

## <sup>98</sup>Tc

In “Production and Identification of Long-Lived Technetium Isotopes at Masses 97, 98, and 99,” published in 1955, Boyd et al. first observed <sup>98</sup>Tc ([1955Bo97](#)). The Oak Ridge 86-inch cyclotron was used to bombard molybdenum metal with 22 MeV protons. <sup>98</sup>Tc was identified with a 60° mass spectrometer following chemical separation. “Weighable quantities of three long-lived technetium isotopes were produced, and technetium 95, 97, and 98 isotopes have been seen on a mass spectrometer for the first time. The ‘missing’ isotope, Tc<sup>98</sup>, has been observed and hence must be long-lived.” Within a month the observation of <sup>98</sup>Tc was independently confirmed ([1955Ka26](#)).

Adapted from reference ([2012Ny02](#))

- [1955Bo97](#) G. E. Boyd, J. R. Sites, Q. V. Larson, and C. R. Baldock, Phys. Rev. **99**, 1030 (1955).  
[1955Ka26](#) S. Katcoff, Phys. Rev. **99**, 1618 (1955).  
[2012Ny02](#) A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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