Turrentine, John William [1]

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by Durward T. Stokes, 1996

5 July 1880–11 July 1966

John William Turrentine, chemist, was born in Company Shops (later renamed Burlington), the son of William Holt and Ella Anvil Rea Turrentine and a descendant of Alexander Turrentine, a migrant from Ireland who settled in North Carolina in 1761. He attended The University of North Carolina [2], receiving the Ph.B. degree in 1901 and the M.S. degree in 1902. He was awarded the Ph.D. degree in inorganic chemistry from Cornell University [3] in 1908 and the honorary degree of doctor of agriculture from North Carolina State College (now North Carolina State University [4]) at Raleigh in 1954.

Turrentine was an instructor in chemistry atLafayette College [5] (1902–5), an assistant at Cornell University (1905–8), and an instructor at Wesleyan College [6] in Connecticut (1908–11). In 1911 he went to work for the Bureau of Soils in the U.S. Department of Agriculture. In that post Turrentine solved the problem of extracting potash [7] from kelp; and when potash importation from Germany ceased in 1914, he was assigned the task of designing, constructing, and operating a plant for this purpose. During the project Turrentine invented a process for the crystallization of potash salts, which revolutionized the potash industry, and developed a procedure for obtaining iodine and decoloring carbon as by-products. He also developed a new method for recovering iodine from dilute solution that proved to be commercially practical. After the plant ceased operations in 1922, he returned to Washington to direct the government's potash studies.

In 1935 Turrentine became president and chairman of the board of directors of the American Potash Institute, founded by American potash producers and importers for scientific research and publicity. He officiated in this capacity until 1950, when he became president emeritus and a consultant of the institute. During his presidency, the work of the organization was greatly expanded, and approximately $500,000 was expended for basic research through fellowships and grants-in-aid to universities and agricultural colleges. In addition, his membership in the American Chemical Society [8]dated from 1902; he also belonged to the American Institute of Chemical Engineers [9], American Society of Agronomy [10], Soil Science Society of America [11], and American Planning and Civic Association. He was a U.S. delegate to the International Congress on Pure and Applied Chemistry when it met in Madrid in 1934 and in Rome in 1938. In 1937 he received the gold medal of the Académie d'Agriculture de France for his work with potash. Turrentine was the author of numerous books and articles on potash and allied subjects including "Potash in North America," published in *American Chemical Society Monograph No. 91*. An excellent photograph of the chemist appeared on the cover of the 13 Dec. 1948 issue of *Chemical Engineering News*.

Turrentine donated twenty acres of his father's former plantation to the Burlington City School System and was present on 7 Nov. 1960 when the institution built on the site was opened and named the Turrentine Junior High School in honor of his parents. He married Katharine Bacon in 1926, and she died in 1948. They had no children. Turrentine resided in Washington, D.C., until his death. He and his wife were buried in Pine Hill Cemetery, Burlington.

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