
SCIENCE

Index to Volume 165

July—September 1969

Editorial Board

GUSTAF O. ARRHENIUS	EVERETT I. MENDELSON
FRED R. EGGAN	ALFRED O. C. NIER
HARRY F. HARLOW	JOHN R. PIERCE
MILTON HARRIS	KENNETH S. PITZER
EMIL HAURY	FRANK W. PUTNAM
RICHARD C. LEWONTIN	ALEXANDER RICH
WILLARD F. LIBBY	CLARENCE M. ZENER

Editorial Staff

DAEL WOLFLE <i>Publisher</i>	HANS NUSSBAUM <i>Business Manager</i>
---------------------------------	--

PHILIP H. ABELSON
Editor

EARL J. SCHERAGO, *Advertising Director*

Published by the

American Association for the Advancement of Science

1515 Massachusetts Avenue, NW, Washington, D.C. 20005

Printed in Washington, D.C., by McCall Printing Company, Mid-Atlantic Division

Copyright 1969 by the American Association for the Advancement of Science

No.	Date of Issue	Pages	No.	Date of Issue	Pages
3888	4 July	1-92	3895	22 August	729-844
3889	11 July	93-224	3896	29 August	845-936
3890	18 July	225-320	3897	5 September	937-1056
3891	25 July	321-436	3898	12 September	1057-1164
3892	1 August	437-520	3899	19 September	1165-1302
3893	8 August	521-636	3900	26 September	1303-1386
3894	15 August	637-728			

Names of authors of books reviewed are printed in SMALL CAPITALS.

A

Abelson, P. H. (*editorials*): Crumbling foundations of prosperity, 1069; German technological resurgence, 339; Microcosms in a world apart, 853; Political action in behalf of science, 1315
 ABM, A. CHAYES and J. B. WIESNER (Eds.), *book review* by B. Richter, 576
 Absence of "heme-heme" interactions in hemoglobin, The, R. G. Shulman *et al.*, 251
 Abstracts with zest (*letter*), B. H. Weil, 6
 Academic research in Germany: a new support program, B. R. Stein, 1096
 ACE study of campus unrest (*letter*), K. Keniston, 1206
 Acetylcholine action: biochemical aspects, J. Durrell *et al.*, 862
 Acetylcholine facilitation, atropine block of synaptic excitation of cortical neurons, R. Spehlmann, 404
 Acetylcholine: release from neural tissue and identification by pyrolysis-gas chromatography, D. E. Schmidt *et al.*, 1370
 Acidic components of Green River shale identified by a gas chromatography-

mass spectrometry-computer system, R. C. Murphy *et al.*, 695
 Acoustical foundations of music, The, J. BACKUS, *book review* by L. Knopoff, 784
 Actinomycin binding to DNA: inability of a DNA containing guanine to bind actinomycin D, R. D. Wells, 75
 Activism and the rejection of history (*editorial*), L. Eiseley, 129
 Addicott, W. O.: Tertiary climatic change in the marginal northeastern Pacific Ocean, 583
 Adenosine 3',5'-monophosphate-dependent protein kinase from brain, E. Miyamoto *et al.*, 63
 Adenosine-3',5'-phosphate: identification as acrasin in a species of cellular slime mold, D. S. Barkley, 1133
 Adirondack conference on electrostatics (*meeting report*), A. D. Moore and B. Vonnegut, 1033
 ADLER, S. L., and R. F. DASHEN, Current algebras and applications to particle physics, *book review* of, 384
 Advances in macromolecular chemistry, W. M. PASIKA (Ed.), *book review* by A. H. Frazer, 167
 AHRENS, L. H. (Ed.), Origin and distribution of the elements, *book review* of, 486
 Akers, C. K. *See* Parsons, D. F.
 Akimoto, S.-I. *See* Morimoto, N., *et al.*
 Albert, D. J., and L. H. Storlien: Hyperphagia in rats with cuts between the ventromedial and lateral hypothalamus, 599
 Alfvén, H., and G. Arrhenius: Two alternatives for the history of the moon, 11
 Algal stromatolites: deepwater forms in the Devonian of Western Australia, P. E. Playford and A. E. Cockbain, 1008
 Alkali bees: response of adults to pathogenic fungi in brood cells, S. W. T. Batra and G. E. Bohart, 607
 Alkon, D. L. *See* Schmidt, D. E., *et al.*
 Allen, J. C. *See* Martinez-Maldonado, M., *et al.*
 Alvarez, L. W.: Recent developments in particle physics, 1071
 Amacher, P., *et al.*: Preventing obsolescence of scientific reviews: an updated-review project, 1029
 Amoore, J. E., *et al.*: Ant alarm pheromone activity: correlation with molec-

- ular shape by scanning computer, 1266
 Amos, B., and E. Yunis: Human leukocyte antigenic specificity HL-A3: frequency of occurrence, 300
 Analytical reaction gas chromatography, V. G. BEREZKIN, book review by R. S. Juvet, Jr., 1003
 Anaphylatoxin release from the third component of human complement by hydroxylamine, D. B. Budzko and H. Müller-Eberhard, 506
 Anders, E.: book review of *Origin and distribution of the elements*, 486
 Anderson, G. P. See Barth, C. A., et al.
 Anderson, J. R. See Hertig, M., et al.
 Anderson, S. C., and N. J. Marchette: March of "progress" (letters), 543
 ANDREEV, P. F., et al., Transformation of petroleum in nature, book review of, 1000
 Aneshansley, D. J., et al.: Biochemistry at 100°C: explosive secretory discharge of bombardier beetles (*Brachinus*), 61
 Animal twilight, J. L. CLOUDSLEY-THOMPSON, book review by H. K. Buechner, 683
 Ant alarm pheromone activity: correlation with molecular shape by scanning computer, J. E. Amoore et al., 1266
 Antigen combining activity associated with immunoglobulin D, G. J. Gleich et al., 606
 Apollo 11 observations of a remarkable glazing phenomenon on the lunar surface, T. Gold, 1345
 Apollo passive seismic experiment, The, G. Latham et al., 241
 Arquerros, L. See Viveros, O. H., et al.
 Arrhenius, G. See Alfvén, H.
 Ascorbic acid: cofactor in rabbit olfactory preparations, K. O. Ash, 901
 Ash, K. O.: Ascorbic acid: cofactor in rabbit olfactory preparations, 901
 Aspirin: its effect on platelet glycolysis and release of adenosine diphosphate, J. C. G. Doery et al., 65
 ASSALL, N. S. (Ed.), Biology of gestation, vol. 2, book review of, 783
 Association Affairs: P. E. Klopsteg retires as treasurer; W. T. Golden elected to the post, W. O. Roberts, 826; preliminary program of annual meeting, 719, 1151, 1276, 1382
 Atherosclerotic plaque: x-ray diffraction investigation, M. Spector et al., 711
 Atmospheric temperature: successful test of remote probing, D. Q. Wark and D. T. Hilleary, 1256
 Aumento, F.: Diorites from the Mid-Atlantic Ridge at 45°N, 1112
 Autosomal trisomy in a chimpanzee: resemblance to Down's syndrome, H. M. McClure et al., 1010
 Ayala, S. C. See Hertig, M., et al.
 Azurin: x-ray data for crystals from *Pseudomonas denitrificans*, G. Strahs, 60
- B**
- BACK, N., et al. (Eds.), Pharmacology of hormonal polypeptides and proteins, vol. 2, book review of, 275
 BACKUS, J., The acoustical foundations of music, book review of, 784
 Bacterial physiology and metabolism, J. R. SOKATCH, book review by J. Lascelles, 1248
 Bactéries anaérobies, A. R. PRÉVOT et al., book review by L. DS. Smith, 581
 Bailar, J. C., Jr.: book review of New pathways in inorganic chemistry, 682
 Baker, H., et al.: Subclinical malnutrition, 313
 BAKER, L. E. See GEDDES, L. A.
 BANDI, H.-G., Eskimo prehistory, book review of, 1247
 BARATZ, J. C., and R. W. SHUY (Eds.), Teaching black children to read, book review of, 1108
 Barbeau, A., et al.: Renin-aldosterone system in Parkinson's disease, 291
 Barchas, J. D. See Steinman, A. M., et al.
 Barghoorn, E. S. See Bartlett, A. S., et al.
 Baringer, J. R., et al.: Experimental herpes encephalitis: crystalline arrays in endoplasmic reticulum, 1381
 Barish, N. H.: Public Health Service grants (letter), 1204
 Barker, L. F. See Shulman, N. R.
 Barkley, D. S.: Adenosine-3',5'-phosphate: identification as acrasin in a species of cellular slime mold, 1133
 Barnhouse-Beuscher, R. See Weissman, M. M., et al.
 Baroness, S. H. See Droz, B.
 Barrett, A. H. See Meeks, M. L., et al.
 Barrons, K. C.: Some ecological benefits of woody plant control with herbicides, 465
 Barry, W. H. See Carnay, L. D.
 Barth, C. A., et al.: Mariner 6: ultraviolet spectrum of Mars upper atmosphere, 1004
 Bartlett, A. S., et al.: Fossil maize from Panama, 389
 Bartnicki-Garcia, S., and E. Lippman: Fungal morphogenesis: cell wall construction in *Mucor rouxii*, 302
 Bassett, W. A. See Takahashi, T., et al.
 Batra, S. W. T., and G. E. Bohart: Alkali bees: response of adults to pathogenic fungi in brood cells, 607
 Battan, L. J., et al.: Whitetop experiment, 618
 Beals, E. W.: Vegetational change along altitudinal gradients, 981
 Bed forms in base-surge deposits: lunar implications: R. V. Fisher and A. C. Waters, 1349
 Bees are easily distracted (letter), R. Dawkins, 751
 Behavior of enzyme systems, J. M. REINER, book review by W. W. Cleland, 486
 BEHRMAN, D., The new world of the oceans, book review of, 1343
 Belden, K. H. See McClure, H. M., et al.
 Bell, W. J. See Pan, M. L., et al.
 Belli, J. A., and M. Shelton: Potentially lethal radiation damage: repair by mammalian cells in culture, 490
 Bennett, M. V. L. See Payton, B. W., et al.
 Bensch, K. G., et al.: Induction in vitro of microtubular crystals by vinca alkaloids, 495
 Benton, A. L.: Cerebrovascular disease: behavioral changes (meeting report), 314
 BEREZKIN, V. G., Analytical reaction gas chromatography, book review of, 1003
 Berger, R. See Bartlett, A. S., et al.
 Bergmann, E. D. See Weisburger, J. H., et al.
 Berl, W. G.: Perspectives on the promise of the present (AAAS), 1150
 BERNAL, I., The Olmec world, book review of, 999
 Berneis, K. H., et al.: Micelle formation between 5-hydroxytryptamine and adenosine triphosphate in platelet storage organelles, 913
 Better written journal papers—who wants them?, J. H. Wilson, Jr., 986
 Beutler, E.: Glutathione reductase: stimulation in normal subjects by riboflavin supplementation, 613
 Bieger, R. C. See Gleich, G. J., et al.
 Biemann, K. See Murphy, R. C., et al.
 BINFORD, L. R. See BINFORD, S. R.
 BINFORD, S. R., and L. R. BINFORD (Eds.), New perspectives in archeology, book review of, 382
 Biochemistry at 100°C: explosive secretory discharge of bombardier beetles (*Brachinus*), D. J. Aneshansley et al., 61
 Biological and cultural evidence from prehistoric human coprolites, R. F. Heizer and L. K. Napton, 563
 Biological unsoundness of modern medical practice (letter), R. F. Mueller, 1313
 Biology and man, G. G. SIMPSON, book review by J. Bronowski, 680
 Biology of *Euglena*, The, D. E. BUETOW (Ed.), book review by R. P. Hall, 580
 Biology of gestation, vol. 2, N. S. ASSALL (Ed.), book review by J. J. Faber and B. B. Ross, 783
 Biosynthesis of oligosaccharides and polysaccharides in plants, W. Z. Hassid, 137
 Biology of *Peromyscus* (Rodentia), J. A. KING (Ed.), book review by J. L. Kavanau, 782
 Bird, J. F., and G. H. Mowbray: Visual transient phenomenon: its polarity and a paradox, 588
 Bird migration: influence of physiological state upon celestial orientation, S. T. Emlen, 716
 Birth control—population policy (letters), M. M. Weissmann et al., 121
 Bistis, G.: book review of Fundamentals of mycology, 887
 Bito, L. Z.: Blood-brain barrier: evidence for active cation transport between blood and the extracellular fluid of brain, 81
 Blade, E., et al.: Water generated earth vibrations, 1148
 Blade, M. See Blade, E., et al.
 Blake, J.: "Family planning and public policy: who is misleading whom?" (letter), 1203. See also Weissman, M. M., et al.
Blastocladiella and *Aqualinderella*: fermentative water molds with high carbon dioxide optima, A. A. Held et al., 706
 Blessing, L. C. See Parsegian, V. L.
 Blinzingher, K. See Baringer, J. R., et al.
 Block, S. See Piermarini, G. J., et al.
 Blood-brain barrier: evidence for active cation transport blood and the extracellular fluid of brain, L. Z. Bito, 81
 Blood, F. R., et al.: Monosodium glutamate, 1028
 BLOOM, A. L., Gas lasers, book review of, 384
 Bloom, F. E. See Siggins, G. R., et al.
 Blum, M. S. See Amoore, J. E., et al.
 Blumberg, W. E. See Shulman, R. G., et al.
 Boffey, P. M. (News and Comment): draft caused drop in graduate science enrollments, 162; environment and American Chemical Society report, 1104; W. D. McElroy: an old incident embarrasses new NSF director, 379; National Academy changes Army gas dump plan, 45; Ovshinsky: promoter or persecuted genius?, 673; social sciences can help avoid policy goofs, 574; trouble at Nevada research center, 880
 Bogin, E., et al.: Extraparticulate chain interaction between different electron transport particles, 1364
 BOGOMOLOV, A. I. See ANDREEV, P. F., et al.
 Bohart, G. E. See Batra, S. W. T.
 Bok, B. J.: book review of Observation in modern astronomy, 681
 Bollen, A., et al.: Ribosomal protein conferring sensitivity to the antibiotic spectinomycin in *Escherichia coli*, 85
 Bond, H. E., et al.: Microsome-associated DNA, 705
 Bondareff, W. See Montgomery, R. B., et al.
 Borsos, T. See Daniels, C. A., et al. See also Kronman, B. S., et al.
 Both sides of "the gap" (letter), B. C. Cochran and J. M. Strawn, 335
 Boucher, R. See Barbeau, A., et al.
 Boulding, K. E.: book review of The careless atom and Technology, engineering, and economics, 483
 Bourgoignie, J., et al.: Cyclic guanosine monophosphate: effects on short-circuit

- current and water permeability, 1362
 BOVET, D. *See* Henry, K. R., *et al.*
 BOVET-NITTI, F. *See* Henry, K. R., *et al.*
 BOVEY, F. A.: Nuclear magnetic resonance spectroscopy, *book review* of, 579
 Bowley, C. J., *et al.*: Sunglint patterns: unusual dark patches, 1360
 Bowman, R. E. *See* Henry, K. R., *et al.*
 Brass, W.: *book review* of Introduction to the mathematics of population, 381
 BRAUN, W. *See* PLESCIA, O. J.
 BREW, J. O. (Ed.), One hundred years of anthropology, *book review* of, 886
 BRICAS, E. (Ed.), Peptides 1968, *book review* of, 1003
 Britten, R. J., and E. H. Davidson: Gene regulation for higher cells: a theory, 349
 Brodie, A. F. *See* Bogin, E., *et al.*
 Bronowski, J.: *book review* of Biology and man, 680
 Brown, W. E., III. *See* Meeks, M. L., *et al.*
 Brumbaugh, R. S.: *book review* of Simple working models of historic machines, 1342
 Buck, C.: Esoteric measurements (*letter*), 851
 Buck, J. B. *See* Smith, D. S.
 Buckholtz, N. S. *See* Henry, K. R., *et al.*
 Budzko, D. B., and H. Müller-Eberhard: Anaphylatoxin release from the third component of human complement by hydroxylamine, 506
 Buechner, H. K.: *book review* of Animal twilight and The zoology of tropical Africa, 683
 BUETOW, D. E. (Ed.), The biology of *Euglena*, *book review* of, 580
 Burchfield, J. D.: *book review* of Tellamed, 52
 Burck, P. J. *See* Ho, P. P. K., *et al.*
 Burke, R. E. *See* Vyklický, L., *et al.*
 Burkholder, W. E. *See* Rodin, J. O., *et al.*
 BURNETT, J. H.: Fundamentals of mycology, *book review* of, 887
 Burruss, R. C. *See* Cawley, J. L., *et al.*
 BURSTALL, A. F.: Simple working models of historic machines, *book review* of, 1342
 Buseck, P. R.: Phosphide from meteorites: barringerite, a new iron-nickel mineral, 169
 Butters, N., and D. Pandya: Retention of delayed-alternation: effect of selective lesions of sulcus principalis, 1271
 Butzer, K. W.: *book review* of The Mediterranean valleys, 52
 Byers, B.: HEW pesticides commission (*letter*), 6
- C**
- Caldwell, M. *See* Harris, R. A., *et al.*
 Camerman, A., and L. H. Jensen: 2-p-Toluidinyl-6-naphthalene sulfonate: relation of structure to fluorescence properties in different media, 493
 Campbell, M. J. *See* O'Leary, B. T., *et al.*
 Campbell, P. M.: Spin-orbit resonance of the inner planets, 930
 Campus signs and times (*letters*), K. R. Coburn and P. Plato, 236
 Carbon-14 in Patagonian tree rings, J. C. Lerman, *et al.*, 1123
 Carbon-14 labeled vasoactive peptides available, J. J. Pisano, 203
 Carbon: observations on the new allotropic form, A. G. Whittaker and P. L. Kintner, 589
 Carbonado: natural polycrystalline diamond, L. F. Trueb and E. C. de Wys, 799
 Carbonic anhydrase in seawater: carbonato complexes, K. V. Krishnamurthy, 929
 Carcinogenesis: physicochemical mechanisms (*meeting report*), J. H. Weisburger *et al.*, 417
 Carcinogenicity of tobacco-smoke constituents, E. P. Radford *et al.*, 312
 Carcinoma of the cervix: deficiency of nexus intercellular junctions, N. S. McNutt and R. S. Weinstein, 597
 Careless atom, The, s. NOVICK, *book review* by K. E. Boulding, 483
 Carnay, L. D., and W. H. Barry: Turbidity, birefringence, and fluorescence changes in skeletal muscle coincident with the action potential, 608
 CAROZZI, A. V. (Ed.), Tellamed, *book review* of, 52
 Carter, J. C. *See* Meeks, M. L., *et al.*
 Carter, L. J. (*News and Comment*): earthquakes and nuclear tests, 773; environmental quality, 44; NASA seeks a Mars flight plan, 987; warm-water irrigation, 478; water-pollution control, 572
 Castellucci, V. *See* Manfredi, M.
 Catchpole, H. R. *See* Rodnan, G. P., *et al.*
 Caucasian genes in American Negroes, T. E. Reed, 762
 Caul, W. F. *See* Miller, R. E., *et al.*
 Cave environment, The, T. L. Poulson and W. B. White, 971
 Cawley, J. L., *et al.*: Chemical weathering in central Iceland: an analog of pre-Silurian weathering, 391
Cebus monkeys: effect on branching of *Gustavia* trees, J. R. Oppenheimer and G. E. Lang, 187
 Cell wall protein in plants: autoradiographic evidence, D. Sadava and M. J. Chrispeels, 299
 Cellular differentiation in the immune system (*meeting report*), J. S. Garvey, 205
 Cellular immunity (*meeting report*), N. A. Mitchison, 931
 Cellular response to ecdysterone in vitro, K. J. Judy, 1374
 Cerebrovascular disease: behavioral changes (*meeting report*), A. L. Benton, 314
 C-fiber responses in the ventrolateral column of the cat spinal cord, M. Manfredi and V. Castellucci, 1020
 Chard, C. S.: *book review* of Eskimo prehistory, 1247
 CHAYES, A., and J. B. WIESNER (Eds.), ABM, *book review* of, 576
 Chayes-Wiesner report challenged (*letter*), D. C. Williams, 335
 Chemical composition of the lunar surface in Mare Tranquillitatis, A. L. Turkevich *et al.*, 277
 Chemical weathering in central Iceland: an analog of pre-Silurian weathering, J. L. Cawley *et al.*, 391
 Chesher, R. H.: Destruction of Pacific corals by the sea star *Acanthaster planci*, 280
 Chipman, D. M., and N. Sharon: Mechanism of lysozyme action, 454
 Chloramphenicol: effects on mouse myeloma cells in tissue culture, B. K. Hartman *et al.*, 297
 Chrispeels, M. J. *See* Sadava, D.
 Churchill, W. H., Jr. *See* Kronman, B. S., *et al.*
 Churkin, M., Jr., Paleozoic tectonic history of the Arctic basin north of Alaska, 549
 Chute, R. M.: *book review* of Diseases in free-living wild animals, 1002
 Circadian rhythm of cell division in *Euglena*: effects of a random illumination regimen, L. N. Edmunds, Jr., and R. R. Funch, 500
 Civan, M. M. *See* DiBona, D. R.
 Clark, B. R. *See* Rubin, R. T., *et al.*
 Clathrate hydrates of air in Antarctic ice, S. L. Miller, 489
 Cleland, C. C., and W. L. Dickerson: Talk time (*letter*), 1065
 Cleland, W. W.: *book review* of Behavior of enzyme systems, 486
 Climatic physiology of the pig, The, L. E. MOUNT, *book review* by T. R. A. Davis, 580
 CLOUDSLEY-THOMPSON, J. L.: Animal twilight, *book review* of, 683; The zoology of tropical Africa, *book review* of, 683
 CLOWES, F. A. L., and B. E. JUNIPER, Plant cells, vol. 8, *book review* of, 683
 Coburn, J. (*News and Comment*): American Council of Education study on campus unrest, 160
 Coburn, K. R., and P. Plato: Campus signs and times (*letters*), 236
 Cochran, B. C., and J. M. Strawn: Both sides of "the gap" (*letters*), 335
 Cockbain, A. E. *See* Playford, P. E.
 Coevolution, D. H. Janzen and C. H. Muller, 415
 Cohen, G. *See* Meltzer, H.
 Collins, W. E. *See* Contacos, P. G.
 Comeau, A. *See* Roelofs, W. L.
 Commoner, B., *et al.*: Electron spin resonance signals in injured nerve, 703
 Conrath, B. *See* Hanel, R.
 Constitution and biosynthesis of lignin, vol. 2, K. FREUDENBERG and A. C. NEISH, *book review* by A. G. Norman, 784
 Contacos, P. G., and W. E. Collins: *Plasmodium malariae*: transmission from monkey to man by mosquito bite, 918
 Control of technology, The (*editorial*), O. M. Solandt, 445
 Cooling history of orthopyroxenes, S. S. Hafner and D. Virgo, 285
 Cooper, J. A., II. *See* Bond, H. E., *et al.*
 Cooper, N. R.: Immune adherence by the fourth component of complement, 396
 COOPER, R. W. *See* ROSENBLUM, L. A.
 Cortez, H. V.: *book review* of The organic compounds of lead, 56
 Coughlin, R. F. *See* Rawson, R. O., *et al.*
 Courington, D. P. *See* Bond, H. E., *et al.*
 Covers: adult female monkey (*Cebus capucinus*) (11 July); antenna-pattern measurement apparatus (29 Aug.); aragonite crystals (15 Aug.); beetle droplets (4 July); cave fish (5 Sept.); crystals of L-asparaginase from *Escherichia coli* B (1 Aug.); devastation by 1959 eruption of Kilauea Volcano (25 July); double muon catalysis (12 Sept.); epitaxial crystal of chalcopyrite (18 July); forest fire (8 Aug.); glazed lunar surface (26 Sept.); lunar sample (19 Sept.); *Peromyscus boylei* (22 Aug.)
 COVINGTON, A. K., and P. JONES (Eds.), Hydrogen-bonded solvent systems, *book review* of, 785
 Cowan, T. M.: Pleas of temporary insanity (*letter*), 543
 Cox, R. P.: Hormonal induction of increased zinc uptake in mammalian cell cultures: requirement for RNA and protein synthesis, 196
 Crovitz, H. F.: When found, make a note of . . . (*letter*), 1066
 Crumbling foundations of prosperity (*editorial*), P. H. Abelson, 1069
 Crustal plates in the central Atlantic: evidence for at least two poles of rotation, P. J. Fox *et al.*, 487
 Crystal structure of benzene II at 25 kilobars, G. J. Piermarini *et al.*, 1250
 Crystalline L-asparaginase from *Escherichia coli* B, P. P. K. Ho *et al.*, 510
 Current algebras and applications to particle physics, S. L. ADLER and R. F. DASHEN, *book review* by S. L. Glashow, 384
 Current algebras and their application, B. RENNER, *book review* by S. L. Glashow, 384
 Currents in La Jolla and Scripps submarine canyons, F. P. Shepard and N. F. Marshall, 177
 CUTRIGHT, P. R., Lewis and Clark, *book review* of, 1246
 Cyclamates and human cells, R. S. Goodhart and D. Stone, 517
 Cyclic adenosine monophosphate: possible mediator for norepinephrine effects on cerebellar Purkinje cells, G. R. Siggins *et al.*, 1018

INDEX TO VOLUME 165

Cyclic guanosine monophosphate: effects on short-circuit current and water permeability, J. Bourgoignie *et al.*, 1362

Cyclophosphamide: effect on experimental allergic encephalomyelitis in Lewis rats, P. Y. Paterson and D. G. Drobish, 191

Cytochrome P-420: tubular aggregates from hepatic microsomes, D. W. Shoeman *et al.*, 1371

Cytogenetic studies in rats of cyclohexylamine, a metabolite of cyclamate, M. S. Legator *et al.*, 1139

D

Damadian, R.: Ion exchange in *Escherichia coli*: potassium-binding proteins, 79

Danforth, C. G.: Practical courses for nonscience students (*letter*), 234

Daniell, E. *See* Mangelsdorf, P. C., *et al.*

Daniels, C. A., *et al.*: Neutralization of sensitized virus by the fourth component of complement, 508

Dao, T. L.: Mammary cancer induction by 7,12-dimethylbenz(a)anthracene: relation to age, 810

Da Prada, M. *See* Berneis, K. H., *et al.*

DASHEN, R. F. *See* ADLER, S. L.

Datta, P.: Regulation of branched biosynthetic pathways in bacteria, 556

Davidson, E. H. *See* Britten, R. J.

Davies, J. *See* Bollen, A., *et al.*

Davies, M. E. *See* Leighton, R. B., *et al.*

Davis, T. R. A.: book review of The climatic physiology of the pig, 580

Davis, W. H.: Real estate invasion (*letter*), 335

DAWES, G. S., Foetal and neonatal physiology, *book review* of, 783

Dawkins, R.: Bees are easily distracted (*letter*), 751

Dawson, M. R. *See* Guilday, J. E., *et al.*

DeCarli, P. S. *See* Pollack, S. S.

De Clercq, E., *et al.*: Interferon induction increased through chemical modification of a synthetic polyribonucleotide, 1137

DEEMING, T. J. *See* EVANS, D. S., *et al.*

Defoliants: orange, white, and blue (*letters*), G. H. Orians *et al.*, 442

Degens, E. T. *See* Hathaway, J. C.

Deggins, B. A. *See* McKinnell, R. G., *et al.*

Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues, M. C. French and D. J. Jeffries, 914

DeGruchy, G. C. *See* Doery, J. C. G., *et al.*

Deiman, J. M., and J. S. Weis: Obstructions (*letter*), 336

Deinhardt, F. *See* Holmes, A. W., *et al.*

Delevoryas, T.: Glossopterid leaves from the Middle Jurassic of Oaxaca, Mexico, 895

Delivoria-Papadopoulos, M., *et al.*: Oxygen-hemoglobin dissociation curves: effect of inherited enzyme defects of the red cell, 601

DeLuca, H. F. *See* Olson, E. B.

DeLucia, C. A. *See* Siqueland, E. R.

de Martire, J. *See* Perez, V., *et al.*

Design of design, The, G. L. GLEGG, *book review* by J. Rabinow, 484

Destruction of Pacific corals by the sea star *Acanthaster planci*, R. H. Chesher, 280

Deutsch, S.: Tektite: a study of human behavior in a hostile environment (*AAAS*), 1276

de Waard, H. *See* Lerman, J. C., *et al.*

de Wys, E. C. *See* Trueb, L. F.

DiBona, D. R., and M. M. Civan: Toad urinary bladder: intercellular spaces, 503

Dickerson, W. L. *See* Cleland, C. C.

Dicks, D., *et al.*: Uncus and amygdala lesions: effects on social behavior in the free-ranging rhesus monkey, 69

Dieldrin and DDT: effects on sparrow hawk eggshells and reproduction, R. D. Porter and S. N. Wiemeyer, 199

Differentiation of populations, P. R. Ehrlich and P. H. Raven, 1228

Diffusible cytotoxic substances and cell-mediated resistance to syngeneic tumors: in vitro demonstration, K. Kikuchi *et al.*, 77

Diorites from the Mid-Atlantic Ridge at 45°N, F. Aumento, 1112

di Paola, G. *See* Perez, V., *et al.*

DiPaolo, J. A., *et al.*: Sarcoma-producing cell lines derived from clones transformed in vitro by benzo[a]pyrene, 917

Diphosphonates inhibit formation of calcium phosphate crystals in vitro and pathological calcification in vivo, M. D. Francis *et al.*, 1264

Diphosphonates inhibit hydroxyapatite dissolution in vitro and bone resorption in tissue culture and in vivo, H. Fleisch *et al.*, 1262

Diseases in free-living wild animals, A. McDARMD (Ed.), *book review* by R. M. Chute, 1002

Djuricic, M. V. *See* Murphy, R. C., *et al.*

Do we need a department of science and technology?, H. Roback, 36

DOBRYANSKII, A. F. *See* ANDREEV, P. F., *et al.*

Doery, J. C. G., *et al.*: Aspirin: its effect on platelet glycolysis and release of adenosine diphosphate, 65

Donohue, J.: Fourier analysis and the structure of DNA, 1091

Donovan, P. J. *See* DiPaolo, J. A., *et al.*

Dowben, R. M.: Expanding horizons in medical education (*AAAS*), 1382

Drobish, D. G. *See* Paterson, P. Y.

Droz, B., and S. H. Barondes: Nerve endings: rapid appearance of labeled protein shown by electron microscope radioautography, 1131

Drury, W. H.: *book review* of The problems of birds as pests, 273

Duke, M. B.: Surveyor alpha-scattering data: consistency with lunar origin of eucrites and howardites, 515

Durrell, J., *et al.*: Acetylcholine action: biochemical aspects, 862

Dwornik, E. J. *See* Faust, G. J., *et al.*

E

Eagle, H. *See* Plotkin, S. A., *et al.*

Early temperature history of the moon, H. C. Urey, 1275

EBSWORTH, E. A. V., *et al.* (Eds.): New pathways in inorganic chemistry, *book review* of, 682

Eckstein, F. *See* De Clercq, E., *et al.*

Editorials: Activism and the rejection of history, 129; The control of technology, 445; Crumbling foundations of prosperity, 1069; For full technological assessment, 755; Foundation or public charity, 1209; German technological resurgence, 339; Handcuffing the foundations, 9; Microcosms in a world apart, 853; Political action in behalf of science, 1315; Potomac Valley Test Facility, 969; The President need not wait, 239; Science policy studies, 547; The university as a five-legged animal, 649

Edmunds, L. N., Jr., and R. R. Funch: Circadian rhythm of cell division in *Euglena*: effects of a random illumination regimen, 500

Education first—then contraception (*letter*), J. G. Walters, 1313

Ehrlich, P. R., and P. H. Raven: Differentiation of populations, 1228

Eichenwald, H. F. *See* Baker, H., *et al.*

Eisele, C.: *book review* of A source book in mathematics, 1200–1800, 54

Eiseley, L. (*editorial*): Activism and the rejection of history, 129

Eisner, T. *See* Anéshansley, D. J., *et al.*

Eknoyan, G. *See* Martinez-Maldonado, M., *et al.*

Elastic coefficients of animal bone, S. B. Lang, 287

Electron microscopic radioautography: identification of origin of synaptic terminals in normal nervous tissue, A. Hendrickson, 194

Electron spin resonance signals in injured nerve, B. Commoner *et al.*, 703

Eliasson, M. *See* Kornetsky, C.

Emerson, R. *See* Held, A. A., *et al.*

Emiliani, C., *et al.*: Underground nuclear explosions and the control of earthquakes, 1255

Emlen, S. T.: Bird migration: influence of physiological state upon celestial orientation, 716

Encyclopedia of geomorphology, The, vol. 3, R. W. FAIRBRIDGE (Ed.), *book review* by C. A. M. King, 53

Energized configurations of heart mitochondria *in situ*, R. A. Harris *et al.*, 700

Engelmann, F.: Female specific protein: biosynthesis controlled by corpus allatum in *Leucophaea maderae*, 407

Enright, J. T., *et al.*: Statistics of unseen animals, 824

Enstatite: disorder produced by a megabar shock event, S. S. Pollack and P. S. DeCarli, 591

Entomological parasitology, M. LECLERCQ, *book review* by W. R. Horsfall, 273

Enzymatic oxidation of toxicants, The, E. HODGSON (Ed.), *book review* by M. A. Q. Khan, 166

Enzyme induction in higher plants, P. Filner *et al.*, 358

Enzyme synthesis in synchronous cultures, J. M. Mitchison, 657

Epinephrine metabolism in mammalian brain after intravenous and intraventricular administration, A. M. Steinman *et al.*, 616

Erratum: For M. A. Taylor (9 May, p. 723), 380

Erythropoiesis in the dog: the periodic nature of the steady state, A. Morley and F. Stohlman, Jr., 1025

ESAU, K.: Viruses in plant hosts, *book review* of, 53

Eskimo prehistory, H.-G. BANDI, *book review* by C. S. Chard, 1247

Esoteric measurements (*letter*), C. Buck, 851

Estradiol: specific binding by pituitary nuclear fraction in vitro, W. W. Leavitt *et al.*, 496

Etching fission tracks in zircons, C. W. Naeser, 388

Ethology of mammals, R. F. EWER, *book review* by P. H. Klopfer, 887

EVANS, B. H. *See* EVANS, D. S., *et al.*

EVANS, D. S., *et al.*: Observation in modern astronomy, *book review* of, 681

EVANS, D. S., *et al.* (Eds.): Herschel at the Cape, *book review* of, 884

Everhart, T. E. *See* Lewis, E. R., *et al.*

Evolution and hominisation, G. KURTH (Ed.), *book review* by F. C. Howell, 275

Evolution or not (*letters*), J. E. Guilday *et al.*, 443

EWER, R. F.: Ethology of mammals, *book review* of, 887

EWERS, J. C. (Ed.): The Indians of Texas in 1830, *book review* of, 1110

Ewing, M. *See* Latham, G., *et al.*

Excitatory and inhibitory motoneurons in the central nervous system of the leech, A. E. Stuart, 817

Expanding horizons in medical education (*AAAS*), R. M. Dowben, 1382

Experimental herpes encephalitis: crystalline arrays in endoplasmic reticulum, J. R. Baringer *et al.*, 1381

Extraparticulate chain interaction between different electron transport particles, E. Bogin *et al.*, 1364

INDEX TO VOLUME 165

F

- Faber, J. J., and B. B. Ross: *book review* of Biology of gestation, vol. 2, and Foetal and neonatal physiology, 783
 Fahey, J. J. *See* Faust, G. T., *et al.*
 FAIRBRIDGE, R. W. (Ed.), The encyclopedia of geomorphology, vol. 3, *book review* of, 53
 Fallat, R. *See* Kueppers, F., *et al.*
 "Family planning and public policy: who is misleading whom?", O. Harkavy *et al.*, 367
 "Family planning and public policy: who is misleading whom?" (*letter*), J. Blake, 1203
 FARB, P., Man's rise to civilization as shown by the Indians of North America from primeval times to the coming of the industrial state, *book review* of, 272
 Fastie, W. G. *See* Barth, C. A., *et al.*
 Faust, G. T., *et al.*: Pecoraite, $\text{Ni}_3\text{SiO}_{10}(\text{OH})_8$, nickel analog of clinochrysotile, formed in the Wolf Creek meteorite, 59
 Faust, W. L.: *book review* of Gas lasers, 384
 Feder, W. A., and F. Sullivan: Ozone: depression of frond multiplication and floral production in duckweed, 1373
 Feeney, R. E. *See* McTaggart-Cowan, P. D.
 Female specific protein: biosynthesis controlled by corpus allatum in *Leucophaea maderae*, F. Engelmann, 407
 FERKISS, V. C., Technological man, *book review* of, 165
 Field potentials generated by dendritic spikes and synaptic potentials, R. S. Zucker, 409
 Fields, C.: Visual stimuli and evoked responses in the rat, 1377
 Filner, P., *et al.*: Enzyme induction in higher plants, 358
 Finegold, M. J. *See* Swift, M. R.
 Finger, G. A. *See* Huntoon, R. D., *et al.*
 Fischer, J. L.: Starfish infestation: hypothesis (*letter*), 645
 Fischinger, P. J., and T. E. O'Connor: Radiation leukemia virus: quantitative tissue culture assay, 306; Viral infection across species barriers: reversible alteration of murine sarcoma virus for growth in cat cells, 714
 FISHER, J., *et al.*, Wildlife in danger, *book review* of, 999
 Fisher, R. V., and A. C. Waters: Bed forms in base-surge deposits: lunar implications, 1349
 Fishman, J. A.: *book review* of Intelligence and cultural environment and Teaching black children to read, 1108
 Fisk, Z., and B. T. Matthias: Rare-earth elements and high pressures, 279
 Fiske, R. S., and W. T. Kinoshita: Inflation of Kilauea volcano prior to its 1967-1968 eruption, 341
 Fit and the unfit (*letter*), S. Schiff, 1206
 Fleisch, H. *See* Francis, M. D., *et al.*
 Fleisch, H., *et al.*: Diphosphonates inhibit hydroxyapatite dissolution in vitro and bone resorption in tissue culture and in vivo, 1262
 Flexner, J. B., and L. B. Flexner: Puro-mycin: effect on memory of mice when injected with various cations, 1143
 Flexner, L. B. *See* Flexner, J. B.
 Fluid drop-like transition of erythrocytes under shear, H. Schmid-Schönbein and R. Wells, 288
 Fluoride in seawater: measurement with lanthanum fluoride electrode, T. B. Warner, 178
 Foetal and neonatal physiology, G. S. DAWES, *book review* by J. J. Faber and B. B. Ross, 783
 Foley, J. E., and K. Miyanshi: Interocular effects in prism adaptation, 311
 For full technological assessment (*editorial*), B. Glass, 755

G

- Forebrain temperature activates behavioral thermoregulatory response in Arctic sculpins, H. T. Hammel *et al.*, 83
 Fossil maize from Panama, A. S. Bartlett *et al.*, 389
 Foundation or public charity (*editorial*), D. Wolfle, 1209
 Fourier analysis and the structure of DNA, J. Donohue, 1091
 Fox, P. J., *et al.*: Crustal plates in the central Atlantic: evidence for at least two poles of rotation, 487
 Fox, S. S. *See* Rosenfeld, J. P., *et al.*
 Francis, M. D. *See* Fleisch, H., *et al.*
 Francis, M. D., *et al.*: Diphosphonates inhibit formation of calcium phosphate crystals in vitro and pathological calcification in vivo, 1264
 Frank, B. H. *See* Ho, P. P. K., *et al.*
 Frank, L. C., Jr. *See* Weissman, M. M., *et al.*
 Frank, O. *See* Baker, H., *et al.*
 Franzgrote, E. J. *See* Turkevich, A. L., *et al.*
 Frazer, A. H.: *book review* of Advances in macromolecular chemistry, 167
 FRAZER, A. H., High temperature resistant polymers, *book review* of, 1111
 Freeman, B. A. *See* Lewis, A. C.
 French, M. C., and D. J. Jefferies: Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues, 914
 Fresh water for agriculture (*letters*), D. A. Korenstein *et al.*, 850
 FREUDENBERG, K., and A. C. NEISH, Constitution and biosynthesis of lignin, vol. 2, *book review* of, 784
 FREY, F. W. *See* SHAPIRO, H.
 Frey-Wyssling, A.: *book review* of Plant cells, 683
 Fried, M. H.: *book review* of Men in groups, 883
 Friedel, R. O. *See* Durrell, J., *et al.*
 Friend, J. P. *See* Leavitt, W. W., *et al.*
 Fruton, J. S.: *book review* of Peptides 1968, 1003
 Fry, P. C. *See* Baker, H., *et al.*
 Fuhrman, F. A., *et al.*: Toxin from skin of frogs of the genus *Atelopus*: differentiation from dendrobatiid toxins, 1376
 Fuhrman, G. J. *See* Fuhrman, F. A., *et al.*
 Fuller, M. S. *See* Held, A. A., *et al.*
 Funch, R. R. *See* Edmunds, L. N., Jr.
 Fundamentals of mycology, J. H. BURNETT, *book review* by G. Bistis, 887
 Fungal morphogenesis: cell wall construction in *Mucor rouxii*, S. Bartnicki-Garcia and E. Lippman, 302
- Gajdusek, D. C. *See* Gibbs, C. J., Jr.
 Gale, W. A., and A. C. E. Sinclair: Polar temperature of Venus, 1356
 Gallo, R. C., *et al.*: Isopentenyladenosine stimulates and inhibits mitosis of human lymphocytes treated with phytohemagglutinin, 400
 Gardner, B. T. *See* Gardner, R. A.
 Gardner, R. A., and B. T. Gardner: Teaching sign language to a chimpanzee, 664
 Garg, B. D. *See* Turino, G. M., *et al.*
 Garland, J. T. *See* Durrell, J., *et al.*
 Garrison, J. *See* Kane, J., *et al.*
 Garvey, J. S.: Cellular differentiation in the immune system (*meeting report*), 205
 Gas lasers, A. L. BLOOM, *book review* by W. L. Faust, 384
 GEDDES, L. A., and L. E. BAKER, Principles of applied biomedical instrumentation, *book review* of, 887
 Gene regulation for higher cells: a theory, R. J. Britten and E. H. Davidson, 349
 Genest, J. *See* Barbeau, A., *et al.*
 Genetics of memory, K. R. Henry *et al.*, 1148
- Geological history of southern Africa, S. H. HAUGHTON, *book review* by B. J. Skinner, 1247
 German technological resurgence (*editorial*), P. H. Abelson, 339
 Gibbon, J., and R. Rutschmann: Temporal order judgment and reaction time, 413
 Gibbs, C. J., Jr., and D. C. Gajdusek: Infection as the etiology of spongiform encephalopathy (Creutzfeldt-Jakob disease), 1023
 Gifts and grants: who benefits? (*letter*), H. P. Wile, 234
 Gillo-Joffroy, L. *See* Barbeau, A., *et al.*
 Glacial age marsh, Lafayette Park, Washington, D.C., A. S. Knox, 795
 GLASBY, J. S., Variable stars, *book review* of, 274
 Glashow, S. L.: *book review* of Current algebras and applications to particle physics and Current algebras and their application, 384
 Glass, B. (*editorial*): For full technological assessment, 755
 Gleason, F. H. *See* Held, A. A., *et al.*
 GLEGG, G. L., The design of design, *book review* of, 484
 Gleich, G. J., *et al.*: Antigen combining activity associated with immunoglobulin D, 606
 Glossopterid leaves from the Middle Jurassic of Oaxaca, Mexico, T. Delevoryas, 895
 Glutathione reductase: stimulation in normal subjects by riboflavin supplementation, E. Beutler, 613
 Gold, T.: Apollo 11 observations of a remarkable glazing phenomenon on the lunar surface, 1345
 Goldberg, E. D. *See* Stommel, H.
 GOLDFARB, S. *See* EVANS, D. S., *et al.*
 Goldstein, M. L.: Undergraduates in research (*letter*), 967
 Goodhart, C. B.: XYY chromosome: legal hazards (*letter*), 967
 Goodhart, R. S., and D. Stone: Cyclamates and human cells, 517
 Goody, R. M. *See* Hunten, D. M.
 Gorbman, A. *See* Oshima, K., *et al.*
 Gorman, A. L. F., and J. S. McReynolds: Hyperpolarizing and depolarizing receptor potentials in the scallop eye, 309
 Gorman, J. E. *See* Rodin, J. O., *et al.*
 Gorodisch, S. *See* Perez, V., *et al.*
 Gotlin, R. W. *See* Sassin, J. F., *et al.*
 Gottlieb, A. A.: Macrophage ribonucleoprotein: nature of the antigenic fragment, 592
 Gottlieb, A. J. *See* Delivoria-Papadopoulos, M., *et al.*
 Grange, R. T., Jr.: *book review* of Prehistory of North America, 1248
 Granitic rock: properties *in situ*, A. S. Orange *et al.*, 202
 Greaves, J. R. *See* Bowley, C. J., *et al.*
 Green, D. E. *See* Harris, R. A., *et al.*
 Green, J. P. *See* Schmidt, D. E., *et al.*
 Green, S. *See* Legator, M. S., *et al.*
 GREENAWAY, D. L., and G. HARBEKE, Optical properties and band structure of semiconductors, *book review* of, 682
 Greenberg, D. S. (*News and Comment*): Concorde transport project, 374; British Association meets, 1239; drug traffic in Holland, 476; European notes, 267; Open University in Great Britain, 881; profit rather than prestige is new French research policy, 1334
 Greene, J. C.: *book review* of Lewis and Clark, 1246
 Greengard, P. *See* Miyamoto, E., *et al.*
 Griffith, J. F. *See* Baringer, J. R., *et al.*
 Growth pattern of *Leishmania* in phlebotomine sandflies, M. Hertig *et al.*, 1379
 Guggenheim, S. *See* Bourgoignie, J., *et al.*
 Guilday, J. E., *et al.*: Evolution or not (*letters*), 443
 Gunn, S. W. A.: Oil spills—an old story (*letter*), 967

H

- Haffer, J.: Speciation in Amazonian forest birds, 131
- Hafner, S. S., and D. Virgo: Cooling history of orthopyroxenes, 285
- Hair color, molt, and testis size in male, short-tailed weasels treated with melatonin, C. C. Rust and R. K. Meyer, 921
- Hall, R. P.: book review of *The biology of Euglena*, 580
- Hall, V. E. See Amacher, P., et al.
- Hall, W. T. See Morton, D. L., et al.
- Halsted, J. A.: Malnutrition research (letter), 543
- Hammel, H. T., et al.: Forebrain temperature activates behavioral thermoregulatory response in Arctic sculpins, 83
- Hanan, J. J. See Korenstein, D. A., et al.
- Handcuffing the foundations (editorial), D. Wolfe, 9
- Haneda, Y., et al.: Luminescent systems in apogonid fishes from the Philippines, 188
- Hanel, R., and B. Conrath: Interferometer experiment on Nimbus 3: preliminary results, 1258
- Hannah, J. See Roberts, G. C. K., et al.
- Hanson, W. R. See Enright, J. T., et al.
- HARBEKE, G. See GREENAWAY, D. L.
- HARBORNE, J. B., and T. SWAIN (Eds.), *Perspectives in phytochemistry*, book review of, 1343
- Harkavy, O., et al.: Family planning and public policy: who is misleading whom?, 367
- Harlow, H. F.: book review of *The squirrel monkey*, 274
- Harris, R. A., et al.: Energized configurations of heart mitochondria *in situ*, 700
- Harrison, C. G. A. See Emiliani, C., et al.
- Hartman, B. K., et al.: Chloramphenicol: effects on mouse myeloma cells in tissue culture, 297
- Hassid, W. Z.: Biosynthesis of oligosaccharides and polysaccharides in plants, 137
- Hathaway, J. C., and E. T. Degens: Methane-derived marine carbonates of Pleistocene age, 690
- HAUGHTON, S. H., Geological history of southern Africa, book review of, 1247
- Hayflick, L. See Plotkin, S. A., et al.
- Heizer, R. F., and L. K. Napton: Biological and cultural evidence from prehistoric human coprolites, 563
- Held, A. A., et al.: *Blastocladiella* and *Aquilaria*: fermentative water molds with high carbon dioxide optima, 706
- Hendrickson, A.: Electron microscopic radioautography: identification of origin of synaptic terminals in normal nervous tissue, 194
- Henry, K. R., et al.: Genetics of memory, 1148
- Hepatitis in marmosets: induction of disease with coded specimens from a human volunteer study, A. W. Holmes et al., 816
- Herriman, A. G. See Leighton, R. B., et al.
- Herschel at the Cape, D. S. EVANS et al. (Eds.), book review by J. B. Irwin, 884
- Hertig, M., et al.: Growth pattern of *Leishmania* in phlebotomine sandflies, 1379
- Heterogeneity of presumably homogeneous protein preparations, W. A. Susor et al., 1260
- HEW pesticides commission (letter), B. Byers, 6
- Hierarchical structures, A. G. Wilson, 202
- Higashi, T. See Bogin, E., et al.
- High-resolution autoradiography of intracellular plutonium, A. Lindenbaum and M. H. Smoler, 192

- High temperature resistant polymers, A. H. FRAZER, book review by L. A. Wall, 1111
- Hild, W. J. See Walker, F. D.
- Hilleary, D. T. See Wark, D. O.
- Hirsch, G. H., and J. B. Hook: Maturation of renal organic acid transport: substrate stimulation by penicillin, 909
- Hirsh, J. See Doery, J. C. G., et al.
- Histochemical fluorescence as an index of spread of centrally applied neurochemicals, R. B. Montgomery et al., 1031
- Ho, M. W., and J. S. O'Brien: Hurler's syndrome: deficiency of a specific beta galactosidase isoenzyme, 611
- Ho, P. P. K., et al.: Crystalline L-asparaginase from *Escherichia coli* B, 510
- Hobson, A.: Sleep and biorhythmicity (meeting report), 932
- HODGSON, E. (Ed.), The enzymatic oxidation of toxicants, book review of, 166
- Hodgson, E. S.: book review of *Olfaction in fishes*, 1111
- Hoebel, E. A.: book review of *The Indian heritage of America and Man's rise to civilization as shown by the Indians of North America from primeval times to the coming of the industrial state*, 272
- Hoffer, B. J. See Siggins, G. R., et al.
- Hoffmann, D. See Radford, E. P., et al.
- Hogan, J. S. See Stewart, R. W.
- Holcomb, R. W. (Research Topics): Quarks, 1340
- Holland, H. D. See Cawley, J. L., et al.
- HOLLOWAY, J. H., Noble-gas chemistry, book review of, 381
- Holmes, A. W., et al.: Hepatitis in marmosets: induction of disease with coded specimens from a human volunteer study, 816
- HOLST, J. J., and W. SCHNEIDER, JR. (Eds.), Why ABM?, book review of, 576
- Hook, J. B. See Hirsch, G. H.
- Hopfinger, A. J. See Zull, J. E.
- Hord, C. W. See Barth, C. A., et al.
- Hormonal induction of increased zinc uptake in mammalian cell cultures: requirement for RNA and protein synthesis, R. P. Cox, 196
- Hormonal stimulation of lactose synthetase in mammary carcinoma, W. L. McGuire, 1013
- Horowitz, N. H. See Leighton, R. B., et al.
- Horsfall, W. R.: book review of Entomological parasitology, 273
- Howell, F. G.: book review of Evolution and hominisation, 275
- Human growth hormone release: relation to slow-wave sleep and sleep-waking cycles, J. F. Sassin et al., 513
- Human leukocyte antigenic specificity HL-A3: frequency of occurrence, B. Amos and E. Yunis, 300
- Human liposarcomas: tissue cultures containing foci of transformed cells with viral particles, D. L. Morton et al., 813
- Humanitarian research (letter), J. Muir, 647
- Hunt, J. M.: book review of Transformation of petroleum in nature, 1000
- Hunt, V. R. See Radford, E. P., et al.
- Hunten, D. M., and R. M. Goody: Venus: the next phase of planetary exploration, 1317
- Huntoon, R. D., et al.: The National Bureau of Standards prepares for the 1970's, 867
- Hurler's syndrome: deficiency of a specific beta galactosidase isoenzyme, M. W. Ho and J. S. O'Brien, 611
- Husain, S. M. See Katz, M. B.
- Hutner, S. H. See Baker, H., et al.
- Hydrocalcite ($\text{CaCO}_3 \cdot \text{H}_2\text{O}$) and nesquehonite ($\text{MgCO}_3 \cdot 3\text{H}_2\text{O}$) in carbonate scales, H. Marschner, 1119
- Hydrogen-bonded solvent systems, A. K.
- COVINGTON and P. JONES (Eds.), book review by R. A. M. O'Ferrall, 785
- Hydrothermal ore deposits in the western United States: a new concept of structural control of distribution, J. Kutina, 1113
- 25-Hydroxycholecalciferol: direct effect on calcium transport, E. B. Olson and H. F. DeLuca, 405
- Hydroxyl and water masers in protostars, M. M. Litvak, 855
- Hyman, H. H.: book review of Noble-gas chemistry, 381
- Hyperphagia and polydipsia in socially isolated rhesus monkeys, R. E. Miller et al., 1027
- Hyperphagia in rats with cuts between the ventromedial and lateral hypothalamus, D. J. Albert and L. H. Storlien, 599
- Hyperpolarizing and depolarizing receptor potentials in the scallop eye, A. L. F. Gorman and J. S. McReynolds, 309

I

- Ikic, D. See Plotkin, S. A., et al.
- Immune adherence by the fourth component of complement, N. R. Cooper, 396
- Indian heritage of America, The, A. M. JOSEPHY, JR., book review by E. A. Hoebel, 272
- Indians of Texas in 1830, The, J. C. EWERS (Ed.), book review by W. W. Newcomb, Jr., 1110
- Indole(ethyl)amine N-methyltransferase in the brain, M. Morgan and A. J. Mandell, 492
- Induction in vitro of microtubular crystals by vinca alkaloids, K. G. Bensch et al., 495
- Infection as the etiology of spongiform encephalopathy (Creutzfeld-Jakob disease), C. J. Gibbs, Jr., and D. C. Gadussek, 1023
- Inflation of Kilauea volcano prior to its 1967-1968 eruption, R. S. Fiske and W. T. Kinoshita, 341
- Ingalls, R. P. See Rogers, A. E. E.
- Ingram, V. M. See Maniatis, G. M., et al.
- Insect vision, G. A. MAZOKHIN-PORSHNYAKOV, book review by M. L. Wolbarsht, 1249
- Instructions for contributors, 7
- Intellectual loneliness (letters), M. B. Katz and S. M. Husain, 752
- Intelligence and cultural environment, P. E. VERNON, book review by J. A. Fishman, 1108
- Interferometer experiment on Nimbus 3: preliminary results, R. Hanel and B. Conrath, 1258
- Interferon induction increased through chemical modification of a synthetic polyribonucleotide, E. De Clercq et al., 1137
- Interoceanic sea-level canal: effects on the fish faunas, R. W. Topp, 1324
- Interocular effects in prism adaptation, J. E. Foley and K. Miyanshi, 311
- Introduction to the mathematics of population, N. KEYFITZ, book review by W. Brass, 381
- Investigation of hypothalamic-pituitary-adrenal function, The, V. H. T. JAMES and J. LANDON (Eds.), book review by J. Meites, 55
- Ion exchange in *Escherichia coli*: potassium-binding proteins, R. Damadian, 79
- Irwin, J. B.: book review of Herschel at the Cape, 884
- Isaacs, J. D. See Schwartzlose, R. A.
- Isaacs, J. J. See Mizell, M., et al.
- Isopentenyladenosine stimulates and inhibits mitosis of human lymphocytes treated with phytohemagglutinin, R. C. Gallo et al., 400
- Iversen, L. L. See Myers, R. D., et al.

J

- Jacobson, C. B. *See* McClure, H. M., et al.
 Jadeite: shock-induced formation from oligoclase, Ries Crater, Germany, O. B. James, 1005
 Jaffe, F. S. *See* Harkavy, O., et al.
 Jaffe, L. D.: Strength-density relations in particulate silicates of complex shape and their possible lunar significance, 1121
 James, O. B.: Jadeite: shock-induced formation from oligoclase, Ries Crater, Germany, 1005
 JAMES, V. H. T. and J. LANDON (Eds.), The investigation of hypothalamic-pituitary-adrenal function, *book review* of, 55
 Jamison, A. (*News and Comment*): Yugoslavia seeks to link science with development, 1241
 Janzen, D. H., and C. H. Muller: Co-evolution, 415
 Jaretzky, O. *See* Roberts, G. C. K., et al.
 Jefferies, D. J. *See* French, M. C.
 JENNINGS, J. D.: Prehistory of North America, *book review* of, 1248
 Jensen, L. H. *See* Camerman, A.
 Johnson, L., Jr.: Obsidian hydration rate for the Klamath Basin of California and Oregon, 1354
 Johnson, L. C. *See* Sassin, J. F., et al.
 Johnson, P. T. *See* Hertig, M., et al.
 Johnson, W. *See* Weissman, M. M., et al.
 Jonas, J.: *book review* of Nuclear magnetic resonance spectroscopy, 579
 Jones, J. K., Jr. *See* Phillips, C. J., et al.
 JONES, P. *See* COVINGTON, A. K.
 JOSEPHY, A. M., JR.: The Indian heritage of America, *book review* of, 272
 Judy, K. J.: Cellular response to ecdysterone in vitro, 1374
 JUNIPER, B. E. *See* CLOWES, F. A. L.
 JUO, A. S. R., and J. L. White: Orientation of the dipole moments of hydroxyl groups in oxidized and unoxidized biotite, 804
 Juvet, R. S., Jr.: *book review* of Analytical reaction gas chromatography, 1003

K

- KAISER, P. *See* PRÉVOT, A. R., et al.
 Kane, J., et al.: Paleozoic foraminifers, 204
 KARTSEV, A. A. *See* ANDREEV, P. F., et al.
 Katz, M. B., and S. M. Husain: Intellectual loneliness (*letter*), 752
 Kavanau, J. L.: *book review* of Biology of *Peromyscus* (Rodentia), 782
 Keeton, W. T.: Orientation by pigeons: is the sun necessary?, 922
 Keller, S. *See* Turino, G. M., et al.
 Kellogg, W. C., et al.: Magnetic observations in studies of sea-floor spreading, 617
 Kelly, K. K. *See* Barth, C. A., et al.
 Kelly, T. K., et al.: Y-modulation: an improved method of revealing surface detail using the scanning electron microscope, 283
 Keniston, K.: ACE study of campus unrest (*letter*), 1206
 Kessler, S.: *book review* of Transmission of schizophrenia, 1341
 Kessler, S., and R. H. Moos: XYY chromosome: premature conclusions (*letter*), 442
 KETY, S. S. *See* ROSENTHAL, D.
 KEYFITZ, N.: Introduction to the mathematics of population, *book review* of, 381
 Khachadurian, K. *See* VanItallie, T. B.
 Khan, M. A. Q.: *book review* of The enzymatic oxidation of toxicants, 166
 Khan, M. I. *See* Regan, T. J., et al.
 Kikuchi, K., et al.: Diffusible cytotoxic substances and cell-mediated resistance to syngeneic tumors: in vitro demonstration, 77

INDEX TO VOLUME 165

- King, C. A. M.: *book review* of The encyclopedia of geomorphology, vol. 3, 53
 KING, J. A. (Ed.), Biology of *Peromyscus* (Rodentia), *book review* of, 782
 King, J. L. *See* Guilday, J. E., et al.
 King, K. W.: Lysine enrichment: do we need it? (*letter*), 125
 Kinoshita, W. T. *See* Fiske, R. S.
 Kintner, P. L. *See* Whittaker, A. G.
 Kipnis, D. M. *See* Bourgoignie, J., et al.
 Kirshner, N. *See* Viveros, O. H., et al.
 Klahr, S. *See* Bourgoignie, J., et al.
 KLEEREKOPER, H.: Olfaction in fishes, *book review* of, 1111
 Klein, A.: *book review* of Nuclear and particle physics, 485
 Klein, R. G.: Mousterian cultures in European Russia, 257
 Kling, A. *See* Dicks, D., et al.
 Klopfer, P. H.: *book review* of Ethology of mammals, 887
 Knopoff, L.: *book review* of The acoustical foundations of music, 784
 Knox, A. S.: Glacial age marsh, Lafayette Park, Washington, D.C., 795
 Knox, R. S.: *book review* of Theory of condensed matter, 581
 Kochman, M. *See* Susor, W. A., et al.
 Koprowski, H. *See* Plotkin, S. A., et al.
 Korenstein, D. A., et al.: Fresh water for agriculture (*letters*), 850
 Kornetsky, C., and M. Eliasson: Reticular stimulation and chlorpromazine: an animal model for schizophrenic over-arousal, 1273
 Koto, K. *See* Morimoto, N., et al.
 Kranhold, J. F., et al.: Renal fructose-metabolizing enzymes: significance in hereditary fructose intolerance, 402
 Krishnamurti, K. V.: Carbonic anhydrase in seawater: carbonato complexes, 929
 Krokosky, E. M. *See* Spector, M., et al.
 Kronman, B. S., et al.: Tumor-specific antigens detected by inhibition of macrophage migration, 296
 Kueppers, F., et al.: Obstructive lung disease and α_1 -antitrypsin deficiency gene heterozygosity, 899
 Kuo, C. S. *See* Condie, K. C., et al.
 Kuo, J. F. *See* Miyamoto, E., et al.
 KURTH, G. (Ed.): Evolution and hominization, *book review* of, 275
 Kutina, J.: Hydrothermal ore deposits in the western United States: a new concept of structural control of distribution, 1113
- L**
- Labat, D. D. *See* McKinnell, R. G., et al.
 LAM, C. S. *See* MARGOLIS, B.
 Lamar, R.: Stanford's classified research (*letter*), 234
 LANDON, J. *See* JAMES, V. H. T.
 Lang, G. E. *See* Oppenheimer, J. R.
 Lang, S. B.: Elastic coefficients of animal bone, 287
 Langer, E. (*News and Comment*): U.N. experts report on CBW supports disarmament effort, 163
 Language unexplained (*letter*), E. H. Lenneberg, 1065
 Lansdell, H.: *book review* of Subcortical correlates of human behavior, 484
 Larson, R. K. *See* Kueppers, F., et al.
 Larson, R. L. *See* Kellogg, W. C., et al.
 Larsson, E. *See* Commoner, B., et al.
 Lascelles, J.: *book review* of Bacterial physiology and metabolism, 1248
 Laszlo, J. *See* Ove, P.
 Latham, G., et al.: The Apollo passive seismic experiment, 241
 Lawrence, H. S. *See* Valentine, F. T.
 Lead: x-ray diffraction study of a high-pressure polymorph, T. Takahashi et al., 1352
 Leavitt, W. W., et al.: Estradiol: specific binding by pituitary nuclear fraction in vitro, 496
- LECLERCQ, M., Entomological parasitology, vol. 29, *book review* of, 273
 Legator, M. S., et al.: Cytogenetic studies in rats of cyclohexylamine, a metabolite of cyclamate, 1139
 Leibowitz, S. F., and N. E. Miller: Unexpected adrenergic effect of chlorpromazine: eating elicited by injection into rat hypothalamus, 609
 Leighton, R. B., et al.: Mariner 6 television pictures: first report, 684; Mariner 7 television pictures: first report, 788
 Lenneberg, E. H.: Language unexplained (*letter*), 1065
 Leonard, T. J., and J. R. Raper: *Schizophyllum commune*: gene controlling induced haploid fruiting, 190
 Leovy, C. B. *See* Leighton, R. B., et al.
 Lerman, J. C., et al.: Carbon-14 in Patagonian tree rings, 1123
 Leuba, C. *See* Orians, G. H., et al.
 Levi, M. M. *See* Turino, G. M., et al.
 Levick, W. R., et al.: Rabbit lateral geniculate nucleus: sharpener of directional information, 712
 LEVITA, E. *See* RIKLAN, M.
 Levy, H. A. *See* Narten, A. H.
 Lewis, A. C., and B. A. Freeman: Separation of type 2 toxins of *Vibrio cholerae*, 808
 Lewis and Clark, P. R. CUTRIGHT, *book review* by J. C. Greene, 1246
 Lewis, E. R., et al.: Studying neural organization in *Aplysia* with the scanning electron microscope, 1140
 Lichtenstein, S. *See* Huntoon, R. D., et al.
 Lindenbaum, A., and M. H. Smoler: High-resolution autoradiography of intracellular plutonium, 192
 Lindqvist, W. F. *See* Kelly, T. K., et al.
 Lingenfelter, R. E. *See* Schumm, S. A., et al.
 Lippman, E. *See* Bartnicki-Garcia, S.
 Little, J. B. *See* Radford, E. P., et al.
 Litvak, M. M.: Hydroxyl and water messers in protostars, 855
 LOCHTE-HOLTGREVEN (Ed.): Plasma diagnostics, *book review* of, 167
 Loh, D. *See* Kranhold, J. F., et al.
 Lou, Y. S., et al.: Martian predictions (*letter*), 234
 Lovasich, J. L., et al.: Timing of the apparent effects of cloud seeding, 892
 Luminescent systems in apogonid fishes from the Philippines, Y. Haneda et al., 188
 Lunar and planetary mass concentrations, B. T. O'Leary et al., 651
 Lunar maria: structure and evolution, W. G. Van Dorn, 693
 Lunar rivers or coalesced chain craters?, S. A. Schumm et al., 201
 Lunar Sample Preliminary Examination Team: Preliminary examination of lunar samples from Apollo 11, 1211
 Lunde, F.: University self-government: who calls the tune? (*letter*), 647
 LURIÉ, D.: Particles and fields, *book review* of, 382
 Lymphocyte stimulation: transfer of cellular hypersensitivity to antigen in vitro, F. T. Valentine and H. S. Lawrence, 1014
 LYNN, J. E., The theory of neutron resonance reactions, *book review* of, 785
 Lysine enrichment: do we need it? (*letter*), K. W. King, 125
 Lytle, F. W.: X-ray integrated reflection coefficient of lithium fluoride, 416
- M**
- Mace, J. W. *See* Sassin, J. F., et al.
 Macronyssid mites in oral mucosa of long-nosed bats: occurrence and associated pathology, C. J. Phillips et al., 1368
 Macrophage ribonucleoprotein: nature of the antigenic fragment, A. A. Gottlieb, 592

INDEX TO VOLUME 165

- MADDOK, A. C. *See* EBSWORTH, E. A. V., *et al.*
 Magnetic model of matter, J. Schwinger, 757
 Magnetic observations in studies of sea-floor spreading, W. C. Kellogg *et al.*, 617
 Malmgren, R. A. *See* Morton, D. L., *et al.*
 Malnutrition research (*letter*), J. A. Halsted, 543
 Maloney, M. A., and H. M. Patt: Origin of repopulating cells after localized bone marrow depletion, 71
 Mammalian DNA polymerase: separation of binding from incorporation of deoxyribonucleoside triphosphates, P. Ove and J. Laszlo, 903
 Mammary alveolar epithelial cells: effect of hydrocortisone on ultrastructure, E. S. Mills and Y. J. Topper, 1127
 Mammary cancer induction by 7,12-dimethylbenz(a)anthracene: relation to age, T. L. Dao, 810
 Man's rise to civilization as shown by the Indians of North America from primeval times to the coming of the industrial state, P. FARBB, *book review* by E. A. Hoebel, 272
 Mandel, A. J. *See* Morgan, M. *See also* Rubin, R. T., *et al.*
 Mandl, I. *See* Turino, G. M., *et al.*
 Manfredi, M., and V. Castellucci: C-fiber responses in the ventrolateral column of the cat spinal cord, 1020
 Mangelsdorf, P. C., *et al.*: Potassium enrichments in interstitial waters of recent marine sediments, 171
 Maniatis, G. M., *et al.*: Tadpole antibodies against frog hemoglobin and their effect on development, 67
 Mannering, G. J. *See* Shoeman, D. W., *et al.*
 Many thanks, Harvard (*letter*), W. Schmidt, 1313
 Mao, H. K. *See* Takahashi, T., *et al.*
 Marantz, R. *See* Bensch, K. G., *et al.*
 Marantz, R., *et al.*: Vinblastine-induced precipitation of microtubule protein, 498
 March of "progress" (*letters*), S. C. Anderson and N. J. Marchette, 543
 Marchette, N. J. *See* Anderson, S. C.
 MARGOLIS, B., and C. S. LAM (Eds.): Nuclear and particle physics, *book review* of, 485
 Marihuana effects amid great expectations, C. R. McCauley and A. T. Weil, 204
 Mariner 6 television pictures: first report, R. B. Leighton *et al.*, 684
 Marine 6: ultraviolet spectrum of Mars upper atmosphere, C. A. Barth *et al.*, 1004
 Mariner 7 television pictures: first report, R. B. Leighton *et al.*, 788
 Markey, S. P. *See* Murphy, R. C., *et al.*
 Mars: water vapor in its atmosphere, T. Owen and H. P. Mason, 893
 Marschner, H.: Hydrocalcite ($\text{CaCO}_3 \cdot \text{H}_2\text{O}$) and nesquehonite ($\text{MgCO}_3 \cdot 3\text{H}_2\text{O}$) in carbonate scales, 1119
 Marshall, N. F. *See* Shepard, F. P.
 Martian predictions (*letter*), Y. S. Lou *et al.*, 234
 Martinez-Maldonado, M., *et al.*: Renal concentrating mechanism: possible role for sodium-potassium activated adenosine triphosphatase, 807
 MARTINI, L. *See* BACK, N., *et al.*
 Martino, J. P.: Science and society in equilibrium, 769
 Masland, R. H.: Visual motion perception: experimental modification, 819
 Mason, B. *See* Faust, G. T., *et al.*
 Mason, H. P. *See* Owen, T.
 Materials science and applied science, W. A. Tiller, 469
 Mathematical papers of Isaac Newton, The, D. T. WHITESIDE (Ed.), *book review* by D. J. Struik, 578
 Matthias, B. T. *See* Fisk, Z.
 Maturation of renal organic acid transport: substrate stimulation by penicillin, G. H. Hirsch and J. B. Hook, 909
 MAZOKHIN-PORSHNYAKOV, G. A.: Insect vision, *book review* of, 1249
 McCauley, C. R., and A. T. Weil: Marihuana effects amid great expectations, 204
 McClure, H. M., *et al.*: Autosomal trisomy in a chimpanzee: resemblance to Down's syndrome, 1010
 McConnel, E. *See* Hertig, M., *et al.*
 McConnell, R. A.: Phenomena of psychic research (*letter*), 851
 McCully, H.: Pliny's pheromonic abortifacients (*letter*), 236
 MC DIARMID, A. (Ed.): Diseases in free-living wild animals, *book review* of, 1002
 McElroy incident (*letters*), D. S. Smith and J. B. Buck, 1066
 McGuire, W. L.: Hormonal stimulation of lactose synthetase in mammary carcinoma, 1013
 McKinnell, R. G., *et al.*: Transplantation of pluripotential nuclei from triploid frog tumors, 394
 McMillan, C.: Photoperiod in three *Xanthium* populations from the Tropic of Cancer in Mexico, 292
 McNutt, N. S., and R. S. Weinstein: Carcinoma of the cervix: deficiency of nexus intercellular junctions, 597
 McReynolds, J. S. *See* Gorman, A. L. F.
 McTaggart-Cowan, P. D., and R. E. Feeney: Public policy: analyses and criticism (*letters*), 544
 Mechanism of lysozyme action, D. M. Chipman and N. Sharon, 454
 Mediterranean valleys, The, C. VITA-FINZI, *book review* by K. W. Butzer, 52
 Meeks, M. L., *et al.*: Water vapor: observations of galactic sources, 180
 Meetings: Adirondack conference on electrostatics, 1033; Carcinogenesis: physicochemical mechanisms, 417; Cellular differentiation in the immune system, 205; Cellular immunity, 931; Cerebrovascular disease: behavioral changes, 314; Science and the future: American and British associations meet, 619; Serially cultured animal cells for preparation of viral vaccines, 1278; Sleep and biorhythmicity, 932
 Meites, J.: *book review* of The investigation of hypothalamic-pituitary-adrenal function, 55
 Meltzer, H., and G. Cohen: On-the-job training offer rebuffed (*letter*), 850
 Memory-blocking agents: effects on olfactory discrimination in homing salmon, K. Oshima *et al.*, 86
 Men in groups, L. TIGER, *book review* by M. H. Fried, 883
 Merigan, T. C. *See* De Clercq, E., *et al.*
 Messages of vertebrate communication, W. J. Smith, 145
 Methane-derived marine carbonates of Pleistocene age, J. C. Hathaway and E. T. Degens, 690
 Meyer, R. K. *See* Rust, C. C.
 Micelle formation between 5-hydroxytryptamine and adenosine triphosphate in platelet storage organelles, K. H. Berneis *et al.*, 913
 Michael, D. N.: *book review* of Technological man, 165
 Microcosms in a world apart (*editorial*), P. H. Abelson, 853
 Microphotometric determination of preferred orientation in undeformed dolomites, E. Sass, 802
 Microsome-associated DNA, H. E. Bond *et al.*, 705
 Michell, A. D. *See* Piermarini, G. J., *et al.*
 Migration of scientists from Latin America, H. M. Nussenzveig, 1328
 Miller, N. E. *See* Leibowitz, S. F.
 Miller, R. E., *et al.*: Hyperphagia and polydipsia in socially isolated rhesus monkeys, 1027
 Miller, S. L.: Clathrate hydrates of air in Antarctic ice, 489
 Mills, E. S., and Y. J. Topper: Mammary alveolar epithelial cells: effect of hydrocortisone on ultrastructure, 1127
 MINSKY, M., and S. PAPERT, Perceptrons, *book review* of, 780
 Mintz, M. (*News and Comment*): FDA and Panalba: a conflict of commercial, therapeutic goals?, 875
 Mirsky, I. A. *See* Miller, R. E., *et al.*
 Mitchell, D. L.: *book review* of Optical properties and band structure of semiconductors, 682
 Mitchison, J. M.: Enzyme synthesis in synchronous cultures, 657
 Mitchison, N. A.: Cellular immunity (*meeting report*), 931
 Mitochondrial DNA: advances, problems, and goals, M. M. K. Nass, 25
 Miyamoto, E., *et al.*: Adenosine 3',5'-monophosphate-dependent protein kinase from brain, 63
 Miyanshi, K. *See* Foley, J. E.
 Mizell, M., *et al.*: Tumor induction in developing frog kidneys by a zonal centrifuge purified fraction of the frog herpes-type virus, 1134
 Mizushima, S. *See* Bollen, A., *et al.*
 Modern genetics, vol. 3, J. A. SERRA, *book review* by J. B. Spofford, 54
 Modified spinel, beta-manganese orthogermanate: stability and crystal structure, N. Morimoto *et al.*, 586
 Monosodium glutamate, F. R. Blood *et al.*, 1028
 Montgomery, R. B., *et al.*: Histochemical fluorescence as an index of spread of centrally applied neurochemicals, 1031
 Mook, W. G. *See* Lerman, J. C., *et al.*
 Moon: electrical properties of the uppermost layers, D. W. Strangway, 1012
 Moore, A. D., and B. Vonnegut: Adirondack conference on electrostatics (*meeting report*), 1033
 Moos, R. H. *See* Kessler, S.
 Morgan, M., and A. J. Mandell: Indole-(ethyl)amine N-methyltransferase in the brain, 492
 Morimoto, N., *et al.*: Modified spinel, beta-manganese orthogermanate: stability and crystal structure, 586
 Morison, R. S.: Science and social attitudes, 150
 Morley, A., and F. Stohlman, Jr.: Erythropoiesis in the dog: the periodic nature of the steady state, 1025
 Morris, R. C., Jr. *See* Kranhold, J. F., *et al.*
 Morton, D. L., *et al.*: Human liposarcomas: tissue cultures containing foci of transformed cells with viral particles, 813
 Mosher, H. S. *See* Fuhrman, F. A., *et al.*
 MOUNT, L. E.: The climatic physiology of the pig, *book review* of, 580
 Mousterian cultures in European Russia, R. G. Klein, 257
 Mowbray, G. H. *See* Bird, J. F.
 Mueller, M. (*News and Comment*): after Kefauver, drug claims tested, 878; anti-smoking forces gain ground, 569; Harvard graduate school, 480; hurricane seeding, 990; NAS-NRC verdict on the benefit-risk ratio of "combinations," 877; NIH partly restores cuts in grants, 1242; rubella vaccine is licensed, 48; Senate hearings on campus disorders, 270; space options presented by Agnew task force, 1335; space scientists and NASA, 776
 Mueller, R. F.: Biological unsoundness of modern medical practice (*letter*), 1313
 Muir, J.: Humanitarian research (*letter*), 647

INDEX TO VOLUME 165

- Muir, M. D. *See* Kelly, T. K.
 Müller, C. H. *See* Janzen, D. H.
 Müller-Eberhard, H. *See* Budzko, D. B.
 Murphy, R. C., *et al.*: Acidic components of Green River shale identified by a gas chromatography-mass spectrometry-computer system, 695
 Murray, B. C. *See* Leighton, R. B., *et al.*
 Murthy, V. R. *See* Condie, K. C., *et al.*
 MURTON, R. K., and E. N. WRIGHT (Eds.), The problems of birds as pests, *book review* of, 273
 Myers, R. D., *et al.*: Thermoregulation and norepinephrine, 1030
 Myers, R. E. *See* Dicks, D., *et al.*
 Myhre, K. *See* Hammel, H. T., *et al.*
 Myotonic muscular dystrophy: abnormalities in fibroblast culture, M. R. Swift and M. J. Finegold, 294

N

- Naeser, C. W.: Etching fission tracks in zircons, 388
 Napton, L. K. *See* Heizer, R. F.
 Narten, A. H. and H. A. Levy: Observed diffraction pattern and proposed models of liquid water, 447
 Nass, M. M. K.: Mitochondrial DNA: advances, problems, and goals, 25; Uptake of isolated chloroplasts by mammalian cells, 1128
 National Bureau of Standards prepares for the 1970's, R. D. Huntoon *et al.*, 867
 Neish, A. C.: *book review* of Perspectives in phytochemistry, 1343
NEISH, A. C. See FREUDENBERG, K.
 Nelson, B. (*News and Comment*): HEW security checks said to bar qualified applicants to PHS, 269; psychologists search for social relevance, 1101
 Nelson, R. L. *See* DiPaolo, J. A., *et al.*
 Nerve endings: rapid appearance of labeled protein shown by electron microscope radioautography, B. Droz and S. H. Barondes, 1131
 Neuroglia electrically coupled to neurons, F. D. Walker and W. J. Hild, 602
 Neutral stance is impossible, A (*letter*), M. R. Zavon, 967
 Neutralization of sensitized virus by the fourth component of complement, C. A. Daniels *et al.*, 508
 Neutron diffraction of cell membranes (myelin), D. F. Parsons and C. K. Akers, 1016
 New pathways in inorganic chemistry, E. A. V. EBSWORTH *et al.* (*Eds.*), *book review* by J. C. Bailar, Jr., 682
 New perspectives in archeology, S. R. BINFORD and L. R. BINFORD (*Eds.*), *book review* by W. W. Taylor, 382
 New world of the oceans, The, D. BEHRMAN, *book review* by C. Wunsch, 1343
 Newcomb, W. W., Jr.: *book review* of The Indians of Texas in 1830, 1110
 Newell, A.: *book review* of Perceptrons, 780
News and Comment: ACE study on campus unrest, 157; after Kefauver, drug claims tested, 878; anti-smoking forces gain ground, 569; antipoverty R&D, 1243; British Association meets, 1239; campus computers, 1337; campus unrest, 46; Concorde transport project, 374; draft caused drop in graduate science enrollments, 162; drug traffic in Holland, 476; earthquakes and nuclear tests, 773; environment and ACS report, 1104; environmental quality, 44; European notes, 267; FDA and Panalba, 875; forest fires, 568; Harvard faculty organizes in response to crisis, 49; Harvard graduate school, 480; HEW security checks said to bar qualified applicants to PHS, 269; Houston Manned Space Center, 265; hurricane seeding, 990; lead poisoning, 991; W. D. McElroy: an old incident embarrasses new

- NSF director, 379; narcotics and drug abuse, 377; NAS-NRC verdict on the benefit-risk ratio of "combinations," 877; NASA seeks a Mars flight plan, 987; National Academy changes Army gas dump plan, 45; NIH and effects of budget cuts, 1332; NIH partly restores cuts in grants, 1242; Open University in Great Britain, 881; Ovshinsky: promotor or persecuted genius?, 673; profit rather than prestige is new French research policy, 1334; psychologists search for social relevance, 1101; rubella vaccine is licensed, 48; seminar for science policy group, 378; Senate hearings on campus disorders, 270; Senate imposes CBW limitations and cuts defense research, 778; social sciences can help avoid policy goofs, 574; space options presented by Agnew task force, 1335; space scientists and NASA, 776; tax reform bill holds penalties for foundations, 678; technology assessment by NAS panel, 992; trouble at Nevada research center, 880; U.N. experts report on CBW supports disarmament effort, 163; warm-water irrigation, 478; water-pollution control, 572; Yugoslavia seeks to link science with development, 1242
Neyman, J. See Battan, L. J., et al. See also Lovasich, J. L., et al.
 Nicholson, R. *See* Perez, V., *et al.*
 Nitrogen fixation by *Gloeo caps*a, J. T. Wyatt and J. K. G. Silvey, 908
 Noble-gas chemistry, J. H. HOLLOWAY, *book review* by H. H. Hyman, 381
 Noncovalent binding of a spin-labeled inhibitor to ribonuclease, G. C. K. Roberts *et al.*, 504
 Norman, A. G.: *book review* of Constitution and biosynthesis of lignin, vol. 2, 784
 Norton, A. C. *See* Amacher, P., *et al.*
 Notkins, A. L. *See* Daniels, C. A., *et al.*
 NOVICK, S.: The careless atom, *book review* of, 483
 Nowaczynski, W. *See* Barbeau, A., *et al.*
 Nuclear and particle physics, B. MARGOLIS and C. S. LAM (*Eds.*), *book review* by A. Klein, 485
 Nuclear magnetic resonance spectroscopy, F. A. BOVEY, *book review* by J. Jonas, 579
 Nucleic acids in immunology, O. J. PLESCIA and W. BRAUN (*Eds.*), *book review* by M. L. Petermann, 579
 Nur, A. *See* Orange, A. S., *et al.*
 Nussenzveig, H. M.: Migration of scientists from Latin America, 1328

O

- Oberle, M. (*News and Comment*): campus computers, 1337; forest fires, 568; Harvard faculty organizes in response to crisis, 49; lead poisoning, 991
O'Brien, J. S. See Ho, M. W. See also Okada, S.
 Observations in modern astronomy, D. S. EVANS, *book review* by B. J. Bok, 681
 Observed diffraction pattern and proposed models of liquid water, A. H. Narten and H. A. Levy, 447
 Obsidian hydration rate for the Klamath Basin of California and Oregon, L. Johnson, Jr., 1354
 Obstructions (*letters*), J. M. Deimen and J. S. Weis, 336
 Obstructive lung disease and α_1 -antitrypsin deficiency gene heterozygosity, F. Kuipers *et al.*, 899
 Oceanography: an international laboratory (*letter*), H. Stommel and E. D. Goldberg, 751
O'Connor, T. E. See Fishinger, P. J.
O'Ferrall, R. A. M. See book review of Hydrogen-bonded solvent systems, 785
Ogawa, S. See Shulman, R. G., et al.

- Oil spills—an old story (*letter*), S. W. A. Gunn, 967
 Okada, S., and J. S. O'Brien: Tay-Sachs disease: generalized absence of a beta-D-N-acetylglycosaminidase component, 698
 Okonkwo, P. O.: Starvation: weapon of warfare (*letter*), 753
 Oldewurtel, H. A. *See* Regan, T. J., *et al.*
 O'Leary, B. T., *et al.*: Lunar and planetary mass concentrations, 651
 Olds, J. *See* Phillips, M. I.
 Olfaction in fishes, H. KLEEREKOPER, *book review* by E. S. Hodgson, 1111
 Oliverio, A. *See* Henry, K. R., *et al.*
 Olmec world, The, I. BERNAL, *book review* by C. R. Wicke, 999
 Olney, J. W. *See* Blood, F. R., *et al.*
 Olson, D. E. *See* Shair, F. H., *et al.*
 Olson, E. B., and H. F. DeLuca: 25-Hydroxycholecalciferol: direct effect on calcium transport, 405
 On-the-job training offer rebuffed (*letter*), H. Meltzer and G. Cohen, 850
 One hundred years of anthropology, J. O. BREW (*Ed.*), *book review* by H. L. Shapiro, 886
 Operant control of neural events in humans, J. P. Rosenfeld *et al.*, 821
 Oppenheimer, J. R., and G. E. Lang: *Cebus* monkeys: effect on branching of *Gustavia* trees, 187
 Optical properties and band structure of semiconductors, D. L. GREENAWAY and G. HARBEKE, *book review* by D. L. Mitchell, 682
 Optics of arthropod compound eye, S. R. Shaw, 88
 Oral contraceptives: long-term use produces fine structural changes in liver mitochondria, V. Perez *et al.*, 805
 Orange, A. S., *et al.*: Granitic rock: properties *in situ*, 202
 Organic compounds of lead, The, H. SHAPIRO and F. W. FREY, *book review* by H. V. Cortez, 56
 Orians, G. H., *et al.*: Defoliants: orange, white, and blue (*letters*), 442
 Orientation by pigeons: is the sun necessary?, W. T. Keeton, 922
 Orientation of the dipole moments of hydroxyl groups in oxidized and unoxidized biotite, A. S. R. Juo and J. L. White, 804
 Origin and distribution of the elements, L. H. AHRENS (*Ed.*), *book review* by E. Anders, 486
 Origin of repopulating cells after localized bone marrow depletion, M. A. Maloney and H. M. Patt, 71
 Oser, B. L. *See* Blood, F. R., *et al.*
 Oshima, K., *et al.*: Memory-blocking agents: effects on olfactory discrimination in homing salmon, 86
 Osiki, F. A. *See* Delivoria-Papadopoulos, M., *et al.*
 Ove, P., and J. Laszlo: Mammalian DNA polymerase: separation of binding from incorporation of deoxyribonucleoside triphosphates, 903
 Owen, T., and H. P. Mason: Mars: water vapor in its atmosphere, 893
 Owens, L. D.: Toxins in plant disease: structure and mode of action, 18
 Oxygen-hemoglobin dissociation curves: effect of inherited enzyme defects of the red cell, M. Delivoria-Papadopoulos *et al.*, 601
 Oyster, C. W. *See* Levick, W. R., *et al.*
 Ozaki, M. *See* Bollen, A., *et al.*
 Ozone: depression of frond multiplication and floral production in duckweed, W. A. Feder and F. Sullivan, 1373

P

- Paleozoic foraminifers, J. Kane *et al.*, 204
 Paleozoic tectonic history of the Arctic basin north of Alaska, M. Churkin, Jr., 549

INDEX TO VOLUME 165

- Palmer, K. A. *See Legator, M. S., et al.*
 Palmieri, G. *See Amoore, J. E., et al.*
 Pan, M. L., et al.: Vitellogenin blood protein synthesis by insect fat body, 393
 Pandya, D. *See Butters, N.*
 PAOLETTI, R. *See BACK, N., et al.*
 PAPERT, S. *See MINSKY, M.*
 Pappas, G. D. *See Payton, B. W., et al.*
 Paramagnetic unit in spinach subchloroplast particles: estimation of size, E. C. Weaver and H. E. Weaver, 906
 Parker, D. C. *See Sassin, J. F., et al.*
 Parsegian, V. L., and L. C. Blessing: Unified science courses (*letters*), 645
 Parsons, D. F., and C. K. Akers: Neutron diffraction of cell membranes (myelin), 1016
 Particles and fields, D. LURIE, *book review* by F. Rohrlich, 382
 PASIKA, W. M. (Ed.), Advances in macromolecular chemistry, *book review* of, 167
 Passannante, A. J. *See Regan, T. J., et al.*
 Paterson, P. Y., and D. G. Drobish: Cyclophosphamide: effect on experimental allergic encephalomyelitis in Lewis rats, 191
 Patt, H. M. *See Maloney, M. A.*
 Patterson, J. H. *See Turkevich, A. L., et al.*
 Payton, B. W., et al.: Temperature-dependence of resistance at an electrotonic synapse, 594
 Peale, S. J. *See Schumm, S. A., et al.*
 Pearce, J. B. *See Barth, C. A., et al.*
 Pecorite, Ni₃Si₄O₁₀(OH)₈, nickel analog of clinochrysotile, formed in the Wolf Creek meteorite, G. T. Faust et al., 59
 Peisach, J. *See Shulman, R. G., et al.*
 Peptides 1968, E. BRICAS (Ed.), *book review* by J. S. Fruton, 1003
 Perceptrons, M. MINSKY and S. PAPERT, *book review* by A. Newell, 780
 Perez, V., et al.: Oral contraceptives: long-term use produces fine structural changes in liver mitochondria, 805
 Perineurium: evidence for contractile elements, M. H. Ross and E. J. Reith, 604
 Perkins, F. *See Plotkin, S. A., et al.*
 Perry, S. *See Gallo, R. C., et al.*
 Perspectives in phytochemistry, J. B. HAR-BORNE and T. SWAIN (Eds.), *book review* by A. C. Neish, 1343
 Perspectives on the promise of the present (AAAS), W. G. Berl, 1150
 Petermann, M. L.: *book review* of Nucleic acids in immunology, 579
 Petersen, K. W. *See Legator, M. S., et al.*
 Pettengill, O. S. *See Hartman, B. K., et al.*
 Pfeiffer, E. W. *See Orians, G. H., et al.*
 Pharmacology of hormonal polypeptides and proteins, N. BACK et al. (Eds.), *book review* by M. X. Zarow, 275
 Phenomena of psychic research (*letter*), R. A. McConnell, 851
 Phillips, C. J., et al.: Macronyssid mites in oral mucosa of long-nosed bats: occurrence and associated pathology, 1368
 Phillips, M. I., and J. Olds: Unit activity: motivation-dependent responses from midbrain neurons, 1269
 Phosphide from meteorites: barringerite, a new iron-nickel mineral, P. R. Buseck, 169
 Photoperiod in three *Xanthium* populations from the Tropic of Cancer in Mexico, C. McMillan, 292
 Pieper, W. A. *See McClure, H. M., et al.*
 Piermarini, G. J., et al.: Crystal structure of benzene II at 25 kilobars, 1250
 Pisano, J. J.: Carbon-14 labeled vasoactive peptides available, 203
 Pitman, W. C., III. *See Fox, P. J., et al.*
 Plant cells, F. A. L. CLOWES and B. E. JUNIPER, *book review* by A. Frey-Wysling, 683
 Plasma diagnostics, W. LOCHTE-HOLT-GREVEN (Ed.), *book review* by F. L. Ribe, 167
Plasmodium malariae: transmission from monkey to man by mosquito bite, P. G. Contacos and W. E. Collins, 918
 Plasticity of hypothalamic motivational systems, R. A. Wise, 929
 Plate, T. G. (*News and Comment*): Houston Manned Space Center, 265
 Platt, P. *See Coburn, K. R.*
 Platt, J. (*editorial*): The university as a five-legged animal, 649
 Plaut, T. F. A.: Social science in the marketplace (*letter*), 124
 Playford, P. E., and A. E. Cockbain: Algal stromatolites: deepwater forms in the Devonian of Western Australia, 1008
 Pleas of temporary insanity (*letter*), T. M. Cowan, 543
 PLESIA, O. J., and W. BRAUN (Eds.), Nucleic acids in immunology, *book review* of, 579
 Pletcher, J. *See Spector, M., et al.*
 Pletscher, A. *See Berneis, K. H., et al.*
 Pliny's pheromonic abortifacients (*letter*), H. McCully, 236
 Plotkin, S. A., et al.: Serially cultured animal cells for preparation of viral vaccines (*meeting report*), 1278
 Polar temperature of Venus, W. A. Gale and A. C. E. Sinclair, 1356
 Political action in behalf of science (*editorial*), P. H. Abelson, 1315
 Pollack, S. S., and P. S. De Carli: Enstatite: disorder produced by a megabar shock event, 591
 Porter, R. D., and S. N. Wiemeyer: Diel-drin and DDT: effects on sparrow hawk eggshells and reproduction, 199
 Potassium enrichments in interstitial waters of recent marine sediments, P. C. Mangelsdorf, Jr., et al., 171
 Potential energy fields about nitrogen in choline and ethanolamine: biological function at cellular surfaces, J. E. Zull and A. J. Hopfinger, 512
 Potentially lethal radiation damage: repair by mammalian cells in culture, J. A. Belli and M. Shelton, 490
 Potomac Valley Test Facility (*editorial*), D. Wolfe, 969
 Poulsom, T. L., and W. B. White: The cave environment, 971
 Practical courses for nonscience students (*letter*), C. G. Danforth, 234
 Prager, D. J.: *book review* of Principles of applied biomedical instrumentation, 887
 Prehistory of North America, J. D. JENNINGS, *book review* by R. T. Grange, Jr., 1248
 Preliminary examination of lunar samples from Apollo 11, Lunar Sample Preliminary Examination Team, 1211
 President need not wait, The (*editorial*), D. Wolfe, 239
 Press, F.: The suboceanic mantle, 174. *See also* Latham, G., et al.
 Preventing obsolescence of scientific reviews: an updated-review project, P. Amacher et al., 1029
 PRÉVOT, A. R., et al.: Les bactéries anaérobies, *book review* of, 581
 Primary afferent depolarization evoked by a painful stimulus, L. Vyklický et al., 184
 Principles of applied biomedical instrumentation, L. A. GEDDES and L. E. BAKER, *book review* by D. J. Prager, 887
 Principles of dispersal in higher plants, L. VAN DER PIJL, *book review* by R. Schmid, 1001
 Problems of birds as pests, The, R. K. MURTON and E. N. WRIGHT (Ed.), *book review* by W. H. Drury, 273
 Procobarbazine: chemical immunosuppressant also powerful carcinogen, J. H. Weisburger, 517
 Protein content of seed: increase improves growth and yield, C. J. Schweizer and S. K. Ries, 73
 Proton flare project, The, A. C. STRICKLAND (Ed.), *book review* by J. M. Wilcox, 168
 Public Health Service grants (*letter*), N. H. Barish, 1204
 Public policy: analyses and criticism (*letters*), P. D. McTaggart-Cowan and R. E. Feeney, 544
 Pullman, B. *See Weisburger, J. H., et al.*
 Pulmonary gas transplant time, F. H. Shair et al., 823
 Puromycin: effect on memory of mice when injected with various cations, J. B. Flexner and L. B. Flexner, 1143
 Pyrotechnics (*letter*), D. L. Sills, 752

Q

- Quantal secretion from adrenal medulla: all-or-none release of storage vesicle content, O. H. Viveros et al., 911
 Quarks (*Research Topics*), R. W. Holcomb, 1340
 Quick, K. P. *See Rawson, R. O., et al.*

R

- Rabbit lateral geniculate nucleus: sharpener of directional information, W. R. Levick et al., 712
 Rabinow, J.: *book review* of The design of design, 484
 Radford, E. P., et al.: Carcinogenicity of tobacco-smoke constituents, 312
 Radiation leukemia virus: quantitative tissue culture assay, P. J. Fischinger and T. E. O'Connor, 306
 Radioisotopes in the human body, F. W. SPIERS, *book review* by M. E. Wrenn, 485
 Radovsky, F. J. *See Phillips, C. J., et al.*
 Raper, J. R. *See Leonard, T. J.*
 Raper, O. F. *See Barth, C. A., et al.*
 Rapp, H. J. *See Daniels, C. A., et al.* *See also* Kronman, B. S., et al.
 Rare-earth elements and high pressures, Z. Fisk and B. T. Matthias, 279
 Rats enriched with odd-carbon fatty acids: maintenance of liver glycogen during starvation, T. B. VanItallie and A. K. Khachadurian, 811
 Raven, P. H. *See Ehrlich, P. R.*
 Rawson, R. O., et al.: Thermoregulatory responses to intra-abdominal heating of sheep, 919
 REAGAN, M. D., Science and the federal patron, *book review* of, 1109
 Real estate invasion (*letter*), W. H. Davis, 335
 Recent developments in particle physics, L. W. Alvarez, 1071
 Red Sea floor origin: rare-earth evidence, J.-G. Schilling, 1357
 Reed, T. E.: Caucasian genes in American Negroes, 762
 Regan, T. J., et al.: Ventricular arrhythmias related to antibiotic usage in dogs, 509
 Regulation of branched biosynthetic pathways in bacteria, P. Datta, 556
 Reiner, J. *See Kikuchi, K., et al.*
 REINER, J. M., Behavior of enzyme systems, *book review* of, 486
 Reith, E. J. *See Ross, M. H.*
 Renal concentrating mechanism: possible role for sodium-potassium activated adenosine triphosphatase, M. Martinez-Maldonado et al., 807
 Renal fructose-metabolizing enzymes: significance in hereditary fructose intolerance, J. F. Kranhold et al., 402
 Renin-aldosterone system in Parkinson's disease, A. Barbeau et al., 291
 RENNER, B., Current algebras and their application, *book review* of, 384
 Reprint clearinghouse (*letter*), J. H. Schneider, 126
 Retention of delayed-alternation: effect of selective lesions of sulcus principalis, N. Butters and D. Pandya, 1271

INDEX TO VOLUME 165

- Reticular stimulation and chlorpromazine: an animal model for schizophrenic over-arousal, C. Kornetzky and M. Eliasson, 1273
- Reynolds, R. *See* Weissman, M. M., *et al.*
- Ribe, F. L.: book review of *Plasma diagnostics*, 167
- Ribosomal protein conferring sensitivity to the antibiotic spectinomycin in *Escherichia coli*, A. Bollen, *et al.*, 85
- Richter, B.: book review of ABM and Why ABM?, 576
- Ries, S. K. *See* Schweizer, C. J.
- RIKLAN, M., and E. LEVITA, Subcortical correlates of human behavior, *book review of*, 484
- Rinehart, J. S. *See* Blade, E., *et al.*
- Roback, H.: Do we need a department of science and technology?, 36
- Roberts, G. C. K., *et al.*: Noncovalent binding of a spin-labeled inhibitor to ribonuclease, 504
- Roberts, W. O. (*Association Affairs*): P. E. Klopsteg retires as treasurer; W. T. Golden elected to the post, 826
- Robinson, J. A. *See* Leavitt, W. W., *et al.*
- Roche, M.: Science and the future: American and British associations meet (*meeting report*), 619
- Rodin, J. O., *et al.*: Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte, 904
- Rodnan, G. P., *et al.*: Who's who (*letters*), 6
- Roelofs, W. L., and A. Comeau: Sex pheromone specificity: taxonomic and evolutionary aspects in Lepidoptera, 398
- Rogers, A. E. E., and R. P. Ingalls: Venus: mapping the surface reflectivity by radar interferometry, 797
- Rohrlich, F.: book review of *Particles and fields*, 382
- Roseman, J.: X-ray resistant cell required for the induction of in vitro antibody formation, 1125
- Rosenblate, H. *See* Holmes, A. W., *et al.*
- ROSENBLUM, L. A., and R. W. COOPER (Eds.), The squirrel monkey, *book review of*, 274
- Rosenfeld, J. P., *et al.*: Operant control of neural events in humans, 821
- ROSENTHAL, D., and S. S. KETY (Eds.), Transmission of schizophrenia, *book review of*, 1341
- Ross, B. B. *See* Faber, J. J.
- Ross, M. H., and E. J. Reith: Perineurium: evidence for contractile elements, 604
- Roszman, L. G. *See* Sassin, J. F., *et al.*
- Routenberg, A. *See* Montgomery, R. B., *et al.*
- Rubin, R. T., *et al.*: Tryptophan pyrolase induction in patients with manic depression, 1146
- Rudell, A. P. *See* Rosenfeld, J. P., *et al.*
- Rudomin, P. *See* Vyklický, L., *et al.*
- Russell, R. G. G. *See* Fleisch, H., *et al.* *See also* Francis, M. D., *et al.*
- Rust, C. C., and R. K. Meyer: Hair color, molt, and testis size in male, short-tailed weasels treated with melatonin, 921
- Rutschmann, R. *See* Gibbon, J.
- Rutter, W. J. *See* Susor, W. A., *et al.*
- Ryall, W. R., and A. Muan: Silicon oxynitride stability, 1363
- Ryan, M. F.: Unreliable results (*letter*), 851
- S**
- Sadava, D., and M. J. Chrispeels: Cell wall protein in plants: autoradiographic evidence, 299
- Sagan, C. *See* O'Leary, B. T., *et al.*
- Sakata, T. *See* Miller, R. E., *et al.*
- Sarcoma-producing cell lines derived from clones transformed in vitro by benzo[a]pyrene, J. A. Di Paolo, *et al.*, 917
- Sass, E.: Microphotometric determination of preferred orientation in undeformed dolomites, 802
- Sassin, J. F., *et al.*: Human growth hormone release: relation to slow-wave sleep and sleep-waking cycles, 513
- Sax, M. *See* Spector, M., *et al.*
- Schiff, S.: The fit and the unfit (*letter*), 1206
- Schilling, J.-G.: Red Sea floor origin: rare-earth evidence, 1357
- Schizophyllum commune*: gene controlling induced haploid fruiting, T. J. Leonard and J. R. Raper, 190
- Schmid, R.: book review of *Principles of dispersal in higher plants*, 1001
- Schmid-Schönbein, H., and R. Wells: Fluid drop-like transition of erythrocytes under shear, 288
- Schmidt, D. E., *et al.*: Acetylcholine: release from neural tissue and identification by pyrolysis-gas chromatography, 1370
- Schmidt, W.: Many thanks, Harvard (*letter*), 1313
- Schneider, J. H.: Reprint clearinghouse (*letter*), 126
- SCHNEIDER, W., JR. *See* HOLST, J. J.
- Schubert, G. *See* Schumm, S. A., *et al.*
- Schumm, S. A., *et al.*: Lunar rivers or coalesced chain craters?, 201
- Schwartz, A. *See* Martinez-Maldonado, M., *et al.*
- Schwartz, P. R. *See* Meeks, M. L., *et al.*
- Schwartzlose, R. A., and J. D. Isaacs: Transient circulation event near the deep ocean floor, 889
- Schweizer, C. J., and S. K. Ries: Protein content of seed: increase improves growth and yield, 73
- Schwinger, J.: A magnetic model of matter, 757
- Science and social attitudes, R. S. Morrison, 150
- Science and society in equilibrium, J. P. Martino, 769
- Science and the federal patron, M. D. REAGAN, book review by J. T. Wilson, 1109
- Science and the future: American and British associations meet (*meeting report*), M. Roche, 619
- Science at small colleges (*letter*), A. H. Westing, 236
- Science policy studies (*editorial*), D. Wolfe, 547
- Sciences of the artificial, The, H. A. SIMON, book review by L. Uhr, 886
- Scott, E. L. *See* Battan, L. J., *et al.* *See also* Lovasich, J. L., *et al.*
- Seismicity of Colorado: consistency of recent earthquakes with those of historical record, R. B. Simon, 897
- Senior, R. M. *See* Turino, G. M., *et al.*
- Separation of type 2 toxins of *Vibrio cholerae*, A. C. Lewis and B. A. Freeman, 808
- Seriously cultured animal cells for preparation of viral vaccines (*meeting report*), S. A. Plotkin, *et al.*, 1278
- SERRA, J. A.: Modern genetics, vol. 3, *book review of*, 54
- Serum elastase inhibitor deficiency and α_1 -antitrypsin deficiency in patients with obstructive emphysema, G. M. Turino, *et al.*, 709
- Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte, J. O. Rodin, *et al.*, 904
- Sex pheromone specificity: taxonomic and evolutionary aspects in Lepidoptera, W. L. Roelofs and A. Comeau, 398
- Shair, F. H., *et al.*: Pulmonary gas transplant time, 823
- SHAPIRO, H. and F. W. FREY, The organic compounds of lead, *book review of*, 56
- Shapiro, H. L.: book review of *One hundred years of anthropology*, 886
- Sharon, N. *See* Chipman, D. M.
- Sharp, R. P. *See* Leighton, R. B., *et al.*
- SHARPE, A. G. *See* ERSWORTH, E. A. V., *et al.*
- Shaw, S. R.: Optics of arthropod compound eye, 88
- Shefanski, M. *See* Bensch, K. G., *et al.* *See also* Marantz, R., *et al.*
- Shelton, M. *See* Belli, J. A.
- Shepard, F. P., and N. F. Marshall: Currents in La Jolla and Scripps submarine canyons, 177
- Shephard, F. *See* Fox, P. J., *et al.*
- Shimada, H. *See* Oshima, K., *et al.*
- Shoeman, D. W., *et al.*: Cytochrome P-420: tubular aggregates from hepatic microsomes, 1371
- Shulman, N. R., and L. F. Barker: Virus-like antigen, antibody, and antigen-antibody complexes in hepatitis measured by complement fixation, 304
- Shulman, R. G., *et al.*: The absence of "heme-heme" interactions in hemoglobin, 251
- Shuy, R. W. *See* Baratz, J. C.
- Siggins, G. R., *et al.*: Cyclic adenosine monophosphate: possible mediator for norepinephrine effects on cerebellar Purkinje cells, 1018
- Silicone oxynitride stability, W. R. Ryall and A. Muan, 1363
- Silverstein, R. M. *See* Rodin, J. O., *et al.*
- Silvey, J. K. G. *See* Wyatt, J. T.
- Simmonds, M. A. *See* Myers, R. D., *et al.*
- Simmons, G. *See* Orange, A. S., *et al.*
- SIMON, H. A., The sciences of the artificial, *book review of*, 886
- SIMON, N. *See* FISHER, J., *et al.*
- Simon, R. B.: Seismicity of Colorado: consistency of recent earthquakes with those of historical record, 897
- Simons, D. B. *See* Schumm, S. A., *et al.*
- Simple working models of historic machines, A. F. BURSTALL, *book review by* R. S. Brumbaugh, 1342
- SIMPSON, G. G., Biology and man, *book review of*, 680
- Sinclair, A. C. E. *See* Gale, W. A.
- Singer, G. *See* Montgomery, R. B., *et al.*
- Siqueland, E. R., and C. A. DeLucia: Visual reinforcement of nonnutritive sucking in human infants, 1144
- Skinner, B. J.: *book review of* Geological history of southern Africa, 1247
- Sleep and biorhythmicity (*meeting report*), A. Hobson, 932
- Slippery polymers (*letter*), H. M. Stauffer, 851
- Smerin, S. E. *See* Steinman, A. M., *et al.*
- Smith, B. A. *See* Leighton, R. B., *et al.*
- Smith, D. S., and J. B. Buck: McElroy incident (*letters*), 1066
- Smith, J. A. *See* Battan, L. J., *et al.* *See also* Lovasich, J. L., *et al.*
- Smith, L. DS.: *book review of* Les bactéries anaérobies, 581
- Smith, W. J.: Messages of vertebrate communication, 145
- Smoler, M. H. *See* Lindenbaum, A.
- Snell, K. C. *See* Rodnan, G. P., *et al.*
- Snyderman, R. *See* Daniels, C. A., *et al.*
- Social benefits versus technological risk, C. Starr, 1232
- Social science in the marketplace (*letter*), T. F. A. Plaut, 124
- SOKATCH, J. R., Bacterial physiology and metabolism, *book review of*, 1248
- Solandt, O. M. (*editorial*): The control of technology, 445
- Solar cycle variation of exospheric temperatures on Mars and Venus: a prediction for Mariner 6 and 7, R. W. Stewart and J. S. Hogan, 386
- Some ecological benefits of woody plant control with herbicides, K. C. Barrons, 465
- Sorenson, G. D. *See* Hartman, B. K., *et al.*
- Source book in mathematics, 1200-1800, A. D. J. STRUIK (Ed.), *book review by* C. Eisele, 54
- Southam, C. M. *See* Kikuchi, K., *et al.*

INDEX TO VOLUME 165

- Speciation in Amazonian forest birds, J. Haffer, 131
- Spector, M., *et al.*: Atherosclerotic plaque: x-ray diffraction investigation, 711
- Spehlmann, R.: Acetylcholine facilitation, atropine block of synaptic excitation of cortical neurons, 404
- Spiegel, S. L. *See* Bowley, C. J., *et al.*
- SPIERS, F. W., Radioisotopes in the human body, *book review* of, 485
- Spiess, F. N. *See* Kellogg, W. C., *et al.*
- Spin-orbit resonance of the inner planets, P. M. Campbell, 930
- Spofford, J. B.: *book review* of Modern genetics, vol. 3, 54
- SPORN, P., Technology, engineering and economics, *book review* of, 483
- Squirrel monkey, The, L. A. ROSENBLUM and R. W. COOPER (Eds.), *book review* by H. F. Harlow, 274
- Stanford's classified research (*letter*), R. Lamar, 234
- Stankievic, R. *See* Gleich, G. J., *et al.*
- Starfish infestation: hypothesis (*letter*), J. L. Fischer, 645
- Starr, C.: Social benefit versus technological risk, 1232
- Starvation: weapon of warfare (*letter*), P. O. Okonkwo, 753
- Statistics of unseen animals, J. T. Enright *et al.*, 824
- Stauffer, H. M.: Slippery polymers (*letter*), 851
- Stein, B. R.: Academic research in Germany: a new support program, 1096
- Steiner, L. A. *See* Maniatis, G. M., *et al.*
- Steinman, A. M., *et al.*: Epinephrine metabolism in mammalian brain after intravenous and intraventricular administration, 616
- Stewart, A. I. *See* Barth, C. A., *et al.*
- Stewart, R. W., and J. S. Hogan: Solar cycle variation of exospheric temperatures on Mars and Venus: a prediction for Mariner 6 and 7, 386
- Stohlmeyer, F., Jr. *See* Morley, A.
- Stommel, H., and E. D. Goldberg: Oceanography: an international laboratory (*letter*), 751
- Stone, D. *See* Goodhart, R. S.
- Storlien, L. H. *See* Albert, D. J.
- Strahs, G.: Azurin: x-ray data for crystals from *Pseudomonas dentriticans*, 60
- Strangway, D. W.: Moon: electrical properties of the uppermost layers, 1012
- Strawn, J. M. *See* Cochran, B. C.
- Strength-density relations in particulate silicates of complex shape and their possible lunar significance, L. D. Jaffe, 1121
- STRICKLAND, A. C. (Ed.), The proton flare project, *book review* of, 168
- STRÖMME, S. B. *See* Hammel, H. T., *et al.*
- Struik, D. J.: *book review* of The mathematical papers of Isaac Newton, 578
- STRUJK, D. J. (Ed.), A source book in mathematics, 1200-1800, *book review* of, 54
- Stuart, A. E.: Excitatory and inhibitory motoneurons in the central nervous system of the leech, 817
- Studying neural organization in *Aplysia* with the scanning electron microscope, E. R. Lewis *et al.*, 1140
- Subclinical malnutrition, H. Baker *et al.*, 313
- Subcortical correlates of human behavior, M. RIKLAN and E. LEVITA, *book review* by H. Lansdell, 484
- Suboceanic mantle, The, F. Press, 174
- Sugiyama, N. *See* Haneda, Y., *et al.*
- Suki, W. *See* Martinez-Maldonado, M., *et al.*
- Sullivan, F. *See* Feder, W. A.
- Sunglint patterns: unusual dark patches, C. J. Bowley *et al.*, 1360
- Surveyor alpha-scattering data: consistency with lunar origin of eucrites and howardites, M. B. Duke, 515
- Susor, W. A., *et al.*: Heterogeneity of presumably homogeneous preparations, 1260
- Sutton, G. *See* Latham, G., *et al.*
- SWAIN, T. *See* HARBORNE, J. B.
- Swanson, M. *See* Emiliani, C., *et al.*
- Swift, M. R., and M. J. Finegold: Myotonic muscular dystrophy: abnormalities in fibroblast culture, 294
- Szilagyi, P. I. A. *See* Schmidt, D. E., *et al.*
- T
- Taber, R. D.: *book review* of Wildlife in danger, 999
- Tadpole antibodies against frog hemoglobin and their effect on development, G. Maniatis *et al.*, 67
- Takahashi, E. *See* Levick, W. R., *et al.*
- Takahashi, T., *et al.*: Lead: x-ray diffraction study of a high-pressure polymorph, 1352
- Talk time (*letter*), C. C. Cleland and W. L. Dickerson, 1065
- Tay-Sachs disease: generalized absence of a beta-D-N-acetylhexosaminidase component, S. Okada and J. S. O'Brien, 698
- Taylor, W. W.: *book review* of New perspectives in archeology, 382
- Teaching black children to read, J. C. BARATZ and R. W. SHUY (Eds.), *book review* by J. A. Fishman, 1108
- Teaching sign language to a chimpanzee, R. A. Gardner and B. T. Gardner, 664
- Technological man, V. C. FERKISS, *book review* by D. N. Michael, 165
- Technology, engineering, and economics, P. SPORN, *book review* by K. E. Boulding, 483
- Tektite: a study of human behavior in a hostile environment (AAAS), S. Deutscher, 1276
- Telfer, W. H. *See* Pan, M. L., *et al.*
- Telliamed, A. V. CAROZZI (Ed.), *book review* by J. D. Burchfield, 52
- Temperature-dependence of resistance at an electrotonic synapse, B. W. Payton *et al.*, 594
- Temporal order judgment and reaction time, J. Gibbon and R. Rutschmann, 413
- Tertiary climatic change in the marginal northeastern Pacific Ocean, W. O. Addicott, 583
- Theory of condensed matter, *book review* by R. S. Knox, 581
- Theory of neutron resonance reactions, The, J. E. LYNN, *book review* by H. B. Willard, 785
- Thermoregulation and norepinephrine, R. D. Myers *et al.*, 1030
- Thermoregulatory responses to intra-abdominal heating of sheep, R. O. Rawson *et al.*, 919
- Thomas, G. E. *See* Barth, C. A., *et al.*
- TIGER, L., Men in groups, *book review* of, 883
- Tiller, W. A.: Materials science and applied science, 469
- Timing of the apparent effects of cloud seeding, J. L. Lovasich *et al.*, 892
- Toad urinary bladder: intercellular spaces, D. R. DiBona and M. M. Civan, 503
- Tokonami, M. *See* Morimoto, N., *et al.*
- 2-p-Toluidinyl-6-naphthalene sulfonate: relation of structure to fluorescence properties in different media, A. Camerman and L. H. Jensen, 493
- Toplin, I. *See* Mizell, M., *et al.*
- Topp, R. W.: Interoceanic sea-level canal: effects on the fish faunas, 1324
- Topper, Y. J. *See* Mills, E. S.
- Toxin from skin of frogs of the genus *Atelopus*: differentiation from dendrobatid toxins, F. A. Fuhrman *et al.*, 1376
- Toxins in plant disease: structure and mode of action, L. D. Owens, 18
- Transformation of petroleum in nature, P. F. ANDREEV *et al.*, *book review* by J. M. Hunt, 1000
- Transient circulation event near the deep ocean floor, R. A. Schwartzlose and J. D. Isaacs, 889
- Transplantation of pluripotential nuclei from triploid frog tumors, R. G. McKinnell *et al.*, 394
- Transmission of schizophrenia, The, D. ROSENTHAL and S. S. KETY, (Eds.), *book review* by S. Kessler, 1341
- Trueb, L. F., and E. C. de Wys: Carbonado: natural polycrystalline diamond, 799
- Tryptophan pyrolase induction in patients with manic depression, R. T. Rubin *et al.*, 1146
- Tsuji, F. I. *See* Haneda, Y., *et al.*
- Tumor induction in developing frog kidneys by a zonal centrifuge purified fraction of the frog herpes-type virus, M. Mizell *et al.*, 1134
- Tumor-specific antigens detected by inhibition of macrophage migration, B. S. Kronman *et al.*, 296
- Turbidity, birefringence, and fluorescence changes in skeletal muscle coincident with the action potential, L. D. Carnay and W. H. Barry, 608
- Turino, G. M., *et al.*: Serum elastase inhibitor deficiency and α_1 -antitrypsin deficiency in patients with obstructive emphysema, 709
- Turkevich, A. L., *et al.*: Chemical composition of the lunar surface in Mare Tranquillitatis, 277
- TURPIN, A. *See* PRÉVOT, A. R., *et al.*
- Two alternatives for the history of the moon, H. Alfvén and G. Arrhenius, 11
- U
- Undergraduates in research (*letter*), M. L. Goldstein, 967
- Uhr, L.: *book review* of The sciences of the artificial, 886
- Uncus and amygdala lesions: effects on social behavior in the free-ranging rhesus monkey, D. Dicks *et al.*, 69
- Underground nuclear explosions and the control of earthquakes, C. Emiliani *et al.*, 1255
- Unexpected adrenergic effect of chlorpromazine: eating elicited by injection into rat hypothalamus, S. F. Leibowitz and N. E. Miller, 609
- Unified science courses (*letters*), V. L. Parsegian and L. C. Blessing, 645
- Unit activity: motivation-dependent responses from midbrain neurons, M. I. Phillips and J. Olds, 1269
- University as a five-legged animal, The (*editorial*), J. Platt, 649
- University self-government: who calls the tune? (*letter*), F. Lunde, 647
- Unreliable results (*letter*), M. F. Ryan, 851
- Uptake of isolated chloroplasts by mammalian cells, M. M. K. Nass, 1128
- Uranium distribution in separated clinopyroxenes from four eclogites, K. C. Condie *et al.*, 57
- Urey, H. C.: Early temperature history of the moon, 1275
- V
- Valdivia, E. *See* Harris, R. A., *et al.*
- Valentine, F. T., and H. S. Lawrence: Lymphocyte stimulation: transfer of cellular hypersensitivity to antigen in vitro, 1014
- VAN DER PIJL, L., Principles of dispersal in higher plants, *book review* of, 1001
- Van Dorn, W. G.: Lunar maria: structure and evolution, 693
- VanItallie, T. B., and A. K. Khachadurian:

INDEX TO VOLUME 165

- Rats enriched with odd-carbon fatty acids: maintenance of glycogen during starvation, 811
- Variable stars, J. S. GLASBY, *book review* by F. B. Wood, 274
- Varner, J. E. *See* Filner, P., et al.
- Vaughan, O. H., Jr. *See* Lou, Y. S., et al.
- Vegetational change along altitudinal gradients, E. W. Beals, 981
- Ventilla, M. *See* Marantz, R., et al.
- Ventricular arrhythmias related to antibiotic usage in dogs, T. J. Regan et al., 509
- Venus: mapping the surface reflectivity by radar interferometry, A. E. E. Rogers and R. P. Ingalls, 797
- Venus: the next phase of planetary exploration, D. M. Hunten and R. M. Goody, 1317
- VERNON, P. E., Intelligence and cultural environment, *book review* of, 1108
- Vinblastine-induced precipitation of microtubule protein, R. Marantz et al., 498
- VINCENT, J. *See* FISHER, J., et al.
- Viral infection across species barriers: reversible alteration of murine sarcoma virus for growth in cat cells, P. J. Fischinger and T. E. O'Connor, 714
- Virgo, D. *See* Hafner, S. S.
- Viruses in plant hosts, K. ESAU, *book review* by S. G. Wildmann, 53
- Virus-like antigen, antibody, and antigen-antibody complexes in hepatitis measured by complement fixation, N. R. Shulman and L. F. Barker, 304
- Visual motion perception: experimental modification, R. H. Masland, 819
- Visual reinforcement of nonnutritive sucking in human infants, E. R. Siqueland and C. A. DeLucia, 1144
- Visual stimuli and evoked responses in the rat, C. Fields, 1377
- Visual transient phenomenon: its polarity and a paradox, J. F. Bird and G. H. Mowbray, 588
- VITA-FINZI, C., The Mediterranean valleys, *book review* of, 52
- Vitellogenesis blood protein synthesis by insect fat body, M. L. Pan et al., 393
- Viveros, O. H., et al.: Quantal secretion from adrenal medulla: all-or-none release of storage vesicle content, 911
- Vogel, J. C. *See* Lerman, J. C., et al.
- Vonnegut, B. *See* Moore, A. D.
- Vyklicky, L., et al.: Primary afferent depolarization evoked by a painful stimulus, 184
- W**
- Wagner, W. W., Jr. *See* Shair, F. H., et al.
- Walker, F. D., and W. J. Hild: Neuroglia electrically coupled to neurons, 602
- Walker, R. M. *See* Condie, K. C., et al.
- Wall, L. A.: *book review* of High temperature resistant polymers, 1111
- Walsh, J. (*News and Comment*): ACE study on campus unrest, 157; anti-poverty R&D, 1243; campus unrest, 46; narcotics and drug abuse, 377; NIH and effect of budget cuts, 1332; seminar for science policy group, 378; Senate imposes CBW limitations and cuts defense research, 778; tax reform bill holds penalties for foundations, 678; technology assessment by NAS panel, 992
- Walters, J. G.: Education first—then contraception (*letter*), 1313
- Wanke, E. *See* Amoore, J. E., et al.
- Wark, D. Q., and D. T. Hilleary: Atmo-
- spheric temperature: successful test of remote probing, 1256
- Warner, T. B.: Fluoride in seawater: measurement with lanthanum fluoride electrode, 178
- Water generated earth vibrations, E. Blade et al., 1148
- Water vapor: observations of galactic sources, M. L. Meeks et al., 180
- Waters, A. C. *See* Fisher, R. V.
- Waters, J. W. *See* Meeks, M. L., et al.
- Weaver, E. C., and H. E. Weaver: Paramagnetic unit in spinach chloroplast particles: estimation of size, 906
- Weaver, H. E. *See* Weaver, E. C.
- Weidner, D. K. *See* Lou, Y. S., et al.
- Weil, A. T. *See* McCauley, C. R.
- Weil, B. H.: Abstracts with zest (*letter*), 6
- Weinberg, A. M. *See* Korenstein, D. A., et al.
- Weinstein, R. S. *See* McNutt, N. S.
- Weir, C. E. *See* Piermarini, G. J., et al.
- Weis, J. S. *See* Deimen, J. M.
- Weisburger, J. H.: Procarbazine: chemical immunosuppressant also powerful carcinogen, 517
- Weisburger, J. H., et al.: Carcinogenesis: physicochemical mechanisms (*meeting report*), 417
- Weissman, M. M., et al.: Birth control—population policy (*letters*), 121
- Wells, R. *See* Schmid-Schönbein, H.
- Wells, R. D.: Actinomycin binding to DNA: inability of a DNA containing guanine to bind actinomycin D, 75
- Wepsic, H. T. *See* Kronman, B. S., et al.
- West, G. S., Jr. *See* Lou, Y. S., et al.
- Westing, A. H.: Science at small colleges (*letter*), 236
- Whang-Peng, J. *See* Gallo, R. C., et al.
- When found, make a note of . . . (*letter*), H. F. Crovitz, 1066
- White, J. G. *See* Shoeman, D. W., et al.
- White, J. L. *See* Jou, A. S. R.
- White, P. L. *See* Blood, F. R., et al.
- White, W. B. *See* Poulsom, T. L.
- WHITESIDE, D. T. (Ed.), The mathematical papers of Isaac Newton, *book review* of, 578
- Whitetop experiment, L. J. Battan et al., 618
- Whittaker, A. G., and P. L. Kintner: Carbon: observations on the new allo-tropic form, 589
- Who's who (*letters*), G. P. Rodnan et al., 6
- Why ABM? J. J. HOLST and W. SCHNEIDER, JR. (Eds.), *book review* by B. Richter, 576
- Wicke, C. R.: *book review* of The Olmec world, 999
- Widom, B. *See* Aneshansley, D. J., et al.
- Widom, J. M. *See* Aneshansley, D. J., et al.
- Wiemeyer, S. N. *See* Porter, R. D.
- WIESNER, J. B. *See* CHAYES, A.
- Wilcox, J. M.: *book review* of The proton flare project, 168
- Wildlife in danger, J. FISHER et al., *book review* by R. D. Taber, 999
- Wildman, S. G.: *book review* of Viruses in plant hosts, 53
- Wile, H. P.: Gifts and grants: who benefits? (*letter*), 234
- Willard, H. B.: *book review* of The theory of neutron resonance reactions, 785
- Williams, C. H. *See* Harris, R. A., et al.
- Williams, D. C.: Chayes-Wiesner report challenged (*letter*), 335
- Wilson, A. G.: Hierarchical structures, 202
- Wilson, J. H., Jr.: Better written journal papers—who wants them?, 986
- Wilson, J. T.: *book review* of Science and the federal patron, 1109
- Wilson, T. R. S. *See* Mangelsdorf, P. C., et al.
- Wise, R. A.: Plasticity of hypothalamic motivational systems, 929
- Wishik, S. M. *See* Harkavy, O., et al.
- Wisniewski, H. *See* Bensch, K. G., et al.
- Wolbarsht, M. L., *book review* of Insect vision, 1249
- Wolfe, L. *See* Holmes, A. W., et al.
- Wolfe, D. (*editorials*): Foundation or public charity, 1209; Handcuffing the foundations, 9; Potomac Valley Test Facility, 969; The President need not wait, 239; Science policy studies, 547
- Wood, F. B.: *book review* of Variable stars, 274
- Wood, J. S. *See* Bond, H. E., et al.
- Woolum, J. C. *See* Commoner, B., et al.
- Wormuth, J. H. *See* Enright, J. T., et al.
- Wray, J. L. *See* Filner, P., et al.
- Wrenn, M. E.: *book review* of Radioisotopes in the human body, 485
- WRIGHT, E. N. *See* MURTON, R. K.
- Wunsch, C.: *book review* of The new world of the oceans, 1343
- WÜTHRICH, K. *See* Shulman, R. G., et al.
- Wyatt, J. T., and J. K. G. Silvey: Nitrogen fixation by *Gloeo caps*, 908
- Wynder, E. L. *See* Radford, E. P., et al.
- Wytzka, J. *See* Kane, J., et al.

X

- X-ray integrated reflection coefficient of lithium fluoride, F. W. Lytle, 416
- X-ray resistant cell required for the induction of in vitro antibody formation, J. Roseman, 1125
- XYY chromosome: legal hazards (*letter*), C. B. Goodhart, 967
- XYY chromosome: premature conclusions (*letter*), S. Kessler and R. H. Moos, 442

Y

- Yamané, T. *See* Shulman, R. G., et al.
- Y-modulation: an improved method of revealing surface detail using the scanning electron microscope, T. K. Kelly et al., 283
- Young, A. T. *See* Leighton, R. B., et al.
- Yunis, E. *See* Amos, B.

Z

- Zajac, F. E., III. *See* Vyklicky, L., et al.
- Zarrow, M. X.: *book review* of Pharmacology of hormonal polypeptides and proteins, vol. 2, 275
- Zavon, M. R.: A neutral stance is impossible (*letter*), 967
- Zbar, B. *See* Kronman, B. S., et al.
- Zeevi, Y. Y. *See* Lewis, E. R., et al.
- Zoology of tropical Africa, The, J. L. CLOUDSLY-THOMPSON, *book review* by H. K. Buechner, 683
- Zucker, R. S.: Field potentials generated by dendritic spikes and synaptic potentials, 409
- Zull, J. E., and A. J. Hopfinger: Potential energy fields about nitrogen in choline and ethanolamine: biological function at cellular surfaces, 512