams on Faraday, and of Frederic L. Holmes on Bernard and Lavoisier. These American authors did not take up the social dimensions in the construction of scientific knowledge that this British group considers so important, but here too the British are not entirely "new." Despite the centrality of the social negotiating process to the analyses of experiment advocated by these British historians, they make no mention of Ludwik Fleck's *Genesis and Development of a Scientific Fact*, a seminal work from a half-century ago that viewed the construction of scientific knowledge in terms of community consensus.

Citing the example set by the *Harvard Case Histories in Experimental Science* series, whose editor, James B. Conant, argued for the *civic* importance of understanding the methods and limits of experimental practice for making responsible judgments on the role of science in a democratic society, Collins and Shapin feel that the NHS approach aids a "radical rethinking" of how to educate non-scientists and even "scientists for their roles outside the laboratory—that is, for educating citizenry in matters scientific" (p. 70).

Insofar as critical judgments about science rely upon familiarity with the knowledge-producing acts that occur largely within the scientific community (for example, those involved in challenges to scientific results, the achievement of consensus, or the assessment of certitude), NHS literature does help to create informed citizenry. But it does not work as effectively in teaching the concepts and tools that could be used for judging how science is to be applied in the larger world. As John L. Heilbron and Daniel J. Kevles have pointed out, properly teaching "the 'civics' of science and technology" requires a consideration of matters that lie outside the scientific community, especially the larger historical forces at work in society ("Point of View," *Chronicle of Higher Education*, 15 February 1989, p. A48). Some authors in this volume, most notably Bill Brock, do emphasize relating science to its larger context in order to help students think about debates involving science, but a more sustained effort at creating pedagogical material suited for dealing with broader social, political, and economic questions concerning science is needed.

The issue of scientific literacy has raised questions about the adequacy of extant narratives of the scientific past. The historical narratives found in science textbooks often depict science as a technico-rational activity serving the Enlightenment goals of progress and truth and fulfilling the liberal ideal of highly developed individual expression. The authors in this volume justifiably find that image unsatisfactory. The pedagogical demands now being placed on the history of science require an image of science more consonant with actual scientific practice since World War II, in particular one taking into account large-scale projects that are carried out by teams of individuals and are often tied to military or security interests. Historians of science now have the opportunity to offer that revised narrative to a broader audience and to shape a citizenry that is scientifically literate in the political sense. Projects on this side of the Atlantic—including the NSF-supported summer institute for high school teachers of science and history at the University of Florida, Gainesville, conducted by Frederick Gregory and Robert Hatch—complement the efforts made in *Teaching the History of Science*. But much more needs to be done. It is not merely a matter, as some authors in this volume seem to think, of using exemplars from the history of science as alternative tools in teaching science. Much more is at stake. To neglect the writing of a narrative of science and technology that is accessible and that accurately depicts their roles in society would be a tragedy. One lesson

learned from recent West German debates over the role of historical knowledge in society is that those who create the memories also shape the future.

KATHRYN M. OLESKO

Department of History,  
Georgetown University,  
Washington, DC 20057-0001

## Books Received

**Atomic Energy for Military Purposes.** The Official Report on the Development of the Atomic Bomb Under the Auspices of the United States Government, 1940-1945. Henry DeWolf Smyth. Stanford University Press, Stanford, CA, 1990. xviii, 324 pp., illus. \$39.50; paper, \$12.95. Stanford Nuclear Age Series. Reprint, 1945 ed., with additions.

**The Bacterial Chromosome.** Karl Drlica and Monica Riley, Eds. American Society for Microbiology, Washington, DC, 1990. xvi, 469 pp., illus. \$87; to ASM members, \$63.

**Biochemistry.** Christopher K. Mathews and K. E. van Holde. Benjamin/Cummings, Redwood City, CA, 1990. xxx, 1129 pp., illus. \$59.25. Benjamin/Cummings Series in Life Sciences and Chemistry.

**Bioengineered Molecules.** Basic and Clinical Aspects. Roberto Verna, Robert Blumenthal, and Luigi Frati, Eds. Raven, New York, 1990. xii, 157 pp., illus. Paper, \$54. Sero Symposium Series. Advances in Experimental Medicine, vol. 1. From a workshop, Rome, Sept., 1988.

**Biologic Markers of Air-Pollution Stress and Damage in Forests.** Committee on Biologic Markers of Air-Pollution Damage in Trees, National Research Council. National Academy Press, Washington, DC, 1989. xiv, 363 pp., illus. Paper, \$35. Based on a workshop, Little Switzerland, NC, April 1988.

**Biological Markers in Dementia of Alzheimer Type.** Christopher J. Fowler *et al.*, Eds. Smith-Gordon, London, and Nishimura, Niigata-Shi, Japan, 1990. viii, 232 pp., illus. Paper, £28. From a symposium, Stockholm, Aug. 1989.

**Biological Radiation Effects.** Jürgen Kiefer. Springer-Verlag, New York, 1990. xviii, 444 pp., illus. Paper, \$69.50.

**Biology.** Neil A. Campbell. 2nd ed. Benjamin/Cummings, Redwood City, CA, 1990. xxxii, 1165 pp. + appendixes, glossary, and index, illus. \$49.95. Benjamin/Cummings Series in the Life Sciences.

**Biomedical Science and the Third World.** Under the Volcano. Barry R. Bloom and Anthony Cerami, Eds. New York Academy of Sciences, New York, 1989. xx, 334 pp., illus. Paper, \$84. Annals of the New York Academy of Sciences, vol. 569. From a conference, New York, Oct. 1988.

**Biotechnology.** A Laboratory Course. Jeffrey M. Becker, Guy A. Caldwell and Eve Ann Zachgo. Academic Press, San Diego, CA, 1990. xvi, 232 pp., illus. Spiral bound, \$29.95.

**Biotechnology of Plant-Microbe Interactions.** James P. Nakas and Charles Hagedorn, Eds. McGraw-Hill, New York, 1990. xiv, 349 pp., illus. \$59.95. McGraw-Hill Environmental Biotechnology Series.

**Brain Circuits and Functions of the Mind.** Essays in Honor of Roger W. Sperry. Colwyn Trevarthen, Ed. Cambridge University Press, New York, 1990. xxxviii, 410 pp., illus. \$69.50; paper, \$37.50.

**Canal Irrigation in Prehistoric Mexico.** The Sequence of Technological Change. William E. Doolittle. University of Texas Press, Austin, 1990. xiv, 205 pp., illus. \$30.

**The Cancer Industry.** Unraveling the Politics. Ralph W. Moss. Photographs by Peter Barry Chowka. 2nd ed. Paragon, New York, 1989. xxii, 503 pp. + plates. \$21.95.

**Cancer Surveys.** Advances and Prospects in Clinical, Epidemiological and Laboratory Oncology. Vol. 8, no. 2, Nitrate, Nitrite, and Nitrosocompounds in Human Cancer. David Forman and David E. G. Shuker, Eds. Published for the Imperial Cancer Research Fund by Oxford University Press, Oxford, 1989. vi, 296 pp., illus., + appendix. Paper, \$45.

**Categorical Data Analysis.** Alan Agresti. Wiley-Interscience, New York, 1990. xvi, 558 pp., illus. \$49.95. Wiley Series in Probability and Mathematical Statistics: Applied Probability and Statistics.

**Causes and Consequences of Variation in Growth Rate and Productivity of Higher Plants.** H. Lambers *et al.*, Eds. SPB, The Hague, 1989. x, 365 pp., illus. \$90.

**Cell Signalling.** Noel G. Morgan. Guilford, New York, 1989. xii, 203 pp., illus. Paper, \$18.95.

**Cellular and Molecular Events in Spermiogenesis.** D. W. Hamilton and G. M. H. Waites, Eds. Published for the World Health Organization by Cambridge University Press, New York, 1990. viii, 334 pp., illus. \$79.50. From a symposium, Oaxtepec, Mexico, March 1987.

**Chandrasekhara Venkata Raman.** A. Jayaraman. Allied East-West Press, New Delhi, 1989. xiv, 214 pp., + plates. Rs. 125.

**Chemical Carcinogenesis and Mutagenesis II.** C. S. Cooper and P. L. Grover, Eds. Springer-Verlag, New York, 1990. xxvi, 470 pp., illus. \$282. Handbook of Experimental Pharmacology, vol. 94, part 2.

**The Chemistry and Application of Dyes.** David R. Waring and Geoffrey Hallas, Eds. Plenum, New York, 1990. xvi, 414 pp., illus. \$85. Topics in Applied Chemistry.

**Chemosensory Information Processing.** Detlev Schild, Ed. Springer-Verlag, New York, 1990. vii, 406 pp., illus. \$116.50. NATO Advanced Science Institute Series H, vol. 39. From a workshop. Göttingen, FRG, July 1989.

**Chronological List of Antarctic Expeditions and Related Historical Events.** R. K. Headland. Cambridge University Press, New York, 1990. x, 730 pp., illus. \$125. Studies in Polar Research.

**The Cognitive Foundations of Personality Traits.** Shulamith Kreitler and Hans Kreitler. Plenum, New York, 1990. xvi, 405 pp., illus. \$49.50. Emotions, Personality, and Psychotherapy.

**Cognitive Models of Psychological Time.** Richard A. Block, Ed. Lawrence Erlbaum Associates, Hillsdale, NJ, 1990. xx, 283 pp., illus. \$34.50.

**The Colors of Mankind.** The Range and Role of Human Pigmentation. Spencer L. Rogers. Thomas, Springfield, IL, 1990. viii, 60 pp., illus. \$17.75.

**Comparative Perception.** Vol. 2, Complex Signals. William C. Stebbins and Mark A. Berkley, Eds. Wiley, New York, 1990. xvi, 483 pp., illus. \$84.95. Wiley Series in Neuroscience, vol. 2.

**The Compassionate Beast.** What Science is Discovering About the Humane Side of Humankind. Morton Hunt. Morrow, New York, 1990. 288 pp. \$18.95.

**Competence Considered.** Robert J. Sternberg and John Kolligian, Jr. Yale University Press, New Haven, CT, 1990. xviii, 420 pp. \$35.

**Computer Graphics and Chemical Structures.** Database Management Systems. Stanley V. Kasperek. Wiley-Interscience, New York, 1990. xxx, 798 pp., illus. \$59.95.

**A Concise Dictionary of Mathematics.** Christopher Clapham, Ed. Oxford University Press, New York, 1990. vi, 204 pp., illus. Paper, \$7.95.

**Constructing a Sociology of the Arts.** Vera L. Zolberg. Cambridge University Press, New York, 1990. xii, 252 pp., \$42.50; paper, \$13.95. Contemporary Sociology Series.

**Cosmic Life-Force.** Fred Hoyle and Chandra Wickramasinghe. Paragon, New York, 1990. viii, 151 pp., illus. \$16.95.

**The Course of Life.** Vol. 2, Early Childhood. Stanley I. Greenspan and George H. Pollock, Eds. 2nd ed. International Universities Press, Madison, CT, 1990. x, 478 pp. \$50.

**Creating Successful Communities.** A Guidebook to Growth Management Strategies. Michael A. Mantell, Stephen F. Harper, and Luther Propst. Island Press, Washington, DC, 1990. xvi, 233 pp., illus. \$39.95; paper, \$24.95. The Conservation Foundation.

**Dictionnaire de l'Ethologie.** Klaus Immelman. Mardaga, Liege, 1990. 293 pp., illus. Paper, FB 1100. Psychologie et Sciences Humaines. Translated from the German edition (Berlin, 1982) by Anne Ruwet.

**Differential Equations.** Their Solutions Using Symmetries. Hans Stephani. Malcolm MacCallum, Ed. Cambridge University Press, New York, 1990. xii, 260 pp., illus. \$44.50; paper, \$17.95.

**Drug-Test Interactions Handbook.** J. G. Salway, Ed. Chapman and Hall, London, 1990 (U.S. distributor, Raven, New York) xvi, 1087 pp. \$320.

**Drunken Goldfish.** And Other Irrelevant Scientific Research. William Hartston. Fawcett Crest, New York, 1990. vi, 249 pp., illus. Paper, \$4.95. Reprint, 1988 ed.

**Ecological Perception Research.** Visual Communication, and Aesthetics. Klaus Landwehr, Ed. Springer-Verlag, New York, 1990. viii, 143 pp., illus. Paper, \$29. Recent Research in Psychology. From a meeting, Bonn-Poppelsdorf, F.R.G., Oct. 1987.

**Ecology and Management of Forest Insects.** Martin R. Speight and David Wainhouse. Clarendon (Oxford University Press), New York, 1990. x, 374 pp., illus. \$69.95; paper, \$33.95.

**Energy, Land, and Public Policy.** J. Barry Cullingworth, Ed. Transaction, New Brunswick, NJ, 1990. xiv, 293 pp., illus. Paper, \$18.95. Energy Policy Studies, vol. 5.

**The Ergodic Theory of Discrete Groups.** Peter J. Nicholls. Cambridge University Press, New York, 1990. xii, 221 pp., illus. Paper, \$34.50. London Mathematical Society Lecture Note Series, vol. 143.

**Estuarine Water Quality Management.** Monitoring, Modelling and Research. W. Michaelis, Ed. Springer-Verlag, New York, 1990. xvi, 478 pp., illus. \$81.20. Coastal and Estuarine Studies, 36. From a meeting, Reinbeck, F.R.G., June 1989.

**Ethical Issues Associated with Scientific and Technological Research for the Military.** Carl Mitcham and Philip Siekevitz, Eds. New York Academy of Sciences, New York, 1989. xvi, 277 pp., illus. Paper, \$69. Annals of the New York Academy of Sciences, vol. 577. From a conference, Arlington, VA, Jan. 1989.

**Ethno-Archéologie dans les Archipels de Patagonie.** Les Nomades Marins de Punta Baja. Dominique Legoupil. Editions Recherche sur les Civilisations, Paris, 1989. 263 pp., illus., + map. Paper, F223. Mémoire no. 84.

**Evolution of Subterranean Mammals at the Organismal and Molecular Levels.** Eviatar Nevo and Osvaldo A. Reig, Eds. Wiley-Liss, New York, 1990. xiv, 422 pp., illus. \$98. Progress in Clinical and Biological Research, vol. 335. From a congress, Rome, Aug., 1989.

**Extensional Tectonics and Stratigraphy of the North Atlantic Margins.** A. J. Tankard and H. R. Balkwill, Eds. American Association of Petroleum Geologists, Tulsa, OK, and Canadian Geological Foundation, Alberta, 1989. viii, 641 pp., illus. \$58; to AAPG members, \$48. AAPG Memoir 46.

**Foundations of College Chemistry.** Morris Hein 7th ed. Brooks/Cole, Pacific Grove, CA, 1990. xvi, 645 pp., illus., + appendices and index. \$43.25.

**Fourteenth Texas Symposium on Relativistic Astrophysics.** (Dallas, TX, Dec. 1988.) Ervin J. Fenyves, Ed. New York Academy of Sciences, New York, 1989. xii, 695 pp., illus. \$175. Annals of the New York Academy of Sciences, vol. 571.

**The Fourth Family of Quarks and Leptons.** David B. Cline and Amarjit Soni, Eds. New York Academy of Sciences, New York, 1989. x, 500 pp., illus. \$125. Annals of the New York Academy of Sciences, vol. 578. From a conference, Santa Monica, CA, Feb. 1989.

**The Fourth State of Matter.** An Introduction to the Physics of Plasma. Yaffa Eliezer and Shalom Eliezer. Hilger, Philadelphia (U.S. distributor, American Institute of Physics, New York). xii, 226 pp., illus. Paper, \$24.

**Graph Theory and Its Application.** East and West. Michael F. Capobianco *et al.*, Eds. New York Academy of Sciences, New York, 1989. x, 724 pp., illus. \$181. Annals of the New York Academy of Sciences, vol. 576. From a conference, Jinan, China, June 1986.

**Great Lakes. Great Legacy?** Theodora E. Colborn *et al.* Conservation Foundation, Washington, DC, and Institute for Research on Public Policy, Ottawa, Ontario, 1990. xiv, 301 pp., illus. Paper, \$20.

**The Greenhouse Trap.** What We're Doing to the Atmosphere and How We Can Slow Global Warming. Francesca Lyman *et al.* Beacon, Boston, 1990. xviii, 190 pp., illus. Paper, \$9.95. A World Resources Institute Guide to the Environment.

**The Growing Scope of Human Biology.** L. H. Schmitt, L. Freedman, and N. W. Bruce, Eds. Published for Australasian Society for Human Biology by Centre for Human Biology, University of Western Australia, Nedlands, 1989. xx, 328 pp., illus. \$A40; paper, \$A20. Proceedings of the Australasian Society for Human Biology, no. 2. From a conference, Perth, Nov. 1988.

**Healthy Work.** Stress, Productivity, and the Reconstruction of Working Life. Robert Karasek and Töres Theorell. Basic Books, New York, 1990. xiv, 381 pp., illus. \$29.95.

**Herbicides and Plant Metabolism.** A. D. Dodge, Ed. Cambridge University Press, New York, 1990. x, 277 pp., illus. \$65. Society for Experimental Biology Seminar Series, 38. From a seminar, York, U.K., April 1987.

**The High-Status Track.** Studies of Elite Schools and Stratification. Paul William Kingston and Lionel S. Lewis, Eds. State University of New York Press, Albany, 1990. xxiv, 261 pp., illus. \$54.50; paper, \$17.95. SUNY, Frontiers in Education.

**High Temperature Superconductivity.** Jeffrey W.

Lynn, Ed. Springer-Verlag, New York, 1990. xvi, 403 pp., illus. \$39.95. Graduate Texts in Contemporary Physics.

**History, Humanity and Evolution.** Essays for John C. Greene. James R. Moore, Ed. Cambridge University Press, New York, 1990. xii, 429 pp., illus. \$59.50.

**A History of Archaeological Thought.** Bruce G. Trigger. Cambridge University Press, New York, xvi, 500 pp., illus. \$59.50; paper, \$17.95.

**Human Growth After Birth.** David Sinclair. 5th ed. Oxford University Press, New York, 1990. x, 259 pp., illus. Paper, \$22.50. Oxford Medical Publications.

**Immunologic Mechanisms in Neurologic and Psychiatric Disease.** Byron H. Waksman, Ed. Raven, New York, 1990. xxviii, 336 pp., illus. \$120. Association for Research in Nervous and Mental Disease Research Publications, vol. 68.

**The Individual, Communication, and Society.** Essays in Memory of Gregory Bateson. Robert W. Rieber, Ed. Cambridge University Press, New York, and Editions de la Maison des Sciences de l'Homme, Paris, 1990. xiv, 343 pp., illus. \$59.50. Studies in Emotion and Social Interaction.

**Molecular Aspects of Chemotherapy.** Edward Borowski and David Shugar, Eds. Pergamon, New York, 1989. xiv, 220 pp., illus. \$70. Pharmacology and Therapeutics. From a symposium, Gdańsk, Poland, July 1988.

**Molecular Evolution.** Computer Analysis of Protein and Nucleic Acid Sequences. Russell F. Doolittle, Ed. Academic Press, San Diego, CA, 1990. xxx, 736 pp., illus. \$85. Methods in Enzymology, vol. 183.

**Molecular Medical Biochemistry.** J. P. Luzio and R. J. Thompson. Cambridge University Press, New York, 1990. xiv, 264 pp., illus. \$69.50; paper, \$24.95.

**Molecular Processes in Space.** Tsutomu Watanabe *et al.*, Eds. Plenum, New York, 1990. x, 261 pp., illus. \$65. Physics of Atoms and Molecules.

**Morphoregulatory Molecules.** Gerald M. Edelman, Bruce A. Cunningham, and Jean Paul Thiery, Eds. Wiley, New York, 1990. xii, 648 pp., illus. \$175. Neurosciences Institute Publications Series.

**Mouse Liver Carcinogenesis.** Mechanisms and Species Comparisons. Donald E. Stevenson *et al.*, Eds. Wiley-Liss, New York, 1990. xx, 444 pp., illus. \$98. Progress in Clinical and Biological Research, vol. 331. From a symposium, Austin, TX, Nov. 1988.

**The Mummies from Qilakitsoq.** Eskimos in the 15th Century. J. P. Hart Hansen and H. C. Gulløv, Eds. Danish Polar Center, Copenhagen, 1990 (available from Nyt Nordisk Forlag, Copenhagen) 199 pp., illus. DKK 297.50. Meddelelser om Grønland, Man and Society, p. 12.

**Myopia.** Prevalence and Progression. Committee on Vision, National Research Council, National Academy Press, Washington, DC, 1989. xii, 113 pp., illus. Paper, \$15.

**Neurobiology of Panic Disorder.** James C. Balenger, Ed. Wiley-Liss, New York, 1990. xvi, 391 pp., illus. \$96. Vol. 8, Frontiers of Clinical Neuroscience.

**New Aspects of Nuclear Dynamics.** J. H. Koch and P. K. A. de Witt Huberts, Eds. Plenum, New York, 1989. x, 228 pp., illus. \$59.50. NATO Advanced Science Institute Series B, vol. 209. Physics. From a summer school, Dronten, Netherlands, 1988.

**The NMDA Receptor.** J. C. Watkins and G. L. Collingridge, Eds. IRL at Oxford University Press, New York, 1990. xviii, 242 pp., illus. Paper, \$45. Based on a symposium, Bristol, England, Apr. 1989.

**Non-Linear Dynamics and Acceleration of Ions When a Plasma Expands into a Plasma.** A. V. Gurevich *et al.* Harwood Academic, New York, 1989. ii, 65 pp., illus. Paper, \$27. Soviet Scientific Reviews, section A, vol. 13, part 2.

**Nonlinear System Analysis and Identification from Random Data.** Julius S. Bendat. Wiley-Interscience, New York, 1990. xxiv, 267 pp., illus. \$49.95.

**Nuclear Methods of Dating.** Etienne Roth and Bernard Poty, Eds. Kluwer, Norwell, MA, 1990. xxii, 600 pp., illus. \$285. Solid Earth Science Library, vol. 5. Translated from the French edition (Paris, 1985).

**Nutrition Learning Packages.** World Health Organization, Geneva, 1989 (available from WHO Publications Center, Albany, NY). viii, 170 pp., illus. Paper, \$24. Published in collaboration with the United Nations Children's Fund.

**Object-Oriented Simulation with Hierarchical, Modular Models.** Intelligent Agents and Endomorphic Systems. Bernard P. Zeigler. Academic Press, San Diego, CA, 1990. xx, 395 pp., illus. \$49.95.

**Observatory Seismology.** J. J. Litchiser, Ed. University of California Press, Berkeley, 1990. x, 379 pp., illus. \$48. From a symposium, Berkeley, May 1987.

**Observing Handbook and Catalogue of Deep-Sky Objects.** Christian B. Luginbuhl and Brian A. Skiff.

Cambridge University Press, New York, 1990. xii, 351 pp., illus. \$49.50.

**Occupational Health in the 1990's.** Developing a Platform for Disease Prevention. Phillip J. Landrigan and Irving J. Selikoff, Eds. New York Academy of Sciences, New York, 1989. viii, 296 pp., illus. Paper, \$74. Annals of the New York Academy of Sciences, vol. 572. From a workshop, Washington, DC, Jan. 1988.

**One Small Plot of Heaven.** Reflections on Family Life by a Quaker Sociologist. Elise Boulding. Pendle Hill, Wallingford, PA, 1989. x, 226 pp. Paper, \$12.50.

**Optical Solitons in Fibers.** Akira Hasegawa. 2nd ed. Springer-Verlag, New York, 1990. xii, 79 pp., illus. Paper, \$26.

**Optics of Chiral Liquid Crystals.** V. A. Belyakov and V. E. Dmitrienko. Harwood Academic, New York, 1989. 212 pp., illus. Paper, \$89. Soviet Scientific Reviews, section A, vol. 13, part 1.

**Organelles in Eukaryotic Cells.** Molecular Structure and Interactions. Joseph M. Tager *et al.*, Eds. Plenum, New York, 1989. viii, 270 pp., illus. \$69.50. From a course, Bari, Italy, May 1988.

**Origins of Sex.** Three Billion Years of Genetic Recombination. Lynn Margulis and Dorion Sagan. Yale University Press, New Haven, CT, 1990. xx, 258 pp., illus. Paper, \$13.95. Reprint, 1986 ed.

**Orthogonal and Symplectic Clifford Algebras.** Spinor Structures. Albert Crumeyrolle. Kluwer, Boston, 1990. xiv, 350 pp., illus. \$124. Mathematics and Its Applications, vol. 57.

**Oxygen Disorder Effects in High-T<sub>c</sub> Superconductors.** J. L. Morán-López and Ivan K. Schuller, Eds. Plenum, New York, 1990. x, 231 pp., illus. \$59.50. From a conference, Trieste, Italy, April 1989.

**Paleoecology.** Concepts and Applications. J. Robert Dodd and Robert J. Stanton, Jr. 2nd ed. Wiley, New York, 1990. xviii, 502 pp., illus. \$74.95.

**The Paradigm of Self-Organization.** Current Trends in Self Organization. G. J. Dalenoort, Ed. Gordon and Breach, New York, 1989. xii, 332 pp., illus. Paper, \$45. Studies in Cybernetics, 19.

**Parallel Distributed Processing.** Implications for Psychology and Neurobiology. R. G. M. Morris, Ed. Clarendon, Oxford, 1989. xii, 339 pp., illus. \$69.52. Based on a conference, Oxford, July 1987.

**The Path of No Resistance.** The Story of the Revolution in Superconductivity. Bruce Schechter. Simon and Schuster, New York, 1990. 200 pp. + plates. Paper, \$8.95. Reprint, 1989 ed.

**Pathogenesis and Control of Viral Infections.** Fernando Aituti, Ed. Raven, New York, 1990. xvi, 338 pp., illus. \$75. Sero Symposia Publications, vol. 59. From a symposium, Beijing, April, 1989.

**Patterns in the Structure of Mammalian Communities.** Douglas W. Morris *et al.*, Eds. Texas Tech University Press, Lubbock, 1989. iv, 266 pp., illus. \$30; paper, \$20. Texas Tech University Museum Special Publications, no. 28. From a congress, Edmonton, Alberta, Aug. 1985.

**Perspectives on Plant Competition.** James B. Grace and David Tilman, Eds. Academic Press, San Diego, CA, 1990. xiv, 484 pp., illus. \$79.95.

**Petrophysics.** V. N. Kobranova. Mir, Moscow, and Springer-Verlag, New York, 1989. 376 pp., illus. \$59.50. Translated from the Russian edition (Moscow, 1986) by V. V. Kuznetsov.

**Phosphate Deposits of the World.** Vol. 2, Phosphate Rock Resources. A. J. G. Notholt, R. P. Sheldon, and D. F. Davidson, Eds. Cambridge University Press, New York, 1989. xviii, 566 pp., illus. \$150. International Geological Correlation Programme Project 156: Phosphorites.

**Phycology.** Robert Edward Lee. 2nd ed. Cambridge University Press, New York, 1989. xvi, 645 pp., illus. Paper, \$59.50; Paper, \$29.95.

**The Physics and Radiobiology of Fast Neutron Beams.** D. K. Bewley. Hilger, New York, 1989. xii, 179 pp., illus. \$59. Medical Science Series.

**Planar Chromatography in the Life Sciences.** Joseph C. Touchstone, Ed. Wiley-Interscience, New York, 1990. xii, 199 pp., illus. \$59.95. Chemical Analysis, vol. 108.

**Polymer Processing.** M. L. Fridman, Ed. Springer-Verlag, New York, 1990. xii, 190 pp., illus. \$79. Advances in Polymer Science, vol. 93.

**The Population Explosion.** Paul R. Ehrlich and Anne H. Ehrlich. Simon and Schuster, New York, 1990. 320 pp. \$18.95.

**A Practical Approach to Toxicological Investigations.** A. Poole and G. B. Leslie. Cambridge University Press, New York, 1990. xiv, 188 pp., illus. \$29.95.

**Prehispanic Chiefdoms in the Valle de la Plata.** Vol. 1, The Environmental Context of Human Habita-

tion. Luisa Fernanda Herrera, Robert D. Drennan, and Carlos A. Uribe, Eds. University of Pittsburgh Department of Anthropology, Pittsburgh, PA, and Universidad de los Andes Department of Anthropology, Bogotá, 1989. xxvi, 238 pp., illus. Paper, \$15. University of Pittsburgh Memoirs in Latin American Archaeology, no. 2.

**The Primary Afferent Neuron.** A Survey of Recent Morpho-Functional Aspects. Wolfgang Zenker and Winfried L. Neuhuber, Eds. Plenum, New York, 1990. x, 260 pp., illus. \$65. Based on a symposium, Zurich, March 1988.

**Principal Diseases of Marine Fish and Shellfish.** Vol. 1, Diseases of Marine Fish. Carl J. Sindermann. 2nd ed. Academic Press, San Diego, CA, 1990. xiv, 521 pp., illus. \$89.

**The Principles of Design.** Nam P. Suh. Oxford University Press, New York, 1990. xiv, 401 pp., illus. \$69.50. Oxford Series on Advanced Manufacturing.

**Principles of Real Analysis.** Charalambos D. Aliprantis and Owen Burkinshaw. 2nd ed. Academic Press, San Diego, CA, 1990. xii, 295 pp., illus. \$39.95.

**Proceedings of the Seventh British National Conference on Databases.** (July 1989.) M. H. Williams, Ed. Published for the British Computer Society by Cambridge University Press, New York, 1990. viii, 259 pp., illus. \$19.50. British Computer Society Workshop Series.

**Proceedings of the 23rd ESLAB Symposium on Two Topics in X-Ray Astronomy** (Bologna, Italy, Sept. 1989). J. Hunt and B. Battick, Eds. 2 vols. Vol. 1, X-Ray Binaries. vol. 2, AGN and the X-Ray Background. European Space Agency, Netherlands, 1989. xxi, 1143 pp., illus. The two, Hfl. 150. ESA SP-296.

**Protein Structure and Engineering.** Oleg Jar-detzky, Ed. Plenum, New York, 1989. x, 385 pp., illus. \$95. NATO Advanced Science Institute Series A, vol. 183. From an institute, Erice, Italy, June 1989.

**Pseudomonas.** Biotransformations, Pathogenesis, and Evolving Biotechnology. Simon Silver *et al.*, Eds. American Society for Microbiology, Washington, DC, 1990. xxiv, 423 pp., illus. \$79; to ASM members, \$61. From a symposium, Chicago, July 1989.

**Quality of Life Assessments in Clinical Trials.** Bert Spilker, Ed. Raven, New York, 1990. xxii, 470 pp., illus. \$85.

**Quantum Field Theory and Critical Phenomena.** J. Zinn-Justin. Clarendon (Oxford University Press), New York, 1989. xxii, 914 pp. \$79.95. International Series of Monographs on Physics, vol. 77.

**The Quantum Physics of Atomic Frequency Standards.** Jacques Vanier and Claude Audoin. Hilger, Philadelphia, 1989 (distributor, American Institute of Physics, New York). 2 vols., boxed. xviii, 1567 pp., illus. \$550.

**Ramsey Theory.** Ronald L. Graham, Bruce L. Rothschild, and Joel H. Spencer. 2nd ed. Wiley-Interscience, New York, 1990. xii, 196 pp. \$49.95.

**Reading Rousseau in the Nuclear Age.** With Full Translations of Jean-Jacques Rousseau's "Etat de Guerre" and of His "Extrait" and "Jugement" of the Abbé de Saint-Pierre's *Projet de Paix Perpetuelle*. Grace G. Roosevelt. Temple University Press, Philadelphia, 1990. x, 275 pp. \$44.95.

**Relativistic Fluids and Magneto-Fluids.** With Applications in Astrophysics and Plasma Physics. A. M. Anile. Cambridge University Press, New York, 1989. xii, 336 pp., illus. \$85. Cambridge Monographs on Mathematical Physics.

**A Researcher's Guide to Scientific and Medical Illustrations.** Mary Helen Briscoe. Springer-Verlag, New York, 1990. xii, 209 pp., illus. Paper, \$19.95. Brock/Springer Series in Contemporary Bioscience.

**Resistance to Antitumor Agents.** Laboratory and Clinical Studies. Mario Ghione and Luciano Rausa, Eds. Harwood, New York, 1989. x, 321 pp., illus. \$84. Ettore Majorana International Life Sciences Series, vol. 7. From a course, Erice, Italy, Apr. 1988.

**Restructuring Science Education.** The Importance of Theories and Their Development. Richard A. Duschl. Teachers College Press, New York, 1990. xviii, 155 pp., illus. \$29.95; paper, \$15.95.

**Rivers at Risk.** The Concerned Citizen's Guide to Hydropower. John D. Echeverria, Pope Barrow, and Richard Roos-Collins. Island Press, Washington, DC, 1989. xvi, 217 pp., illus. \$29.95; paper, \$17.95. American Rivers.

**Sadie Brower Neakok.** In Inupiaq Woman. Margaret B. Blackman. University of Washington Press, Seattle, and Douglas and McIntyre, Vancouver, 1990. xviii, 275 pp., illus. \$19.95.

**Samuel F. B. Morse.** Paul J. Staiti. Cambridge University Press, New York, xxii, 298 pp., illus., +

plates. \$50. Cambridge Monographs on American Artists.

**Scale and Scope.** The Dynamics of Industrial Capitalism. Alfred D. Chandler, Jr., with the assistance of Takashi Hikino. Belknap (Harvard University Press), Cambridge, MA, 1990.

**Science, Technology, and Reparations.** Exploitation and Plunder in Postwar Germany. John Gimbel. Stanford University Press, Stanford, CA, 1990. xvi, 280 pp. \$29.50.

**Scientific Data Analysis.** An Introduction to Overdetermined Systems. Richard L. Branham, Jr. Springer-Verlag, New York, 1990. x, 237 pp., illus. \$45.

**The Scientific Measurement of International Conflict.** Handbook of Datasets on Crises and Wars, 1495-1988 A.D. Claudio Cioffi-Revilla. Rienner, Boulder, CO, 1990. xvi, 88 pp., illus. Paper, \$15.95.

**The Search for Eve.** Michael H. Brown. Harper and Row, New York, 1990. x, 357 pp., illus. \$22.95.

**Turn Left at Orion.** A Hundred Night Sky Objects to See in a Small Telescope—and How to Find Them. Guy Consolmagno and Dan M. Davis. Illustrations by Karen Kotash and Anne Drogin. Cambridge University Press, New York, 1990. 205 pp. \$22.95.

**Understanding Literacy and Cognition.** Theory, Research, and Application. Che Kan Leong and Bikkar S. Randhawa, Eds. Plenum, New York, 1989. viii, 322 pp., illus. \$69.50. Based on a symposium, Saskatoon, Canada, Oct. 1987.

**Use of X-Ray Crystallography in the Design of Antiviral Agents.** W. Graeme Laver and Gillian M. Air, Eds. Academic Press, San Diego, CA, 1990. xxxiv, 360 pp., illus., + plates. \$79. From a workshop, Kona, HI, Feb. 1989.

**Vision and the Emergence of Meaning.** Blind and Sighted Children's Early Language. Anne Dunlea. Cambridge University Press, New York, 1990. xvi, 196 pp., illus. \$39.50.

**X-Ray Lasers.** Raymond C. Elton. Academic Press, San Diego, CA, 1990. xiv, 287 pp., illus. \$59.95.

## AIDS TARGETED INFORMATION/ATIN

### TARGETS YOUR LITERATURE SEARCH

Expand your base of knowledge about AIDS/HIV with *AIDS Targeted Information/ATIN*. Every month, *ATIN* not only provides abstracts but also in-depth evaluations of the current published scientific literature on AIDS. Written by clinicians and researchers for clinicians and researchers, *ATIN* provides an authoritative command of the world's literature on AIDS. Published by Williams & Wilkins. Indexed. 12 issues per year. \$125.

To order call  
**1-800-638-6423**

Sponsored by the American Foundation for AIDS Research (AmFAR).

Circle No. 93 on Readers' Service Card