They showed that element 93 has chemical properties similar to those of uranium and not similar to those of rhenium as suggested by the periodic table of that time (Figure 1).

Immediately thereafter, during the summer and fall of 1940, McMillan started looking for the daughter product of the 2.3-day activity, which obviously would be the isotope of element 94 with mass number 239 (94-239). Not finding anything he could positively identify as such, he began to bombard uranium with deuterons in the 60-Inch Cyclotron in the hope that he might find a shorter-lived isotope--one of a higher intensity of radioactivity that would be easier to identify as an isotope of element 94. Before he could finish this project, he was called away to work on radar at M.I.T.

During this time my interest in the transuranium elements continued. Since McMillan and I lived only a few rooms apart in the Faculty Club, we saw each other quite often, and, as I recall, much of our conversation, whether in the laboratory, at meals, in the hallway, or even going in and out of the shower, had something to do with element 93 and the search for element 94. I must say, therefore, that his sudden departure for M.I.T. came as something of a surprise to me--especially since I did not even know when he had gone.

In the meantime, I had asked Arthur Wahl, one of my two graduate students, to begin studying the tracer chemical properties of element 93 with the idea that this might be a good subject for his thesis. My other coworker was Joe Kennedy, fellow instructor at the University and also very interested in the general transuranium problem.

I quote from my diary of Friday, August 30, 1940 (note that in three days we will reach the 50th Anniversary of this date):

> "This afternoon Wahl, Kennedy, and I irradiated our first sample of uranium with neutrons to produce the recently discovered isotope 93^{239} in order to begin a program of study, by tracer technique, of the chemical properties of element 93. This research and its possible expansion into the search for the next transuranium element, element 94, may provide a suitable subject for Wahl's Ph.D. thesis. Today's bombardment used 5.5 g uranyl nitrate hexahydrate [$UO_2(NO_3)_2 6H_2O$ or UNH] placed directly behind a beryllium target bombarded with 16 Mev deuterons in the 60-inch cyclotron. This UNH sample was dissolved in water, and the oxidation-reduction cycle was performed by Wahl in order to isolate the 93^{239} from uranium and fission products in order to characterize its radiation and follow its decay to see if it displays the known half-life of 93^{239}, 2.3 days. Absorption measurements of the radiations in aluminum will be made.
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> In order to distinguish between this and subsequent bombardments, we intend to use the following nomenclature. Since our primary product of interest is element 93, our designation in each case will start with 93 followed in turn by a