



COVER A 10 by 10 micrometer "layer silicate" interplanetary dust particle collected from the stratosphere by the NASA Johnson Space Center Cosmic Dust Collection Program. Data from analytical electron microscopic studies establish that some (and potentially all) interplanetary dust particles of the "layer silicate" subset are derived from asteroids. See page 549. [Scanning electron micrograph by J. P. Bradley; image processing by J. Barabe and S. Kilbourne]

- 544 Rapid Changes in the Range Limits of Scots Pine 4000 Years Ago: A. J. GEAR AND B. HUNTLEY
- 547 Deuterium on Venus: Observations From Earth: C. DE BERGH, B. BÉZARD, T. OWEN, D. CRISP, J.-P. MAILLARD, B. L. LUTZ
- 549 An Interplanetary Dust Particle Linked Directly to Type CM Meteorites and an Asteroidal Origin: J. P. BRADLEY AND D. E. BROWNEE
- 552 A New Method for Carbon Isotopic Analysis of Protein: D. E. NELSON
- 555 Cystic Fibrosis Transmembrane Conductance Regulator: Nucleotide Binding to a Synthetic Peptide: P. J. THOMAS, P. SHENBAGAMURTHI, X. YSERN, P. L. PEDERSEN
- 558 Transducin Activation by Rhodopsin Without a Covalent Bond to the 11-*Cis*-Retinal Chromophore: E. A. ZHUKOVSKY, P. R. ROBINSON, D. D. OPRIAN
- 560 Inhalational Anesthetics Stereochemistry: Optical Resolution of Halothane, Enflurane, and Isoflurane: J. MEINWALD, W. R. THOMPSON, D. L. PEARSON, W. A. KÖNIG, T. RUNGE, W. FRANCKE
- 561 Regulation of the Apolipoprotein AI Gene by ARP-1, a Novel Member of the Steroid Receptor Superfamily: J. A. A. LADIAS AND S. K. KARATHANASIS
- 565 Cortical Computational Maps Control Auditory Perception: H. RIQUIMAROUX, S. J. GAIONI, N. SUGA
- 568 ACh Receptor-Rich Membrane Domains Organized in Fibroblasts by Recombinant 43-Kilodalton Protein: W. D. PHILLIPS, C. KOPTA, P. BLOUNT, P. D. GARDNER, J. H. STEINBACH, J. P. MERLIE
- 570 Protein Kinase C and Regulation of the Local Competence of *Xenopus* Ectoderm: A. P. OTTE, I. M. KRAMER, A. J. DURSTON

Book Reviews

- 574 How Monkeys See the World, *reviewed by* A. JOLLY ■ Unified Theories of Cognition, J. A. FELDMAN ■ The Decline and Fall of Hemispheric Specialization, M. C. CORBALLIS ■ The Deep Sea Bed, C. R. SMITH ■ The Milky Way as a Galaxy, F. SCHWEIZER ■ Books Received

Products & Materials

- 579 Personal Capillary Electrophoresis System ■ Interactive Plotting Software ■ T Cell Site Prediction Software ■ Automated Tattoo Delivery ■ Monoclonal Antibody Purification Kit ■ Amino Acid Analyzers ■ Monoclonal Antibodies ■ Literature

Board of Directors

Richard C. Atkinson
*Retiring President,
Chairman*

Donald N. Langenberg
President

Leon M. Lederman
President-elect

Mary Ellen Avery
Francisco J. Ayala
Eugene H. Cota-Robles
Robert A. Frosch
Joseph G. Gavin, Jr.
John H. Gibbons
Beatrix A. Hamburg
Florence P. Haseftine

William T. Golden
Treasurer

Richard S. Nicholson
Executive Officer

Editorial Board

Charles J. Arntzen
Elizabeth E. Bailey
David Baltimore
William F. Brinkman
E. Margaret Burbidge
Pierre-Gilles de Gennes
Joseph L. Goldstein
Mary L. Good
Harry B. Gray
F. Clark Howell
Paul A. Marks
Yasutomi Nishizuka
Helen M. Ranney
Robert M. Solow
Edward C. Stone
James D. Watson

Board of Reviewing Editors

John Abelson
Frederick W. Alt
Don L. Anderson
Stephen J. Benkovic
Gunter K-J Blobel
Floyd E. Bloom
Henry R. Bourne
James J. Bull
Kathryn Calame
Charles R. Cantor
Ralph J. Cicerone
John M. Coffin
Robert Dorfman
Bruce F. Eldridge
Paul T. Englund
Fredric S. Fay

Harry A. Fozzard
Theodore H. Geballe
Roger I. M. Glass
Stephen P. Goff
Corey S. Goodman
Stephen J. Gould
Eric F. Johnson
Stephen M. Kosslyn
Konrad B. Krauskopf
Charles S. Levings III
Richard Losick
John C. McGiff
Anthony R. Means
Mortimer Mishkin
Roger A. Nicoll
William H. Orme-Johnson III
Yeshayau Pocker

Dennis A. Powers
Erkki Ruoslahti
Thomas W. Schoener
Ronald H. Schwartz
Terrence J. Sejnowski
Thomas A. Steitz
Robert T. N. Tjian
Emil R. Unanue
Geerat J. Vermeij
Bert Vogelstein
Harold Weintraub
Zena Werb
George M. Whitesides
Owen N. Witte
William B. Wood
Keith Yamamoto