LETTERS

Carter's Innovation Initiatives: P. M. Smith; E. E. David, Jr.; Fossils in Asphalt: W. A. Akersten; Room Temperature: M. A. Crayton.

EDITORIAL

Beef Production and Consumption

ARTICLES


Animals as an Energy Source in Third World Agriculture: G. M. Ward, T. M. Sutherland, J. M. Sutherland

NEWS AND COMMENT

Legislating an End to Animals in the Lab

Briefing: Big Future for Synthetics; Feds Defend Bubble Meddle; Time for Discover Bergland Opposed on Farm Machine Policy

Another Smallpox Scare

NAS Elects New Members

EPA Announces Toxic Waste Controls

RESEARCH NEWS

Perilous Times for U.S. Microcircuit Makers

Do the Japanese Make Better IC's?

BOOK REVIEWS

Topics in Plant Population Biology, reviewed by J. Antonovics; Recent Developments in Gravitation, S. A. Bludman; Biochemical and Clinical Aspects of Oxygen, P. G. Debrunner; Ancient Panama, D. Stone

REPORTS

Stratospheric Ozone, Middle Ultraviolet Radiation, and Carbon-14 Measurements of Marine Productivity: R. C. Smith and K. S. Baker

Cogeneration of Electric Energy and Nitric Oxide: C. G. Vayenas and R. D. Farr

Sexual Characteristics of Adult Female Mice Are Correlated with Their Blood Testosterone Levels During Prenatal Development: F. S. vom Saal and F. H. Bronson  

Monte Carlo Simulation of Water Behavior Around the Dipeptide N-Acetylanalanyl-N-Methylamide: A. T. Hagler, D. J. Osguthorpe, B. Robson  

Calcification Inside Artificial Hearts: Inhibition by Warfarin-Sodium: W. S. Pierce et al.  

Alteration in Connections Between Muscle and Anterior Horn Motoneurons After Peripheral Nerve Repair: T. M. Brushart and M.-M. Mesulam  

Bladder-Surface Glycosaminoglycans: An Efficient Mechanism of Environmental Adaptation: C. L. Parsons, C. Stauffer, J. D. Schmidt  

Olfactory Sensitivity in Humans: Genetic Versus Environmental Control: H. B. Hubert et al.  

Gutless Bivalves: R. G. B. Reid and F. R. Bernard  

Neurotransmitter Receptor Binding in Bovine Cerebral Microvessels: S. J. Peroutka et al.  

Single-Shot Channel Activation Accounts for Duration of Inhibitory Postsynaptic Potentials in a Central Neuron: D. S. Faber and H. Korn  

A Disparity Gradient Limit for Binocular Fusion: P. Burt and B. Julesz  

Telemetered Electromyography of Forelimb Muscle Chains in Gibbons (Hylobates lar): W. L. Jungers and J. T. Stern  


Technical Comments: Rings of Uranus: Proposed Model Is Unworkable: D. M. Hunten; F. P. Fanale et al.; J. Gradie; T. C. Van Flandern  

PRODUCTS AND MATERIALS  
Reverse Osmosis; Blood Gas Controls; Scanning Electron Microscope; Rotary Vacuum Evaporator; Infrared Spectrophotometer; Optical Scanner–Data Processor; Peristaltic Pump; Water Purification System; Literature  

COVER  
Photomicrograph of motoneurons in the anterior horn of the spinal cord after injection of horseradish peroxidase into the peroneal muscles. Some of the neurons have been labeled, and others have not. Tetramethyl benzidine procedure with neutral red counterstain (about 170). See page 603. [T. M. Brushart and M.-M. Mesulam, Beth Israel Hospital, Boston, Massachusetts]