NEWS & COMMENT

Big Physics Provokes a Backlash
Brookhaven: A Physics Enterprise Zone?

Space Experts Convene in the Nation’s Capital

Testing Target Date Looms, but Will the Vaccines Be Ready?

Lithuanian Biochemist Builds Enzyme Empire

Back to the Drawing Board, Says NIH

RESEARCH NEWS

Red Menace in the World’s Oceans
New Killers Unmasked

Leaving Jupiter, Ulysses Heads for the Sun’s South Pole

User-Friendly Chemistry Takes Center Stage at ACS Meeting

One-Pot Biochemical Cookery

Making Buckyballs Go Ballistic

Perspectives

Ulysses Spacecraft Rendezvous with Jupiter
D. D. Barbosa and M. G. Kivelson

Exons as Microgenes?
H. M. Seidell, D. L. Pompliano, J. R. Knowles

Article

Carnivorous Plants: Evolution of carnivorous plants

RESEARCH ARTICLE

Oxidized Redox State of Glutathione in the Endoplasmic Reticulum
C. Hwang, A. J. Sinskey, H. F. Lodish

DEPARTMENTS

THIS WEEK IN SCIENCE

EDITORIAL

Automotive Fuel Efficiency

LETTERS

Material Girls: E. Ossianer; J. Barrett, J. Beresford, D. Gaquin
Pleistocene Paleotemperatures: C. Emiliani
Patents and Indigenous Rights: J. Christensen

SCIENCESCOPE

Europe joins decade of the brain, etc.

Random Samples

Mathematicians in the Doldrums • ‘Perfume’ Controls Bee-havior • Barbara McClintock Dies at 90 • Russian Scientists Take to the Waves

BOOK REVIEWS

The Daguerreotype, reviewed by W. D. Hackmann • Developmental Patterning of the Vertebrate Limb, D. L. Stocum • The Origins of Southwestern Agriculture, B. B. Huckell • Other Books of Interest • Books Received

PRODUCTS & MATERIALS

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Red tide on the rise

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Drawing of the Ulysses spacecraft as it left Jupiter traveling southward in the previously unexplored dusk sector, showing the large Io plasma torus (yellow ring) and a small auroral oval (violet). In February 1992, Ulysses flew past Jupiter to take advantage of the gravity assist that redirected it toward the sun's polar regions. The scientific results obtained during this encounter with Jupiter are presented in a series of reports beginning on page 1503; see also the Perspective on page 1487 and the News story on page 1478. [Illustration: Jet Propulsion Laboratory]

### REPORTS

#### ULYSSES AT JUPITER

**Ulysses at Jupiter: An Overview**

E. J. Smith, K.-P. Wenzel, D. E. Page

**Volcanic Activity on Io at the Time of the Ulysses Encounter**

J. R. Spencer, R. R. Howell, B. E. Clark, D. R. Klassen, D. O'Connor

**Imaging Observations of Jupiter's Sodium Magneto-Nebula During the Ulysses Encounter**

M. Mendillo, B. Flynn, J. Baumgardner

**Hubble Space Telescope Imaging of the North Polar Aurora on Jupiter**

J. Caldwell, B. Turgeon, X.-M. Hua

**Magnetic Field Observations During the Ulysses Flyby of Jupiter**

A. Balogh, M. K. Dougherty, R. J. Forsyth, D. J. Southwood, E. J. Smith et al.

**The Hot Plasma Environment at Jupiter:**


**Ulysses Radio and Plasma Wave Observations in the Jupiter Environment**

R. G. Stone, B. M. Pederson, C. C. Harvey, P. Caru, N. Cornilleau-Wehrlin et al.

**Ulysses Radio Occultation Observations of the Io Plasma Torus During the Jupiter Encounter**


**Plasma Composition in Jupiter’s Magnetosphere: Initial Results from the Solar Wind Ion Composition Spectrometer**


**Jupiter's Magnetosphere: Plasma Description from the Ulysses Flyby**


**Energetic Charged-Particle Phenomena in the Jovian Magnetosphere: First Results from the Ulysses COSPIN Collaboration**


**Ulysses Dust Measurements Near Jupiter**

E. Grün, H. A. Zook, M. Baguhl, H. Fechtig, M. S. Hanner et al.

**An Overview of Energetic Particle Measurements in the Jovian Magnetosphere with the EPAC Sensor on Ulysses**


**Regulation of Dynein-Driven Microtubule Sliding by the Radial Spokes in Flagella**

E. F. Smith and W. S. Sale

**NMR Determination of Residual Structure in a Urea-Denatured Protein, the 434-Represor**

D. Neri, M. Billerer, G. Wider, K. Wüthrich

**Attention-Based Motion Perception**

P. Cavanagh
Editor's Summary

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