LETTERS

TM: Meditation or Sleep?: R. K. Wallace; R. R. Pagano, R. M. Rose, S. Warrenburg; Doomsday Expectations: W. E. Westman

EDITORIAL

Viking 1

ARTICLES

Energy Partitioning in the Products of Ionic Decomposition: J. L. Franklin

Inherited Metabolic Diseases of the Nervous System: R. O. Brady

Ecologic Dilemmas: A. Wolman

NEWS AND COMMENT

Nuclear Explosives: Technology for On-site Inspection

Cosmetic Standards: Are Pesticides Overused for Appearances Sake?

Biomedical Training: Time for a Slowdown

Energy Conservation: Congress Acts on Building Standards

RESEARCH NEWS

Coal Research (II): Gasification Faces an Uncertain Future

BOOK REVIEWS

Lowell and Mars, reviewed by D. S. Evans; Prehistoric Maritime Adaptations of the Circumpolar Zone and Maritime Adaptations of the Pacific, D. R. Harris; Control Processes in Virus Multiplication, N. P. Salzman; Microbial Drug Resistance, L. S. Baron; Molecular Aspects of Membrane Phenomena, J. E. Thompson; Books Received; Book Order Service
The First Viking Mission to Mars: G. A. Soffen and C. W. Snyder

Preliminary Results from the Viking Orbiter Imaging Experiment: M. H. Carr et al.


Infrared Thermal Mapping of the Martian Surface and Atmosphere: First Results: H. H. Kieffer et al.

Composition and Structure of the Martian Atmosphere: Preliminary Results from Viking 1: A. O. Nier et al.

Preliminary Meteorological Results on Mars from the Viking 1 Lander: S. L. Hess et al.

The Surface of Mars: The View from the Viking 1 Lander: T. A. Mutch et al.


Viking Lander Location and Spin Axis of Mars: Determination from Radio Tracking Data: W. H. Michael, Jr., et al.

Argon Content of the Martian Atmosphere at the Viking 1 Landing Site: Analysis by X-ray Fluorescence Spectroscopy: B. C. Clark et al.

Physical Properties of the Martian Surface from the Viking 1 Lander: Preliminary Results: R. W. Shorthill et al.

The Viking Landing Sites: Selection and Certification: H. Masursky and N. L. Crabill.

Radar Characteristics of Viking 1 Landing Sites: G. L. Tyler et al.

Tube Furnaces; Slide Stainer; Tissue Water Bath; Micropipets with Dual Calibration; Thyroxine Radioimmunoassay; Immersible Molecular Separators; Estril Radioimmunoassay; Culture Chamber; Radioimmunoassay for Aminoglycoside Antibiotic; Test for Gonorrhea; Data Processing for Automatic Clinical Analyzers; Literature.

Cover

Pictures, obtained by camera 1 (left) and camera 2 (right), 0.822 meter apart, provide stereo coverage of about 45 degrees in front of Viking 1 lander. The remainder of the camera 2 picture is included for its geological interest. Both images were computer-rectified to be equivalent to pictures obtained with conventional film-plane cameras. The stereo effect may be viewed by those with average interocular distances with any standard pocket stereo viewer. The apparent downward convexity toward the viewer in the foreground is a camera artifact. See page 791. [Jet Propulsion Laboratory, Pasadena, California]