

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Science serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

Editorial Board

1976

ALFRED E. BROWN	FRANK PRESS
JAMES F. CROW	FRANK W. PUTNAM
HANS LANDSBERG	MAXINE SINGER
EDWARD NEY	ARTHUR M. SQUIRES

1977

WARD GOODENOUGH	DONALD KENNEDY
CLIFFORD GROBSTEIN	NEAL E. MILLER
H. S. GUTOWSKY	RAYMOND H. THOMPSON
N. BRUCE HANNAY	

Editorial Staff

Editor

PHILIP H. ABELSON

Publisher

WILLIAM D. CAREY

Business Manager

HANS NUSSBAUM

Managing Editor: ROBERT V. ORMES

Assistant Editors: ELLEN E. MURPHY, JOHN E. RINGLE

Assistant to the Editors: RICHARD SEMIKLOSE

News and Comment: JOHN WALSH, Editor; PHILIP M. BOFFEY, LUTHER J. CARTER, BARBARA J. CULLITON, ROBERT GILLETTE (on sabbatical), CONSTANCE HOLDEN, DEBORAH SHAPLEY, NICHOLAS WADE, Editorial Assistant, SCHERRAINE MACK

Research News: ALLEN L. HAMMOND, WILLIAM D. METZ, THOMAS H. MAUGH II, JEAN L. MARK, ARTHUR L. ROBINSON, GINA BARI KOLATA, FANNIE GROOM

Book Reviews: KATHERINE LIVINGSTON, LYNN MANFIELD, JANET KEGG

Cover Editor: GRAYCE FINGER

Editorial Assistants: JOHN BAKER, ISABELLA BOULDIN, MARGARET BURESCH, ELEANORE BUTZ, MARY DORFMAN, SYLVIA EBERHART, JUDITH GIVELBER, CAITILIN GORDON, CORRINE HARRIS, NANCY HARTNAGEL, OLIVER HEATWOLE, CHRISTINE KARLIK, MARGARET LLOYD, JEAN ROCKWOOD, LEAH RYAN, LOIS SCHMITT, YA LI SWIGART, ELEANOR WARNER, ROBERTA WEDGE

Guide to Scientific Instruments: RICHARD SOMMER

Membership Recruitment: GWENDOLYN HUDDLE;

Subscription Records and Member Records: ANN RAGLAND

Advertising Staff

Director

EARL J. SCHERAGO

Production Manager

MARGARET STERLING

Advertising Sales Manager: RICHARD L. CHARLES

Sales: NEW YORK, N.Y. 10036: Herbert L. Burklund, 11 W. 42 St. (212-PE-6-1858); SCOTCH PLAINS, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); CHICAGO, ILL. 60611: Jack Ryan, Room 2107, 919 N. Michigan Ave. (312-DE-7-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 11 N. La Cienega Blvd. (213-657-2772); DORSET, VT. 05251: Fred W. Dieffenbach, Kent Hill Rd. (802-867-5581)

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Phones: (Area code 202) Central Office: 467-4350; Book Reviews: 467-4367; Business Office: 467-4411; Circulation: 467-4417; Guide to Scientific Instruments: 467-4480; News and Comment: 467-4430; Reprints and Permissions: 467-4483; Research News: 467-4321; Reviewing: 467-4443. Cable: Advancesci, Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. See also page xi, *Science*, 26 March 1976. ADVERTISING CORRESPONDENCE: Room 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE-6-1858.

A Century of Chemical Progress

For nearly three decades following its formation in 1848, AAAS provided the principal "home" for the chemists of the United States—first through a Section of Chemistry and Mineralogy and then through a Section A subsection which later became Section C (Chemistry).

When nearly 100 chemists met at Northumberland, Pennsylvania, in 1874 to celebrate the centennial of Joseph Priestley's discovery of oxygen, discussions of a national chemical society took place. The plan fell through at the time, largely because of loyalty to AAAS and the belief of some that there never would be enough chemists in the land to sustain a healthy society. These discussions led, however, to establishment of the American Chemical Society (ACS), with 133 founding members, on 6 April 1876. The society has survived in such good health that this year, as it observes its 100th anniversary, it has attained a membership of more than 110,000. Moreover, throughout its first century, ACS has enjoyed a cooperative and mutually beneficial relationship with AAAS, of which it is an affiliate.

The society's phenomenal growth has paralleled the phenomenal development of American chemistry, which ACS has done much to stimulate. Dedicated to the "advancement of chemistry in all its branches," ACS from the start has made the rapid and wide dissemination of chemical knowledge one of its principal objectives. Its *Proceedings*, first published in 1876, became in 1879 the *Journal of the American Chemical Society*, which still flourishes today as part of a diversified family of journals, magazines, books, and secondary publications—notably *Chemical Abstracts*.

A second way in which ACS has promoted the diffusion of knowledge has been by its elaborate network of scientific meetings. With the aid of 175 local sections, in all parts of the country except Alaska, and 28 technical divisions serving all major fields of chemistry, ACS sponsors two national, ten regional, and more than 1000 local meetings each year.

For many years, ACS has made its members' expertise available to public officials dealing with problems affecting, or affected by, chemistry. More recently, the society's Committee on Chemistry and Public Affairs, supported by a staff department, has made significant contributions in this area. It was partly in recognition of this type of service that Congress conferred a national charter on the society in 1938.

The society also has worked through the years to strengthen the chemical profession itself, by exerting a constructive influence on chemical education and by helping chemists protect and enhance their professional status.

The centennial observance provides an exceptional opportunity to pursue another key ACS objective, that of increasing public understanding of the meaning and importance of the work of chemists and chemical engineers. The largest single centennial project is a traveling exhibit, supported by industry and designed to familiarize the public with the myriad ways in which chemistry improves the quality of everyday life. This exhibit will open in New York on 5 April during the ACS Centennial Meeting and later will visit some 14 other major cities over the next 3 years. A special commemorative stamp honoring the science of chemistry will be introduced at the Centennial Banquet on 6 April. At both the New York meeting and the 1976 fall meeting in San Francisco, technical programs of unequalled quality will be presented, with many outstanding foreign scientists participating. Local sections will hold their own celebrations at various times during the year.

All who have helped plan the centennial celebration hope that the gains made in 1976 in scientific reporting, member participation, public relations, intersociety and international cooperation, and overall professional enthusiasm will be maintained as ACS enters its second century.—GLENN T. SEABORG, *President, American Chemical Society, Washington, D.C. 20036*