

the relative fuzziness of the 300-dot-per-inch resolution at which the papers are reproduced, both on the CD—the trade-off for so many papers and pages—and in the printed volume, which for economy was printed from the same digitized data. Further, while full bibliographic information is given in the chapter introductions for the papers reproduced in that chapter of the printed volume and in the corresponding section of the CD, there is no means, other than checking each possibly pertinent introduction or mounting the CD and activating its search options, to ascertain whether the CD contains a specific paper sought by the user. Nonetheless, one can only be grateful to the area editors, and, most especially, the volume editor, Henry Stroke, for their great labor putting together this very welcome collection.

Paul Forman  
Smithsonian Institution,  
Washington, DC 20560, USA

**Sin-itiro Tomonaga.** Life of a Japanese Physicist. MAKINOSUKE MATSUI, Ed. MYU, Tokyo, 1995. xii, 338 pp., illus., + plates. \$50 or ¥5000; paper, \$29 or ¥2900. Translated from the Japanese edition (Tokyo, 1980) by Cheryl Fujimoto and Takako Sano. English edition edited and annotated by Hiroshi Ezawa. Distinguished Scientists Series, 3.

Sin-itiro Tomonaga was awarded the 1965 Nobel Prize in Physics (shared with Richard Feynman and Julian Schwinger) for his work in the 1940s in the development of quantum electrodynamics. On his death in 1979 Japanese friends and colleagues collaborated to produce this memorial work that now appears in English. The translation was motivated by the consideration that "Japanese scientists seem to appear, on the part of the world outside the Japanese language sphere, as machines for producing scientific papers, which have no human faces," and indeed the original Japanese title, *Kaiso no Tomonaga Sin-itiro* or "Sin-itiro Tomonaga in Recollections," more aptly describes the work, which is not a biography in the conventional sense but a collection of brief anecdotal essays by Tomonaga himself, members of his family, and acquaintances ranging from elementary school classmates to fellow eminences in science. The contributions are grouped chronologically, but seemingly as much by vintage of acquaintance as by era of Tomonaga's life. The son of a philosophy professor, Tomonaga was educated at Kyoto and spent time in Leipzig with Werner Heisenberg and at the Institute for Advanced Study in Princeton before returning to Japan to take up a series of academic and

administrative positions there. Given the purpose of the volume, it offers little in the way of exposition of the content or significance of Tomonaga's scientific work (a source on that subject is Silvan Schweber's *QED and the Men Who Made It*, reviewed in *Science* 266, 1888 [1994]). The book does, however, include accounts of Tomonaga's laboratory arrangements, dealings with students and colleagues, and readings and writings. Many of the contributors recount informal social occasions, some recurring themes in these accounts being Tomonaga's sickliness as a child, his enjoyment of revels enhanced by alcohol, and the improvement in his spoken English that was wrought (he felt) by the acquisition of American false teeth. There are also accounts of Tomonaga's public activities (among them advocacy of nuclear arms control) and honors received. The text is augmented by over 30 pages of photographs and other illustrations, and a chronology of Tomonaga's life and career and an index to the work are included at the end.

Katherine Livingston

## Books Received

**Analytic Element Modeling of Groundwater Flow.** H. M. Haitjema. Academic Press, San Diego, 1995. xii, 394 pp., illus., + diskette. \$59.95.

**Analyzing Interaction.** Sequential Analysis with SDIS and GSEQ. Roger Bakeman and Vicenç Quera. Cambridge University Press, New York, 1995. x, 155 pp., + diskette. \$59.95; paper, \$24.95.

**Artificial Minds.** Stan Franklin. MIT Press, Cambridge, MA, 1995. xiv, 449 pp., illus. \$30.

**Bacterial Superantigens.** Structure, Function and Therapeutic Potential. Jacques Thibodeau and Rafick-Pierre Sékaly, Eds. Landes, Austin, TX, 1995 (distributor, CRC Press, Boca Raton, FL). xvi, 241 pp., illus. \$99. Molecular Biology Intelligence Unit.

**Basic Issues of the History of Nutrition.** K. Y. Guggenheim. 2nd ed. Magnes Press, Jerusalem, 1995. 143 pp., illus. \$17.

**Biomimetics.** Design and Processing of Materials. Mehmet Sarikaya and İlhan A. Aksay, Eds. AIP Press, Woodbury, NY, 1995. xii, 285 pp., illus. \$69. AIP Series in Polymers and Complex Materials.

**Chiral Reactions in Heterogeneous Catalysis.** Georges Jannes and Vincent Dubois, Eds. Plenum, New York, 1995. xvi, 212 pp., illus. \$85. From a symposium, Brussels, Oct. 1993.

**Circumstellar Matter 1994.** G. D. Watt and P. M. Williams, Eds. Kluwer, Norwell, MA, 1995. xvi, 618 pp., illus. \$315 or £199 or Dfl. 445. Reprinted from *Astrophysics and Space Science*, vol. 224, nos. 1-2, 1995. From a conference, Edinburgh, Aug.-Sept. 1994.

**Classical Mechanics with Maple.** Ronald L. Greene. Springer-Verlag, New York, 1995. x, 173 pp., illus. Paper, \$29.

**Current Protocols in Protein Science.** Vol. 1. John Coligan *et al.*, Eds. Wiley, New York, 1995. Various-ly pagged, illus. Looseleaf, \$295.

**Davenport-Schinzel Sequences and Their Geometric Applications.** Micha Sharir and Pankaj K. Agarwal. Cambridge University Press, New York, 1995. xii, 372 pp., illus. \$49.95.

**Descartes and His Contemporaries.** Meditations, Objections, and Replies. Roger Ariew and Marjorie Grene, Eds. University of Chicago Press, Chicago, 1995. viii, 261 pp. \$45 or £35.95; paper, \$17.95 or £14.25. Science and Its Conceptual Foundations.

**Design Issues in Optical Processing.** John N. Lee, Ed. Cambridge University Press, New York, 1995. xviii, 274 pp., illus. \$59.95. Cambridge Studies in Modern Optics, 16.

**Electrophysiology of Mind.** Event-Related Brain Potentials and Cognition. Michael D. Rugg and Michael G. H. Coles, Eds. Oxford University Press, New York, 1995. xviii, 220 pp., illus. \$75. Oxford Psychology, no. 25.

**Elementary Theory of Analytic Functions of One or Several Complex Variables.** Henri Cartan. Dover, New York, 1995. 228 pp., illus. Paper, \$8.95. Reprint, 1973 ed.

**Emergent Forms.** Origins and Early Development of Human Action and Perception. Eugene C. Goldfield. Oxford University Press, New York, 1995. xiv, 369 pp., illus. \$75; paper, \$39.

**Explorations in Chemistry.** A Manual for Discovery. Nicholas Kildahl and Theresa Varco-Shea. Wiley, New York, 1995. viii, 345 pp., illus. Paper, \$38.95.

**Farmer's Rights and Plant Genetic Resources.** Recognition and Reward: A Dialogue. M. S. Swaminathan, Ed. Macmillan India, Madras, 1995. xii, 440 pp., illus. Rs. 600.

**Fire in the Mind.** Science, Faith, and the Search for Order. George Johnson. Knopf, New York, 1995. xv, 381 pp., illus. \$27.50.

**Five Equations that Changed the World.** The Power and Poetry of Mathematics. Michael Guillen. Hyperion, New York, 1995. x, 277 pp. \$22.95.

**The Grizzly Bears of Yellowstone.** Their Ecology in the Yellowstone Ecosystem, 1959-1992. John J. Craighead, Jay S. Sumner, and John A. Mitchell. Island Press, Washington, DC, 1995. xxii, 535 pp., illus. \$100.

**Growth Factors and Tumor Promotion.** Implications for Risk Assessment. R. Michael McClain *et al.*, Eds. Wiley-Liss, New York, 1995. xx, 470 pp., illus. \$125. Progress in Clinical and Biological Research, vol. 391. From a conference, Austin, TX, Dec. 1993.

**Guide to Organizing an International Scientific Conference.** Gideon Rivlin. Karger, Farmington, CT, 1995. x, 94 pp., illus. Paper, \$68 or DM 93 or Sfr 78.

**Handbook of Physiology.** A Critical, Comprehensive Presentation of Physiological Knowledge and Concepts. Section 11, Aging. Edward J. Masoro, Ed. Oxford University Press, New York, 1995. xii, 681 pp., illus. \$165.

**Harmonic Approximation.** Stephen J. Gardiner. Cambridge University Press, New York, 1995. xiv, 132 pp. Paper, \$32.95. London Mathematical Society Lecture Note, 221.

**How Maps Work.** Representation, Visualization, and Design. Alan M. MacEachren. Guilford, New York, 1995. xiv, 513 pp., illus. \$42.

**The Human T-Cell Receptor Repertoire and Transplantation.** Peter J. van den Elsen, Ed. Springer-Verlag, New York, and Landes, Austin, TX, 1995 (distributor, CRC Press, Boca Raton, FL). xii, 172 pp., illus. \$79. Molecular Biology Intelligence Unit.

**The Impact of Short Interspersed Elements (SINEs) on the Host Genome.** Richard J. Maraia. Landes, Austin, TX, 1995 (distributor, CRC Press, Boca Raton, FL). xvii, 236 pp., illus. \$99. Molecular Biology Intelligence Unit.

**In Quest of the Sacred Baboon.** A Scientist's Journey. Hans Kummer. Princeton University Press, Princeton, NJ, 1995. xxii, 331 pp., illus., + plates. \$29.95. Translated by M. Ann Biederman-Thorson.

**In Search of Infinity.** N. Ya. Vilenkin. Birkhäuser, Cambridge, MA, 1995. vii, 145 pp., illus. \$24.50. Translated by Abe Shenitzer.

**Linus Pauling.** A Life in Science and Politics. Ted Goertzel and Ben Goertzel. BasicBooks, New York, 1995. xviii, 300 pp., illus., + plates. \$27.50.

**Liquid Metal Systems.** Material Behavior and Physical Chemistry in Liquid Metal Systems 2. H. U. Borgstedt, Ed. Plenum, New York, 1995. xii, 419 pp., illus. \$120. From a seminar, Karlsruhe, Germany, March 1993.

**Melatonin.** From Contraception to Breast Cancer Prevention. Michael Cohen, John Hosimovich, and Amnon Brzezinski. Sheba Press, Fairfax, VA, 1995. xiv, 157 pp., illus. Paper, \$65.

**The Melatonin Miracle.** Nature's Age-Reversing, Disease-Fighting, Sex-Enhancing Hormone. Walter Pierpaoli and William Regelson, with Carol Colman. Simon and Schuster, New York, 1995. 255 pp., illus. \$21.

**Mending the Ozone Hole.** Science, Technology,

and Policy. Arjun Makhijani and Kevin R. Gurney. MIT Press, Cambridge, MA, 1995. xii, 355 pp., illus. \$35.

**Microbial Diversity and Ecosystem Function.** D. Allsopp, R. R. Colwell, and D. L. Hawksworth, Eds. CAB International, Oxford, UK, in association with United Nations Environment Programme, 1995 (U.S. distributor, University of Arizona Press). xii, 482 pp., illus. \$105. From a workshop, Egham, UK, Aug. 1993.

**Murchison in Moray.** A Geologist on Home Ground. Michael Collie and John Diemer. American Philosophical Society, Philadelphia, 1995. xxx, 263 pp., illus. Paper, \$20. Transactions of the American Philosophical Society, vol. 85, pt. 3.

**The N = 2 Wonderland.** From Calabi-Yau Manifolds to Topological Field Theories. Pietro Fre' and Paolo Soriani. World Scientific, River Edge, NJ, 1995. xiv, 468 pp., illus. \$86.

**The Neem Tree.** *Azadirachta indica* A. Juss. and Other Meliaceae Plants. H. Schmutterer, Ed. VCH, New York, 1995. xxiv, 696 pp., illus. \$125.

**Neuron-Glia Interrelations During Phylogeny.** Antonia Vernadakis and Betty Roots, Eds. Humana, Totowa, NJ, 1995. 2 vols. Vol. 1, Phylogeny and Ontogeny of Glial Cells. xvi, 276 pp., illus. \$125. Vol. 2, Plasticity and Regeneration. xx, 516 pp., illus. \$185. Contemporary Neuroscience.

**Organic Chemistry.** T. W. Graham Solomons. 6th ed. Wiley, New York, 1995. xxviii, 1218 pp., illus., + supplementary material. \$90.95.

**Organocopper Reagents.** A Practical Approach. Oxford University Press, New York, 1995. xiv, 362 pp., illus. \$80; paper, \$39.95. Practical Approach in Chemistry.

**The Orion Mystery.** Unlocking the Secrets of the Pyramids. Robert Bauval and Adrian Gilbert. Crown, New York, 1995. x, 325 pp., illus., + plates. Paper, \$14. Reprint, 1994 ed.

**Out of Their Minds.** The Lives and Discoveries of 15 Great Computer Scientists. Dennis Shasha and Cathy Lazere. Copernicus (Springer-Verlag), New York, 1995. xii, 291 pp., illus., + plates. \$23 or \$C33.

**Overcoming Math Anxiety.** Sheila Tobias. 2nd ed. Norton, New York, 1995. 260 pp., illus. Paper, \$12.95.

**Particle-Induced X-Ray Emission Spectrometry (PIXE).** Sven A. E. Johansson, John L. Campbell, and Klas G. Malmqvist, Eds. Wiley, New York, 1995. xxvi, 451 pp., illus. \$79.95. Chemical Analysis, vol. 133.

**Particles and Nuclei.** An Introduction to the Physical Concepts. Bogdan Povh *et al.* Springer-Verlag, New York, 1995. x, 340 pp., illus. Paper, \$29.50. Translated from the German edition (Berlin, 1995) by Martin Lavelle.

**Particulate-Filled Polymer Composites.** Roger Rothon, Ed. Longman Scientific and Technical, Harlow, Essex, UK, 1995. xii, 375 pp., illus. \$85. Polymer Science and Technology.

**The Quest for Comets.** An Explosive Trail of Beauty and Danger. David H. Levy. Avon, New York, 1995. xx, 282 pp., illus. Paper, \$12.50 or \$C16. Reprint, 1994 ed.

**Reasoning About Knowledge.** Ronald Fagin *et al.* MIT Press, Cambridge, MA, 1995. xiv, 477 pp., illus. \$45.

**Recent Advances in the Regional Analysis of Indigenous Land Use and Tropical Deforestation.** Clifford A. Behrens, Ed. Plenum, New York, 1994. pp. 243-413, illus. *Human Ecology*, vol. 22, no. 3 (Sept. 1994).

**Receptor Research Methods.** Ben Greenstein, Ed. Harwood, Langhorne, PA, 1995 (distributor, International Publishers Distributor, Brooklyn, NY). xvi, 342 pp., illus. \$115 or £75 or ECU 96; paper, \$48 or £30 or ECU 40.

**Skew Fields.** Theory of General Division Rings. P. M. Cohn. Cambridge University Press, New York, 1995. xvi, 500 pp., illus. \$89.95. Encyclopedia of Mathematics and Its Applications, 57.

**The Snows of Olympus.** A Garden on Mars. Arthur C. Clarke. Norton, New York, 1995. 120 pp., illus. \$25.

**Society's Choices.** Social and Ethical Decision Making in Biomedicine. Ruth Ellen Bulger, Elizabeth Meyer Bobby, and Harvey V. Fineberg, Eds. National Academy Press, Washington, DC, 1995. xviii, 541 pp. \$59.95.

**Trading Up.** Consumer and Environmental Regulation in a Global Economy. David Vogel. Harvard University Press, Cambridge, MA, 1995. xiv, 322 pp. \$35.

**Trends and Future Perspectives in Peptide and Protein Drug Delivery.** Vincent H. L. Lee, Mitsuru Hashida, and Yutaka Mizushima, Eds. Harwood, Langhorne, PA, 1995 (distributor, International Publishers Distributor, Brooklyn, NY). xiv, 378 pp., illus. \$120 or £78 or ECU 100. Drug Targeting and Delivery, vol. 4. From a conference, Kyoto, Japan, Sept. 1993.

**An Unquiet Mind.** Kay Redfield Jamison. Knopf, New York, 1995. viii, 228 pp. \$22 or \$C31.

**Virulence Mechanisms of Bacterial Pathogens.** James A. Roth *et al.*, Eds. 2nd ed. ASM Press, Washington, DC, 1995. xviii, 366 pp., illus. \$69. From a symposium, Ames, IA, June 1994.

**Weapons for Victory.** The Hiroshima Decision Fifty Years Later. Robert James Maddox. University of Missouri Press, Columbia, 1995. x, 215 pp. \$19.95.

**Wildlife Policies in the U.S. National Parks.** Fred-eric H. Wagner *et al.* Island Press, Washington, DC, 1995. x, 243 pp., illus. \$49; paper, \$26.

## Publishers' Addresses

Below is information about how to direct orders for books reviewed in this issue. A fuller list of addresses of publishers represented in *Science* appears in the issue of 26 May 1995, page 1220.

**AIP (American Institute of Physics) Press,** c/o AIPC, P.O. Box 80, Williston, VT 05495-0080. Phone: 800-809-2247; 800-488-2665; 802-862-0095. Fax: 802-864-7626.

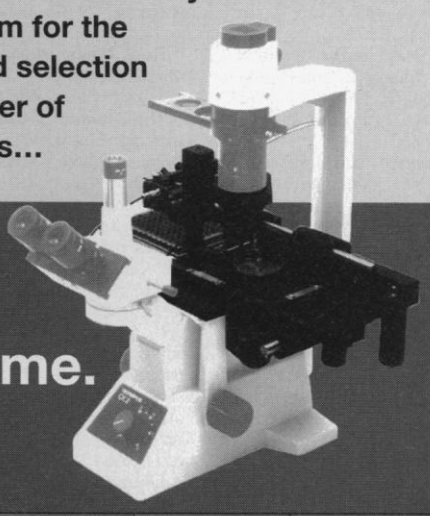
**MYU K.K.,** Scientific Publishing Division, 2-32-3 Sendagi, Bunkyo-ku, Tokyo 113, Japan.

**University of Alabama Press,** Box 870380, Tuscaloosa, AL 35487-0380. Phone: 800-825-9980. Fax: 205-348-9201.

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