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
Money for Science: Academy Sends Report to Congress——
Congress: HEW under Scrutiny——Weather: The Latest Report——
Air Pollution: Politics

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

BOOK REVIEWS
Traité de Paléobotanique: A. A. Crildland

ANALYSIS OF ESSENTIAL NUCLEAR REACTOR MATERIALS, reviewed by K. C. Thomas; other reviews by P. C. Silva, L. Katz, V. S. Stubican, D. R. Ingles, L. C. Young, B. R. McAuslan, A. C. Hagg, A. J. Bard

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

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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.