LETTERS NIH Budget: H. A. Waxman; Geographical Clay: Medicinal Effects: A. M. Behbehani; Experiment and Theory: J. R. McNesby; W. A. Goddard III

EDITORIAL Oceanography from Space: R. Revelle


NEWS AND COMMENT A New Soviet Missile Angers the White House Japan and the Economics of Invention Europe Mirrors U.S. Debate on Car Exhaust Briefing: Biomedical Delegation Lobbies White House; Watson Fights Back; Reagan Names Space Commission; Servan-Schreiber Resigns from Computing Center; Prospects Brighten for Electron Accelerator

RESEARCH NEWS Making Antibodies Without the Antigens Nuclear Winter Won't Blow Away Plant Communities Resist Climatic Change A New Approach to Cystic Fibrosis

AAAS News Corporate Involvement Fuels Science Education Projects: J. Wrather; Women Scientists and Engineers Asked to Participate in United Nations Conference; Nomination of AAAS Fellows Invited; AAAS Insurance Program Participants Receive Premium; Dark Side of Science Available on Disk
BOOK REVIEWS
High Altitude and Man, reviewed by E. A. Phillipson; T. H. Huxley’s Place in Natural Science, P. F. Rehbock; A Permanência de Rodolpho von Ihering, M. J. Weitzman and S. H. Weitzman; Nest Building and Bird Behavior, H. B. Tordoff; Books Received ................................................................. 171

REPORTS
Computerized Pattern Recognition: A New Technique for the Analysis of Chemical Communication: A. B. Smith, III et al. .......................... 175
Flight of Winter Moths Near 0°C: B. Heinrich and T. P. Mommsen .......................... 177
Mammalian and Yeast ras Gene Products: Biological Function in Their Heterologous Systems: D. DeFeo-Jones et al. .......................... 179
A Region of the Herpesvirus saimiri Genome Required for Oncogenicity: R. C. Desrosiers et al. ..................................................... 184
Hypomethylation of DNA from Benign and Malignant Human Colon Neoplasms: S. E. Goelz et al. ..................................................... 187
Inhibition of Calcification of Bioprosthetic Heart Valves by Local Controlled-Release Diphosphonate: R. J. Levy et al. ..................................................... 190
Ocelli: A Celestial Compass in the Desert Ant Cataglyphis: K. Fent and R. Wehner ..................................................... 192
Synaptic Morphology and Differences in Sensitivity: R. D. Fields and M. H. Ellisman ..................................................... 197
Dynamic Modification of the Vestibulo-Ocular Reflex by the Nodulus and Uvula: W. Waespe, B. Cohen, T. Raphan ..................................................... 199
Digestive Adaptations for Fueling the Cost of Endothermy: W. H. Karasov and J. M. Diamond ..................................................... 202
Herbicide Resistance and Cross-Resistance: Changes at Three Distinct Sites in the Herbicide-Binding Protein: J. M. Erickson et al. ..................................................... 204

PRODUCTS AND MATERIALS
Ion Meter; Mass Spectrometer; Gas Chromatograph; Image Analyzer; Amino Acid Analyzer; Literature ..................................................... 208

COVER
“Fur” (technically pile) on thorax of moth, Orthosia rubescens. Such fur allows noctuid winter moths to maintain thoracic temperatures above 30°C during flight at near freezing temperatures in late winter. It consists of modified scales (that color Lepidoptera wings), elongated to near 2 millimeters to serve as insulation. See page 177. [Bernd Heinrich, University of Vermont, Burlington 05405]