LETTERS

The Smithsonian: Fact and Hearsay: C. W. Larsen; ASM on Recombinant DNA: H. O. Halvorson; Long-Sentence Obscurantism?: R. Grantham; Malaria Vaccines: P. H. Silverman ........................................ 1152

EDITORIAL

Energy Conservation Is Not Enough ........................................ 1159

ARTICLES

Evolution and Tinkering: F. Jacob ........................................ 1161
The Discovery of the J Particle: A Personal Recollection: S. C. C. Ting ........................................ 1167

NEWS AND COMMENT

Saccharin: A Chemical in Search of an Identity: ......................... 1179
Arms Control Impact Statements Again Have Little Impact ............... 1181
Eschewing Understatement, United Kingdom's Science Attaché Declares
Tosca Non Grata ........................................ 1182
The State of Academic Science: Concern About the Vital Signs ........... 1184
Missile Accuracies: Overlooked Program Could Undermine SALT ........... 1185

RESEARCH NEWS

Overlapping Genes: More Than Anomalies? ............................ 1187
Guayule and Jojoba: Agriculture in Semiarid Regions ................. 1189

BOOK REVIEWS

Evolution and the Genetics of Populations, reviewed by F. J. Ayala; The Mentally Retarded and Society, E. Zigler; Subcellular Mechanisms in Reproductive Neuroendocrinology, D. Pearson; Books Received and Book Order Service .......... 1191

REPORTS

Dust Concentration in the Atmosphere of the Equatorial North Atlantic: Possible Relationship to the Sahelian Drought: J. M. Prospero and R. T. Nees ......... 1196
Benzo[a]pyrene Diol Epoxides: Mechanism of Enzymatic Formation and Optically Active Intermediates: S. K. Yang et al. ............... 1199
Phyllotaxis in Xanthium Shoots Altered by Gibberellic Acid: R. Maksymowych and R. O. Erickson ........................................ 1201

BOARD OF DIRECTORS

WILLIAM D. MC ELROY
Retiring President, Chairman

EMILIO Q. DADDARIO
President

EDWARD E. DAVID, JR.
President-Elect

MARTIN B. CUMMINGS
RUTH M. DAVIS

RENEE C. FOX
MCCORMICK

CHAIRMEN AND SECRETARIES OF AAAS SECTIONS

MATHEMATICS (A)
Dorothy M. Stone
Truman A. Botts

PHYSICS (B)
Norman Ramsey
Rolf M. Sinclair

SOCIAL AND ECONOMIC SCIENCES (K)
Sociedad Española de Neurociencias
Miriam Riley

DENTISTRY (R)
Harold M. Fullmer
Sholom Paul

PHARMACEUTICAL SCIENCES (S)
Jennifer Brown
Raymond Jang

HISTORY AND PHILOSOPHY OF SCIENCE (L)
Erman McMillin
George Basala

INFORMATION, COMPUTING, AND COMMUNICATION (T)
Lawrence H. Helfrinn
Joseph Becker

ENVIRONMENTAL SCIENCES (E)
Arthur B. Fine

ENGINEERING (M)
Ernst Weber
Paul H. Robbins

Astronomy (D)
Beverly T. Lynds

Astronomy (D)
Arno A. Littler

Eugene S. Brigham

PHYSICS (B)
Norman Ramsey
Rolf M. Sinclair

Encyclopedia of Science and Technology

DIVISIONS

ALASKA DIVISION
David M. Hickok
President

PACIFIC DIVISION
Keith B. Mathur
Executive Secretary

SOUTHWESTERN AND ROCKY MOUNTAIN DIVISION
Robert T. Orr
President

Max P. Dunford
Executive Officer

SCIENCE is published weekly, except the last week in December, by the American Association for the Advancement of Science, 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Subscription rates: $60.00; foreign postage: $10.00; other surface $13; air surface via Amsterdam $30. Single copies $2 each. Second-class postage paid at Washington, D.C., and additional entry. Copyright 1977 by the American Association for the Advancement of Science. Member rates on request. Annual subscriptions $60; foreign postage: Canada $10; other surface $13; air surface via Amsterdam $30. Single copies $2

D. Hirshman

Nucleation on Photoexcited Molecules: J. L. Katz et al. ........................................... 1203
North Atlantic Ice-Rafting: A Major Change at 75,000 Years Before the Present: W. F. Ruddiman ......................................................... 1208
Insecticide Solvents: Interference with Insecticidal Action: I. B. Brattsen and C. F. Wilkinson ................................................................. 1211
Stability of the Individual Globin Genes During Erythroid Differentiation: E. Benz, Jr., et al. .......................................................... 1213
Hemoglobin Ontogenesis: Test of the Gene Excision Hypothesis: Th. Papayannopoulou et al. .................................................. 1215
Sickle Hemoglobin Aggregation: A New Class of Inhibitors: J. R. Votano, M. Gorecki, A. Rich ......... 1216
Experimental Allergic Encephalomyelitis in Lewis Rats: Chemical Synthesis of Disease-Inducing Determinant: G. A. Hashim ................................................ 1219
Prelytic Damage of Red Cells in Filtrates from Peroxidizing Microsomes: M. K. Roders, E. A. Glende, Jr., R. O. Recknagel ........................................... 1221
Gating of Neuronal Transmission in the Hippocampus: Efficacy of Transmission Varies with Behavioral State: J. Winson and C. Abzug ................................................ 1223
Infrared Reflectance in Leaf-Sitting Neotropical Frogs: P. A. Schwalm, P. H. Starrett, R. W. McDiarmid .................................................. 1225
Naloxone in Chronic Schizophrenia: J. Volavka et al. .................................................. 1227
Experimental Triggering of Reproduction in a Natural Population of Microtus montanus: N. C. Negus and P. J. Berger ........................................ 1230

PRODUCTS AND MATERIALS
pH Meter; Cardioscope; Metallograph; Vocal Input to Computer; Surgical Dissecting Board; Calculator Accessory for Spectrophotometers; Ultraviolet Absorption–Refractive Index Detector; Literature ......................... 1236

COVER
Embryonic sporophytes of two Antarctic brown seaweeds, Desmarestia aniceps (left, about × 84) and Himantothallus gradifolius (right, about × 75) show similarity of development despite widely divergent adult form. This type of filamentous development is characteristic of Desmarestiales, indicating that the former assignment of Himantothallus to Laminariales (kelps)—an order characterized by parenchymatous growth—is incorrect. See page 1206. [James Hendel, Scientific Photographic Laboratory, University of California, Berkeley]