

¹⁸O

The first identification of ¹⁸O was reported by Giauque and Johnston in 1929 at Berkeley in “An isotope of oxygen, mass 18. Interpretation of the atmospheric absorption bands” (1929Gi01). Giauque and Johnston reinvestigated the absorption band data of atmospheric oxygen by Dieke and Babcock (1927Di01). “It occurred to us that the A’ band might result from an isotope of oxygen and we have found that it is fully explained as originating from an oxygen molecule consisting of an atom of mass 16 combined with an atom of mass 18. Such an isotope has not previously been observed but its existence in small amount has certainly not been disproved. Since it is practically the same mass as water, it might easily be misinterpreted in a mass spectrograph.” The paper was submitted on January 14, 1929 and published on May 6, 1929. On March 2, 1929 Giauque and Johnston published a shorter version of the results in Nature (1929Gi02). No submission date is given and it is assumed that it was submitted after the longer paper.

Adapted from reference (2012Th01)

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