SCIENCE

NEW SERIES
VOL. 91, NO. 2368

FRIDAY, MAY 17, 1940

SUBSCRIPTION, $6.00
SINGLE COPIES, .15

Science: published weekly by The Science Press, Lancaster, Pa.
Entered as second-class matter July 18, 1923, at the Post Office at Lancaster, Pa., under the Act of March 3, 1879.

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SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. MCKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

Lancaster, Pa. Garrison, N. Y.

New York City: Grand Central Terminal

Annual Subscription, $6.00 **Single Copies, 15 Cts.**

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary in the Smithsonian Institution Building, Washington, D. C.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

PRELIMINARY ANNOUNCEMENT OF THE SEATTLE MEETING

Edited by Dr. F. R. MOULTON

PERMANENT SECRETARY

FROM June 17 to June 22, inclusive, the association will hold its summer meeting in Seattle, Washington, in cooperation with the Pacific Division. This will be the one hundred sixth meeting of the association and the twenty-fourth meeting of the Pacific Division. On two previous occasions the Pacific Division met in Seattle, the first in 1920 and the second in 1936. Twenty-seven affiliated and independent societies will participate in the Seattle meeting.

The fact that the association will not meet elsewhere than in Seattle this coming June adds nothing technically to the dignity of the meeting, for every meeting of the Pacific Division and of the Southwestern Division is a meeting of the association, and might well be announced as such. The vast size of our country makes it advisable to have administrative machinery for organizing and holding meetings on the Pacific Coast and in the great Southwest. The officers of the Pacific Division and the members of the association resident in its territory will be primarily responsible for the meeting in Seattle. The association refrains from holding a meeting elsewhere simply to encourage its members from the East to go westward and become better acquainted with their western colleagues. Many scientists from the Pacific Coast attend scientific meetings in the East; return visits will also be advantageous.

phoretic pattern did not differ essentially from that of serum from a horse that had been producing pneumococcic antiserum for ten years. We have also found no significant difference on electrophoresis between tetanus antitoxic sera drawn from horses four and 30 months after beginning hyperimmunization.

Recently we have completed the electrophoretic study of the sera of horses hyperimmunized with a number of antigens of bacterial origin. Some have shown with more or less prominence the T-component absent in normal sera; others have shown no T but, like our pneumococcic antisera, an enhanced γ-glubulin peak. Antitoxic sera against Cl. welchii, Cl. sordelli and Cl. oedematiens, as well as against C. diphtheriae and Cl. tetani show large T components. Scarlet fever, botulinus, staphylococcus, histolyticus and vibrion septic antitoxic sera have also contained some T-globulin. In certain of these sera there has been more T than γ, in others it has been present in small amounts only. The amount of γ in these sera has been greater than in normal sera. Several antisera against the meningococcus have resembled our antipneumoncoccic sera both in the extraordinarily large amounts of γ and in the absence of detectable amounts of T. Sera against the organisms of hemolytic septicemia and swine erysipelas have also been very rich in γ. The latter serum has shown a small amount of a component having approximately the mobility of T. A serum against the Shiga and Flexner strains of dysentery bacteria has contained both T and a moderately enhanced γ. These various sera have been taken, some from freshly immunized horses, others from old serum producers.

All these results make it clear that horses respond to some antigens by an increase in the already existing γ-globulins, to others by the production of a new T component. In the experiments here reported all antitoxic sera have contained T while the most impressive increases in γ have been seen in anti-carbohydrate sera. More work will, however, be needed before we can specify those qualities of an antigen which determine the production of a T or a γ antibody.

J. VAN DER SCHEER
RALPH W. G. WYCKOFF
LEDERLE LABORATORIES, INC.,
PEARL RIVER, N. Y.

ON THE URINARY EXCRETION OF "FREE" SULFAPYRIDINE

CERTAIN theories relative to the mode of action of the sulfanilamide series of drugs involve oxidation-reduction mechanisms. We have isolated a monohydroxyl derivative of sulfapyridine from dog urine following the administration of the drug. The compound melts at 180°–181° (corr.) and depresses the melting point of sulfapyridine. The ultra-violet absorption data are shown in Fig. 1. The compound gives a

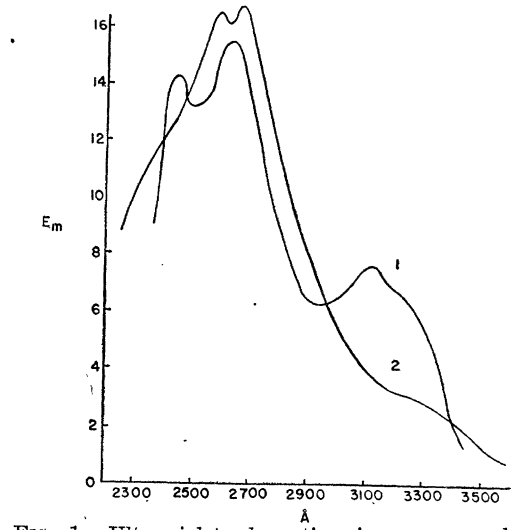

FIG. 1. Ultra-violet absorption in aqueous solution. 1. Sulfapyridine. 2. Hydroxy-sulfapyridine.

positive diazo and ferric chloride reaction.

Calculated for $C_{11}H_{11}O_3N_3S$:
C = 49.81; H = 4.15; N = 15.84.
Found:
C = 50.33; H = 4.26; N = 15.96.

A glucuronate of this substance has been isolated and characterized as its silver salt.

Calculated for $C_{11}H_9O_2N_3SAg \cdot OC_6H_8O_6Ag \cdot 3H_2O$:
C = 28.77; H = 3.24; N = 5.92: Ag = 30.46; H_2O = 7.61.
Found:
C = 28.98; H = 3.38; N = 5.73; Ag = 30.16; H_2O = 6.85.

Since the hydroxy-sulfapyridine glucuronate is very water-soluble, this product is of interest in relation to the problem of the formation of renal calculi.

JOHN V. SCUDI
LABORATORY OF RESEARCH AND DEVELOPMENT,
MERCK AND CO. INC.,
RAHWAY, N. J.

BOOKS RECEIVED

CUSHMAN, JOSEPH A. *Foraminifera; their Classification and Economic Use.* Third edition, revised. Pp. viii + 535. Illustrated. Harvard University Press. $6.00.

EGLOFF, GUSTAV. *Physical Constants of Hydrocarbons. Vol. II, Cyclanes, Cyclenes, Cyclynes and Other Alicyclic Hydrocarbons.* Reinhold. $12.00.

GRADY, ROY I. and JOHN W. CHITTUM. *The Chemist at Work.* Pp. xv + 422. Journal of Chemical Education, Easton, Pa.

HINSHELWOOD, C. N. *The Kinetics of Chemical Change.* Pp. vi + 274. 35 figures. Oxford University Press. $4.50.

LEE, J. S. *The Geology of China.* Pp. xv + 528. 93 figures. Nordemann. $9.00.

PRESTON, RICHARD J. *Rocky Mountain Trees.* Pp. lxxxi + 285. Illustrated. Iowa State College Press, Ames. $2.00.

SOLOMON, ARTHUR K. *Why Smash Atoms?* Pp. xii + 174. Illustrated. Harvard University Press. $2.50.

WHITE, HARVEY E. *Classical and Modern Physics.* Pp. viii + 712. Illustrated. Van Nostrand.