LETTERS
Bad News: Is It True?: S. Singer; A. F. Matthews; J. P. Holdren et al.;
R. Bodola; J. M. Street, G. A. Fuller; B. Currey; W. Sanderson and
B. F. Johnston; W. H. Davis; G. L. Cowgill; J. L. Simon 1296

EDITORIAL
World Energy in Transition 1311

ARTICLES
Total Eclipses of the Sun: J. B. Zirker 1313
Toward a Unified Theory: Threads in a Tapestry: S. L. Glashow 1319
The Geopolitics of Oil 1324

NEWS AND COMMENT
Science Finds a Place in the Transition 1328
Senator Schmitt, New Science Power 1329
Simon Ramo's Prescriptions for Innovation 1331
Briefing: For NIH, Business as Usual; Primate Center Attempts
Bailout Through Congress; New Watchdog Group Ponders
Scientific Freedom 1332

RESEARCH NEWS
Gene Transfer Moves Ahead 1334
Physics Journals Adopt New Policy 1337

ANNUAL MEETING
An Invitation; Washington Meeting in 1982 1338

BOOK REVIEWS
The First Americans, reviewed by D. D. Anderson; Earthquake Engineering
and Hazards Reduction in China, F. T. Wu; Symposium on Glacier
Beds, W. S. B. Paterson; Liposomes in Biological Systems,
D. Papahadjopoulos; Books Received 1339

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Rupture Zones of Great Earthquakes in the Alaska-Aleutian Arc, 1784 to 1980: L. R. Sykes et al. ........................................... 1343

A Temperature and Precipitation Record of the Past 16,000 Years in Southern Chile: C. J. Heusser and S. S. Streeter ........................................... 1345


Possible Fluid Dynamical Interpretation of Some Reported Features in the Jovian Atmosphere: T. Maxworthy and L. G. Redekopp ........................................... 1350

Lightning on Jupiter: Rate, Energetics, and Effects: J. S. Lewis ........................................... 1351

Fluoride Distribution and Biological Availability in the Fallout from Mount St. Helens, 18 to 21 May 1980: D. R. Taves ........................................... 1352

Deforestation and Increased Flooding of the Upper Amazon: A. H. Gentry and J. Lopez-Parodi ........................................... 1354

Chemical Species in Fly Ash from Coal-Burning Power Plants: L. D. Hulett, Jr., et al. ........................................... 1356

Resonance Raman Effect of Carbonyl Group as a Probe of Its π-Electron State: Y. Nishimura and M. Tsuboi ........................................... 1358

Comparison of the Nucleic Acid Sequence of Anglerfish and Mammalian Insulin mRNA's from Cloned cDNA's: P. M. Hobart et al. .......... 1360

Modulation of Epidermal Growth Factor Receptors on 3T3 Cells by Platelet-Derived Growth Factor: M. Wranck, C. F. Fox, R. Ross ........................................... 1363

Ratoon Stunting Disease of Sugarcane: Isolation of the Causal Bacterium: M. J. Davis et al. ........................................... 1365

Functional Development of Grafted Vasopressin Neurons: D. Gash, J. R. Sladek, Jr., and C. D. Sladek ........................................... 1367

Mental Symptoms in Huntington's Disease and a Possible Primary Aminergic Neuron Lesion: J. J. Mann et al. ........................................... 1369

Pineal Melatonin Rhythm: Reduction in Aging Syrian Hamsters: R. J. Reiter et al. ........................................... 1372

Neural Organization Predicts Stimulus Specificity for a Retained Associative Behavioral Change: J. Farley and D. L. Alkon ........................................... 1373

Membrane Depolarization Accumulates During Acquisition of an Associative Behavioral Change: D. L. Alkon ........................................... 1375

Technical Comments: Arginine Vasopressin in Extracts of Bovine Pituitary: J. H. Cort; H. J. Gitelman et al. ........................................... 1377

Scanning electron photomicrographs of fly ash particles that have been etched in 1 percent hydrogen fluoride (×2200). Glass phases and the toxic elements contained within them have been removed, leaving crystalline residues of mullite (needles) and quartz. These are relatively pure and may be a recoverable resource that can be used in commercial ceramic manufacture. See page 1356. (Photomicrographs, Oak Ridge National Laboratory Analytical Chemistry Division, Oak Ridge, Tennessee 37830)