^{39}K

In the 1918 paper "A New Method of Positive Ray Analysis" Dempster measured the mass of ^{39}K at the Ryerson Physical Laboratory of the University of Chicago (1918De01). Positive ions from heated aluminum phosphate were analyzed with the newly developed mass spectrometer: "(The figure) gives the curves for sodium and potassium under slightly poorer vacuum conditions, both taken while the magnetic field was held constant at 5,200 gauss. The maximum for sodium was obtained with 1,433 volts and for potassium with 845 volts. The ratio is almost exactly 39 to 23." Dempster assumed that potassium was perfectly homogeneous.

This assignment was changed (2016Th03) from the initial compilation (2012Th10) where the discovery of ^{39}K was credited to a later paper by F. W. Aston (1921As03) published in 1921.

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