

ized objects). Storage and retrieval processes for these memory levels, and the functional and process interactions between the levels, were discussed. Like Feigenbaum's model, Atkinson's distinguished between short-term and long-term memory systems and covered much data usually subsumed either under "learning" or "memory" but not both.

Autonomic indices of attention, readiness, and rejection of the external environment, were discussed. John Lacey (Fels Research Institute) demonstrated the relation among measures of heart rate, blood pressure, galvanic skin response, and respiration in a variety of situations. These and other data, both from human and animals, were discussed in the context of possible feedback of these effects into the central nervous system.

The conference was held under the auspices of the Interdisciplinary Communications Program of the New York Academy of Sciences, and was supported by the Office of Naval Research and the National Aeronautics and Space Administration. The proceedings of this conference, edited by Daniel P. Kimble, will be published under the auspices of the New York Academy of Sciences. The first volume, *The Anatomy of Memory*, is now available from Science and Behavior Books, Palo Alto, California.

DANIEL P. KIMBLE

Psychology Department,
University of Oregon, Eugene

Forthcoming Events

February

22-24. **Offshore Exploration**, 1st conf., Long Beach, Calif. (P.O. Box 88, 2550 Via Tejon, Palos Verdes Estates, Calif.)

22-26. Canadian Assoc. of **Radiologists**, 29th annual, Montreal, Quebec. (The Association, 1555 Summerhill Ave., Montreal)

23-25. **Biophysical Soc.**, 10th annual mtg., Boston, Mass. (J. Baruch, Bolt, Beranek and Newman Inc., 50 Moulton St., Cambridge, Mass. 02138)

24-26. American Acad. of **Forensic Sciences**, Chicago, Ill. (S. R. Gerber, Law-Medicine Center, Western Reserve Univ., Cleveland, Ohio 44106)

24-26. Interdisciplinary Aspects of **Radiative Energy Transfer**, Philadelphia, Pa. (J. J. Welsh, Space Sciences Laboratory, General Electric Co., Box 8555, Valley Forge, Pa.)

25-26. **Thoracic Soc.**, spring mtg., London, England. (H. M. Foreman, Sully Hospital, Sully, Glamorganshire, England)

27-3. Society of **Economic Geologists**,

annual mtg., New York, N.Y. (J. Kallikoski, Dept. of Geology, Princeton, N.J.)

27-3. American Inst. of **Mining, Metallurgical, and Petroleum Engineers**, annual mtg., New York, N.Y. (The Institute, 345 E. 47 St., New York 10017)

27-4. International **Anesthesia Research Soc.**, Bal Harbour, Fla. (A. W. Friend, 227 Wade Park Manor, Cleveland, Ohio)

28-4. **Aerial Triangulation**, symp., Urbana, Ill. (M. B. Scher, Intern. Soc. for Photogrammetry, Commission 3, 9701 East Light Dr., Falls Church, Va.)

28-4. American **Crystallographic Assoc.**, mtg., Univ. of Texas, Austin. (W. L. Kehl, Gulf Research and Development Co., P.O. Drawer 2038, Pittsburgh, Pa. 15230)

28-4. American Assoc. of **Junior Colleges**, 46th annual conv., St. Louis, Mo. (The Association, 1315 16th St., NW, Washington, D.C. 20036)

March

1-2. **Dairy Engineering**, natl. conf., Michigan State Univ., East Lansing. (C. W. Hall, Agricultural Engineering Dept., Michigan State Univ., East Lansing)

1-3. **Space Maintenance and Extra-Vehicular Activities**, natl. conf., Orlando, Fla. (M. B. Goldman, Mail No. 302, Martin Co., Baltimore, Md. 21203)

1-10. **Industrial Development** in the Arab Countries, regional symp., Kuwait. (Intern. Agency Liaison Branch, Office of the Director General, Food and Agriculture Organization, Via delle terme di Caracalla, Rome, Italy)

2-4. **Air Pollution Medical Research**, AMA conf., Los Angeles, Calif. (Dept. of Environmental Health, American Medical Assoc., 535 N. Dearborn St., Chicago, Ill. 60610)

2-4. **Plasmadynamics**, conf., Monterey, Calif. (American Inst. of Aeronautics and Astronautics, 1290 Sixth Ave., New York 10019)

2-4. **Scintillation and Semiconductor Counters**, 10th symp., Washington, D.C. (W. A. Higinbotham, Brookhaven Natl. Laboratory, Upton, L.I., N.Y.)

3-4. Louisiana Soc. for **Electron Microscopy**, 3rd annual symp., New Orleans. (W. R. Goynes, Southern Regional Research Laboratory, Box 19687, New Orleans)

3-5. **Pb-Zn-Barite-Fluorite Symp.**, New York, N.Y. (C. H. Behre, Jr., Behre Dolbear & Co., 11 Broadway, New York 10004)

3-5. Central **Surgical Assoc.**, Chicago, Ill. (C. E. Lischer, 457 N. Kingshighway, St. Louis 8, Mo.)

4-5. **Cineradiology**, 5th symp., Rochester, N.Y. (R. Gramiak, Div. of Diagnostic Radiology, Univ. of Rochester Medical Center, Rochester 14620)

4-6. American Assoc. of **Pathologists and Bacteriologists**, 63rd annual mtg., Cleveland, Ohio. (P. Fitzgerald, Downstate Medical Center, 450 Clarkson Ave., Brooklyn 3, N.Y.)

5-10. International Acad. of **Proctology**, 18th annual conv., Miami Beach, Fla. (A. F. Cantor, 147-41 Sanford Ave., Flushing, N.Y. 11355)

6-11. American Soc. of **Photogrammetry**, Washington, D.C. (C. E. Palmer, 5917 Brookview Dr., Brookland Estates, Alexandria, Va.)

7-9. **Fundamental Cancer Research**, 20th annual symp., Univ. of Texas, Houston. (M. Mandel, Dept. of Biology, M. D. Anderson Hospital and Tumor Inst., Univ. of Texas, Houston 77025)

7-9. **Electric Propulsion**, 5th conf., American Inst. of Aeronautics and Astronautics, San Diego, Calif. (A. T. Forrester, Electro-Optical Systems, Inc., 300 N. Halstead St., Pasadena, Calif. 91107)

7-9. **Space**, 3rd congr., Cocoa Beach, Fla. (R. M. Barnes, PAA-Guided Missiles Range Div., Bldg. 423, MU 111, Patrick Air Force Base, Fla.)

7-11. American Soc. for **Metals**, western metal and tool exposition and conf., Los Angeles, Calif. (The Society, Metals Park, Ohio)

7-11. Society of **Plastics Engineers**, 22nd annual technical conf., Montreal, P.Q., Canada. (G. L. Bata, Union Carbide Canada, Ltd., P.O. Box 700, Pointe-aux-Trembles, P.Q.)

7-12. Inter-American **Nuclear Energy Commission**, 6th mtg., Washington, D.C. (J. D. Perkinson, Jr., Pan American Union, Washington 20006)

8-3. World **Meteorological Organization**, commission for synoptic meteorology, 4th session, Wiesbaden, Germany. (WMO, 41, avenue Giuseppe Motta, Geneva, Switzerland)

9-11. **Ethics in Medical Progress**, Ciba Foundation symp., London, England. (Ciba Foundation, 41 Portland Pl., London W.1)

9-13. Teaching Machines and **Programmed Instruction**, intern. symp., Nürtingen, Germany. (Arbeitsgemeinschaft Programmierte Instruktion, Inst. für Kybernetik, Pädagogische Hochschule Berlin, Malteserstr. 74-100, 1 Berlin 46)

10-11. **Heat Transfer** to Non-Newtonian Fluids, 12th annual heat transfer conf., Oklahoma State Univ., Stillwater. (J. D. Parker, Dept. of Mechanical Engineering, Oklahoma State Univ., Stillwater 74075)

11-13. National Council of **Teachers of Mathematics**, San Diego, Calif. (J. D. Gates, 1201 16th St., NW, Washington, D.C. 20036)

11-13. National **Wildlife Federation**, annual mtg., Pittsburgh, Pa. (T. L. Kimball, 1412 16th St., NW, Washington, D.C. 20036)

12-13. **Linguistics**, 11th natl. conf., Linguistic Circle of New York, N.Y. (L. Pap, State Univ. College, New Paltz, N.Y. 12561)

14-16. Society of **Toxicology**, annual scientific mtg., Williamsburg, Va. (C. S. Weil, Mellon Inst., 4400 Fifth Ave., Pittsburgh, Pa. 15213)

14-16. **Wildlife and Natural Resources**, 31st North American conf., Pittsburgh, Pa. (C. R. Gutermauth, Wildlife Management Inst., Wire Bldg., Washington, D.C.)

14-20. **Obstetrics and Gynecology**, 8th Australian congr., Hobart. (J. F. Correy, 173 Macquaire St., Hobart)

14-6 May. Extraordinary Administrative **Aeronautical Radio Conf.**, 2nd session, Geneva, Switzerland. (Intern. Telecommunication Union, Place des Nations, Geneva)

15-16. **Flame Resistant Polymers**, conf., London, England. (Secretary, Plastics Inst., 6 Mandeville Pl., London, W.1)



INTELLIGENT LIFE IN THE UNIVERSE

By I. S. Shklovskii, *Sternberg Astronomical Institute, Soviet Academy of Sciences*, and Carl Sagan, *Harvard University and Smithsonian Astrophysical Observatory*. A translation, annotation, and extension of I. S. Shklovskii's *Vselennia, Zhizn, Razum*. Authorized translation by Paula Fern. C. 500 pp, over 140 illus., (Spring 1966). Estimated price, \$8.95.

The product of a unique international collaboration between a world-famous Russian astronomer and a leading American space scientist, this book is the first popular and accurate modern discussion of the entire panorama of natural evolution—including the origins of the universe, the evolution of stars and planets, the beginnings of life on earth, and the development of intelligence and technical civilizations among galactic communities. The content covers a vast amount of new material, some never before published in any form and some previously available only in technical journals inaccessible to the general reader.

While the book contains in small print technical material of interest to the specialist, it is written primarily for the intelligent layman. Where necessary, details have been included in a non-technical way so that the lay reader can critically judge the train of argument. Although acknowledgedly speculative in many places—for example, in the detailed discussions of interstellar contact—*Intelligent Life in the Universe* is an outstanding summary of the present state of scientific knowledge and philosophical interest in those arresting areas of contemporary research. While carefully presenting the scientific background in physics, astronomy, and biology, the book conveys the excitement of scientific endeavor. For this reason, it will provide excellent supplementary reading for introductory college courses in the natural sciences.

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15-18. **Optical Soc. of America**, spring mtg., Washington, D.C. (M. E. Warga, 1155 16th St., NW, Washington, D.C. 20006)

17-19. **Isobaric Spin in Nuclear Physics**, intern. conf., Florida State Univ., Tallahassee. (D. Robson, Dept. of Physics, Florida State Univ., Tallahassee)

18-19. **Rural Health**, conf., Colorado Springs, Colo. (B. L. Bible, 535 N. Dearborn St., Chicago, Ill. 60610)

18-20. **American Psychosomatic Soc.** annual mtg., Chicago, Ill. (W. A. Greene, The Society, 265 Nassau Rd., Roosevelt, N.Y. 11575)

20-23. **Solar Energy Soc.**, 2nd annual mtg., Boston, Mass. (F. Edlin, Arizona State Univ., Tempe 85281)

21-24. **Aerospace Instrumentation**, 4th intern. symp., College of Aeronautics, Cranfield, England. (E. K. Merewether, ISA Aerospace Industry Div., 4515 Canoga Ave., Woodland Hills, Calif.)

21-25. **Institute of Electrical and Electronics Engineers**, intern. conv., New York, N.Y. (IEEE, 345 E. 47 St., New York 10017)

22-23. **Biomagnetism**, 3rd intern. symp., Univ. of Illinois, Chicago. (M. F. Bar-nothy, Univ. of Illinois, 833 S. Wood St., Chicago)

22-23. **Modern Concepts of Cardiovascular Diseases**, conf. and workshop, Reno, Nev. (G. T. Smith, Laboratory of Patho-Physiology, Univ. of Nevada, Reno 89507)

22-24. **Measurement and Applications of Neutron Cross Sections**, conf., Washington, D.C. (W. W. Havens, Dept. of Physics, Columbia Univ., 538 W. 120 St., New York 10027)

22-31. **American Chemical Soc.**, spring mtg., Pittsburgh, Pa. (ACS, 1155 16th St., NW, Washington, D.C.)

23-25. **Institute of Mathematical Statistics**, Purdue Univ., Lafayette, Ind. (G. E. Nicholson, Jr., Univ. of North Carolina, Chapel Hill)

23-25. **Modern Methods of Weather Forecasting and Analysis**, Chicago, Ill. (J. R. Fults, U.S. Weather Bureau, 5730 S. Woodlawn Ave., Chicago)

24-26. **Biomathematics and Computer Science in the Life Sciences**, symp., Houston, Tex. (Dean, Div. of Continuing Education, Univ. of Texas Graduate School of Biomedical Sciences, Texas Medical Center, Houston 77025)

24-26. **Pediatric and Adolescent Gynecology**, conf., New York Acad. of Sciences, New York. (W. R. Lang, Jefferson Medical College of Philadelphia, 1025 Walnut St., Philadelphia, Pa.)

24-26. **Pollution and Marine Ecology**, conf., Galveston, Tex. (S. M. Ray, Texas A&M Univ. Marine Laboratory, Galveston 77550)

24-27. **International Assoc. for Dental Research**, 44th general mtg., Miami, Fla. (G. H. Rovelstad, U.S. Navy Dental School, Natl. Naval Medical Center, Bethesda, Md. 20014)

25-26. **National Assoc. of Biology Teachers**, western regional conv., Los Angeles, Calif. (The Association, Professional Building, Great Falls, Mont.)

26-2. **Stress Analysis**, 3rd intern. conf., Berlin, Germany. (H. Kotthaus, Verein Deutscher Ingenieure, Prinz-Georg Str. 77/79, 4 Düsseldorf 10)

26-27. Arizona Chest Disease Symp., Tucson. (E. A. Oppenheimer, P.O. Box 6067, Tucson 85716)

27-30. American Assoc. of Dental Schools, Miami Beach, Fla. (R. Sullens, 840 N. Lake Shore Dr., Chicago, Ill.)

28-30. Great Lakes Research, 9th conf., Chicago, Ill. (B. M. McCormac, IIT Research Inst., 10 W. 35 St., Chicago 60616)

28-31. Collegium Intern. Neuro-Psychopharmacologicum, 5th biennial mtg., Washington, D.C. (M. K. Taylor, 3636 16th St., NW, Washington 20010)

29-31. Airborne Infection, 2nd intern. conf., Illinois Inst. of Technology, Chicago. (E. K. Wolfe, U.S. Army Biological Laboratories, Fort Detrick, Frederick, Md.)

29-31. Applied Meteorology, 6th natl. conf., Los Angeles, Calif. (B. N. Charles, Booz-Allen Applied Research, 6151 W. Century Blvd., Los Angeles 90045)

29-31. Chemical Soc., anniversary mtgs., Oxford, England. (General Secretary, Burlington House, London W.1)

29-31. Surface-Active Substances, intern. conf., Berlin, East Germany. (Inst. für Fettchemie, Deutsche Akademie der Wissenschaften zu Berlin, Rudower Chaussee 5, 1199 Berlin-Adlershof)

29-31. Symbolic and Algebraic Manipulation, symp., Assoc. for Computing Machinery, Washington, D.C. (J. E. Sammet, I.B.M. Corp., 545 Technology Sq., Cambridge, Mass. 02139)

29-1. American Assoc. for Contamination Control, 5th annual technical mtg., Houston, Tex. (W. T. Maloney, The Association, 6 Beacon St., Boston, Mass. 02108)

29-1. Ultraviolet and X-ray Spectroscopy of Laboratory and Astrophysical Plasma, conf., Abingdon, England. (Inst. of Physics and the Physics Soc., 47 Belgrave Sq., London, S.W.1, England)

30. Oral Cancer, 4th symp., St. Francis Hospital, Poughkeepsie, N.Y. (M. A. Engelman, 1 E. Academy St., Wappingers Falls, N.Y.)

30-1. Magnetohydrodynamics, 7th symp., Princeton, N.J. (R. G. Jahn, Guggenheim Laboratories, Forrestal Research Center, Princeton, N.J. 08540)

31-2. Michigan Acad. of Science, Arts, and Letters, Wayne State Univ., Detroit. (E. A. Wunsch, Dept. of English, Univ. of Michigan, Ann Arbor)

April

1-2. Alabama Acad. of Science, Birmingham-Southern College, Birmingham. (W. B. DeVall, Dept. of Forestry, Auburn Univ., Auburn, Ala.)

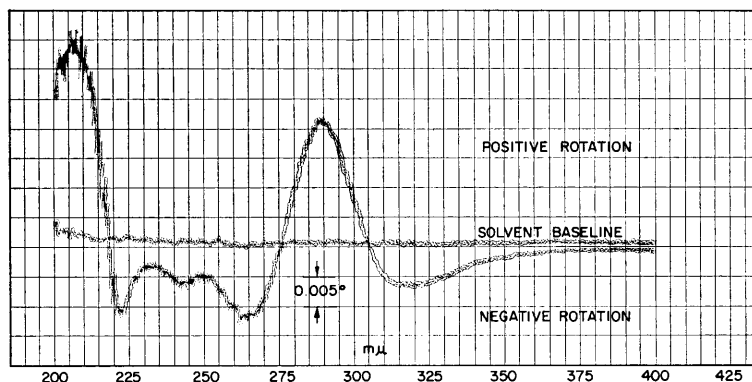
1-2. Arkansas Acad. of Science, Little Rock. (G. E. Templeton, Univ. of Arkansas, Fayetteville)

1-5. National Science Teachers Assoc., New York, N.Y. (R. H. Carleton, 1201 16th St., NW, Washington, D.C. 20036)

1-7. American Acad. of General Practice, Boston, Mass. (M. F. Cahal, Volker Blvd. at Brookside, Kansas City 12, Mo.)

4-6. Atomic Energy Soc. of Japan, annual mtg., Tokyo. (M. Masamoto, Japan Atomic Energy Research Inst., 1-1, Shibamura-cho, Minato-ku, Tokyo)

4-6. Exobiology, conf., Ames Research Center, Moffett Field, Calif. (Letters and Science Extension, Univ. of California, Berkeley 94720)



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4-6. American Assoc. of **Physical Anthropologists**, Berkeley, Calif. (F. E. Johnston, Dept. of Anthropology, Univ. of Pennsylvania, Philadelphia 19104)

4-7. Federation of European **Biochemical Soc.**, 3rd mtg., Warsaw, Poland. (T. Klopotoski, Polish Biochemical Soc., Freta 16, Warsaw)

4-7. Advances in **Water Quality Improvement**, conf., Univ. of Texas, Austin. (Special Lecture Series, Engineering Laboratories Bldg. 305, Univ. of Texas, Austin 78712)

4-8. International **Biological Program**, 2nd general assembly, Paris, France. (F. W. G. Baker, 2 via Sebenico, Rome, Italy)

4-10. **Psychology**, 10th inter-American congr., Lima, Peru. (Intern. Soc. of Psychology, 2104 Meadowbrook Dr., Austin, Tex.)

5-7. Middle East **Neurosurgical Soc.**, mtg., Jerusalem, Jordan. (F. S. Haddad, Orient Hospital, Beirut, Lebanon)

5-8. American Assoc. of **Anatomists**, San Francisco, Calif. (R. T. Woodburne, Dept. of Anatomy, Univ. of Michigan, Ann Arbor 48104)

6-7. **Phlebology**, 6th intern. mtg., Aix-en-Provence, France. (F. Beurier, 94, cours Sextius, Aix-en-Provence)

6-8. **Electron and Laser Beam Technology**, Univ. of Michigan, Ann Arbor. (G. I. Haddad, Electrical Engineering Dept., Univ. of Michigan, Ann Arbor)

6-8. Recent Advances in **Phytochemistry**, intern. symp., Univ., of Texas, Austin. (T. J. Mabry, Dept. of Botany, Univ. of Texas, Austin 78712)

6-8. **Plant Phenolic Group** of North America, 6th annual mtg., Austin, Tex. (V. C. Runeckles, Imperial Tobacco Co., Montreal, P.Q., Canada)

7-8. Southern **Sociological Soc.**, annual mtg., New Orleans, La. (J. J. Honigmann, Dept. of Anthropology, Univ. of North Carolina, Chapel Hill)

7-9. Southern Soc. for **Philosophy and Psychology**, New Orleans, La. (G. R. Hawkes, U.S. Army Medical R&D Command, Washington, D.C. 20315)

8-11. **Animal Toxins**, intern. symp., Atlantic City, N.J. (F. E. Russell, Box 323, Los Angeles County General Hospital, 1200 N. State St., Los Angeles, Calif. 90033)

11-12. American Soc. for **Artificial Internal Organs**, Atlantic City, N.J. (B. K. Kusserow, Dept. of Pathology, Univ. of Vermont College of Medicine, Burlington)

11-13. Institute of **Electrical and Electronics Engineers**, Region 3, conv., Atlanta, Ga. (M. D. Price, Dept. 72-14, Zone 400, Lockheed-Georgia Co., Marietta, Ga.)

11-13. Comparative **Hemoglobin** Structure, intern. symp., Salonika, Greece. (Secretary, P.O. Box 201, Salonika)

11-15. **Aeronomic Studies of Lower Ionosphere**, conf., Ottawa, Ont., Canada. (W. Pfister, Air Force Cambridge Research Laboratories, Upper Atmosphere Physics Laboratory, L. G. Hanscom Field, Bedford, Mass.)

11-15. American Assoc. of **Cereal Chemists**, New York, N.Y. (R. J. Tarleton, The Association, 1955 University Ave., St. Paul, Minn. 55104)

11-16. Federation of American Societies for **Experimental Biology**, 50th annual mtg., Atlantic City, N.J. The following societies will meet in conjunction with the FASEB; information may be obtained from FASEB, 9650 Rockville Pike, Bethesda, Maryland 20014:

American Physiological Society
American Soc. of Biological Chemists
American Soc. for Pharmacology and Experimental Therapeutics
American Soc. for Experimental Pathology

American Inst. of Nutrition
American Assoc. of Immunologists

11-20. **Oceanography**, intern. conf., Moscow, U.S.S.R. (R. C. Vetter, Committee on Oceanography, Natl. Acad. of Sciences, 2101 Constitution Ave., NW, Washington, D.C. 20418)

12-13. Frontiers in **Food Research**, symp., Cornell Univ., Ithaca, N.Y. (W. F. Shipe, Dept. of Dairy and Food Science, Cornell Univ., Ithaca)

12-14. **Generalized Networks**, intern. symp., New York, N.Y. (H. J. Carlin, Polytechnic Inst. of Brooklyn, 333 Jay St., Brooklyn, N.Y. 11201)

12-14. **Remote Sensing of Environment**, 4th symp., Univ. of Michigan, Ann Arbor. (Extension Service, Conference Dept., Univ. of Michigan, Ann Arbor 48104)

12-15. **Quantum Electronics**, intern. conf., Phoenix, Ariz. (J. P. Gordon, Bell Telephone Laboratories, Murray Hill, N.J.)

12-16. Society for Applied **Mathematics and Mechanics**, annual scientific mtg., Darmstadt, Germany. (F. Reutter, Gesellschaft für Angewandte Mathematik und Mechanik, Templergraben 55, 51, Aachen, Germany)

12-29. **Soil Conservation**, 1st Pan American congr., São Paulo, Brazil. (J. Abrahams Neto, avda. Francisco Matarazzo 455, Caixa Postal 8366, São Paulo)

13-15. Institute of **Environmental Sciences**, 12th annual tech. mtg. and equipment exp., San Diego, Calif. (The Institute, 34 S. Main St., Mount Prospect, Ill. 60057)

13-16. **Geological Soc.** of America, southeast section, Univ. of Georgia, Athens. (L. D. Ramspott, Dept. of Geology, Univ. of Georgia, Athens 30601)

13-16. American **Orthopsychiatric Assoc.**, 43rd annual mtg., San Francisco, Calif. (M. F. Langer, The Association, 1790 Broadway, New York 10019)

13-16. American **Radium Soc.**, annual mtg., Phoenix, Ariz. (J. L. Pool, Memorial Soc., 444 E. 68 St., New York 10021)

13-16. National Council of **Teachers of Mathematics**, 44th annual mtg., New York, N.Y. (J. D. Gates, 1201 16th St., NW, Washington, D.C. 20036)

14-15. British **Biophysical Soc.**, spring mtg., Oxford, England. (D. Noble, Balliol College, Oxford)

14-15. **Molecular Interactions and the Crystallography of Ceramics**, Univ. of Nottingham, Nottingham, England. (S. C. Wallwork, Dept. of Chemistry, Univ. of Nottingham, University Park, Nottingham)

14-16. Association of Southeastern **Biol-ogists**, Raleigh, N.C. (M. Y. Menzel, Dept. of Biological Sciences, Florida State Univ., Tallahassee)

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14-16. American Cleft Palate Assoc., Mexico City, Mexico. (C. G. Wells, Parker Hall, Univ. of Missouri, Columbia)

14-16. Eastern Psychological Assoc., New York, N.Y. (M. A. Iverson, Queens College, Flushing, N.Y. 11367)

14-17. American Assoc. of Endodontists 23rd annual mtg., San Francisco, Calif. (J. F. Bucher, 6828 Winterberry Lane, Bethesda, Md. 20034)

14-19. American Dermatological Assoc., Hot Springs, Va. (R. R. Kierland, Mayo Clinic, Rochester, Minn.)

14-20. Geodetical Measuring Technique and Instruments, conf., Budapest, Hungary. (F. Raum, Preparatory Committee of the Conference, Technika Hazs, Szabadsag ter 17, Budapest 5)

15-16. Iowa Acad. of Science, Pella. (G. W. Peglar, Dept. of Mathematics, Iowa State Univ., Ames)

15-16. Montana Acad. of Sciences, Missoula. (L. H. Harvey, Univ. of Montana, Missoula 59801)

15-17. American Soc. of Internal Medicine, New York, N.Y. (A. O. Whitehall, 3410 Geary Blvd., San Francisco, Calif. 95118)

16-18. Lateral Line Detectors, intern. conf., New York, N.Y. (P. H. Cahn, Stern College, Yeshiva Univ., 253 Lexington Ave., New York 10016)

17-20. Electron and Ion Beam Science and Technology, 2nd intern. conf., American Inst. of Mining, Metallurgical, and Petroleum Engineers, New York, N.Y. (H. N. Appleton, 345 E. 47 St., New York 10017)

18-19. American Otological Soc., San Juan, P.R. (W. H. Bradley, 1100 E. Genessee St., Syracuse, N.Y.)

18-20. Thermodynamics of Ceramic Systems, mtg., London, England. (J. P. Roberts, British Ceramics Soc., Houldsworth School of Applied Science., Univ. of Leeds, Leeds 2, England)

18-20. Technical Microbiology, symp., Berlin, Germany. (S. Windisch, Inst. für Gärungsgewerbe, Seestr. 13, 1 Berlin 65)

18-20. Structures and Materials, 7th conf., Cocoa Beach, Fla. (R. W. Leonard, NASA-Langley Research Center, Mail Stop 188C, Langley Station, Hampton, Va. 23365)

18-21. Aerospace Medical Assoc., 37th annual scientific mtg., Las Vegas, Nev. (C. A. Berry, Chief of Center Medical Programs, NASA-Manned Spacecraft Center, Houston, Tex. 77058)

18-21. American Geophysical Union, 47th annual mtg., Washington, D.C. (W. E. Smith, AGU, 1145 19th St., NW, Washington, 20036)

18-21. Tectonic Levels in the Earth's Crust, intern. symp., Neuchatel, Switzerland. (J.-P. Schaer, Dept. of Geology, University, 11 rue Emile Argand, 200 Neuchatel)

18-22. American Assoc. of Corrosion Engineers, 22nd annual mtg., Miami Beach, Fla. (N. E. Hamner, The Association, 980 M&M Bldg., Houston, Tex.)

18-22. Applications of Liquid Fuels, conf., Torquay, England. (Inst. of Fuel, 18 Devonshire St., Portland Pl., London, W.1, England)

18-22. American College of Physicians, New York, N.Y. (E. C. Rosenow, Jr., 4200 Pine St., Philadelphia 4, Pa.)

The name is GERBER

GRAPHIC DATA SCANNING & REDUCTION

Complex graphic data scanning and reduction systems can be assembled from basic off-shelf Gerber modules. From simple variable scales, scanners, tabulating and digitizing units to a variety of large scale control elements, Gerber designs and assembles systems for rapid reading, translation, and digitizing of data from strip charts, drawings, maps, films — almost any medium in which optical identification can be achieved.

Using a Gerber variable scale with a scanning device, graphic information can be read and reduced quickly and inexpensively. Where large quantities of data must be translated, Gerber offers reading heads capable of tabulating and digitizing semi-automatically. On Gerber large area data reduction systems, thousands of mechanical drawings can be digitized and stored until needed; at which time data can be processed for statistical analysis or computer controlled scaling of variables can be achieved in reproduction on automatic drafting tables (also designed and manufactured by Gerber).

The name is GERBER — for graphic data scanning and reduction.

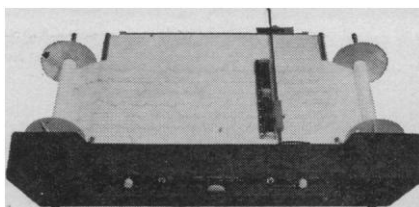
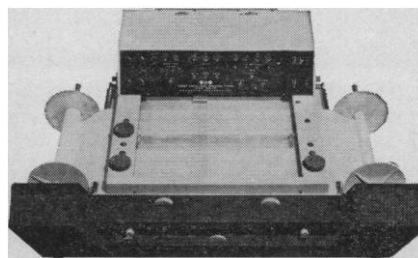
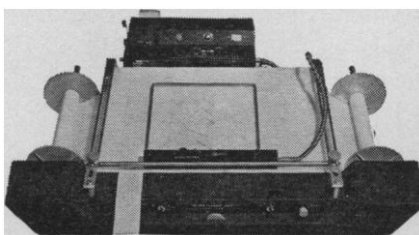


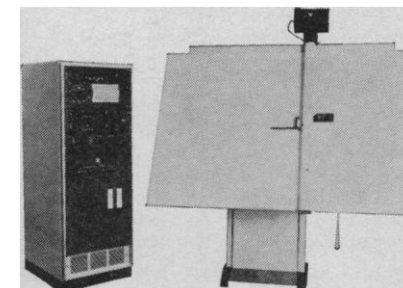
CHART SCANNER (S-2) — Electrically driven transport for handling graphs and charts. Variable speed to 500 feet per minute. 24-inch long table handles data records to 16 inches wide. Free standing, 66-inch long S-10 floor model also available. (Optional variable scale for S-2 permits reading of curve amplitude directly.)



DIGITAL DATA READER — Reduces almost any X-Y recorded graphic data to digital form at over 10,000 tabulations per day. Output to punched cards, punched tape, or typewriter. A channel counter and time line counter are included. Input flexibility offered with keyboard for insertion of additional data by operator.



OSCILLOGRAM AMPLITUDE TABULATOR — Semi-automatic tabulating system for translating graphic records into printed tape output in 4-digit amplitude readings at 100, 256, or 1000 counts per inch. Scaling with a calibration curve eliminates further mathematical computation. Both linear and nonlinear records may be read from multi-channel recordings.



LARGE AREA COORDINATE DIGITIZER — For digitizing maps, graphs, layouts, drawings, or other graphic coordinate data for computer input. Also converts rough sketches into digital data for direct input to automatic artwork generators. Working surface is 48" square; resolution, 1000 counts per inch; accuracy, $\pm .005$ " over entire reading surface. Manual controls allow data insertion. Programmable output to punched tape cards, or typewriter.



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