**Editorial**
The Thalidomide Lesson ........................................... 497

**Articles**
Intracellular Oxidation-Reduction States in Vivo: B. Chance et al. .... 499

The microfluorometry of pyridine nucleotide gives a continuous measurement of the oxidation state.

Cesium-137 in Man: C. O. Onstead, E. Oberhausen, F. V. Keary ....... 508

Fallout was decreasing at a rate equivalent to a half-life of 1 year before testing was resumed.

Alfvén Waves: F. I. Boley and J. M. Wilcox .......................... 511

These waves, predicted by Alfvén, have been studied in laboratory and geophysical plasma experiments.

**News and Comment**
Neither the Republicans nor the Russians accept the new U.S. test-ban position ...... 514

**Book Reviews**
International Educational Programs: F. Bowles ........................ 519

American higher education's commitment to world education is one of our most important undertakings.

*Handbook of North American Birds*, reviewed by A. H. Miller; other reviews .... 520

**Reports**
Archeological Survey and Excavation in Iran, 1961: F. Hole ............. 524

Stranded Arrangement of Sporopollenin in the Exine of Microspores of *Poa annua*: J. R. Rowley ........................................... 526

Radiocarbon Ages of Postglacial Lake Clays near Michigan City, Indiana: E. M. Winkler .......................... 528


Operant Conditioning of Heart Rate: D. W. Shearn .......................... 530

Spinal Cord Convulsions in Developing Rats: A. Vernadakis .............. 532

Beta Brain Waves as an Index of Alertness: R. E. Dustman, R. S. Boswell, P. B. Porter .................. 533

Action of Acetylcholine on Bivalse Hearts: M. J. Greenberg and D. A. Windsor .......... 534

Effect of Rotation on Flowering Response of *Xanthium pennsylvanicum*: T. Hoshizaki and K. C. Hamner .................. 535

Antigenic Structure of *Plasmodium vinckei*: D. Spira and A. Zuckerman .......... 536

Substituted Uracil Herbicides: H. C. Bucha et al. ...................... 537

Patterns of Gene Pleiotropy in Morphogenetic Processes: K. C. Sondhi ....... 538

Theory of Homologous Sublattices and Intracrystalline Equilibria: R. F. Mueller .......... 540

Narcotic Antagonists as Analgesics: S. Archer et al. .................. 541

Recognition and Quantitation of Herpesvirus Particles in Human Vesicular Lesions: K. O. Smith and J. L. Melnick .................. 543

Protection of Rats against Adjuvant Arthritis by Bacterial Lipo polysaccharides: F. D. Wood and C. M. Pearson .......... 544

Tissue Cultures of a Cactus: C. E. Steinhart .......................... 545

**Departments**
New Products .................................................................. 549

Comparative Pathology: An Opportunity for Biologists?: Forthcoming Events .... 550

**Cover**
Prehistoric blue pigment from Chichen Itza, Yucatan, used on temple frescoes and ritual vessels. The fibers are attapulgite, but the fact that no natural occurrence of blue attapulgite is known suggests that this is an artificial pigment. The color is remarkably stable, although the pigment contains no color-producing ions. Experiments are in progress to determine whether it is a clay-organic complex (× 33,000). [John C. Hathaway, U.S. Geological Survey, Denver, and Anna O. Shepard, U.S. Geological Survey and Carnegie Institution of Washington]
Editor's Summary

This copy is for your personal, non-commercial use only.

**Article Tools**  Visit the online version of this article to access the personalization and article tools: http://science.sciencemag.org/content/137/3529.citation

**Permissions**  Obtain information about reproducing this article: http://www.sciencemag.org/about/permissions.dtl