LETTERS


EDITORIAL

Mariner IV Mission

ARTICLES

Quantum Theory and Elementary Particles: V. F. Weisskopf

Recent discoveries, including new symmetries, have carried the search for elementary particles to a new level.

Spider-Web Building: P. N. Witt and C. F. Reed

Measurement of web geometry identifies components in a complex invertebrate behavior pattern.

Nuclear Physics: A Status Report: A. Zucker and D. A. Bromley

The development of nuclear physics, its present position, and prospects for the future are reviewed.

Advice to a New Academy: J. A. Stratton

The Engineering Academy, founded on the same principles as the NAS, faces difficult important tasks.

NEWS AND COMMENT

Science and Government: New Currents Affecting NSF, NIH

Social Sciences: the Fall of Camelot

Education: African Students in the United States

Report from Europe: Is French Scientific Policy Chauvinist?: V. K. McElheny

BOOK REVIEWS


Downloaded from http://science.sciencemag.org on April 15, 2017
Mariner IV Measurements near Mars: Initial Results
Spacecraft Description and Encounter Sequence: H. R. Anderson .......... 1226
Absence of Martian Radiation Belts and Implications Thereof:
J. A. Van Allen et al. .......... 1228
Search for Trapped Electrons and a Magnetic Moment at Mars by Mariner IV:
J. J. O’Gallagher and J. A. Simpson .......... 1233
Zodiacal Dust: Measurements by Mariner IV: W. M. Alexander,
C. W. McCracken, J. L. Bohn ......... 1240
Magnetic Field Measurements near Mars: E. J. Smith et al. .......... 1241
Occultation Experiment: Results of the First Direct Measurement of Mars’s
Atmosphere and I onosphere: A. Kliore et al. .......... 1243

Heat Stabilities of Acid Phosphatases from Pinto Bean Leaves: R. C. Staples,
W. J. McCarthy, M. A. Stahmann .......... 1248
Inhibitory Oxidation Products of Indole-3-Acetic Acid: Enzyme Formation and
Detoxification by Pea Seedlings: C. C. Still, C. C. Olivier, H. S. Moyed .......... 1249

Actinomycin D and Hydrocortisone: Intracellular Binding in Rat Liver:
C. W. Dingman and M. B. Sporn .......... 1251
Tetrodotoxin and Manganese Ion: Effect on Action Potential of the Frog
Heart: S. Hagiwara and S. Nakajima .......... 1254
Anesthesia of Artemia Larvae: Method for Quantitative Study:
A. B. Robinson et al. .......... 1255
Base Specificity in the Interaction of Polynucleotides with Antibiotic Drugs:
D. C. Ward, E. Reich, I. H. Goldberg .......... 1259
Chondroitin Sulfate: Inhibition of Synthesis by Puromycin: G. de la Haba
and H. Holtzer .......... 1263
Right Horn Implantation in the Common Duiker: G. Child and A. S. Mossman .......... 1265
Preservation of Mammalian Cells in a Chemically Defined Medium and

Comment on Reports: Sulfur Dioxide in City Atmospheres: R. H. Linnell .......... 1267

Computing Methods Applied to Reactor Problems: W. Sangren; Forthcoming Events .. 1268

Mariner IV Measurements near Mars: Initial Results
Spacecraft Description and Encounter Sequence: H. R. Anderson .......... 1226
Absence of Martian Radiation Belts and Implications Thereof:
J. A. Van Allen et al. .......... 1228
Search for Trapped Electrons and a Magnetic Moment at Mars by Mariner IV:
J. J. O’Gallagher and J. A. Simpson .......... 1233
Zodiacal Dust: Measurements by Mariner IV: W. M. Alexander,
C. W. McCracken, J. L. Bohn ......... 1240
Magnetic Field Measurements near Mars: E. J. Smith et al. .......... 1241
Occultation Experiment: Results of the First Direct Measurement of Mars’s
Atmosphere and I onosphere: A. Kliore et al. .......... 1243

Heat Stabilities of Acid Phosphatases from Pinto Bean Leaves: R. C. Staples,
W. J. McCarthy, M. A. Stahmann .......... 1248
Inhibitory Oxidation Products of Indole-3-Acetic Acid: Enzyme Formation and
Detoxification by Pea Seedlings: C. C. Still, C. C. Olivier, H. S. Moyed .......... 1249

Actinomycin D and Hydrocortisone: Intracellular Binding in Rat Liver:
C. W. Dingman and M. B. Sporn .......... 1251
Tetrodotoxin and Manganese Ion: Effect on Action Potential of the Frog
Heart: S. Hagiwara and S. Nakajima .......... 1254
Anesthesia of Artemia Larvae: Method for Quantitative Study:
A. B. Robinson et al. .......... 1255
Base Specificity in the Interaction of Polynucleotides with Antibiotic Drugs:
D. C. Ward, E. Reich, I. H. Goldberg .......... 1259
Chondroitin Sulfate: Inhibition of Synthesis by Puromycin: G. de la Haba
and H. Holtzer .......... 1263
Right Horn Implantation in the Common Duiker: G. Child and A. S. Mossman .......... 1265
Preservation of Mammalian Cells in a Chemically Defined Medium and

Comment on Reports: Sulfur Dioxide in City Atmospheres: R. H. Linnell .......... 1267

Computing Methods Applied to Reactor Problems: W. Sangren; Forthcoming Events .. 1268

Mariner IV left Earth 28 November 1964 on a cruise to the neighborhood
of Mars. Data transmitted by instru-
ments aboard the spacecraft during
counter, 14 to 15 July 1965, are
presented and interpreted in the re-
ports on the nature of the magnetic
fields and particle fluxes near Mars
(pages 1226–1248). [Drawing by
Federal Graphics]
Editor's Summary

This copy is for your personal, non-commercial use only.

**Article Tools**  Visit the online version of this article to access the personalization and article tools:
http://science.sciencemag.org/content/149/3689.citation

**Permissions**  Obtain information about reproducing this article:
http://www.sciencemag.org/about/permissions.dtl