Washington, D.C., 1966. 212 pp. \$24. Records new periodical titles for the period in and after 1960.

Conference and Symposium Reports

Acquisition of Skill. Proceedings of a conference (New Orleans, La.), March 1965. Edward A. Bilodeau, Ed. Academic Press, New York, 1966. 555 pp. Illus. \$12.50. Ten papers: "A brief history of research on the acquisition of skill" by Arthur L. Irion; "Selective learning" by Clyde E. Noble; "Individual differences" by Marshall B. Jones; "Some mechanisms of motor responding: An examination of attention" by Jack A. Adams; "Facilitation and interference" by William F. Battig; "Information feedback" by Ina McD. Bilodeau; "Retention" by Edward A. Bilodeau; "Tracking behavior" by E. C. Poulton; "Cybernetic theory and analysis of learning" by Karl U. Smith; and "Motor-skills learning and verbal learning: Some observations" by Benton J. Underwood.

Advances in X-Ray Analysis. vol. 9. Proceedings of the Fourteenth Annual Conference on Applications of X-ray Analysis (Denver, Colo.), August 1965. Gavin R. Mallett, Marie Fay, and William M. Mueller, Eds. Plenum Press, New York, 1966. 554 pp. Illus. \$22.50.

Forty-seven papers.

Aspects of Comparative Ophthalmology. Proceedings of a symposium organized by the British Small Animal Veterinary Association (London), June 1965. Oliver Graham-Jones, Ed. Pergamon, New York, 1966. 357 pp. Illus. \$13. Twenty-seven papers.

Biological Membranes: Recent Progress. (Ann. N.Y. Acad. Sci. 137). Edward M. Weyer, Ed. New York Academy of Sciences, New York, 1966. 646 pp. Illus. Paper, \$12. Forty-six papers presented at a conference held in October 1965.

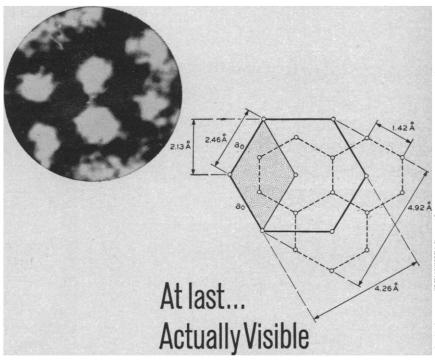
Biosynthesis of Aromatic Compounds. vol. 3. Proceedings of the Second Meeting of the Federation of European Biochemical Societies (Vienna), April 1965. G. Billek, Ed. Pergamon, New York, 1966. 152 pp. Illus. \$4.50. Thirteen papers.

Breeding Pest-Resistant Trees. Proceedings of a N.A.T.O. and N.S.F. Advanced Study Institute (University Park, Pa.), August-September 1964. H. D. Gerhold, R. E. McDermott, E. J. Schreiner, and J. A. Winieski, Eds. Pergamon, New York, 1966. 515 pp. Illus. \$24. Fiftyeight papers.

Cell Differentiation and Morphogenesis. International Lecture Course (Wageningen, The Netherlands), April 1965. W. Beermann, R. J. Gautheret, P. D. Nieuwkoop, C. W. Wardlaw, V. B. Wigglesworth, E. Wolff, and J. A. D. Zeevaart. North-Holland, Amsterdam; Interscience (Wiley), New York, 1966. 217 pp. Illus. \$9.75

Chromosome Manipulations and Plant Genetics. Contributions to a symposium held during the Tenth International Botanical Congress (Edinburgh), August 1964. Ralph Riley and K. R. Lewis, Eds. Plenum Press, New York, 1966. 131 pp.



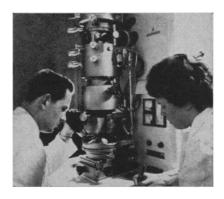


For the first time, the hexagonal structure of graphite has been seen, with the Siemens Elmiskop. A 6-sided carbon cell of 5 Å diameter, made up of 3 carbon crystal cells, or only 10 atoms, was photographed by R. D. Heidenreich of Bell Telephone Laboratories in New York and H. Fernandez Moran of the University of Chicago. Although this form of carbon is well known by x-ray and electron diffraction, this is indeed the first time that the structure had been actually visible. The visibility of the hexagonal cells, using axial illumination, indicates that a point to point resolution of 2 Å can be obtained with the Elmiskop I A, due to its short objective focal length of 2.2 mm. Another axample of Siemens performance.

Electron Microscope Elmiskop I A

Siemens Elmiskop Electron Microscopes have won a worldwide reputation for highest resolution, stability and reliability. Over 800 Elmiskops are already in service at leading universities, medical centers and industrial laboratories.

VISIT BOOTHS 5-6-7 EMSA MEETING



SIEMENS AMERICA INCORPORATED 350 Fifth Avenue, New York, N.Y. 10001 SIEMENS CANADA LIMITED 407 McGill Street, Montreal 1, P.Q.

Corporations of THE SIEMENS GROUP IN GERMANY • Berlin • Munich • Erlangen



Illus. \$8. Nine papers: "Some experimental applications of aneuploidy in Nicotiana" by D. R. Cameron; "Chromosome engineering in Lycopersicon" by Charles M. Rick and Gurdev S. Khush; "Haploidy as a new approach to the cytogenetics and breeding of Solanum tuberosum" by S. J. Peloquin, R. W. Hougas, and A. C. Gabert; "Nullisomic-tetrasomic combinations in hexaploid wheat" by E. R. Sears; "Estimates of the homoeology of wheat chromosomes by measurements of differential affinity at meiosis" by Ralph Riley and Victor Chapman; "Biometrical analysis using chromosome substitutions within a species" by C. N. Law: "Establishing a monosomic series in Avena sativa L" by R. C. McGinnis: "Attributes of intra- and inter-specific aneuploidy in Gossypium" by Meta S. Brown; and "Aspects of chromosome manipulation: a résumé" by D. U. Gerstel and T. J. Mann.

Civil Defense. A symposium. AAAS Publication No. 82. Henry Eyring, Ed. AAAS, Washington, D.C., 1966. 144 pp. Paper, members, \$3.50; others, \$4. Seven papers: "The basic case for civil defense" by Fred A. Payne; "Civil defense as insurance and as military strategy" by Wolfgang K. H. Panofsky; "The effect of civil defense on strategic planning" by Owen Chamberlain; "The possible effectiveness of civil defense" by Eugene P. Wigner; "Medical aspects of civil defense" by Victor W. Sidel; "The agricultural problems in civil defense" by John H. Rust; and "Feasibility of biological recovery from nuclear attack" by Barry Commoner.

The Cnidaria and Their Evolution. Proceedings of a symposium (London), March 1965. W. J. Rees, Ed. Published for the Zoological Society of London. Academic Press, New York, 1966. 467 pp. Illus. \$17.50. Eighteen papers.

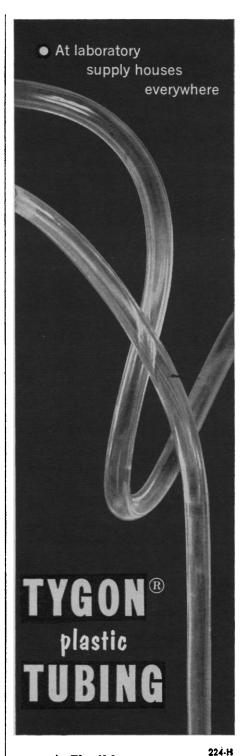
Data/Information Availability. Papers presented at an institute under the auspices of the Center for Technology and Administration, American University (Washington, D.C.). Ralph I. Cole, Ed. Thompson, Washington, D.C., 1966. 199 pp. Illus. \$8.50. Thirteen papers.

Diagnostic Ultrasound. Proceedings of

Diagnostic Ultrasound. Proceedings of the First International Conference (Pittsburgh, Pa.), 1965. Charles C. Grossman, Joseph H. Holmes, Claude Joyner, and Edward W. Purnell, Eds. Plenum Press, New York, 1966. 533 pp. Illus. \$11.50. Thirty-three papers.

The Earth-Moon System. Proceedings of an international conference (New York), January 1964. B. G. Marsden and A. G. W. Cameron, Eds. Plenum Press, New York, 1966. 302 pp. Illus. \$12.50. Sixteen papers.

The Economics of Air Pollution. A symposium. Harold Wolozin, Ed. Norton, New York. 1966. 318 pp. Illus. \$5. Nine papers: "Air pollution—General background and some economic aspects" by Allen V. Kneese; "Economic incentives in air-pollution control" by Edwin S. Mills; "Risks versus costs in environmental health" by Leslie A. Chambers; "The structuring of atmospheric pollution control systems" by Thomas D. Crocker; "Strategies for measuring the cost of air pollution" by Ronald G. Ridker; "The

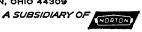


- **▶** Flexible
- ▶ Glass-clear
- ▶ Chemically inert
- ▶ 73 Standard sizes

Plastics & Synthetics Division



AKRON, OHIO 44309



use of government statistics in air-pollution control" by Edward T. Crowder; "The use of consumer-expenditure data in air-pollution control" by Helen H. Lamale; "Air-pollution control in the metropolitan Boston area: A case study in public policy formation" by Lester Goldner; and "Setting criteria for public expenditures on air-pollution abatement: Theoretical foundations and limitations" by Harold Wolozin.

The Economics of Education. Proceedings of a conference held by the International Economic Assoc. (Menthon-St.-Bernard, France), 1963. E. A. G. Robinson and J. E. Vaizey, Eds. Macmillan, London; St. Martin's Press, New York, 1966. 800 pp. Illus. \$16. Twenty-four papers on the following topics: General Problems of Education (3 papers); Education and Economic Progress (7 papers); Demand and Supply (3 papers); The Cost and Financing of Education (4 papers); Balance Between Different Forms of Education (5 papers); International Aid in Education (2 papers); and a Report on the Proceedings.

The Education of a Physicist. An international conference (London), July 1965. Sanborn C. Brown and Norman Clarke, Eds. M.I.T. Press, Cambridge, Mass., 1966. 195 pp. Illus. \$7.50. Fifteen papers on the following topics: First-Degree Courses (4 papers); Special Problem Areas (5 papers); Practical Work, Films, and Television (2 papers); Technical Universities (1 paper); and Relationships Between Government, Industry, and

the University (3 papers).

Electron Spin Resonance and the Effects of Radiation on Biological Systems. Proceedings of a conference (Gatlinburg, Tenn.), May 1965. Wallace Snipes, Ed. Natl. Acad. of Sciences-Natl. Research Council, Washington, D.C., 1966. 206 pp. Illus. Paper, \$4. Eight papers: "Summary of electron spin resonance technique as applied to radiation-produced radicals" by Ralph Livingston; "Radiationproduced electron spin resonance signals in nucleic acids" by Adolph Müller; "Electron spin resonance of irradiated deoxyribonucleic acid" by R. G. Shulman, R. O. Rahn, P. S. Pershan, J. W. Longworth, and J. Eisinger; "Electron spin resonance signals in irradiated proteins" by Thormod Henriksen; "Radiation chemistry of proteins in the dry state" by Bert M. Tolbert; "Contributions of electron paramagnetic resonance techniques to the understanding of radiation biology' by E. L. Powers; "The significance of electron spin resonance measurements on irradiated biological macromolecules" by Peter Alexander; and "Biological damage and free radicals in irradiated seeds" by Alan D. Conger.

The Evolution of Canada's Flora. A colloquium commemorating the founding meeting of the Canadian Botanical Association (Ottawa), May 1965. Roy L. Taylor and R. A. Ludwig, Eds. Univ. of Toronto Press, Toronto, 1966. 145 pp. Illus. \$5.50. Eight papers: "Personal recollections of Frère Marie-Victorin" by Marcel Raymond; "Phytogeographic zonation: An ecological appreciation" by J. S. Rowe; "Evolutionary and phytogeographic patterns in the Canadian moss flora"



by Howard Crum; "Reproductive specialization as a factor in the evolution of the Canadian flora" Theodore Mosquin; "Aspects of the late-Pleistocene history of the Canadian flora" by J. C. Ritchie; "Movement of plants under the influence of man" by Jacques Rousseau; "Development of marine benthic algal communities on Vancouver Island, British Columbia" by Robert K. S. Lee; and "Vegetative propagation in relation to the aggressiveness of species" by T. A. Steeves, R. T. Coupland, and M. V. S. Raju.

The Evolving Society. Proceedings of the First Annual Conference on the Cybercultural Revolution-Cybernetics and Automation. Alice Mary Hilton, Ed. Institute for Cybercultural Research, New York, 1966. 424 pp. Illus. \$8.95. Twentynine papers on the following topics:
Basic Assumptions (4 papers); Computing Machines and Cybernated Systems (6 papers); The Evolving Society (8 papers); The Future Society-Concepts (7 papers); The Future Society—Reasons for Hope and Causes for Fear (4 papers).

First International Congress of Para-sitology, Proceedings (Rome), September 1964. vols. 1 and 2. Augusto Corradetti, Ed. Tamburini Editore, Milan; Pergamon, New York, 1966. vol. 1, 656 pp.; vol. 2, 496 pp. Illus. \$45 set. The papers are in various languages.

Full Cycles of High Temperature Gas-Cooled Reactors. Proceedings of a conference (Brussels), June 1965. D. Tytgat, Ed. European Atomic Energy Community, Brussels, 1965. 662 pp. Illus \$12. Twenty-six papers.

Head Injury. Proceedings of a conference (Chicago), February 1966. William F. Caveness and A. Earl Walker, Eds. Lippincott, Philadelphia, 1966. 589

pp. Illus. \$15. Forty papers.

Heat Flow Below 100°K and Its Technical Applications. Proceedings of the International Institute of Refrigeration (Grenoble, France), June 1965. Louis Weil, Ed. Pergamon, New York, 1966. 364 pp. Illus. \$12. Thirty-two papers on the following topics: Heat Transfer in Solids (11 papers); Heat Transfer in Liquids (1 paper); Heat Transfer in Powders (1 paper); Heat Transfer to Liquid Nitrogen and Hydrogen (4 papers); Heat Transfer in Missiles and Space Operations (3 papers); Heat Transfer to Liquid Helium (8 papers); and miscellaneous (4 papers). Papers are in English or French, with a summary of each in both French and

How to Collect Shells. Based on symposia given at meetings of the American Malacological Union during the last 25 years. American Malacological Union, Marinette, Wis., ed. 3, 1966. 105 pp. Illus. Paper, \$2. Twenty-five papers.

Insect Behaviour. A symposium (London), September 1965. P. T. Haskell, Ed. Royal Entomological Society, London, 1966. 121 pp. Illus. £2 5s. Eight papers: "Orientation behaviour in insects and factors which influence it" by G. Birukow; "The role of rhythms in insect behaviour" by P. S. Corbet; "Flight be-haviour" by P. T. Haskell; "Feeding behaviour" by V. G. Dethier; "Sexual behaviour" by A. Manning; "Insect communication" by J. D. Carthy; "Behaviour

Self Sticking LABELS

(we make them)

You can . . .

WRITE ON THEM • PRINT ON THEM • COLOR THEM NUMBER THEM



Write for complete information about our full line of Laboratory Tapes and Labels

PROFESSIONAL TAPE COMPANY, INC. 365 East Burlington Road, Riverside, III. 60546

SPORES FERNS MICROSCOPIC ILLUSIONS ANALYZED. VOL. 1

C. S. HIRES

580 pages, approx. 1150 illustrations, 14 color. Word and name indices. Simpler more accurate terms.

> Exceptional fern photos, enlarged fertile areas, cell structure, glands and projections.

Basic concepts of 3-D spore and tetrad structure. Line drawings of wall arrangements at all angles and focal levels, organized for easy reference. Fine detail.

MISTAIRE LABORATORIES 152 GLEN AVENUE **MILLBURN, N.J. 07041**



of social insects" by E. O. Wilson; and "Some outstanding questions in insect behaviour" by J. S. Kennedy.

Instrumentation in the Chemical and Petroleum Industries. Proceedings of sessions held during the First Joint International Symposium (Montreal, Canada), May 1965, and papers from the sessions at the 20th Annual ISA Conference (Los Angeles, Calif.), October 1965. Carl W. Sanders, Ed. Plenum Press, New York, 1966. 219 pp. Illus. \$10.50. Seventeen papers.

Malignant Transformation by Viruses. A symposium (Chicago), February 1966. W. H. Kirsten, Ed. Springer-Verlag, New York, 1966. 191 pp. Illus. \$8. Recent Results in Cancer Research, vol. 6. Nine papers on the following topics: The Characteristics of Malignant Transformation by Viruses (4 papers); Genetics and Immunology of Malignant Transformation by Viruses (3 papers); and Significance of Malignant Transformation in Relation to Human Neoplasms (2 papers).

Materials Science Research. vol. 3, The Role of Grain Boundaries and Surfaces in Ceramics. Proceedings of a conference (Raleigh, N.C.), November 1964. W. Wurth Kriegel and Hayne Palmour III, Eds. Plenum Press, New York, 1966. 645 pp. Illus. \$22.50. Thirty papers on the following topics: Interfaces—Sites for Kinetic Processes (4 papers); Electromagnetic Wave Behavior Near Interfaces (7 papers); Grain Boundary Contributions to Deformation (6 papers); Grain Boundary Contributions to Strength and Thermomechanical Behavior (7 papers); and Surface and Environmental Contributions to Mechanical Behavior (6 papers).

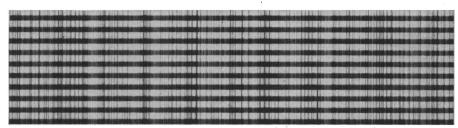
Medical Education Reconsidered. Report of the Endicott House Summer Study on Medical Education, July 1965. Oliver Cope and Jerrold Zacharias. Lippincott, Philadelphia, 1966. 95 pp. Illus. \$4

Methods in Astrodynamics and Celestial Mechanics. Papers based on the American Institute of Aeronautics and Astronautics and Institute of Navigation Astrodynamics Specialist Conference (Monterey, Calif.), September 1965. Raynor L. Duncombe and Victor G. Szebehely, Eds. Academic Press, New York, 1966. 452 pp. Illus. \$5. Progress in Astronautics and Aeronautics, vol. 17. Nineteen papers on the following topics: Behavior of Bodies near Liberation Points (6 papers); Asymptotic Representations of Space Vehicle Trajectories (5 papers); Orbit Determination and Mission Analysis (5 papers); and Optimization in Astrodynamics (3 papers).

Modern Developments in Powder Metallurgy. Proceedings of the 1965 International Powder Metallurgy Conference (New York), June 1965. vol. 1, Fundamentals and Methods (412 pp. \$32.50); vol. 2, Applications (362 pp. \$32.50); vol. 3, Development and Future Prospects (289 pp. \$22.50). Henry H. Hausner, Ed. Plenum Press, New York, 1966. Illus. \$80 set. Sixty-three papers.

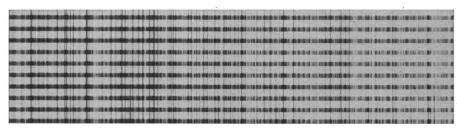
Natural Features of Indiana. A symposium (Crawfordsville, Ind.), April 1966. Alton A. Lindsey, Ed. Indiana Acad. of Science, Indianapolis, 1966. 630 pp. Illus. \$4.

GET BRIGHTER, SHARPER



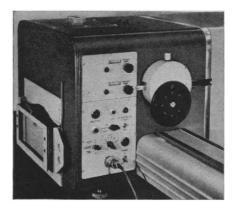
Spectrogram of Molybdenum, 3270A-3500A region

SPECTROGRAMS



Spectrogram of Molybdenum, 2500A-2730A region

IN EVERY SPECTRAL RANGE



The Bausch & Lomb Research Dual Grating Spectrograph uses large, 4" x 5" gratings. Great flexibility in choice of these Certified-Precision Gratings permits coverage of all spectral ranges. Gratings are mounted in pairs, backto-back, in an easily rotatable turret. Using one grating at a time, the resultant f/15.5 numerical aperture gives greater intensity, offers higher photographic speed ratings—than ever before. Determinations are faster, easier, more dependable. Sufficient illumination is available to make spectrograms in the

higher orders. Separations are more distinct—bands are bright. Pairs of extra gratings, when ordered with your spectrograph, can be interchanged quickly—without realignment.

For highly critical and ultra-speed work specify a single 4" x 8" echelle type grating and obtain a numerical aperture of f/12.1 at normal incidence. Using a 300 groove/mm echelle at an incidence angle of 65°, high-quality spectrograms, up to the 28th order, are possible. Dispersion at this point is approximately 0.25A/mm. An ideal instrument for isotope work and laser applications. A wide variety of these extra large echelle gratings is available.

Write for Catalog 33-2102, Bausch & Lomb, 85633 Bausch Street, Rochester, New York 14602.

BAUSCH & LOMB

23 SEPTEMBER 1966

1579