

From Page 215

other compounds thus far unidentified. This formation of acetaldehyde from a simple organic peroxide is of physiological interest as is the entire reaction inasmuch as all attempts to demonstrate the presence of hydrogen peroxide, supposed to be the substrate for catalase, have failed. The fact that a substituted organic peroxide may serve as a substrate for this enzyme which is sufficiently concentrated in the liver of mammals to bring about such a catalysis, opens a new approach to the problem.

Dr. Stern placed the enzyme in a spectroscope and found that its spectrum disappears upon adding the peroxide, and a new spectrum is formed. This was the spectrum due to the chemical combination between the two substances. Simultaneously with the destruction of the peroxide, the spectrum of the free enzyme reappeared. It was thus possible for the first time to observe directly the entire cycle of an enzymatic process.

Dr. Stern's study shows the enzyme working as follows:

The enzyme operates by providing a new path of reaction which leads over an intermediate compound composed of the enzyme and substrate molecules. This compound is unstable but has a mean span of life sufficient to allow for direct observation.

The knowledge of the exact cause of the combination between the enzyme and the substance to be decomposed might provide insight into the finer mechanism of enzyme action. For that purpose Dr. Stern has recently developed a method which permits the photographic recording of such reactions. By the use of a photo-electric cell and a radio tube, the rapid reactions between a catalyst and its substrate are indicated on a photographic film. This photo-electric method permits the recording of chemical reactions which are too fast to be followed by the human eye.

Science News Letter, October 3, 1936

GEOLOGY

Museums Sometimes Fooled By False Meteorites

SOME chunks of iron and stone, even if they are neatly labeled "meteorite" and in a museum, did not come from the sky. The Society for Research on Meteorites received a communication from John Davis Buddhue of Pasadena, Calif., telling of studies upon ordinary earthly rocks or accidental masses of metal that have acquired places in museums and remained undetected for years. One Chinese "meteorite" is really a block of limestone. A Scotch one came from an iron furnace and one found in Baluchistan is really only a mass of fused ash from a burning haystack. There are other supposed meteorites, however, that have the scientists puzzled.

Science News Letter, October 3, 1936

One-fourth of the babies prematurely born in United States hospitals die before leaving the hospital.

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STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF MARCH 3, 1933

Of SCIENCE NEWS LETTER published weekly at Washington, D. C., for Oct. 1, 1936
 Washington District of Columbia } ss.

Before me, a Notary Public in and for the District of Columbia aforesaid, personally appeared Watson Davis, who, having been duly sworn according to law, deposes and says that he is the Editor of the SCIENCE NEWS LETTER and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Editor, Watson Davis, 2101 Constitution Ave., Washington, D. C.

2. That the owner is: Science Service, Inc., 2101 Constitution Ave., Washington, D. C., a non-profit corporation without stock, operating as the Institution for the Popularization of Science.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

Watson Davis,
 Editor

Sworn to and subscribed before me this 24th day of September, 1936.

[SEAL] Charles L. Wade
 (My commission expires March 26, 1938.)

