LETTERS


EDITORIAL

Science Books

ARTICLES

Numerical Weather Prediction in Daily Use: G. P. Cressman

The tenth anniversary of calculations for daily weather forecasts finds forecasts more accurate and useful.

Chemical Coding of Behavior in the Brain: N. E. Miller

Stimulating the same place in the brain with different chemicals can elicit different types of behavior.

Sap Pressure in Vascular Plants: P. F. Scholander et al.

Negative hydrostatic pressure can be measured in plants.

NEWS AND COMMENT


BOOK REVIEWS

On Aquatic Microbiology Today: C. B. van Niel


REPORTS

Faint Ring around the Spiral Galaxy M82: H. Arp

Photometry at Cerro Tololo, Chile: Effects of Mount Agung Eruption: H. Moreno, N. Sanduleak, J. Stock

Alaskan Glaciers: Recent Observations in Respect to the Earthquake Advance Theory: A. S. Post

Split-Twig Figurines from Northern Arizona: New Radiocarbon Dates: R. C. Euler and A. P. Olson

"Zamene," Isomeric Carbon-19 Monoolefins from Marine Zooplankton, Fishes, and Mammals: M. Blumer and D. W. Thomas

Fatty Acids in Blue-Green Algal Mat Communities: P. L. Parker and R. F. Leo

Circulating DNA as a Possible Factor in Oncogenesis: A. Bendich, T. Wilczok, E. Borenfreund

Myeloma Proteins and the Clinical Response to Melphalan Therapy: D. E. Bergsagel, P. J. Migliore, K. M. Griffith

Electron Spin Resonance of Irradiated DNA: P. S. Pershan et al.

Peptides Attached to Thrombin: Their Influence on Proteolysis: R. H. Landaburu, O. Abdala, J. Morrone

Chromosome Complement: Differences between Equus caballus and Equus przewalskii, Poliakoff: K. Benirschke et al.

Hybrid Antibody Molecules with Allotypically Different L-Polypeptide Chains: M. Mannik and H. Metzger

Rubella Complement Fixation Test: J. L. Sever et al.

Density-Gradient Centrifugation: Non-Ideal Sedimentation and the Interaction of Major and Minor Components: M. K. Brakke and J. M. Daly

Countercurrent Multipliers in Avian Kidneys: T. L. Poulson

Lactate Dehydrogenases in Trout: Evidence for a Third Subunit: E. Goldberg

Convection Plumes from Ulmus americana L.: E. B. Peterson and A. W. H. Damman

Arthropod Preparation for Behavioral, Electrophysiological, and Biochemical Studies: W. C. Corning, D. A. Feinstein, J. R. Haight

Selective Attentiveness and Cortical Evoked Responses to Visual and Auditory Stimuli: P. Spong, M. Haider, D. B. Lindsley

Carotid Sinus and Aortic Reflexes in the Regulation of Circulation during Sleep: M. Guazzi and A. Zanchetti

Impaired Recovery from Hypothermia after Anterior Hypothalamic Lesions in Hibernators: E. Satinoff

MEETINGS

Stereospecificity: A. Sehon; Forthcoming Events

COVER

Three long-exposure photographs, taken with the wide angle, 48-inch (120-cm) Schmidt telescope at Mount Palomar, are printed together to show a faintly luminous, previously unknown feature around one end of the spiral galaxy M81. The oval insert shows the spiral galaxy as it appears on a normal photograph taken with the 200-inch (500-cm) telescope. The whole inserted area and more is completely burned out on the combined print which shows the faint ring. The exploding galaxy M82 is at the top edge of the photograph. See page 363. [William Miller]