
EDITORIAL  Academic Science and Industry .................................................. 1251

ARTICLES  Electron Tunneling and Superconductivity:  J. Giaever .................................. 1253
Heritability Analyses of IQ Scores: Science or Numerology?: D. Layzer ........................ 1259
Student-Faculty Evaluation: L. W. Zelby .................................................. 1267

NEWS AND COMMENT  Uranium Enrichment: U.S. “One Ups” European Centrifuge Effort ............. 1270
Medical Education: Institute Puts a Price on Doctor’s Heads .................................. 1272
Journals: Photocopying Is Not the Only Problem .............................................. 1274
House Science Committee: Staking Out a Broader Claim ..................................... 1277

RESEARCH NEWS  Biochemistry of Cancer Cells: Focus on the Cell Surface ...................... 1279

BOOK REVIEWS  Human Associative Memory, reviewed by M. Powers; Deep Impurities in Semiconductors, C. H. Henry; Theory of the Earth’s Gravity Field, Z. F. Danet; Periglacial Processes and Environments, J. T. Andrews; Geomorphology in Deserts, K. W. Butzer; North Sea Science, W. Burr; Disease and Economic Development, P. K. Newman; Lipids and Biomembranes of Eukaryotic Microorganisms, E. D. Korn; Books Received .............................................. 1283
Mariner 10 Venus Encounter: J. A. Dunne ........................................... 1289

Preliminary Infrared Radiometry of Venus from Mariner 10: S. C. Chase et al. ...... 1291

Observations at Venus Encounter by the Plasma Science Experiment on
Mariner 10: H. S. Bridge et al. ............................................................. 1293

Venus: Mass, Gravity Field, Atmosphere, and Ionosphere as Measured by the
Mariner 10 Dual-Frequency Radio System: H. T. Howard et al. ...................... 1297

Magnetic Field Observations near Venus: Preliminary Results from Mariner 10:
N. F. Ness et al. ................................................................................. 1301

Venus: Atmospheric Motion and Structure from Mariner 10 Pictures:
B. C. Murray et al. ............................................................................. 1307

Ultraviolet Observations of Venus from Mariner 10: Preliminary Results:
A. L. Broadfoot et al. ......................................................................... 1315

Search by Mariner 10 for Electrons and Protons Accelerated in Association
with Venus: J. A. Simpson et al. .......................................................... 1318

Technical Comments: Seasonal Changes in Goldfish Learning? E. J. Fjeringstad:
V. E. Shashoua .................................................................................. 1321

A view of Venus from 720,000 kilometers taken by the television
cameras on Mariner 10 one day after
encounter. Individual frames were
calendar-enhanced by the Image Proc-
cessing Laboratory, Jet Propulsion Lab-
oratory, then mosaicked and retouched
at the Division of Astrogeology, U.S.
Geological Survey in Flagstaff. The
frames were taken in invisible ultra-
violet light and are printed here in
shades of blue. See page 1307.