LETTERS
Significance of Nitrosamines in Animal Diets: G. S. Edwards and J. G. Fox; Phenacetin Studies: P. Cuatrecasas; Science and Regulatory Policy: D. L. Davis; C. L. Comar

EDITORIAL
Spectacular Science and Ponderous Process: M. F. Singer

ARTICLES
The Early Days of Experimental Neutrino Physics: F. Reines
Echolocation and Pursuit of Prey by Bats: J. A. Simmons et al.

NEWS AND COMMENT
Toxic Substances: EPA and OSHA Are Reluctant Regulators
Study of Terrorism Emerging as an International Endeavor
OSHA Carcinogen Policy Delayed

RESEARCH NEWS
Mental Disorders: A New Approach to Treatment?
Prospects for Proprietary Synchrotron Radiation Research
The Great Titration Contest

BOOK REVIEWS
Science in Culture, reviewed by A. Thackray; Chemists by Profession, J. W. Servos; Structure and Properties of Nearby Galaxies and The Large Scale Structure of the Universe, V. Rubin; The Origin of the Solar System, S. J. Weidenschilling; Avian Breeding Cycles, R. E. Ricklefs
Viking Bistatic Radar Observations of the Hellas Basin on Mars: Preliminary Results: R. A. Simpson et al. ........................................... 45


Pyrite: Its Rapid Formation in a Salt Marsh and Its Importance in Ecosystem Metabolism: R. W. Howarth ........................................... 49

Diphtyanyl and Diphtyanyl Glycerol Ether Lipids of Methanogenic Archaeaetes: T. G. Tornabene and T. A. Langworthy .................. 51

Ethanol Ingestion: Differences in Blood Acetaldehyde Concentrations in Relatives of Alcoholics and Controls: M. A. Schuckit and V. Ruyes ........ 54

N-Acetyl Gramicidin: Single-Channel Properties and Implications for Channel Structure: G. Scabo and D. W. Urry ......................... 55

Irradiance Modulation Used to Examine Sound-Radiating Cuticular Motion in Insects: W. M. Masters ................................................. 57

Synaptic Phosphoproteins: Specific Changes After Repetitive Stimulation of the Hippocampal Slice: M. Browning et al. ......................... 60

Catechol-O-Methyltransferase: Thermolabile Enzyme in Erythrocytes of Subjects Homozygous for Allele for Low Activity: P. D. Scanlon, F. A. Raymond, R. M. Weinshilboum ........................................ 63

Octopamine Receptors, Adenosine 3',5'-Monophosphate, and Neural Control of Firefly Flashing: J. A. Nathanson ..................................... 65

Cholecystokinin in the Brains of Obese and Nonobese Mice: E. Straus and R. S. Yallow ................................................................. 68

Target Range-Sensitive Neurons in the Auditory Cortex of the Mustache Bat: W. E. O'Neill and N. Suga ........................................... 69


Plasticity: The Mirror of Experience: D. N. Spinelli and F. E. Jensen ................................................................. 75


Cover

Slate-pencil sea urchin, Eucidarlis thomarsii (Val.), perched on the reef-building coral Pocillopora damicornis (L.). In Panama, the urchin grazes on the coral only if deprived (for several weeks) of coraline algae and other preferred prey. See page 47. [G. M. Wellington, University of California, Santa Barbara]