LETTERS


EDITORIAL

Your Annual Meeting: A. Herschman

ARTICLES


Energy and Labor in the Construction Sector: B. Hannon et al.

NEWS AND COMMENT

Electronics Industry Takes to "Potting" Its Products for Market

1976 Swine Flu Campaign Faulted Yet Principals Would Do It Again

NAS Saccharin Report Sweetens FDA Position, But Not by Much

Librarian Turned Entrepreneur Makes Millions Off Mere Footnotes

RESEARCH NEWS

Computer Science: Surprisingly Fast Algorithms

The 1978 Nobel Prize in Economics: J. G. March

Weather Modification: A Call for Tougher Tests

ANNUAL MEETING

Science and Technology: Resources for Our Future: A. Herschman; Meeting Information; Preconvention Program; Registration and Housing Forms

BOOK REVIEWS

Science Policy, reviewed by R. Amann; Genetic Interaction and Gene Transfer, T. Friedmann; Many Degrees of Freedom in Field Theory, J. L. Challifour; Many Degrees of Freedom in Particle Theory, L. Dolan; Sulidae, G. E. Watson; Books Received
REPORTS

Carbon-14 Dating: A Comparison of Beta and Ion Counting: M. Stuiver .................. 881
Strain in Southern California: Measured Uniaxial North-South Regional
Contraction: J. C. Savage et al. ................................................. 883
Stone Tools from Mid-Pleistocene Sediments in Java: T. Jacob et al. .................. 885
Regional Implications of Triassic or Jurassic Age for Basalt and Sedimentary
Red Beds in the South Carolina Coastal Plain: G. S. Gohn et al. ....................... 887
Australopithecine Enamel Prism Patterns: E. S. Vrba and F. E. Grine ............. 890
Rapid Changes in Brain Benzodiazepine Receptors After Experimental Seizures:
S. M. Paul and P. Skolnick ....................................................... 892
The Red Cell as a Fluid Droplet: Tank Tread-Like Motion of the Human
Erythrocyte Membrane in Shear Flow: T. M. Fischer, M. Stohr-Liesen,
H. Schmid-Schönbein ......................................................... 894
Human Flicker Sensitivity: Two Stages of Retinal Diffusion: D. H. Kelly
and H. R. Wilson ................................................................. 896
Cultural Transmission of Enemy Recognition: One Function of Mobbing:
E. Curio, U. Ernst, W. Vieth ................................................................ 899
Light Stimulates Tyrosine Hydroxylase Activity and Dopamine Synthesis in
Retinal Amacrine Neurons: P. M. Iuvone et al. .................................. 901
Paper-Marking Test for Chimpanzee: Simple Control for Social Cues:
D. Premack, G. Woodruff, K. Kennel ........................................... 903
Memory Impairment in Korsakoff’s Psychosis: A Correlation with Brain
Noradrenergic Activity: W. J. McEntee and R. G. Mair . ......................... 905
Fractional Factorial Analysis of Growth and Weaning Success in Peromyscus
maniculatus: W. P. Porter and R. L. Busch .................................. 907

PRODUCTS AND MATERIALS

Carbon Dioxide Incubators; Programmable Diagnostic Ultrasound Imaging System;
Mössbauer-Effect Sources; Micro Kjeldahl Analyzer; Infrared Data Station
for Computerized Dispersive Spectroscopy; Dew-Point Hygrometer; Kilowatt-
Hour Meter; Literature ............................................................ 914

COVER

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 set in type and reflect the individual opinions of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

Editorial Board
1979: E. Peter Giedrusch, Ward Goodenough, N. Bruce Hannay, Martin J. Klein, Franklin A. Long, Neal E. Miller, Jeffrey J. Wine

Publisher
William D. Carey

Editor
Philip H. Abelson

Editorial Staff
Managing Editor
Robert V. Ormes
Assistant Managing Editor
John E. Ringle

News and Comment
Barbara J. Culliton, Editor
William J. Broad (intern), Luther J. Carter, Constance Holden, Eliot Marshall, Deborah A. Shapley, Jeffrey Smith, Nicholas Wade, John Walsh, Scherrine Macc

Research News
Allen L. Hammond, Editor

Assistant Editors
Eleanor Butz, Mary Dorrman, Sylvia Eberhart, Judith Gottlieb

Assistant Editors
Caitlin Gordon, Ruth Kulstad, Lois Schmitt, Diane Turkin

Book Reviews
Katherine Livingston, Editor
Linda Heberman, Janet Kegg

Letters
Christine Karlak

Copy Editor
Isabella Bouldin

Production
Nancy Hartnagle, John Baker, Ya Li, Swigert, Eleanore Warner, Jean Rockwood, Leah Ryan, Sharon Ryan

Covers, Reprints, and Permissions
Grayce Finger, Editor

Guide to Scientific Instruments
Richard Sommer

Assistant to the Editors
Richard Semiklo

Membership Recruitment
Gwendolyn Huddle

Member and Subscription Records
Ann Ranglad


ADVERTISING REPRESENTATIVES

Director
Earl J. Scherago

Production Manager
Margaret Sterling

Advertising Sales Manager
Richard L. Charles

Marketing Manager
Herbert L. Burkland

Sales

ADVERTISING CORRESPONDENCE: Tenth Floor, 1515 Broadway, New York, N.Y. 10036. Phone: 212-730-1030.

Your Annual Meeting

In its 130-year history, the AAAS has had 144 national meetings, usually annually, although some war years were missed and in other years both winter and summer meetings were held. The forthcoming Annual Meeting in Houston (3 to 8 January 1979) will be our 145th National Meeting.

During our formative years (the first 50 or so), as the various specialties of science were just beginning to be recognized, our national meetings provided the principal forum for the interchange of information among all U.S. scientists. As these various specialties matured and formed their separate associations, both here and abroad, our national meeting went through an extended transition until, just after our own centennial (in 1948), a new policy was adopted. It was decided that the AAAS would hold meetings "at which one branch of science is interpreted to the other branches of science, meetings at which are stressed the interrelations between the branches of science, meetings at which the unifying theme would be central problems whose treatment requires the attack of several disciplines."

The Houston meeting, "Science and Technology: Resources for Our Future," follows this paradigm and addresses such a central problem. The world now stands at a crossroads, all of the fledgling disciplines of a century ago have grown into "big science," and the mostly rural and agrarian cultures in which they began have become the modern urbanized-industrial nations of today. These are the nations whose growth and development consumed prodigious amounts of the world's depletable resources and whose further momentum appears to require an even greater consumption; these are the nations whose peoples have been freed from a marginal existence, spurring equal hopes among the billions of their less fortunate brethren; and these are the nations whose leaders grope for a path to bridge the gap between the reality of a world's declining material resources and the hopes of a world of rising human expectations. The future of these nations, and of the world society of which they are as yet only the smaller part, depends in considerable measure on whether the needed resources can be found.

At such a crossroads, the intellectual resources of the big sciences we have nurtured must not be overlooked, and that is the central problem we address in Houston. These are unique resources that are depleted through neglect rather than use, and they are the resources that, with prudent management, can help chart the path between the hope and the reality. In nine public lectures and 138 symposia, the Annual Meeting will deal with many of these resources and the successes and failures in their application. The full program of the meeting (see page 865) is rich and extensive and deserves your careful attention. However, some of its substance can be conveyed by focusing on a few symposia in the "general interest" category.

In "Frontiers of the Natural Sciences" and "Frontiers of the Social Sciences," nine eminent scientists—from mathematics, physics, chemistry, astronomy, biology, geology, anthropology, psychology, and sociology—will examine, concisely and without jargon, the outer limits of knowledge as it now exists in their respective disciplines. In other symposia in this category, scholars will address the questions of whether there are, in fact, physical or social limitations to usable knowledge; what the role of industry is in promoting scientific innovation (and application); what the space program has achieved in this tenth year since the lunar landing; and what the economic, aesthetic, and technological problems of macroengineering projects are likely to be. As a group, these symposia represent a "microcosm" of the meeting—dealing with the extent of our scientific knowledge, its possible limits, and the problems found or anticipated in its application. Yet throughout runs the thread of the interrelations among and the needed interpretations between the branches of science in addressing our central problems.

As concerned citizens and scientists, it behooves us all to lend our voices to the discussions in Houston this January. It is your Annual National Meeting. —Arthur Herschman