

the importance of basic and applied research. The universities of Toronto and McGill advanced the nascent movement to supplement the teaching mission of physicists with a research orientation. In addition, the National Research Council (NRC), founded during the war ostensibly to promote Canadian industrial research, provided the physicists with a governmental source of support. Though the venerable Royal Society of Canada tried to keep abreast of disciplinary developments, the NRC provided financial props for physics students and faculty and sponsored the pioneering *Canadian Journal of Research*. During World War II, the contributions that physicists made especially to military technology ensured their place in the Canadian social fabric.

Around 1950, however, Canadian physicists struggled to pin down their group identity. Industrial physicists, faced with recent federal labor regulations, pushed for a "professional" organization of the type used so successfully by engineers to control access to jobs. University physicists, in contrast, favored a more "disciplinary" organization—one that provided research forums, supported publications, recognized meritorious contributions, fostered physics education, and represented the membership in broader deliberations on science policy in this emerging era of Big Science. The academic faction prevailed, and the new Canadian Association of Physicists took its current shape as a "disciplinary" rather than a "professional" grouping.

Gingras tells his story, one that repeatedly intersects with the histories of the larger and more established British and U.S. communities, with much attention to statistical and biographical detail. Though careful to include the contributions of French-speaking physicists, he points out that the English-speaking researchers laid the groundwork of the modern community. Key players included Ernest Rutherford, who during his turn-of-the-century stay at McGill University infused life into the Canadian research enterprise, and John C. McLennan, who

Gingras has left room for other scholars to add to the Canadian narrative; for example, he has included only passing discussions of the impact of World War II on the physics community. He also has provided only preliminary support for his broader suggestion that the physicists' institutional emergence not only was similar to other Canadian scientists' cases but also stimulated the rise of scientific research generally in Canada. Though the English translation is occasionally awkward, the eight main chapters of this short work can be read quickly and easily. Overall, Gingras has taken an important step toward unraveling the complex story of the

institutional formation of the Canadian physics community.

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## Books Received

**Advances in Molecular Biology and Targeted Treatment for AIDS.** Ajit Kumar, Ed. Plenum, New York, 1991. x, 365 pp., illus. \$89.50. George Washington University Medical Center Department of Chemistry Annual Spring Symposia. From a symposium, Washington, DC, May 1990.

**Animal Cells.** A. Doyle, R. Hay, and B. E. Kirsop, Eds. Cambridge University Press, New York, 1991. xvi, 191 pp., illus. \$34.50. Living Resources for Biotechnology.

**Bacteria.** L. R. Hill and B. E. Kirsop, Eds. Cambridge University Press, New York, 1991. xiv, 186 pp., \$34.50. Living Resources for Biotechnology.

**Barons of the Sky.** From Early Flight to Strategic Warfare. The Story of the American Aerospace Industry. Wayne Biddle. Simon and Schuster, New York, 1991. 366 pp. + plates. \$22.95.

**Behavioral Biology.** Neuroendocrine Axis. Trevor Archer and Stefan Hansen, Eds. Erlbaum, Hillsdale, NJ, 1991. xiv, 269 pp., illus. \$49.95. From a symposium, Gothenburg, Sweden, Dec. 1989.

**The Cretaceous in Australia.** A Re-appraisal of the Evidence. M. A. J. Williams, P. De Deckker, and A. P. Kershaw, Eds. Geological Society of Australia, Sydney, 1991. x, 346 pp., illus. Paper, \$A45. Geological Society of Australia Special Publication No. 18.

**Carbonylation.** Direct Synthesis of Carbonyl Compounds. H. M. Colquhoun, D. J. Thompson, and M. V. Twigg. Plenum, New York, 1991. xii, 296 pp., illus. \$65.

**Catalytic Ammonia Synthesis.** Fundamentals and Practice. J. R. Jennings, Ed. Plenum, New York, 1991. xx, 451 pp., illus. \$89.50. Fundamental and Applied Catalysis.

**Des Miasmes aux Viruses.** Histoire des Maladies Infectieuses. Jean Théodorides. Editions Louis Pariente, Paris, 1991. 382 pp., illus. Boxed. 450 F.

**Detection Theory.** A User's Guide. Neil A. Macmillan and C. Douglas Creelman. Cambridge University Press, New York, 1991. xvi, 407 pp., illus. \$59.50; paper, \$24.95. Intended for students of psychophysics and related subjects.

**Energy and the Environment in the 21st Century.** Jefferson W. Tester *et al.*, Eds. MIT Press, Cambridge, MA, 1991. xx, 1006 pp., illus. \$50. From a conference, Cambridge, MA, March 1990.

**Evolution of the Vertebrates.** A History of the Backboned Animals Through Time. 4th ed. Edwin H. Colbert and Michael Morales. Wiley-Liss, New York, 1991. xviii, 470 pp., illus. \$49.95.

**Evolutionary Biology.** E. Edward Bittar, Ed. JAI Press, Greenwich, CT, 1991. xii, 333 pp., illus. \$78.50. Fundamentals of Medical Cell Biology, vol. 1.

**Fishing Vessel Safety.** Blueprint for a National Program. Committee on Fishing Vessel Safety, National Research Council. National Academy Press, Washington, DC, 1991. xx, 282 pp., illus. \$29.95.

**Flavins and Flavoproteins, 1990.** B. Curti, S. Ronchi, and G. Zanetti, Eds. De Gruyter, New York, 1991. xxiv, 945 pp., illus. DM 390. From a symposium, Como, Italy, July 1990.

**The Global Citizen.** Donella H. Meadows. Island Press, Washington, DC, 1991. xvi, 300 pp., illus. Paper, \$14.95.

**Global Climate Change and Life on Earth.** Richard L. Wyman, Ed. Routledge, Chapman and Hall, New York, 1991. xxii, 282 pp., illus. \$55; paper, \$24.95. Based on a conference, Albany, NY, April 1989.

**Human Factors for Informatics Usability.** B. Shackel and S. J. Richardson, Eds. Cambridge University Press, New York, 1991. xvi, 438 pp., illus. \$59.50. Based on a meeting, Loughborough, UK, Dec. 1986.

**Human Paleopathology.** Current Syntheses and Future Options. Donald J. Ortner and Arthur C. Aufderheide, Eds. Smithsonian Institution Press, Washington, DC, 1991. vii, 311 pp., illus. \$70. From a symposium,

Zagreb, Yugoslavia, July 1988.

**Integrated Design of Water Treatment Facilities.** Susumu Kawamura. Wiley, New York, 1991. xxii, 658 pp., illus. \$69.95.

**Interaction and Determination.** Attempt at Elaborating an Up-to-Date Theory of Determinacy in Natural Philosophy. Antal Müller. Akadémiai Kiadó, Budapest, 1991. 235 pp., illus. \$29. Translated from the Hungarian edition, with revisions, by Matild Gulyas.

**Issues in Science Education.** Science Competence in a Social and Ecological Context. Torsten Husén and John P. Keeves, Eds. Pergamon, New York, 1991. viii, 255 pp., illus. \$50. From a symposium, Stockholm, June 1989.

**Laser Interaction and Related Plasma Phenomena.** Vol. 9. Heinrich Hora and George H. Miley, Eds. Plenum, New York, 1991. xvi, 653 pp., illus. \$125. From a workshop, Monterey, CA, Nov. 1989.

**Life Under Extreme Conditions.** Biochemical Adaptation. Guido di Prisco, Ed. Springer-Verlag, New York, 1991. xii, 144 pp., illus. \$65. From a meeting, Rome, July 1989.

**Mapping Crime in Its Community Setting.** Event Geography Analysis. Michael D. Maltz, Andrew C. Gordon, and Warren Friedman. Springer-Verlag, New York, 1991. xxiv, 173 pp., illus. \$55.

**The Mars Project.** Werner von Braun. University of Illinois Press, Urbana, 1991. xi, 91 pp., illus. Paper, \$9.95. Translated from the German edition (Esslingen, 1952). Reprint, 1953 ed.

**A Natural History of Trees of Eastern and Central North America.** Donald Culross Peattie. Illustrations by Paul Lanacre. Houghton Mifflin, Boston, MA, 1991. xviii, 606 pp. Paper, \$16.95. Reprint, 1948 ed.

**A Natural History of Western Trees.** Donald Culross Peattie. Illustrations by Paul Landacre. Houghton Mifflin, Boston, MA, 1991. xvi, 751 pp. Paper, \$18.95. Reprint, 1950 ed.

**Occurrence, Characteristics, and Genesis of Carbonate, Gypsum, and Silica Accumulations in Soils.** W. D. Nettleton, *et al.*, Eds. Soil Science Society of America, Madison, WI, 1991. xviii, 149 pp., illus. Paper, \$18. SSSA Special Publication no. 26. From a symposium, Anaheim, CA, Nov. 1990.

**The Patient's Ordeal.** William F. May. Indiana University Press, Bloomington, 1991. xiv, 218 pp., \$24.95. Medical Ethics Series.

**Pattern Formation in Plant Tissues.** Tsvi Sachs. Cambridge University Press, New York, 1991. xii, 234 pp., illus. \$75. Development and Cell Biology Series.

**The Rainforests of West Africa.** Ecology—Threats—Conservation. Claude Martin. Birkhäuser Boston, Secaucus, NJ, 1991. 235 pp., illus. \$39.80. Translated from the German by Claude Martin.

**Report of the Working Group on High Luminosities at LEP.** E. Blucher *et al.*, Eds. CERN, Geneva, 1991. x, 308 pp., illus. Paper.

**Science and Empire.** East Coast Fever in Rhodesia and the Transvaal. Paul F. Crane. Cambridge University Press, New York, 1991. xviii, 385 pp. \$65. Cambridge History of Medicine.

**Science and Technology of Thin Film Superconductors.** 2. Robert D. McConnell and Rommel Noufi, Eds. Plenum, New York, 1990. xviii, 639 pp., illus. \$125.80. From a conference, Denver, CO, April 1990.

**Taking Software Design Seriously.** Practical Techniques for Human-Computer Interaction Design. John Karat, Ed. Academic Press, San Diego, CA, 1991. x, 357 pp., illus. Based on a workshop, Seattle, WA, April 1990.

**Technoculture.** Constance Penley and Andrew Ross, Eds. University of Minnesota Press, Minneapolis, 1991. xviii, 327 pp., illus. \$39.95; paper, \$15.95. Cultural Politics, vol. 3.

**Values, Self, and Society.** Toward a Humanist Social Psychology. M. Brewster Smith. Transaction Books, New Brunswick, NJ, 1991. xx, 289 pp. \$34.95.

**Vegetation and Climate Interactions in Semi-Arid Regions.** A. Henderson-Sellers and A. J. Pitman, Eds. Kluwer, Boston, MA, 1991. vii, 238 pp., illus. \$180. Advances in Vegetation Science, 12. Reprinted from *Vegetatio*, vol. 91. From a conference, Sydney, Australia, Jan. 1990.

**Whose Science? Whose Knowledge?** Thinking from Women's Lives. Sandra Harding. Cornell University Press, Ithaca, NY, 1991. xiv, 319 pp. \$34.50; paper, \$12.95.

**Wildlife, Forests, and Forestry.** Principles of Managing Forests for Biological Diversity. Malcolm L. Hunter, Jr. Illustrations by Diane Bowman. Prentice Hall, Englewood Cliffs, NJ, 1990. xiv, 370 pp. \$47.

**Zoology.** Robert L. Dorit, Warren F. Walker, Jr., and Robert D. Barnes. Saunders, Philadelphia, PA, 1991. xxvi, 1009 pp., illus., + appendixes + index. \$57.25.