

chapter as a "highly condensed review." Fortunately, very few of the 23 distinguished contributors take this approach. Most of them refer to other summaries and, while giving the essential background, leave themselves space to deal, often in a very illuminating and interesting manner, with the implications of the research they describe. To give one example: in his chapter on dispersal Gregory suggests that the spores of fungi like the giant puffball (*Calvatia gigantea*) may be more significant in promoting genetic exchange between existing mycelia than in starting new mycelia.

The first chapter gives an exhaustive and somewhat repetitive account of fungal protoplasts, and the next five deal with fungal structures ranging from aggregations of yeast cells to the complex fruit bodies of basidiomycetes. The next six chapters are concerned with the mechanisms of morphogenesis in various groups including the Myxomycetes and cellular slime molds. Two chapters on the physiology of reproduction are followed by six on reproduction and inheritance. In this last group the chapters by Emerson on Mendelian inheritance, Roper on the parasexual cycle, and Jinks on extranuclear inheritance are outstandingly good in providing clear, authoritative statements of what the authors consider significant. The last three chapters deal with spore dissemination: release, dispersal, and dormancy and germination. Author, subject, and organism indices conclude this important and useful reference book.

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## Point Defects and Dislocations

**Theory of Crystal Defects.** Proceedings of a summer school held in Hrazany, Czechoslovakia, September 1964. BORIS GRUBER, Ed. Czechoslovak Academy of Sciences, Prague; Academic Press, New York, 1966. 415 pp., illus. \$15.

The Summer School of Hrazany, held at the initiative of Frantisek Kroupa, had the great merit of the bringing together of teachers and students from both the eastern and western parts of Europe to discuss problems of defects in crystals. The lectures included such well-known names as Indenbom, Orlov, Hirsch, Howie, Seeger, Kröner, Saada, Sestak, and

Kroupa. The main lectures of this summer school now appear in published form.

The emphasis of the school was theoretical and on a "mechanical" or "atomistic" description of defects—primary point defects and dislocations—with little reference to their electronic state or to the physical properties sensitive to it. Within these limitations, the general aim of the school was, I think, reasonably well fulfilled. Some rather specialized papers such as Ludwig's on the dynamics of a crystal lattice with defects, Saada's on stacking faults, Kroupa's on dislocation loops, and Sestak's on glide and workhardening in BCC metals, bring out original material and are of intrinsic interest. It is probably mainly for those special papers that this book will be appreciated. I recommend it to serious students of defects in solids as a useful complement to other references.

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## Books Received

**Aerodynamics of V/STOL Flight.** Barnes W. McCormick, Jr. Academic Press, New York, 1967. 340 pp. Illus. \$17.

**Ancient Men of the Arctic.** J. Louis Giddings. Knopf, New York, 1967. 438 pp. Illus. \$10.

**Animal Forms and Patterns: A Study of the Appearance of Animals.** Adolf Portmann. Translated from the German by Hella Czech. Schocken, New York, 1967. 254 pp. Illus. \$6.50.

**Animal Sonar Systems: Biology of Bionics.** vols. 1 and 2. NATO. Advanced Study Institute Symposium (Frascati, Italy), September–October 1966. R.-G. Busnel, Ed. Laboratoire d'Acoustique Animale, Jouy-en-Josas, France, 1967. vol. 1, 713 pp.; vol. 2, 520 pp. Illus. Paper, 35 F. Thirty papers in English or French.

**Annals of Epidemiology.** Berton Roueché. Little, Brown, Boston, 1967. 327 pp. Paper, \$4; cloth, \$7.

**Annual Review of Plant Physiology.** vol. 18. Leonard Machlis, Ed. Annual Reviews, Palo Alto, Calif., 1967. 488 pp. Illus. \$8.50. Nineteen papers.

**The Art of the Soluble.** P. B. Medawar. Methuen, London; Barnes and Noble, New York, 1967. 160 pp. \$4.50.

**Automatic Control Systems.** Benjamin C. Kuo. Prentice-Hall, Englewood Cliffs, N.J., ed. 2, 1967. 537 pp. Illus. \$13.50. Prentice-Hall Electrical Engineering Series.

**Combinatorial Methods in the Theory of Stochastic Processes.** Lajos Takács. Wiley, New York, 1967. 276 pp. \$12.75.

**Composite Materials.** Leslie Holliday,

Ed. Elsevier, New York, 1966. 554 pp. Illus. \$24. Elsevier Materials Science Series.

**A Comprehensive World: On Modern Science and Its Origins.** Jeremy Bernstein. Random House, New York, 1967. 281 pp. \$5.95.

**Les Concepts de Claude Bernard sur le Milieu Intérieur.** An international symposium (Paris), June–July 1965. Roger Heim and others. Masson, Paris, 1967. 429 pp. Illus. 65 F. Nineteen papers in French or English.

**The Contribution of the Social Sciences to Psychotherapy.** Lewis Bernstein and B. Cullen Burris, Eds. Thomas, Springfield, Ill., 1967. 130 pp. \$5.75. Six papers.

**Creativity: Its Educational Implications.** John Curtis Gowan, George D. Demos, and E. Paul Torrance, Eds. Wiley, New York, 1967. 350 pp. Paper, \$4.95; cloth, \$7.95. Thirty-six papers.

**Culture in Process.** Alan R. Beals, George Spindler and Louise Spindler. Holt, Rinehart, and Winston, New York, 1967. 302 pp. Illus. Paper, \$3.95.

**Furoprans and Furoprones.** Ahmed Mustafa. Interscience (Wiley), New York, 1967. 388 pp. Illus. \$21.

**General Virology.** S. E. Luria and James E. Darnell, Jr. Wiley, New York, ed. 2, 1967. 528 pp. Illus. \$12.50.

**Génétique et Evolution.** Claudine Petit and Georges Prévost. Hermann, Paris, 1967. 392 pp. Illus. Paper, 60 F.

**Great Ideas in the History of Surgery.** Leo M. Zimmerman and Ilza Veith. Dover, New York, ed. 2, 1967. 599 pp. Illus. Paper, \$3.

**Guilt and Sin in Traditional China.** Wolfram Eberhard. Univ. of California Press, Berkeley, 1967. 151 pp. Illus. \$5.

**Symposium über Hefe-Protoplasten.** A symposium (Jena), September 1965. Rudolf Müller, Ed. Akademie Verlag, Berlin, 1967. 436 pp. Illus. Paper, 61.50.

**Take As Directed: Our Modern Medicines.** F. E. Shideman, Ed. Chemical Rubber Co., Cleveland, 1967. 471 pp. Illus. \$9.95.

**The Technique and Practice of Psychoanalysis.** vol. 1. Ralph R. Greenson. International Universities Press, New York, 1967. 468 pp. \$12.50.

**The Theory of Splines and Their Applications.** J. H. Ahlberg, E. N. Nilson, and J. L. Walsh. Academic Press, New York, 1967. 296 pp. Illus. \$13.50. Mathematics in Science and Engineering, vol. 38.

**Thin-Walled Structures.** A. H. Chilver, Ed. Wiley, New York, 1967. 311 pp. Illus. \$10. Nine papers.

**The University of Wisconsin Medical School: A Chronicle, 1848–1948.** Paul F. Clark. Published for the Wisconsin Medical Alumni Assoc. Univ. of Wisconsin Press, Madison, 1967. 285 pp. Illus. \$10.

**The Use of Quality and Quantity of Publication as Criteria for Evaluating Scientists.** Bryon T. Shaw. U.S. Department of Agriculture, Washington, D.C., 1967 (order from Superintendent of Documents, Washington, D.C.). 80 pp. Illus. Paper, 50¢.

**The Water Crisis.** Frank E. Moss. Praeger, New York, 1967. 319 pp. Illus. \$5.95.