



At ceremony honoring the Association's programs for disabled scientists and engineers are (left to right) John Gavin; Martha Ross Redden; Virginia Stern; William R. Howell, chairman of the board, J. C. Penney Company, Inc.; Margaret Heckler, secretary, U.S. Department of Health and Human Services; and Senator Robert Dole, chairman, National Organization Awards Program.

the AAAS set out on an uphill effort to dismantle barriers to the full participation of disabled men and women in scientific and engineering careers. The results speak for themselves, and science is the chief beneficiary."

The award of \$3000 was presented at a Capitol Hill ceremony on 6 June. Receiving the award for AAAS were Martha Ross Redden, director, and Virginia Stern, senior program associate of the Project on the Handicapped in Science, and John Gavin, a member of the Resource Group. Other organizations winning awards were the American Library Association, Boy Scouts of America, Paralyzed Veterans of America, and Special Olympics, Inc.

In addition to forming the Resource Group of Disabled Scientists and Engineers, the Project has conducted a series of workshops centering on the uses of science and technology to aid disabled persons; prepared a guide to assist other organizations to hold "barrier-free" meetings; and put together a slide show and directory of out-of-school science programs available to all students, including disabled youth. The AAAS Project (part of the Office of Opportunities in Science) is currently conducting a program to better bridge the gap between researchers and developers of technologies and the disabled people who are potential users of the technologies. As part of this project, the AAAS has assembled a consortium of professional societies involved in expanding their services to disabled members.

More than 90 organizations entered this, the first, awards competition, the purpose of which is to initiate or expand the participation of disabled persons

within national organizations and associations and their memberships, and to link association activities to the goals of the Decade of Disabled Persons (1983-1992).

## New Insights into The Technological Marketplace Available

Students, parents, educators, and employers who are concerned with the marketplace for scientists and engineers will find both an undersupply and an oversupply of these professionals in the coming decade, concludes a new report from the Scientific Manpower Commission. Engineers, particularly electrical, electronic, and aerospace engineers, will find employment prospects especially bright through the 1980's, as will computer specialists and some other technical professionals. However, a significant oversupply of some kinds of life scientists and social scientists may limit opportunities in those fields, even through 1995.

*The Technological Marketplace: Supply and Demand for Scientists and Engineers* provides a statistically based assessment, field by field, of balances and imbalances over the past decade, at present, and as anticipated through the next decade and a half.

Engineering degrees have been increasing steadily since 1977, with much of the increase made up of women. However, the increase is not expected to continue past about 1987 because of the decline in the number of college age students. As a proportion of all degrees

awarded, those in science have been dropping since the early seventies.

In examining available projections of supply during the next decade, consideration is given not only to the decreasing size of the college age population, but also to the rising representation of foreign nationals among those preparing for and engaged in technological careers, particularly in such fields as engineering, computer science, economics, and agriculture. Present faculty shortages in engineering and computer science are expected to continue despite employment of foreign-born graduates in these faculty positions. (In 1983, more than one-fourth of all assistant professors in engineering had earned their B.S. degrees outside the United States.)

While our increasingly technological society will continue to create new jobs for scientists and engineers over the coming years, with technical employment growing at a faster rate than total U.S. employment, the number of professional jobs for scientists and engineers, as well as the mix of specialists required to fill them, will depend in part on both the levels of funding and the emphasis of that funding in support of research and development. The nature and extent of these funding decisions by the Congress, the administration, and the private sector cannot be known with certainty, but this report provides a comprehensive picture of some of the most likely forecasts of both supply and demand through the remainder of this century.

*The Technological Marketplace: Supply and Demand for Scientists and Engineers*, third edition, by Betty M. Vetter (May 1985, 54 pp. 38 tables, 17 figures) is available from the Scientific Manpower Commission, 1333 H Street, NW, Washington, D.C. 20005, for \$25 prepaid.

BETTY M. VETTER  
*Scientific Manpower Commission*

## Obituaries

**Edwin Melvin Banks**, professor and former head of the Department of Ecology, Ethology, and Evolution, University of Illinois, member of Section G since 1958, 24 March 1985.

**Werner C. Baum** of Delmar, New York, member of Section G since 1957, 4 April 1985.

**Raymond L. Bisplinghoff**, Apollo engineer, of North Hampton, New Hampshire, member of Section M since 1947, 5 March 1985.

**W. Frank Blair**, professor emeritus of  
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zoology, University of Texas, Austin, member of Section G since 1946, 9 February 1985.

**William G. Bos**, Department of Chemistry, University of Louisville, member since 1982, 13 June 1985.

**George B. Brown**, former vice president, Sloan-Kettering Institute for Cancer Research, member of Section C since 1946, 22 April 1985.

**C. Fred Burrell** of Richmond, California, member of Section B since 1976, 16 January 1985.

**Cornelia Post Channing**, professor of physiology, University of Maryland Medical School, member of Section N since 1972, 8 April 1985.

**C. Daniel Cole**, professor of physics, University of Lowell, member of Section B since 1963, 25 May 1985.

**Harold J. Coolidge**, former executive secretary, Pacific Science Board, National Academy of Sciences, member of Section G since 1948, 15 February 1985.

**Doris E. Curran** of Seattle, Washington, member of Section G since 1947, 9 February 1985.

**Troy Cook Daniels**, dean, School of Pharmacy, University of California, San Francisco, member of Section C since 1945, 9 February 1985.

**Richard F. Davis** of Adelphi, Maryland, member of Section O since 1955, 3 January 1985.

**William J. Dempsey, Sr.**, retired U.S. Geological Survey geophysicist, member of Section E since 1963, 6 April 1985.

**Arthur J. Draper** of Hamden, Connecticut, member since 1984, 20 May 1985.

**Thomas Bradford Drew**, professor emeritus, Massachusetts Institute of Technology, member of Section M since 1942, 5 May 1985.

**Harold Foote**, former president, Commonwealth Associates (Jackson, Michigan), member of Section M since 1933, 7 June 1985.

**O. H. Gaebler** of Detroit, Michigan, member of Section C since 1929, 19 March 1985.

**Katherine Godlewski** of Palo Alto, California, member of Section J since 1971, 22 April 1985.

**J. Herbert Hollomon**, former assistant secretary for science and technology of the U.S. Department of Commerce, member of Section M since 1948, 1 May 1985.

**Sister Marie P. Kernaghan**, former head of the science department, Maryville College, member of Section B since 1934, 27 March 1985.

**Irene Kline** of Cleveland, Ohio, member of Section N since 1955, 9 June 1985.

**Vincent Depaul Larkin** of Garden City, New York, member of Section N since 1956, 23 May 1985.

**R. Bruce Lindsay** of Portsmouth, Rhode Island, member of Section B since 1921, 2 March 1985.

**James A. MacNab**, professor emeritus, Portland State University, member of Section G since 1926, 29 May 1985.

**Harry B. Neustein**, Los Angeles Children's Hospital, member of Section N since 1956, 28 April 1985.

**Jeffrey S. O'Neal** of Clifton, New Jersey, member of Section C since 1979, 11 March 1985.

**Archie M. Palmer** of Washington, D.C., member of Section M since 1948, 1 March 1985.

**John J. Pisano**, National Heart, Lung and Blood Institute, National Institutes of Health, member of Section C since 1965, 26 March 1985.

**John H. Pomeroy**, former manager of international research program on moon rocks gathered by Apollo astronauts, member of Section C since 1960, 14 March 1985.

**G. Elliot Robinson** of Hanover, Massachusetts, member of Section K since 1963, 30 March 1985.

**Douglass F. Roy** of Redding, California, member of Section G since 1960, 25 January 1985.

**Helmuth G. Schneider** of Westfield, New Jersey, member of Section C since 1959, 25 February 1985.

**Arthur T. Schramm**, chairman of the board, Food Materials Corporation, member of Section C since 1965, 24 May 1985.

**Francis P. Shepard**, professor emeritus of submarine geology, Scripps Institution of Oceanography, member of Section E since 1982, 25 April 1985.

**William Sichak** of Plainfield, New Jersey, member of Section B since 1960, 13 May 1985.

**Frank C. Starr, Jr.**, of Wilmington, Delaware, member since 1982, 8 March 1985.

**J. H. Tatsch** of Fredericksburg, Texas, member since 1984, 30 April 1985.

**K. C. Tsou**, School of Medicine, University of Pennsylvania, member of Section N since 1953, 27 January 1985.

**Frank Verbrugge**, director, University Computer Services and professor of physics, University of Minnesota, member of Section B since 1962, 15 January 1985.

**George W. White** of Champaign, Illinois, member of Section L since 1928, 20 February 1985.

## BOOKS RECEIVED

(Continued from page 549)

**Bomb**. Walter C. Patterson. Sierra Club Books, San Francisco, 1985. xvi, 272 pp. \$16.95.

**Polymers as Biomaterials**. Shalaby W. Shalaby *et al.*, Eds. Plenum, New York, 1984. x, 389 pp., illus. \$62.50. From a symposium, Seattle, March 1983.

**Powder Technology**. Koichi Iino, John Keith Beddow, and Genji Jimbo, Eds. Hemisphere, Washington, D.C., 1984. xvi, 823 pp., illus. \$108.50. From a symposium, Kyoto, Japan, Sept. 1981.

**Prehistoric Hunter-Gatherers**. The Emergence of Cultural Complexity. T. Douglas Price and James A. Brown, Eds. Academic Press, Orlando, Fla., 1985. xviii, 454 pp., illus. \$60. Studies in Archaeology. Based on a conference, Vancouver, B.C., Aug. 1983.

**Primates in Nature**. Alison F. Richard. Freeman, New York, 1985. xii, 558 pp., illus. \$27.95; paper, \$17.95.

**Principles of Gene Manipulation**. An Introduction to Genetic Engineering. R. W. Old and S. B. Primrose. 3rd ed. Blackwell Scientific, Palo Alto, Calif., 1985. xiv, 409 pp., illus. Paper, \$21. Studies in Microbiology, vol. 2.

**Problems of Antiviral Therapy**. Charles H. Stuart-Harris and John Oxford, Eds. Academic Press, Orlando, Fla., 1984. x, 347 pp., illus. \$30. From a colloquium, London, Sept. 1982.

**Proceedings of the 39th Industrial Waste Conference**. (West Lafayette, Ind., May 1984.) Butterworth, Boston, 1985. xiv, 970 pp., illus. \$79.95.

**Production Gas Carburising**. G. Parrish and G. S. Harper. Pergamon, New York, 1985. viii, 321 pp., illus. \$40; paper, \$15.75. Pergamon Materials Engineering Practice Series.

**Quadratic and Hermitian Forms**. Winfried Scharlau. Springer-Verlag, New York, 1985. x, 421 pp., \$48.50. Grundlehren der mathematischen Wissenschaften 270.

**Social Psychiatry**. Vladimir Hudolin, Ed. Plenum, New York, 1984. xx, 874 pp. \$97.50. From a congress, Zagreb, Yugoslavia, Aug. 1981.

**Sociology and Anthropology in the People's Republic of China**. Report of a Delegation Visit, February-March 1984. Alice S. Rossi, Ed. National Academy Press, Washington, D.C., 1985. x, 161 pp. Paper, \$3.

**Software Engineering**. Marc Thorin. Butterworths, Boston, 1985. x, 130 pp., illus. Paper, \$18.95.

**Soil Reclamation Processes**. Microbiological Analyses and Applications. Robert L. Tate III and Donald A. Klein, Eds. Dekker, New York, 1985. xii, 349 pp., illus. \$59.50. Books in Soils and the Environment.

**Solitons in Nuclear and Elementary Particle Physics**. A. Chodos, E. Hadjimichael, and C. Tze, Eds. World Scientific, Singapore, 1984 (U.S. distributor, Taylor and Francis, Philadelphia). x, 314 pp., illus. \$40. From a workshop, Lewes, Del., June 1984.

**Spread Spectrum Communications**. Vol. 2. Marvin K. Simon *et al.* Computer Science Press, Rockville, Md., 1985. xx, 358 pp., illus. \$49.95. Electrical Engineering, Communications and Signal Processing.

**Storage Carbohydrates in Vascular Plants**. Distribution, Physiology and Metabolism. D. H. Lewis, Ed. Cambridge University Press, New York, 1985. xii, 284 pp., illus. \$69.50. Society for Experimental Biology Seminar Series, 19. From a seminar, Oxford, England, Dec. 1980.

**Structure and Representations of Q-Groups**. Dennis Kletzing. Springer-Verlag, New York, 1984. vi, 290 pp. Paper, \$16. Lecture Notes in Mathematics, vol. 1084.

**The Structure of Biological Science**. Alexander Rosenberg. Cambridge University Press, New York, 1985. xii, 281 pp., illus. \$37.50; paper, \$12.95.

**Sunlight and Health**. Michael J. Lillyquist. Dodd, Mead, New York, 1985. xii, 223 pp. \$15.95.

**Syngensis and Epigenesis in the Formation of Mineral Deposits**. A Volume in Honour of Professor G. Christian Amstutz on the Occasion of His 60th Birthday with Special Reference to One of His Main Scientific Interests. A. Wauschkuhn, C. Kluth, and R. A. Zimmermann, Eds. Springer-Verlag, New York, 1984. xiv, 653 pp., illus. \$61.50. From a symposium, Feb. 1983.

**System Design with Microprocessors**. D. Zissos. 2nd ed. Academic Press, Orlando, Fla., 1984. viii, 191 pp., illus. Paper, \$19.50.

**The Wonder of Being Human**. Our Brain and Our Mind. John Eccles and Daniel N. Robinson. New Science Library (Shambhala), Boston, 1985 (distributor, Random, New York). xiv, 183 pp., illus. Paper, \$8.95. Reprint, 1984 edition.

**The X-Ray Universe**. Wallace Tucker and Riccardo Giacconi. Harvard University Press, Cambridge, Mass., 1985. xii, 201 pp., illus. \$20. The Harvard Books on Astronomy.