

^{21}Ne

Hogness and Kvalnes from the Chemical Laboratories of the University of California at Berkeley reported the first observation of ^{21}Ne in the 1928 paper “The ionization processes in methane interpreted by the mass spectrograph” (1928Ho01). In the process of studying CH_4 molecules with a mass spectrograph, neon was also analyzed. “The calibrating gas, neon, gave the positive ions, Ne_{20}^+ and Ne_{22}^+ in the ratio of ten to one as found by Aston and by Barton and Bartlett. There was, in addition to these ions, a small peak for Ne_{21}^+ , which was always found when neon was in the apparatus but was never obtained in the absence of neon.” Aston had observed an “extremely faint” line at mass 21 but did not claim the existence of ^{21}Ne (1920As05). The paper was submitted on August 13, 1928 while a short note also appeared in the September 22, 1928 issue of Nature without a submission date (1928Ho02).

Adapted from reference (2012Th01)

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