

films OF THE WEEK

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

A LASER IMAGES DEMONSTRATION

16mm, color, sound, 10 min. Using argon, krypton and helium-neon gas lasers, it is possible to alter laser light to produce different kinds of images. This motion picture employs music (electronic, classical, and rock) in combination with the rhythm of kaleidoscopic laser forms to showcase the diversity and interest of laser images. The result is a contemporary abstract film experience in which laser images form surrealistic patterns and organic forms apparently suspended in blank space, frozen still, or wheeling slowly like galaxies, flashing like meteors, or coiled bursts of fire in hues of blue-gold and molten red. Audience: general. Purchase \$150 or rental \$15 from Creative Film Society, Dept. SN, 14558 Valerio St., Van Nuys, Calif. 91405.

SOUL CITY. 16mm, b&w, sound, 13 min. In Warren County, North Carolina, blacks are experimenting with the development of a community in which all residents are participating in the planning of growth. This experiment, under the inspiration of Floyd McKissick, is taking place because blacks found that trying to escape the oppressive conditions of the South by moving into large cities still did not allow them to control their own lives. The 2,500 acres of Soul City will be controlled by blacks, not whites. Within 17 years, McKissick hopes the city will have a population of 50,000 persons working and living collectively. Audience: secondary, college, adult. Purchase \$85 or rental \$4.80 from Audio-Visual Center, Dept. SN, Indiana University, Bloomington, Ind. 47401.

NATURE IN THE CITY. 16mm, color, sound, 13 min. Designed to encourage children to investigate plant and animal life that has adapted to the environment of the city. The film provides children with a view of the city they may have never observed. It shows how animals live, develop, and adapt to their environment. Also investigated are trees, plants and flowers which, by their interrelation with the animals, form an essential part of the urban ecosystem. Audience: elementary, general. Purchase \$155 from Journal Films, 909 West Diversey Parkway, Chicago, Ill. 60614.

Space Watchers:

THE FLIGHT OF APOLLO 15 (The Moon the Rover Roamed)

Available for immediate shipment:
35mm slides
(60 color and 12 black & white) \$18.00
Set of 8 color 11 x 14 prints \$5.95

Set of 12 8x10 prints
(8 color and 4 black & white) \$2.00

Add 50c for mailing and handling.
Send 50c for complete catalog of slides, prints, emblems, and related items beginning with the flight of GEMINI IV (free with any order)

Space Photos

Department SN7
2608 Sunset Blvd., Houston, Texas 77005

books OF THE WEEK

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DIVIDENDS FROM SPACE—Frederick I. Ordway III, Carsbie C. Adams and Mitchell R. Sharpe; introd. by Wernher von Braun and S. Fred Singer—Crowell, 1972, 318 p., photographs, \$10. A comprehensive, readable report on the practical benefits and many potential applications of the space research investment in such areas as home, industry, health, surveying, exploring oceans, land and atmosphere, and communication via space.

ENERGY IN CHEMISTRY: An Approach to Thermodynamics—B. E. Dawson—Methuen (Barnes & Noble), 1971, 64 p., diagrams, paper, \$2.50. Illustrates one way of introducing, and then using, some of the key ideas of chemical thermodynamics at a relatively elementary level. Discusses energy changes in chemical processes, aspects of phase equilibria and chemical equilibria.

ENGINEERING DESIGN BY GEOMETRIC PROGRAMMING—Clarence Zener—Wiley-Interscience, 1971, 98 p., diagrams, \$8.95. Geometric programming is tailored specifically for solving optimization problems. This book is designed to acquaint student with the mathematical discipline of generalization to variables, constraints and higher degrees of difficulty. Discusses applications in civil, electrical and chemical engineering.

MOUNTAIN SHEEP: A Study in Behavior and Evolution—Valerius Geist—Univ. of Chicago Press, 1971, 383 p., 89 plates, drawings, tables, \$14.50. A scientific record of field studies of free-living mountain sheep, their home ranges, migrations, social and rutting behavior, ewes, lambs, population dynamics, and the effect of glaciation on the evolution of form and behavior of mountain sheep.

THE NATURAL HISTORY AND PROGRESS IN TREATMENT OF CONGENITAL HEART DEFECTS—B. S. Langford Kidd and John D. Keith, Eds.—Thomas, C. C., 1971, 346 p., illus., \$19.75. Deals with advances in the areas of ventricular septal defects, pulmonary valve stenosis, transposition of great vessels, aortic stenosis, and pulmonary vascular disease.

THE ORGANIC WAY TO MULCHING—Glenn F. Johns; Robert Rodale, Ed.—Rodale Press, 1972, 192 p., photographs, \$5.95. Discusses the organic gardener's way of mulching, its relation to soil, materials used, stone mulching, and mulching of specific plants.

THE PLATELET by 40 Authors—K. M. Brinkhous, R. W. Shermer and F. K. Mostofi, Eds.—Williams & Wilkins, 1971, 420 p., photographs, diagrams, \$25.50. Outstanding hematologists deal with many of the newer aspects of the physiology and pathology of the platelet, from maturation and self-renewal of the megacaryocyte to tests of platelet activity in clinical diagnosis.

POLARIZATION INTERFEROMETERS: Applications in Microscopy and Macroscopy—M. Francon and S. Mallick—Wiley-Interscience, 1971, 159 p., plates, diagrams, \$12.50. Monograph presents the fundamentals of polarization interferometers, observation of phase objects, measurement of optical thickness, testing, and miscellaneous applications.

PRINCIPLES OF MAMMALIAN AGING—Robert R. Kohn—Prentice-Hall, 1971, 171 p., photographs, diagrams, \$7.95; paper, \$4.95. Explores the basic concepts and significant discoveries that mark the biological and medical aspects of mammalian systems at every level of organization from the simplest molecular and extracellular phenomena to the complex animal and human species.

PSYCHIATRIC DISORDER AND THE URBAN ENVIRONMENT: Report of the Cornell Social Science Center—Berton H. Kaplan, Ed.—Behavioral Pubns. 1971, 310 p., diagrams, \$12.95. Experienced investigators describe their methodology and results of studying the urban environment's influence on mental health and mental illness.

RANDOM DATA: Analysis and Measurement Procedures—Julius S. Bendat and Allan G. Piersol—Wiley-Interscience, 1971, 407 p., diagrams, \$18.50. Intended as a reference for practicing engineers and scientists, the book emphasizes practical aspects, with special attention to the inter-relationships of the various technical disciplines involved.

READING THE PAST: The Story of Deciphering Ancient Languages—Leonard Cottrell—Crowell-Collier, 1971, 182 p., illus., \$5.95. Traces for the layman the progressive stages of the decipherment of Egyptian hieroglyphics, Babylonian cuneiform, and Cretan Linear B.

SELECTIONS FROM THE SCIENTIFIC CORRESPONDENCE OF ELIHU THOMSON—Harold J. Abrahams and Marion B. Savin, Eds.—M.I.T. Press, 1971, 589 p., portrait, \$17.50. Credited with almost 800 electrical inventions, Thomson (1853-1937) was a truly scientific inventor who made no sharp distinctions between pure and applied science as his correspondence illustrates.

TOWARD A MATHEMATICS OF POLITICS—Gordon Tullock—Univ. of Mich. Press, 1971, 176 p., diagrams, \$7.95. Chapters recount the intermediate results in a search for unified models of analysis applicable to both economics and politics, such as mathematical models of man, of monopolistic competition, politics of persuasion, and economics of lying.

TEXTBOOKS

COMPREHENSIVE GROUP PSYCHOTHERAPY—Harold I. Kaplan and Benjamin J. Sadock, Eds.—Williams & Wilkins, 1971, 911 p., illus., \$27.50. Text attempts to provide, in a still evolving field, a dynamic and eclectic yet structured and systematic presentation of the body of knowledge currently available in group psychotherapy.

DIFFERENTIAL GAMES—Avner Friedman—Wiley-Interscience, 1971, 350 p., \$17.50. Addressed to graduate students and workers in fields of engineering, economics and mathematics, text treats games of fixed duration, of pursuit and evasion, computation of saddle points, games of survival, and N-person games.

FUNDAMENTALS OF ASTRODYNAMICS—Roger R. Bate, Donald D. Mueller and Jerry E. White—Dover, 1971, 455 p., illus., paper, \$4.50. This is a new work, based on U.S. Air Force course. Emphasis is on use of the universal variable formulation, although classical methods are discussed. Exercises include derivations, and quantitative and qualitative problems.

LOGIC: A Comprehensive Introduction—Samuel D. Guttenplan and Martin Tamny—Basic Bks., 1971, 381 p., diagrams, \$10. Text attempts a balanced, broad treatment, from formal logic to logic of science, and of philosophical reasoning, unified by the distinction of syntactic, semantic and pragmatic aspects of language applied to logical discourse.

MACROMOLECULES: Structure and Function—Finn Wold—Prentice-Hall, 1971, 305 p., photographs, diagrams, \$8.75; paper, \$3.50. Text deals in some depth with the structure-function analysis of biological macromolecules and macromolecular complexes, with strong emphasis on the experiments that are the basis for the models.

MINERAL OPTICS: Principles and Techniques—Wm. Revell Phillips—Freeman, 1971, 249 p., 14 color plates, foldout chart, illus., diagrams, \$12.50. Designed to prepare students for the study of rocks in thin sections, text deals with uniaxial and biaxial crystals, and describes the construction and application of the universal stage, an instrument now in use in most modern petrographic laboratories.