RESEARCH ON HEAVY HYDROGEN AT PRINCETON

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The heavy water produced in the Frick Chemical Laboratory at Princeton University has been found to possess a specific gravity greater than that recorded hitherto by at least two tenths of one per cent. The value obtained for the specific gravity is 1.1078 at 77 degrees Fahrenheit (25 degrees Centigrade) as compared with the value 1.1056 previously recorded by Professor G. N. Lewis, of California. Many samples of this, the purest heavy water hitherto obtained, have been studied by Dr. P. W. Selwood; in all more than three ounces of heavy water of this gravity has been investigated and further processes of refinement have failed to produce any increased density. The presumption is, therefore, strong that this represents the density of pure deuterium oxide.

1 Recorded at the Princeton Sigma Xi Symposium on Heavy Water, March 20, 1934, and in a lecture at the Franklin Institute, March 21, 1934, on "Heavy Hydrogen—A New Research Tool."