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## Rapid Anion Exchange Separation of Fermium with Mineral Acid-Methyl Alcohol Mixed Media\*

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Anion exchange separation of  $^{250}\text{Fm}$  (30 m) synthesized by the  $^{12}\text{C} + ^{242}\text{Pu}$  and  $^{16}\text{O} + ^{238}\text{U}$  reactions has been investigated with mineral acid-methyl alcohol mixed media at elevated temperature. Fermium was chromatographically separated from the other transplutonium elements, the target materials and an Al catcher foil by anion exchange with mixtures of nitric acid and methyl alcohol. By use of the mixed media of hydrochloric acid and methyl alcohol, Fm together with Cf was separated from Al, Am, Cm, Pu, U and major fission products. The separation systems are suitable for rapid separation and immediate alpha-counting source preparation of Fm.

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