LETTERS
Alcohol or Humus?: H. Jenny; Mathematical "Invasion": J. Alperin and S. Mac Lane; Keeler's Gap: D. E. Osterbrock ........................................ 444

EDITORIAL
Regulation and the Universities: D. Kennedy ........................................ 449

ARTICLES
Water Revisited: F. H. Stillinger ................................................ 451
The Phylogeny of Prokaryotes: G. E. Fox et al. ..................................... 457
Seabed Minerals and the Law of the Sea: V. E. McKelvey ....................... 464

NEWS AND COMMENT
Making the Multiuniversity More Multiethnic ........................................ 473
A Major Minority ............................................................... 474
NIH Shaken by Death of Research Volunteer ......................................... 475
Briefing: Industrial Productivity and the "Soft Sciences"; Reversals for Carter Energy Legislation; Harvard Nuclear Engineer to Chair the NRC ........................................ 476
Behavioral Medicine: An Emergent Field ........................................... 479
Health Committee Investigates Farm Drugs ......................................... 481

RESEARCH NEWS
Changing Global Sea Levels as a Geologic Index ................................... 483

BOOK REVIEWS
The Evolution of Culture in Animals, reviewed by R. H. Wiley; Vertebrate Ecology in the Northern Neotropics, B. K. McNab; Prehistoric Hunters of the High Andes, T. F. Lynch; Wave Instabilities in Space Plasmas, D. T. Farley; Books Received ........................................ 487
Volcanic Contribution of Chlorine to the Stratosphere: More Significant to Ozone Than Previously Estimated: D. A. Johnston

N-Formylmethionyl Peptide Receptors on Equine Leukocytes Initiate Secretion but Not Chemotaxis: R. Snyderman and M. C. Pike

Ion Pairing Techniques: Compatibility with On-Line Liquid Chromatography-Mass Spectrometry: D. P. Kirby, P. Vouros, B. L. Karger

Human Hepatocellular Carcinoma Cell Lines Secrete the Major Plasma Proteins and Hepatitis B Surface Antigen: B. B. Knowles, C. C. Howe, D. P. Aden

Cerebral Regional Oxygen Consumption and Supply in Anesthetized Cat: E. Buchweitz, A. K. Sinha, H. R. Weiss

Multiple Mating-Type Specificities in the Flax Rust Melampsora lini: G. J. Lawrence


Cell Variants Showing Differential Susceptibility to Ultraviolet Light-Induced Transformation: T. Kakunaga and J. D. Crow

(−)Pentobarbital Opens Ion Channels of Long Duration in Cultured Mouse Spinal Neurons: D. A. Mathers and J. L. Barker


Calcium Regulation During Stimulus-Secretion Coupling: Continuous Measurement of Intracellular Calcium Activities: J. O'Doherty et al.

Initiation of Sulfate Activation: A Variation in C Photosynthesis Plants: B. C. Gerwick, S. B. Ku, C. C. Black

Carcinogenic Activity of Particulate Nickel Compounds Is Proportional to Their Cellular Uptake: M. Costa and H. H. Mollenhauer

Developmental Potential of Somatic Nuclei Transplanted into Meiotic Oocytes of Rana pipiens: N. J. Hoffner and M. A. DiBerardino

Biochemical Analysis of Human T Lymphocyte Differentiation Antigens T4 and T5: C. Terhorst et al.

Excitatory and Inhibitory Effects of Serotonin on Sensorimotor Reactivity Measured with Acoustic Startle: M. Davis, D. J. Astrachan, E. Kass

Female Mate Choice in a Neotropical Frog: M. J. Ryan

Augustine Volcano, Alaska. The chlorine output of some explosive volcanoes exceeds earlier estimates of volcanic impact on the stratosphere by 20 to 40 times or more. See page 491. [D. A. Johnston, U.S. Geological Survey, Menlo Park, California]