LETTERS
Experimental Phenylketonuria: R. Karrer; H. F. Harlow and H. A. Waisman; Marine Biology and a New Canal: J. D. Davis; The Smithsonian: C. G. Abbot; J. W. Bodine

EDITORIAL
Gordon Research Conferences

ARTICLES
Research within the Ionosphere: R. E. Bourdeau
We have revised our understanding of this atmospheric region by using remotely controlled laboratories.

Lignin: Its Constitution and Formation from p-Hydroxycinnamyl Alcohols: K. Freudenberg
Lignin is duplicated by dehydrogenation of these alcohols; intermediates explain formation and structure.

Nucleation of Crystals from Solution: A. G. Walton
Mechanisms of precipitation are fundamental to analytical and physiological processes.

NEWS AND COMMENT

Report from the Middle East: Fundamental Biology at the Weizmann Institute: V. K. McElheny

BOOK REVIEWS
Traité de Paléobotanique: A. A. Cridland


REPORTS
Fossil Particle Tracks and Uranium Distributions in Minerals of the Vaca Muerta Meteorite: R. L. Fleischer et al.

Enzymatic Synthesis of Tri- and Tetraneucleotides of Defined Sequence: R. E. Thach and P. Doty
Glossopteris Discovered in West Antarctica: C. Craddock et al. 634

Pulse Radiolysis of Dioxane Solutions: J. H. Baxendale, E. M. Fielden, J. P. Keene 637

Rotation Technique in Electron Microscopy of Viruses: H. O. Agrawal, J. W. Kent, D. M. McKay 638

Linkage in Control of Allotypic Specificities on Two Different γ-Immunoglobulins: R. Lieberman, S. Dray, M. Potter 640


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COVER

Ping pong balls used as a model of yellow mosaic virus in the turnip. Partial rotation and superimposition of photographs of such a model yield information about the radial symmetry of the virus. If the degree of rotation corresponds exactly with a regularly repeating pattern around its center, then the result is a more prominent version of the original; if not, then, as with this model, the result shows no resemblance to the original. See page 638.