LETTERS
Effective International Cooperation: J. A. Lerch; NSF and Science Education: K. V. Natarajan; Chlorinated Drinking Water: C. A. Stewart, Jr. 1085

EDITORIAL

ARTICLES
Gulf Stream Cold-Core Rings: Their Physics, Chemistry, and Biology: The Ring Group 1091

Psychoneuroendocrine Influences on Immunocompetence and Neoplasia: V. Riley 1100

Biomass Energy from Crop and Forest Residues: D. Pimentel et al. 1110

NEWS AND COMMENT
Nuclear Pulse (II): Ensuring Delivery of the Doomsday Signal 1118

FDA Sees No Radiation Risk in VDT Screens 1120

Briefing: Cancer Institute Passes First Test in Senate; Kean v. AAAS Settled Out of Court; Cambridge Biologists Pursued by Money; False Alerts and Faulty Computers; Protests Help Argentinian Physicist 1122

Japanese Agitated by Nuclear Plant Spill 1124

Library of Medicine vs. Private Enterprise 1125

At Long Last, Linus Pauling Lands NCI Grant 1128

RESEARCH NEWS
Bound to Provoke a Reaction 1128

Magnetic Fusion in Flux 1129

AAAS NEWS
Ethics Project Completes Report: R. A. Chalk; Environmental Science and Engineering Fellowships Announced; Puerto Rican Scientists Call for New Organization and Reforms in Science Education: M. Aldrich; AAAS Launches New Radio Program; R&D Colloquium; Minority Forums Held Across Country; Annual Meeting Survey: A. Herschman; Science 81 Announces 675,000 Rate Base Effective in July; Future Annual Meeting Dates Change; AAAS Annual Elections: Preliminary Announcement 1131
BOOK REVIEWS

DDT: Scientists, Citizens, and Public Policy, reviewed by S. G. Hadden; The Brightest Stars, S. C. Wolff; Growth and Differentiation in Physarum polycephalum, W. R. Jeffery; Molecular Biology of Tumor Viruses, D. M. Livingston; The Archaeology of New England, D. F. Dincauze; Books Received ........................................ 1138

REPORTS

Historical Nile Floods and Their Implications for Climatic Change: F. A. Hassan ................................................................. 1142


Cultivation in vitro of the Vivax-Type Malaria Parasite Plasmodium cynomolgi: P. Nguyen-Dinh et al. ........................................ 1146

Long-Term Potentiation in the Hippocampal Slice: Evidence for Stimulated Secretion of Newly Synthesized Proteins: C. Duffy, T. J. Teylei, V. E. Shashoua ...................................................... 1148

Lysoosomal Cathepsin B: Correlation with Metastatic Potential: B. F. Sloane, J. R. Dunn, K. V. Honn .................................................. 1151

Selective Protection of Methionine Enkephalin Released from Brain Slices by Enkephalinase Inhibition: G. Patey et al. ...................... 1153

Calcium Spike Electrogenesis and Other Electrical Activity in Continuously Cultured Small Cell Carcinoma of the Lung: E. V. McCann et al. .......................................................... 1155

Divalent Cation Ionophores Stimulate Resorption and Inhibit DNA Synthesis in Cultured Fetal Rat Bone: J. A. Lorenzo and L. G. Raisz .................................................. 1157

DNA Sequence of Two Closely Linked Human Leukocyte Interferon Genes: R. M. Lawn et al. ...................................................... 1159

Corticosterone Increases the Amount of Protein 1, a Neuron-Specific Phosphoprotein, in Rat Hippocampus: E. J. Nestler et al. ........... 1162

Optical Recording of Calcium Action Potentials from Growth Cones of Cultured Neurons with a Laser Microbeam: A. Grinvald and I. C. Farber ........................................ 1164

Intravenous Self-Administration of Nomifensine in Rats: Implications for Abuse Potential in Humans: C. Spyraki and H. C. Fibiger .................................................. 1167

Genetically Determined Deficiency of the Third Component of Complement in the Dog: J. A. Winkelstein et al. .................................. 1169


A Novel Illusion of Bars Made from Triangles: L. E. Leguire, R. Blake, M. E. Sloane ...................................................... 1172

Electroencephalographic Tolerance and Abstinence Phenomena During Repeated Alcohol Ingestion by Nonalcoholics: D. H. Zilm, H. L. Kaplan, H. Capell. .................................................. 1175

COVER

NOAA-5 color-enhanced, infrared image of the Gulf Stream on 13 April 1977 at 1400 G.M.T. A warm-core ring north of the violet Gulf Stream and a cold-core ring to the south ("Bob") appear in yellow. Colors correspond to the following temperatures in degrees Celsius: black less than 26, violet 20 to 25, red 17 to 19, orange-yellow 13 to 16, blue 3 to 12, white (clouds) less than 3. See page 1091. [Photo courtesy of Richard V. Legeckis, National Earth Satellite Service, National Oceanic and Atmospheric Administration, Rockville, Maryland]
Editor's Summary