LETTERS  Alternative to Peer Review?: J. C. Liebman; R. L. McCreery; M. R. Kalt; S. S. Easter, Jr.; H. Morawetz; L. S. Jacobs; H. K. Birnbaum; M. W. Berns; R. Roy; Bridge Design: W. Bascom .......................................................... 1335

EDITORIAL  Coal Research ............................................................ 1341

ARTICLES  Critical Data for Critical Needs: D. R. Lide, Jr. .................. 1343

5-Methylcytosine in Eukaryotic DNA: M. Ehrlich and R. Y.-H. Wang .......... 1350

Allocating Petroleum Products During Oil Supply Disruptions: R. H. Bezdek and W. B. Taylor, Jr. .......................................................... 1357

NEWS AND COMMENT  New A-Bomb Data Shown to Radiation Experts .................. 1364

Hatch Batters NCI with Straus Case ........................................ 1366

... But Straus Defends Himself in Boston .................................. 1367

Gold Pipettes Make for Tight Lips .......................................... 1368

A Manhattan Project Postscript .............................................. 1369

Briefing: Nuclear Policy on Hold Until After French Vote; Human Life Bill Arouses More Opposition; World Bank Puts Off Energy Lending Plans; FDA Plans Action on Sodium in Foods; It is Illegal to Say That One Is Sane .................................................. 1372

RESEARCH NEWS  Angiogenesis Inhibitors Link Many Diseases .................. 1374

Meeting Highlights: Nonmarine Iridium Anomaly Linked to Extinctions; A Hot Spot Found, Another Discarded; Are Ocean Islands/Recycled Ocean Crust? ........................................ 1376

Let Us Now Praise Famous Boojums ........................................ 1378

BOOK REVIEWS  The Social Context of Soviet Science, reviewed by H. Balzer; The Dying Community, R. McC. Adams; Animal Tool Behavior, J. B. Lancaster; Photosynthesis, R. Malkin; Books Received ........................................ 1379

REPORTS  The Mount St. Helens Volcanic Eruption of 18 May 1980: Minimal Climatic Effect: A. Robock ........................................ 1383
Microwave Radiometric Measurements of Sea Surface Temperature from the Seasat Satellite: First Results: R. Hofer, E. G. Njoku, J. W. Waters

Hydrovolcanic Explosions: The Systematics of Water-Pyroclast Equilibration: M. F. Sheridan and K. H. Wohletz

Soil as a Sink for Atmospheric Carbon Monoxide: G. W. Bartholomew and M. Alexander

1979J3: Discovery of a Previously Unknown Satellite of Jupiter: S. P. Synnott

Melting of Normal Hydrogen Under High Pressures Between 20 and 300 Kelvins: V. Diatschenko and C. W. Chu

Uninfected Cells of Soybean Root Nodules: Ultrastructure Suggests Key Role in Ureide Production: E. H. Newcomb and S. R. Tandon


Improved Detail in Biological Soft X-ray Microscopy: Study of Blood Platelets: R. Feder et al.

Estradiol and Progesterone Profiles Indicate a Lack of Endocrine Recognition of Pregnancy in the Opossum: J. D. Harder and M. W. Fleming

Diethylstilbestrol Induces Neoplastic Transformation Without Measurable Gene Mutation at Two Loci: J. C. Barrett, A. Wong, J. A. McLachlan

Cancer Incidence in the Love Canal Area: D. T. Janerich et al.

Myelination of Central Nervous System Axons in Tissue Culture by Transplanted Oligodendrocytes: F. J. Seil and N. K. Blank

Phase Relationships Between Adjacent Simple Cells in the Visual Cortex: D. A. Pollen and S. F. Ronner

All-Female Fish: A Cryptic Species of Menidia (Atherinidae): A. A. Echelle and D. T. Mosier

Memory Performance of Chemical Workers Exposed to Polybrominated Biphenyls: G. G. Brown et al.

Rapid Eye Movement Storms in Infants: Rate of Occurrence at 6 Months Predicts Mental Development at 1 Year: P. T. Becker and E. B. Thoman


Cover

Edge of a morphologically transformed colony (top) of Syrian hamster embryo cells contrasted with the edge of a normal colony. Morphologically transformed cells, which progress to neoplastic cells, are characterized by disoriented, basophilic cells with a decreased nuclear/cytoplasmic ratio. Transformed colonies are induced by many carcinogens, for example, benzo[a]pyrene and diethylstilbestrol. Diethylstilbestrol, however, transforms the cells without measurable gene mutation at two loci (about × 47). See page 1402. [Chester Reather, Johns Hopkins University, Baltimore, Maryland]
Science 212 (4501), 1335-1420.