

Insect Adaptations

Evolution of Insect Migration and Diapause.

Papers from a symposium, Washington, D.C., Aug. 1976. HUGH DINGLE, Ed. Springer-Verlag, New York, 1978. xvi, 286 pp., illus. \$22.80. Proceedings in Life Sciences.

Ideas about insect migration have changed radically since about 1950, and migration is now seen as an integral part of the life histories of very large numbers of diverse species. Phenomena whose importance is now recognized include the regulation of the migration syndrome by external stimuli mediated by the endocrine system and the role of migration in population ecology and dynamics. Diapause, also an endocrine-controlled "escape mechanism," is a static counterpart of those phenomena and is similarly significant. It has taken time for population ecologists to use these concepts, but the last decade especially has seen attempts to explore and quantify the adaptive changes in life histories associated with migration and diapause. This is what the 12 papers in this volume do. Much new quantitative information, from laboratory and field, is given for a selected range of species, the main issues being as follows.

The proportion of a population, or a species, that migrates, as well as the performance of its individual members, varies in time and space; all members may migrate or only some, with varying durations of flight. In some populations flight is only local or even entirely absent, and, indeed, wing muscles and wings may not even develop; such variation is genetically based and environmentally controlled. Because both migration and diapause are physiologically associated, through endocrines, with development, especially that of the flight apparatus and ovaries (ovarian development is commonly delayed by migration and more so by diapause), they also affect the traditional population parameters such as birth rate, generation time, and voltinism; these parameters vary with changes, often extreme, in the environment (mainly involving climate and light) and in resources (such as food), as when reproduction is delayed until the new habitat is reached. Losses in transit and during dormancy also contribute to mortality. Population density thus varies and can also affect migration directly. The possible adjustments are many, especially with respect to reproduction, and fitness varies accordingly.

The claim made by the editor of this volume that migration and diapause provide rich material for studies of evolution

is amply justified. Though the promise is perhaps better fulfilled by the papers on diapause, all the papers in the volume are of a high standard and well documented. Those that I found particularly illustrative and informative were M. A. Rankin's on hormonal control of migratory behavior, K. Vepsäläinen's on the genetic and environmental determinants of wing length, flight, and voltinism in *Gerris*, Tauber and Tauber's on tendencies to speciation in *Chrysopa* of diverse phenologies, and S. Masaki's on clines of diapause and voltinism in crickets on climatically different islands.

Migration has, indeed, been much overlooked in population models created by entomologists, and this volume is particularly welcome in that it begins to rectify this neglect.

C. G. JOHNSON

42 Luton Road,
Harpenden, Hertfordshire, England

Books Received

Advances in Preparation and Characterization of Multiphase Polymer Systems. Papers from a meeting, Akron, Ohio, May 1976. R. J. Ambrose and S. L. Aggarwal, Eds. Interscience (Wiley), 1978. vi, 212 pp., illus. Paper, \$12. *Journal of Polymer Science: Polymer Symposium*, No. 60.

Aging into the 21st Century. Middle-Agers Today. Lissy F. Jarvik and Helene Kratz, Eds. Gardner Press, New York, 1978 (distributor, Halsted [Wiley], New York). x, 214 pp. \$18.

Atoms and Molecules. Mitchel Weissbluth. Academic Press, New York, 1978. xvi, 714 pp., illus. \$59.50.

Basic Microbiology with Applications. Thomas D. Brock and Katherine M. Brock. Prentice-Hall, Englewood Cliffs, N.J., ed. 2, 1978. xiv, 608 pp., illus. \$18.95.

Basic Sciences and Agriculture. Proceedings of a symposium, New Delhi, Oct. 1975. Indian National Science Academy, New Delhi, 1978. xii, 256 pp., illus. Paper, \$10. *INSA Bulletin* No. 55.

A Behavioral Atlas of the Rat Brain. Robert Thompson. Oxford University Press, New York, 1978. xii, 80 pp., illus. Cloth, \$14.95; paper, \$8.95.

Beyond the Moon. Paolo Maffei. Translated from the Italian edition (Milan, 1977) by D. J. K. O'Connell. MIT Press, Cambridge, Mass., 1978. xii, 378 pp., illus. \$12.50.

Bioorganic Chemistry. Vol. 4, Electron Transfer and Energy Conversion; Cofactors; Probes. E. E. van Tamelen, Ed. Academic Press, New York, 1978. xxii, 478 pp., illus. \$49.50.

Catastrophe Theory and Its Applications. Tim Poston and Ian Stewart. Fearon-Pitman, Belmont, Calif., 1978. xviii, 492 pp., illus. \$49.75. Surveys and Reference Works in Mathematics, 2.

Chromatography of Synthetic and Biological Polymers. Vol. 1, Column Packings, GPC, GF and Gradient Elution. Roger Epton, Ed. Published for the Chemical Society Macromolecular Group by Horwood, Chichester, En-

gland, 1978 (U.S. distributor, Halsted [Wiley], New York). x, 368 pp., illus. \$42.50.

The Chronic Mental Patient in the Community. Formulated by the Committee on Psychiatry and the Community. Group for the Advancement of Psychiatry, New York, 1978. pp. 227-380. Paper, \$3.50. GAP Publication No. 102.

Climates of Hunger. Mankind and the World's Changing Weather. Reid A. Bryson and Thomas J. Murray. University of Wisconsin Press, Madison, 1977. xvi, 172 pp., illus. \$8.95.

Cloning. Nuclear Transplantation in Amphibia. A Critique of Results Obtained with the Technique to Which Is Added a Discourse on the Methods of the Craft. Robert Gilmore McKinnell. University of Minnesota Press, Minneapolis, 1978. xii, 320 pp., illus. \$22.50.

The Codasyl Approach to Data Base Management. T. William Olle. Wiley-Interscience, New York, 1978. xx, 288 pp., illus. \$21.50. Wiley Series in Computing.

Contributions to the Psychopathology of Schizophrenia. Brendan A. Maher, Ed. Academic Press, New York, 1977. x, 382 pp. Paper, \$9.50. Reprinted from *Progress in Experimental Personality Research*.

Correlational Procedures for Research. Robert M. Thorndike. Gardner Press, New York, 1978 (distributor, Halsted [Wiley], New York). xii, 338 pp., illus. \$21.50.

Country to City. The Urbanization of a Japanese Hamlet. Edward Norbeck. University of Utah Press, Salt Lake City, 1978. xxii, 358 pp., illus. \$15.

Current Topics in Bioenergetics. Vol. 7, Photosynthesis: Part A. D. Rao Sanadi and Leo P. Vernon, Eds. Academic Press, New York, 1978. xii, 282 pp., illus. \$29.50.

Current Topics in Developmental Biology. Vol. 12, Fertilization. A. A. Moscona and Alberto Monroy, Eds. Academic Press, New York, 1978. xiv, 254 pp., illus. \$23.50.

Current Topics in Experimental Endocrinology. Vol. 3. L. Martini and V. H. T. James, Eds. Academic Press, New York, 1978. xii, 220 pp., illus. \$24.

Currents in Alcoholism. Vol. 3, Biological, Biochemical, and Clinical Studies. Papers from a conference, San Diego, Calif., May 1977. Frank A. Seixas, Ed. Grune and Stratton, New York, 1978. xxii, 602 pp., illus. \$31.50.

Desert Journal. Reflections of a Naturalist. Raymond B. Cowles. University of California Press, Berkeley, 1978. xvi, 264 pp., illus. Paper, \$4.95. Reprint of the 1977 edition.

A Dictionary of the Natural Environment. F. J. Monkhouse and John Small. Halsted (Wiley), New York, 1978, vi, 320 pp., illus. \$19.50.

Dimensions of Personality. Harvey London and John E. Exner, Jr., Eds. Wiley-Interscience, New York, 1978. xx, 620 pp. \$23.95. Wiley Series on Personality Processes.

Dynamic System Identification. Experiment Design and Data Analysis. Graham C. Goodwin and Robert L. Payne. Academic Press, New York, 1977. x, 292 pp., illus. \$26. Mathematics in Science and Engineering, vol. 136.

Early Developmental Hazards. Predictors and Precautions. Papers from a AAAS symposium, Denver, Feb. 1977. Frances Degen Horowitz, Ed. Published for the American Association for the Advancement of Science by Westview Press, Boulder, Colo., 1978. xviii, 114 pp. \$12.50. AAAS Selected Symposia Series, 19.

Educational Programs and Intellectual Productivities. Supplement to *The Gifted and the Crea-*

tive. Papers from a symposium, Baltimore, Nov. 1975. Julian C. Stanley, William C. George, and Cecilia H. Solano, Eds. Study of Mathematically Precocious Youth, Johns Hopkins University Department of Psychology, Baltimore, 1978. vi, 62 pp. Paper, \$3.50.

Effects of Noise on Wildlife. Papers from a symposium, Madrid, July 1977. John L. Fletcher and R. G. Busnel, Eds. Academic Press, New York, 1978. x, 306 pp., illus. \$16.50.

Electronic Systems and Instrumentation. Richard W. Henry. Wiley, New York, 1978. xiv, 382 pp., illus. \$18.95.

Elementary Crystallography. An Introduction to the Fundamental Geometrical Features of Crystals. Martin J. Buerger. MIT Press, Cambridge, Mass., 1978. xxiv, 528 pp., illus. Paper, \$12.50. Reprint of the 1963 edition.

Endangered and Threatened Plants of the United States. Edward S. Ayensu and Robert A. DeFilipps with the assistance of Sam E. Fowler, Mary G. Mangone, Carol Matti-Nattella, and William E. Rice. Smithsonian Institution, Washington, D.C., and World Wildlife Fund, Washington, D.C., ed. 2, 1978 (distributor, Smithsonian Institution Press, Washington, D.C.). xvi, 404 pp. \$17.50.

Energy Resources. J. T. McMullan, R. Morgan, and R. B. Murray. Halsted (Wiley), New York, 1978. viii, 178 pp., illus. Paper, \$7.95. Resource and Environmental Sciences Series.

Environment and Man. Richard H. Wagner. Norton, New York, ed. 3, 1978. xiv, 592 pp., illus. \$12.95.

An Evaluation of Railroad Safety. Office of Technology Assessment, Washington, D.C., 1978 (available from the Superintendent of Documents, Washington, D.C.). xvi, 224 pp. Paper, \$4.25.

The Evolution of the Dentition in Upper Paleolithic and Mesolithic Europe. David W. Frayer. University of Kansas Department of Anthropology, Lawrence, 1978. xvi, 202 pp., illus. Paper, \$8.50. University of Kansas Publications in Anthropology, No. 10.

Excavation of the Abri Pataud, Les Eyzies (Dordogne): Stratigraphy. Hallam L. Movius, Jr. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass., 1977. xiv, 168 pp., illus. + loose charts. Paper, \$25. American School of Prehistoric Research, Bulletin 31.

Experiencing Science. Jeremy Bernstein. Basic, New York, 1978. xii, 276 pp. \$11.95.

Fluorides and Dental Fluorosis. Howard M. Myers. Karger, Basel, 1978. viii, 76 pp. Paper, \$21.25. Monographs in Oral Science, 7.

A Grammar of Dreams. David Foulkes. Basic, New York, 1978. xviii, 460 pp. \$20.

The Great Nutrition Robbery. Beatrice Trum Hunter. Scribner, New York, 1978. xii, 242 pp., illus. \$9.95.

Group Symmetries in Nuclear Structure. Jitendra C. Parikh. Plenum, New York, 1978. x, 278 pp., illus. \$33.50. Nuclear Physics Monographs.

Handbook of North American Indians. William C. Sturtevant, Ed. Vol. 8, California. Robert F. Heizer, Ed. Smithsonian Institution, Washington, D.C., 1978 (available from the Superintendent of Documents, Washington, D.C.). xvi, 800 pp., illus. \$13.50. Stock No. 047-000-00347-4.

Handicapping America. Barriers to Disabled People. Frank Bowe. Harper and Row, New York, 1978. xviii, 254 pp., illus. \$9.94.

Holtzman Inkblot Technique Annotated Bibliography. Jon D. Swartz, Wayne H. Holtzman, Donald B. Witzke, and Camelia H.

Bishop. Hogg Foundation for Mental Health, Austin, Tex., ed. 3, 1978. iv, 214 pp. Paper.

Homology and Cohomology Theory. An Approach Based on Alexander-Spanier Cochains. William S. Massey. Dekker, New York, 1978. xvi, 412 pp. \$29.75. Pure and Applied Mathematics, 46.

Images and Self-Images. Male and Female in Morocco. Daisy Hilse Dwyer. Columbia University Press, New York, 1978. xviii, 194 pp. Cloth, \$12; paper, \$3.95.

Immune Modulation and Control of Neoplasia by Adjuvant Therapy. Papers from a conference, Bethesda, Md. Michael A. Chirigos, Ed. Raven, New York, 1978. xviii, 502 pp., illus. \$39. Progress in Cancer Research and Therapy, vol. 7.

Immunochemistry. An Advanced Textbook. L. E. Glynn and M. W. Steward, Eds. Wiley-Interscience, New York, 1978. x, 628 pp., illus. \$57.50.

Induced Innovation. Technology, Institutions, and Development. Hans P. Binswanger and Vernon W. Ruttan with Uri Ben-Zion and eight others. Johns Hopkins University Press, Baltimore, 1978. xvi, 424 pp., illus. \$22.50.

Intercellular Junctions and Synapses. J. Feldman, N. B. Gilula, and J. D. Pitts, Eds. Chapman and Hall, London, and Halsted (Wiley), New York, 1978. x, 246 pp., illus. \$35. Receptors and Recognition, Series B, vol. 2.

Intermountain Biogeography. A Symposium. Missoula, Mont., June 1976. Brigham Young University, Provo, Utah, 1978. iv, 268 pp., illus. Paper, \$15. Great Basic Naturalist Memoirs, No. 2.

International Classification of Procedures in Medicine. Vol. 1. World Health Organization, Geneva, 1978 (U.S. distributor, WHO Publications Centre USA, Albany, N.Y.). Variously pagged. Paper, \$6.75.

International Review of Experimental Pathology. Vol. 18. G. W. Richter and M. A. Epstein, Eds. Academic Press, New York, 1978. xii, 418 pp., illus. \$43.

Introducing Culture. Ernest L. Schusky and T. Patrick Culbert. Prentice-Hall, Englewood Cliffs, N.J., ed. 3, 1978. x, 230 pp., illus. Paper, \$6.50. Prentice-Hall Anthropology Series.

Introduction to Modern Algebra. Marvin Marcus. Dekker, New York, 1978. xiv, 490 pp. \$19.50. Pure and Applied Mathematics, 47.

Introduction to Physical Oceanography. John A. Knauss. Prentice-Hall, Englewood Cliffs, N.J., 1978. xiv, 338 pp., illus. \$28.95.

An Introduction to Chemistry. David S. Newman. Norton, New York, 1978. xiv, 434 pp., illus. \$12.95.

The King Danced in the Marketplace. Frances Gillmor. Illustrated by Carolyn Huff Kinsey. University of Utah Press, Salt Lake City, 1977. xvi, 272 pp. Paper, \$10. Reprint of the 1964 edition.

The Landscape and Man in Socialist Czechoslovakia. O. Vidláková, Ed. Translated from the Czech. Orbis, Prague, 1977. 112 pp. + plates. Paper, 8 Kčš.

Language and Hemispheric Specialization in Man. Cerebral Event-Related Potentials. John E. Desmedt, Ed. Karger, Basel, 1977. viii, 286 pp., illus. \$43.75. Progress in Clinical Neurophysiology, vol. 3.

Mathematical Models in Water Pollution Control. Papers from a conference. Newcastle upon Tyne, England, Sept. 1973. A. James, Ed. Wiley-Interscience, New York, 1978. xvi, 420 pp., illus. \$36.

The Methodology of Scientific Research Pro-

grammes. Imre Lakatos. John Worrall and Gregory Currie, Eds. Cambridge University Press, New York, 1978. viii, 250 pp. \$19.95. Philosophical Papers, vol. 1.

Mind in Society. The Development of Higher Psychological Processes. L. S. Vygotsky. Translated from the Russian. Michael Cole, Vera John-Steiner, Sylvia Scribner, and Ellen Souberman, Eds. Harvard University Press, Cambridge, Mass., 1978. xiv, 160 pp. \$12.50.

The Mindful Brain. Cortical Organization and the Group-Selective Theory of Higher Brain Function. Gerald M. Edelman and Vernon B. Mountcastle. MIT Press, Cambridge, Mass., 1978. vi, 100 pp., illus. \$10.

The Modern Technique of Rock Blasting. U. Langefors and B. Kihlström. Halsted (Wiley), New York, ed. 3, 1978. 438 pp., illus. \$25.

Money and the Real World. Paul Davidson. Halsted (Wiley), New York, ed. 2, 1978. xxii, 428 pp., illus. \$9.95.

Morphological and Epidemiological Aspects of Simian Herpesvirus Infections. Manfred Brack. Verlag Paul Parey, Berlin, 1977. 64 pp. Paper, DM 24. Schriftenreihe Versuchstierkunde, 5.

Mothers, Fathers, and Children. Explorations in the Formation of Character in the First Seven Years. Sylvia Brody and Sidney Axelrad in association with Ethel Horn, Marsha Moroh, and Marvin Taylor. International Universities Press, New York, 1978. xiv, 670 pp. \$27.50.

Moving Boundary Problems. Proceedings of a symposium, Gatlinburg, Tenn., Sept. 1977. D. G. Wilson, Alan D. Solomon, and Paul T. Boggs, Eds. Academic Press, New York, 1978. xii, 330 pp., illus. \$15.

Multi-Storey Buildings in Steel. F. Hart, W. Henn, and H. Sontag. Translated from the German edition (Cologne, 1974). G. Bernard Godfrey, Ed. Halsted (Wiley), New York, 1978. 360 pp., illus. \$67.50.

Muon Physics. Vol. 1, Electromagnetic Interactions. Vernon W. Hughes and C. S. Wu, Eds. Academic Press, New York, 1977. xii, 396 pp., illus. \$36.50.

The Mysteries of Modern Science. Brian M. Stableford. Routledge and Kegan Paul, London, 1978. vi, 270 pp. \$12.95.

The Nature of Schizophrenia. New Approaches to Research and Treatment. Lyman C. Wynne, Rue L. Cromwell, and Steven Matthysse in collaboration with Margaret L. Toohey, Bonnie J. Spring, and Jonathan Sugarman. Wiley, New York, 1978. xxiv, 726 pp., illus. \$45. A Wiley Medical Publication.

Neurosciences Research Program Bulletin. Papers from meetings. MIT Press, Cambridge, Mass., 1977 and 1978. Vol. 12. viii, 682 pp., illus. \$25. Vol. 13. viii, 468 pp., illus. \$25. Vol. 14. vi, 542 pp., illus. \$25. Collected reprints from *NRP Bulletin*.

Nonlinear Analysis. A Collection of Papers in Honor of Erich H. Rothe. Lamberto Cesari, Rangachari Kannan, and Hans F. Weinberger, Eds. Academic Press, New York, 1978. xiv, 238 pp. \$24.50.

Novel Aspects of Reproductive Physiology. Proceedings of a workshop, Brook Lodge, Mich., 1977. Charles H. Spilman and John W. Wilks, Eds. Spectrum, New York, 1978 (distributor, Halsted [Wiley], New York). xvi, 398 pp., illus. \$20.

Nuclear Structure Physics. Proceedings of a summer school, St. Andrews, Scotland, Aug. 1977. S. J. Hall and J. M. Irvine, Eds. Scottish Universities Summer School in Physics, Edinburgh University Physics Department, Edinburgh, 1978. xxvi, 724 pp., illus. £15.

(Continued on page 1112)



Our Sample Injector: it's the standard.

When we introduced the Rheodyne Model 7120 Syringe Loading Sample Injector in early 1976, we knew it was a good product.

Now, we suspect, it might be a great product. According to the best educated guesses we can make, it's the best selling sample injector around by a factor of three to one. Why?

Because it does the job well, because we keep improving it, because we give you good delivery, because we give you good service.

Technically the Model 7120 gives you maximum versatility in HPLC sample injection. You load the sample by syringe through a built-in needle port. For maximum precision use conventional loop filling or partial loop filling with only 0.5 μ l sample loss. Removable sample loops are available from 10 μ l to 2 ml. The valve will withstand 7000 psi operating pressure. And at \$490, there's simply no better price/performance value on the market.

Over the years, the product gets better. With thousands in the field, it's more reliable. It's easier to turn too. And if you need parts or new valves, we can give you same day service.

If you want us to repair or rework the valve, we'll usually have it on the way back to you within 24 hours.

More information

Our technical bulletin tells the whole story. For your copy, please address Rheodyne, Inc., 2809 Tenth St., Berkeley, CA 94710. Phone (415) 548-5374.


RHEODYNE

THE LC CONNECTION COMPANY

Circle No. 179 on Readers' Service Card

BOOKS RECEIVED

(Continued from page 1078)

Nutrition and Drug Interrelations. Papers from a symposium, Ames, Iowa, Aug. 1976. John N. Hathcock and Julius Coon, Eds. Academic Press, New York, 1978. xxii, 928 pp. \$55. Nutrition Foundation Monograph Series.

On Aesthetics in Science. Judith Wechsler, Ed. MIT Press, Cambridge, Mass., 1978. xii, 180 pp., illus. \$12.50.

On Human Communication. A Review, a Survey, and a Criticism. Colin Cherry. MIT Press, Cambridge, Mass., ed. 3, 1978. xviii, 374 pp., illus. \$17.50. Studies in Communication.

Optical Shop Testing. Daniel Malacara, Ed. Wiley, New York, 1978. xx, 524 pp., illus. \$29.95. Wiley Series in Pure and Applied Optics.

Optimal Control and Differential Equations. Proceedings of a conference, Norman, Okla., Mar. 1977. A. B. Schwarzkopf, Walter G. Kelley, and Stanley B. Eliason, Eds. Academic Press, New York, 1978. xii, 336 pp. \$17.

Orbital Motion. A. E. Roy. Halsted (Wiley), New York, 1978. xiv, 490 pp., illus. \$29.95.

Ordre et Dynamique du Vivant. Chemins de la Biologie Moléculaire. Antoine Danchin. Editions du Seuil, Paris, 1978. 382 pp., illus. Paper, 95 F.

Orientation Effects in Solid Polymers. Proceedings of a conference, Budapest, Apr. 1976. G. Bodor, Ed. Interscience (Wiley), New York, 1978. vi, 426 pp., illus. Paper, \$19. *Journal of Polymer Science: Polymer Symposium*, No. 58.

Our Southern Highlanders. A Narrative of Adventure in the Southern Appalachians and a Study of Life among the Mountaineers. Horace Kephart. University of Tennessee Press, Knoxville, 1976. xlviii, 470 pp. + plates. \$12.95. Reprint of 1922 edition with a new introduction.

Patty's Industrial Hygiene and Toxicology. Vol. 1, General Principles. George D. Clayton and Florence E. Clayton, Eds. Wiley-Interscience, New York, ed. 3, 1978. xx, 1466 pp., illus. \$75.

Phospholipases and Prostaglandins. Claudio Galli, Giovanni Galli, and Giuseppe Porcellati, Eds. Raven, New York, 1978. xii, 206 pp., illus. \$22. *Advances in Prostaglandin and Thromboxane Research*, vol. 3.

Photoemission and the Electronic Properties of Surfaces. B. Feuerbacher, B. Fitton, and R. F. Willis, Eds. Wiley, New York, 1978. xviii, 540 pp., illus. \$48.

Physics for Engineers and Scientists. D. Elwell and A. J. Pointon. Horwood, Chichester, England, and Halsted (Wiley), New York, ed. 2, 1978. xiv, 356 pp., illus. \$35.

Plant Proteins. Papers from a school, Nottingham, 1976. G. Norton. Butterworths, Boston, 1978. xii, 352 pp., illus. \$32.95.

Populations of Small Mammals under Natural Conditions. Papers from a symposium, Pittsburgh, May 1976. Dana P. Snyder, Ed. University of Pittsburgh, Pymatuning Laboratory of Ecology, Linesville, Pa., 1978. xiv, 238 pp., illus. \$8.50. *The Pymatuning Symposia in Ecology. Special Publication Series*, vol. 5.

The Porphyrins. Vol. 2, Structure and Synthesis, Part B. David Dolphin, Ed. Academic Press, New York, 1978. xx, 438 pp., illus. \$46.50.

Potentiometric Water Analysis. Derek Midg-

ley and Kenneth Torrance. Wiley-Interscience, New York, 1978. xii, 410 pp. \$42.

Power and Authority in Adolescence. The Origins and Resolutions of Intergenerational Conflict. Formulated by the Committee on Adolescence. Group for the Advancement of Psychiatry, New York, 1978. pp. 49-276. Paper, \$6.50. GAP Publication No. 101.

Power System Control and Protection. B. Don Russell and Marion E. Council, Eds. Academic Press, New York, 1978. x, 290 pp., illus. \$15.

Prehistoric Patterns of Human Behavior. A Case Study in the Mississippi Valley. Bruce D. Smith with a contribution by Wilma Wetterstrom. Academic Press, New York, 1978. xxii, 266 pp., illus. \$19. *Studies in Archeology*.

Proceedings of the 1978 Heat Transfer and Fluid Mechanics Institute. Pullman, Wash., June 1978. Clayton T. Crowe and William L. Grosshandler, Eds. Published for the Heat Transfer and Fluid Mechanics Institute by Stanford University Press, Stanford, Calif., 1978. xiv, 330 pp., illus. \$28.50.

The Processing of Memories. Forgetting and Retention. Norman E. Spear. Erlbaum, Hillsdale, N.J., 1978 (distributor, Halsted [Wiley], New York). xiv, 554 pp., illus. \$29.95. *The Experimental Psychology Series*.

Prostaglandins and Perinatal Medicine. Papers from a symposium, Toronto, Mar. 1977. Flavio Coceani and Peter M. Olley, Eds. Raven, New York, 1978. xvi, 412 pp., illus. \$35. *Advances in Prostaglandin and Thromboxane Research*, vol. 4.

Psychology of Learning and Behavior. Barry Schwartz. Norton, New York, 1978. xx, 412 pp., illus. \$13.95.

Purpose in a World of Chance. A Biologist's View. W. H. Thorpe. Oxford University Press, New York, 1978. xii, 124 pp., illus. \$9.95.

Quantification in Cultural Anthropology. An Introduction to Research Design. Allen W. Johnson. Stanford University Press, Stanford, Calif., 1978. xvi, 232 pp., illus. \$12.50.

Renal Function. Papers from a conference, Feb. 1977. Gerhard H. Giebisch and Elizabeth F. Purcell, Eds. Josiah Macy, Jr. Foundation, New York, 1977 (distributor, Independent Publishers Group, Port Washington, N.Y.). viii, 322 pp., illus. \$10.

Reviews of Neuroscience. Vol. 3. Seymour Ehrenpreis and Irwin J. Kopin, Eds. Raven, New York, 1978. viii, 230 pp., illus. \$19.75.

The Revisionists Revised. A Critique of the Radical Attack on the Schools. Diane Ravitch. Basic Books, New York, 1978. xii, 194 pp. \$8.95.

Second-Language Acquisition in Childhood. Barry McLaughlin. Erlbaum, Hillsdale, N.J., 1976 (distributor, Halsted [Wiley], New York). xiv, 240 pp. \$14.95.

Semiconductor Circuit Design for A.F. and D.C. Amplification and Switching. J. Watson. Halsted (Wiley), New York, ed. 3, 1977. xii, 536 pp., illus. \$17.95.

The Sensitive Scientist. Report of a British Association Study Group. David Morley. SCM Press, London, 1978. xii, 132 pp. Paper, £1.95.

Sex, Evolution, and Behavior. Adaptations for Reproduction. Martin Daly and Margo Wilson. Duxbury Press (Wadsworth), North Scituate, Mass., 1978. xii, 388 pp., illus. Paper, \$8.95.

Shelter Provision in Developing Countries. The Influence of Standards and Criteria. A. L. Mabogunje, J. E. Hardoy, and R. P. Misra. C. Ian Jackson, Ed. Published for the Scientific

COMPARE SAVANT CELLS

Feature for Feature

- **FUSED** — no cement used.
- **MATCHED** — free of charge on each order.
- **CODED** — for re-order accuracy
- **APPROVED** — meets or exceeds specs for all double-beam spectrophotometers.



COMPARE PRICE!

Type 9Q — 10 mm LP
Semi-Micro
Quality Quartz

\$42

FREE CELL RACK
With order for 4 or
more Quartz Cells.

New catalog price list available
SAVANT CELLS DIVISION
221 Park Ave., Hicksville, N.Y. 11801
(516) 935-8774

Circle No. 32 on Readers' Service Card



We make more than
1000 different

**Carbohydrates
Alcaloids
Amino Acids
Biologically active Peptides
Lichen substances
Lipids etc.**

for you.

Send for new SENN
CHEMICALS catalog 1978

SENN CHEMICALS
P.O. Box 2
CH-8157 DIELS DORF
Switzerland

Phone 01-8531835
01-8531942
Telex 58786

Circle No. 192 on Readers' Service Card



Committee on Problems of the Environment of the ICSU by Wiley, New York, 1978. xii, 94 pp. Paper, \$10.50. SCOPE 11.

SI Calculations in Engineering Science. A. C. Walshaw. Newnes-Butterworths, Boston, 1977. viii, 88 pp., illus. Paper, \$3.95.

A Sierra Club Naturalist's Guide to Southern New England. Neil Jorgensen. Drawings by Katharine Brewer and Priscilla Kunhardt. Sierra Club Books, San Francisco, 1978. xxii, 418 pp. + plates. Cloth, \$15; paper, \$9.95.

Sky and Sextant. Practical Celestial Navigation. John P. Budlong. Van Nostrand Reinhold, New York, ed. 2, 1978. viii, 224 pp., illus. \$11.95.

Small Cities in Transition. The Dynamics of Growth and Decline. Papers from a conference, Dec. 1976. Herrington J. Bryce, Ed. Ballinger (Lippincott), Cambridge, Mass., 1977. xxvi, 418 pp. \$22.50. A Joint Center for Political Studies Book.

Small Systems Computer Sourcebook. J. C. Boonham, Ed. Rococo Press, St. Osyth, Essex, England, 1978 (U.S. distributor, Halsted [Wiley], New York). vi, 148 pp., illus. Paper, \$14.95.

Sources of Color Science. David L. MacAdam, Ed. MIT Press, Cambridge, Mass., 1978. xii, 282 pp., illus. Paper, \$4.95. Reprint of the 1970 edition.

Speleology. The Study of Caves. George W. Moore and G. Nicholas Sullivan. Illustrated by John C. Schoenherr. Zephyrus Press, Teaneck, N.J., ed. 2, 1978. xiv, 150 pp. \$8.50.

State Policies and Federal Programs. Priorities and Constraints. Peter Passell and Leonard Ross. Praeger, New York, 1978. xx, 172 pp. \$16.95. A Twentieth Century Fund Report.

Structure and Function in Man. Stanley W. Jacob, Clarice Ashworth Francone, and Walter J. Lossow. Saunders, Philadelphia, ed. 4, 1978. xvi, 678 pp., illus. \$13.95.

Studies in Inductive Probability and Rational Expectation. Theo A. F. Kuipers. Reidel, Boston, 1978. xii, 154 pp. \$22.50. Synthese Library, vol. 123.

Studies in Perception. Interrelations in the History of Philosophy and Science. Peter K. Machamer and Robert G. Turnbull, Eds. Ohio State University Press, Columbus, 1978. x, 568 pp., illus. \$30.

Studies on the Collapse of Fire Service in New York City 1972-1976. The Impact of Pseudoscience in Public Policy. Rodrick Wallace and Deborah Wallace. University Press of America, Washington, D.C., 1977. iv, 122 pp., illus. Paper, \$6.85.

A Synonymic Checklist of the Hexapoda of the New Zealand Sub-Region. The Smaller Orders. K. A. J. Wise. Auckland Institute and Museum, Auckland, New Zealand, 1977. iv, 176 pp., illus. Paper, NZ\$11. Bulletin of the Auckland Institute and Museum, No. 11.

Synthetic Detergents. A. Davidsohn and B. M. Milwidsky. Godwin, London, and Halsted (Wiley), New York, ed. 6, 1978. x, 266 pp., illus. \$25.

Systematic Materials Analysis. Vol. 4. J. H. Richardson and R. V. Peterson, Eds. Academic Press, New York, 1978. xviii, 494 pp., illus. \$49.50. Materials Science and Technology.

Taurine and Neurological Disorders. André Barbeau and Ryan J. Huxtable, Eds. Raven, New York, 1978. xiv, 468 pp., illus. \$36.

Teaching Conservation in Developing Nations. Judith Brace, Ralph R. White, and Stephen C. Bass. Illustrated by Anne Brace. National Audubon Society, New York, 1977. xii, 252 pp. Paper, \$1.50.

Tensor Geometry. The Geometric Viewpoint and Its Uses. C. T. J. Dodson and T. Poston. Fearon-Pitman, Belmont, Calif., 1978. xiv, 598 pp., illus. \$38.50. Surveys and Reference Works in Mathematics, 1.

The Theoretical Foundations of Chinese Medicine. Systems of Correspondence. Manfred Porkert. MIT Press, Cambridge, Mass., 1978. xvi, 368 pp., illus. Paper, \$9.95. M.I.T. East Asian Science Series, vol. 3.

The Therapeutic Interaction: A Synthesis. Robert Langs. Aronson, New York, 1977. xiv, 206 pp. \$10.

Thermal Effluent Disposal from Power Generation. Papers from a course, Dubrovnik, Yugoslavia, Aug. 1976. Zoran P. Zarić, Ed. Hemisphere, Washington, D.C., 1978. viii, 376 pp., illus. \$40. Series in Thermal and Fluids Engineering.

Thin Films. Interdiffusion and Reactions. J. M. Poate, K. N. Tu, and J. W. Mayer, Eds. Wiley-Interscience, New York, 1978. xii, 578 pp., illus. \$35. Electrochemical Society Series.

Topics in Bioelectrochemistry and Bioenergetics. Vol. 2. G. Milazzo, Ed. Wiley-Interscience, New York, 1978. xiv, 204 pp., illus. \$29.

Topics in Hormone Chemistry. Vol. 1. W. R. Butt, Ed. Horwood, Chichester, England, and Halsted (Wiley), New York, 1978. 292 pp., illus. \$52.50.

Toward a Theory of Psychosomatic Disorders. Alexithymia, Pensée Opératoire, Psychosomatiques Phénomén. Proceedings of a conference, Heidelberg, Germany, Sept. 1976. W. Bräutigam and M. von Rad, Eds. Karger, Basel, 1977. xiv, 390 pp. \$53.50. Reprinted from *Psychotherapy and Psychosomatics*, vol. 28, No. 1-4.

Toxic Substances Control Sourcebook. Alexander McRae, Leslie Whelchel, and Howard Rowland, Eds. Center for Compliance Information, Aspen Corporation, Germantown, Md., 1978. xiv, 610 pp. \$59.50.

Transmission of Information in the Optical Waveband. L. G. Kazovsky. Halsted (Wiley), New York, and Israel University Press, Jerusalem, 1978. xvi, 122 pp., illus. \$18.50.

University Astronomy. Jay M. Pasachoff and Marc L. Kutner. Saunders, Philadelphia, 1978. xviii, 764 pp., illus. + appendices + plates. \$18.95. Saunders Golden Sunburst Series.

Vector and Tensor Analysis. Eutiquio C. Young. Dekker, New York, 1978. xii, 526 pp., illus. \$37.50. Pure and Applied Mathematics, 48.

The Vertebrate Body. Shorter Version. Alfred Sherwood Romer and R. Thomas S. Parsons. Saunders, Philadelphia, ed. 5, 1978. vi, 476 pp., illus. \$12.95.

Visions of Utopia. Nashoba, Rugby, Ruskin, and "New Communities" in Tennessee's Past. John Egerton. University of Tennessee Press, Knoxville, 1977. viii, 96 pp., illus. Paper, \$3.50. Tennessee Three Star Books.

Water Deficits and Plant Growth. Vol. 5. Water and Plant Disease. T. T. Kozlowski, Ed. Academic Press, New York, 1978. xviii, 324 pp., illus. \$31.50.

Wave Propagation and Scattering in Random Media. Vol. 2. Multiple Scattering, Turbulence, Rough Surfaces, and Remote Sensing. Akira Ishimaru. Academic Press, New York, 1978. xx + pp. 251-572, illus. \$26.50.

Your Encounter with Life, Death and Immortality. Ruth E. Norman. Unarius Educational Foundation, El Cajon, Calif., 1978. vi, 84 pp., illus. Paper, \$1.95.