

Th(NO ₃) ₄ , cc.	F Calcd., mg.	F Found, mg.	Th(NO ₃) ₄ , cc.	F Calcd., mg.	F Found, mg.
0.260	0.050	0.052	0.990	0.200	0.198
.245		.049	1.020		.204
.520	.100	.104	1.000	.201*	.200
.505		.101	1.155	.230*	.231
.760	.150	.152	1.490	.300	.298
.865	.175*	.173	2.000	.400	.400

LABORATORY OF PHYSIOLOGICAL CHEMISTRY
UNIVERSITY OF MINNESOTA
MINNEAPOLIS, MINNESOTA

W. D. ARMSTRONG

RECEIVED MARCH 8, 1933

PUBLISHED APRIL 6, 1933

A NEW BAND IN THE WATER VAPOR DISCHARGE

Sir:

In a spectrographic study of the electrodeless discharge in water vapor the writers have observed a band of moderate intensity with a head of wave length 3564 Å. This band is degraded toward the red and appears to have the structure of a hydride. It does not belong to any known system of hydroxyl bands and may prove to be due to OH⁺. Other fainter bands were also observed which have not been measured accurately or identified. The analysis of these bands is being carried out under the direction of Professor F. W. Loomis of the Department of Physics.

DEPARTMENT OF CHEMISTRY
UNIVERSITY OF ILLINOIS
URBANA, ILLINOIS

W. H. RODEBUSH
M. H. WAHL

RECEIVED MARCH 20, 1933

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NEW BOOKS

Tables Annuelles de Constantes et Données Numériques de Chimie, de Physique, de Biologie et de Technologie. (**Annual Tables of Constants (A T C) and Numerical Data, Chemical, Physical, Biological and Technological.**) Published under the Patronage of the International Research Council and of the International Union of Chemistry. American Agents, McGraw-Hill Book Co., Inc., 330 West 42d St., New York, 1931-1932. Vol. VIII, 2 parts (1927-1928), 2706 pp. Vol. IX (1929), 1607 pp.; Index to Vol. IX, 124 pp. 22 × 28 cm. Price, cloth, Vol. VIII, \$20.00; Vol. IX, \$16.00.

With the appearance of Volume IX for 1929 and of Volume VIII in two parts covering 1927-1928, Dr. Marie and the International Committee have finally completed the Herculean task of bringing the Annual Tables up to date, after the serious interruption and delay incident to the World War. Volume IX was issued at the end of 1931, and its Index a few months later. This resumption of prompt publication is of great importance to the scientific world, and Dr. Marie and the Committee are to be congratulated