
EDITORIAL  Energy and Chemicals from Trees


NEWS AND COMMENT  A Fatal Flaw in the Concept of Space War  EPA May Allow More Lead in Gasoline  Watt and the Wilderness  Briefing: Keeping the Door Open to Membership in IIASA; Creationist Bill Fails in Maryland; Looking a Gift Computer in the Mouth at NSF; Hearings Planned for Classification Order

RESEARCH NEWS  The Leukotrienes in Allergy and Inflammation  New Theory of Hormones Proposed

BOOK REVIEWS  The Development of Darwin’s Theory, reviewed by P. J. Bowler; Charles Darwin, M. J. Kottler; Free Oscillations of the Earth, F. Gilbert; The Biology of the Turbellaria, R. Kenk; Spaceborne Synthetic Aperture Radar for Oceanography, R. K. Raney; Books Received
## REPORTS

- **Recent Volcanic Activity at Glacier Peak**: J. E. Beget ............................................ 1389
- **Kinetics of Delignification: A Molecular Approach**: J. F. Yan ........................................ 1390
- **Dating of a Fault by Electron Spin Resonance on Intrafault Materials**: M. Ikeya, T. Miki, K. Tanaka ................................. 1392
- **α-Adrenoceptor–Mediated Hyperpolarization of Locus Coeruleus Neurons: Intracellular Studies in vivo**: G. K. Aghajanian and C. P. VanderMaelen ...................................................... 1394
- **Oxytocin Receptors and Human Parturition: A Dual Role for Oxytocin in the Initiation of Labor**: A.-R. Fuchs et al. .................................................................................. 1396
- **Rapid Electronic Autofluorography of Labeled Macromolecules on Two-Dimensional Gels**: J. B. Davidson and A. L. Case ............................................................ 1398
- **Human Liver MAO-A and MAO-B Separated by Immunoaffinity Chromatography with MAO-B-Specific Monoclonal Antibody**: R. M. Denney et al. .................. 1400
- **Brain Target Sites for 1,25-Dihydroxyvitamin D3**: W. E. Stumpf et al. ........................................ 1403
- **Intraspecific Vertical Stratification as a Mate-Finding Mechanism in Tropical Cockroaches**: C. Schal ................................................................................. 1405
- **Suprachiasmatic Stimulation Phase Shifts Rodent Circadian Rhythms**: B. Rusak and G. Groos ..................................................................................... 1407
- **Accommodative Defocus Does Not Limit Development of Acuity in Infant Macaca nemestrina Monkeys**: H. Howland, R. G. Boothe, L. Kiorpes ........................................ 1409
- **Long-Term Synaptic Potentiation in the Superior Cervical Ganglion**: T. H. Brown and D. A. McAfee ................................................................. 1411
- **Onset and Offset of Brain Events as Indices of Mental Chronometry**: B. Renaut et al. .................................................................................. 1413
- **Dietary Restriction in Mice Beginning at 1 Year of Age: Effect on Life-Span and Spontaneous Cancer Incidence**: R. Weindruch and R. L. Waterford .......... 1415
- **Alterations in Precision of the Crossed Retinotectal Projection During Chick Development**: S. C. McLoon ................................................................. 1418
- **Peptide and Steroid Regulation of Muscle Degeneration in an Insect**: L. M. Schwartz and J. W. Truman ................................................................. 1420
- **Technical Comments: Jumping Chickens: Relevance to Hazard in Humans**: M. L. Leng; L. J. Rogers and C. A. Sanderson ...................................................................... 1421

## PRODUC AND MATERIALS

- **Personal Computer; Cell Culture Chamber; Refrigerators; Sample Preparation; Human T Cell Growth Factor; Infrared Spectrometer; Literature** ........................................ 1424

## COVER

Representatives of families of land mammals that participated in the Great American Faunal Interchange. Animals shown in North America migrated northward from South America (and vice versa) after the appearance of the Panamanian land bridge about a million years ago. See page 1351. [Marlene Hill Werner, Field Museum of Natural History, Chicago, Illinois 60605]