

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 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 outbook care officiated. authors are affiliated.

Editorial Board

FREDERICK R. BLATTNER, BERNARD F. BURKE, ARNOLD DEMAIN, CHARLES L. DRAKE, ARTHUR F. FINDEIS, E. PETER GEIDUSCHEK, GLYNN ISAAC, NEAL E. MILLER, FREDERICK MOSTELLER, ALLEN NEWELL, RUTH PATRICK, BRYANT W. ROSSITER, VERA C. RUBIN, WILLIAM P. SLICHTER, SOLOMON H. SNYDER, PAUL E. WAGGONER, JOHN WOOD

> Publisher: WILLIAM D. CAREY Editor: PHILIP H. ABELSON

> > **Editorial Staff**

Assistant Managing Editor: John E. Ringle Production Editor: Ellen E. Murphy Business Manager: Hans Nussbaum News Editor: Barbara J. Culliton

News and Comment: Colin Norman (deputy editor), Jeffrey L. Fox, Constance Holden, Eliot Marshall, R. Jeffrey Smith, Marjorie Sun, John WALSH

European Correspondent: David Dickson Contributing Writer: Luther J. Carter

Research News: Roger Lewin (deputy editor), Richard A. Kerr, Gina Kolata, Jean L. Marx, Thomas H. Maugh II, Arthur L. Robinson, M. Mitchell

Administrative Assistant, News: Scherraine Mack; Editorial Assistant, News: Fannie Groom Senior Editors: Eleanore Butz, Mary Dorfman,

RUTH KULSTAD

Associate Editors: Martha Collins, Sylvia Eberhart, Caitilin Gordon, William Greaves, Lois SCHMITT

Assistant Editors: STEP McCullough, Edith Meyers STEPHEN KEPPLE. LISA

Book Reviews: KATHERINE LIVINGSTON, Editor; LIN-DA HEISERMAN, JANET KEGG

Letters: CHRISTINE GILBERT Copy Editor: ISABELLA BOULDIN

Production: JOHN BAKER; HOLLY BISHOP, ELEANOR Warner; Jean Rockwood, Sharon Ryan, Beverly

Covers, Reprints, and Permissions: GRAYCE FINGER, Editor; GERALDINE CRUMP, CORRINE HARRIS
Guide to Scientific Instruments: RICHARD G. SOMMER

Guide to Scientific Instruments: RICHARD G. SOMMER Editorial Administrator: SUSAN ELLIOTT Assistant to the Associate Publisher: Rose Lowery Assistant to the Managing Editor: NANCY HARTNAGEL Membership Recruitment: GWENDOLYN HUDDLE

Member and Subscription Records: ANN RAGIAND EDITORIAL CORRESPONDENCE: 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Area code 202. General Editorial Office, 467-4350; Book Reviews, 467-4367; Guide to Scientific Instruments, 467-4480; 467-4367; Guide to Scientific Instruments, 467-4480; News and Comment, 467-4430; Reprints and Permissions, 467-4483; Research News, 467-4321. Cable: Advancesci, Washington. For "Information for Contributors," write to the editorial office or see page xi, Science, 29 June 1984.

BUSINESS CORRESPONDENCE: Area Code 202. Membership and Subscriptions: 467-4417.

Advertising Representatives

Director: EARL J. SCHERAGO Production Manager: GINA REILLY Production Manager: GINA REILLY
Advertising Sales Manager: RICHARD L. CHARLES
Marketing Manager: HERBERT L. BURKLUND
Sales: NEW YORK, N.Y. 10036: Steve Hamburger, 1515
Broadway (212-730-1050); 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. (312-337-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 111 N. La Cienega Blvd. (213-657-2772); SAN JOSE, CALIF. 95112: Bob Brindley, 310 S. 16
St. (408-998-4690); DORSET, VT. 05251: Fred W. Dieffenbach, Kent Hill Rd. (802-867-5581).
ADVERTISING CORRESPONDENCE: Tenth floor. ADVERTISING CORRESPONDENCE: Tenth floor, 1515 Broadway, New York 10036 (212-730-1050).

Science Finds Its Voice

The 150th national meeting of the AAAS (24 to 29 May) set out to do what comes naturally for a large organization that exists to advance science. It showcased the scientific disciplines, crisscrossed fields of science, and converged international perspectives on the prospects for discovery and application of knowledge. It mingled the gray eminences of science with the lesser known and the often overlooked and tumbled with practiced agility through the hoops of policy controversy. The sole throwback to the years of polarization and internal divisions was provided, almost unseen, by a lunchhour demonstration on behalf of animal welfare.

The annual meeting is the venue for convocations of the AAAS Council, which is the ultimate governing body. It is at council meetings that officers become accountable, and it is in this parliamentary setting that the AAAS speaks, as it were, *urbi et orbi*, through resolutions presented and adopted. Although such proclamations are of indeterminate effect, taken as such they serve to put the AAAS on record and to reinforce subsequent initiatives of material significance to the concerns of the members.

It is of more than passing interest that all four of the resolutions adopted at the 1984 meeting of the council bore on the theme of freedom with responsibility. The first resolution, presented by the Medical Scientists Committee of the National Institutes of Health, drew attention to the targeting of scientists for harassment or repression of their work and called on the AAAS to reaffirm its commitment to the fundamental rights of scientists. A second resolution, presented by the AAAS Committee on Scientific Freedom and Responsibility, took up the issue of openness in science and technology against an emerging background of overt and subtle pressures on institutions and firms and urged affiliated societies and academic centers to examine their policies and restate their adherence to freedom of inquiry and expression. A third resolution, sponsored by the same committee, focused on the general dangers to science and national security inherent in governmental thrusts toward restriction of communication and publication of unclassified research. A final resolution came to the defense of the scientific and human rights of Andrei Sakharov and Yelena Bonner, calling upon the Soviet government to end their present isolation and urging affiliates and individual members to register their concerns with the Soviet authorities.

Although George Orwell was never mentioned as these resolutions were brought up, discussed, and voted on, there is significance to the council's concentration on the state of scientific freedom and human rights in 1984 to the exclusion of other matters that absorbed crowded sessions in New York, notably those on the risks of nuclear arms. The potential violence from nuclear warfare, tangible and quantifiable, which has been the subject of repeated resolutions at prior council meetings, gave place to concern for actual and demonstrable violence to individuals and for outspoken resistance to imposed limits on open communication of unclassified research. The four resolutions show a remarkable unity of substance and thrust, and they say a great deal about the contradictions of the times: exuberance in the pursuit of discovery and knowledge, science and scientists as trustees of the human instinct for inquiry and truth, the dilemmas in the relation of political power to the ungovernable dynamics of free scholarship, and the enforceability of guarantees of individual freedoms under laws and conventions.

In a greening public park near the White House there has long been a sculpture bearing the legend, "And freedom shrieked as Kosciuszko fell." Lest its meaning decay, it is well that science find its voice.

-WILLIAM D. CAREY