was a life-long friend of mine; we knew each other when we were 13 years old, Freshmen starting high school in the Los Angeles area and, as fate would have it, we spent a good deal of our life collaborating in research in a number of areas.

Now, I am going to lay the ground work with some descriptive remarks concerning the background for the discovery of this element but illustrated by a number of slides. This element was really the turning point in the synthesis of new elements. This is the first element whose discovery was based on the one atom at a time approach, and the first element that used some of the techniques that are necessary for detecting isotopes or elements on such a small scale; all of the elements that have been synthesized and identified since mendelevium have used basically the techniques that were worked out for this occasion.

Now, with that, let me give you the first slide that shows the reaction that was used:

$$^{253}_{99}Es + ^{4}_{2}He \longrightarrow ^{256}101 + n$$

Slide 1

I am going to be rather brief because I am sure that the reminiscers who are following me are going to fill in some of the details. In this case, the reaction that was used is shown here. It was remarkable in that this was really the first time that such a small amount of target material was used; an invisible amount, and I mean a really invisible amount, something of the order of 10^9 or 10^{10} atoms. And the einsteinium-253 had been synthesized over a number of years by the bombardment of lighter isotopes beginning with