

THE TRANSURANIUM ELEMENTS; PRESENT STATUS

Nobel Lecture, December 12, 1951.

By Glenn T. Seaborg.

Mina Damer och Herrar:

Jag är inte van vid kemiska ord på Svenska, och det är för att mina föräldrar aldrig talade kemi i hemmet. Jag skulle gärna ändå velat hålla hela denna föreläsning på Svenska. Men--om jag talade Svenska så skulle mina vänner McMillan och Lawrence inte förstå mer än hälften av vad jag säger. Jag ska därför tala engelska, och jag vet att ni alla förstår det språket mycket bra.

As I continue, speaking in English, I want to assure my British and American colleagues here, Sir John Cockcroft and Professors Walton, Lawrence, and McMillan, that they haven't missed anything yet. I want to begin by saying that I am fortunate in being a member of a Chemistry Department which has a long standing tradition of great breadth of research interests, leading to an early program in nuclear chemistry under the active leadership of men like G. N. Lewis and W. M. Latimer. The work on the transuranium elements which I am about to describe was made possible by this circumstance and because of the unusual and excellent spirit of cooperation which exists at the Radiation Laboratory, under the direction of Professor E. O. Lawrence, where the cyclotron bombardments so crucial to the final results were made. I shall try in the course of my lecture to point out the contributions to this work of my many colleagues but unfortunately it will not be possible to do this adequately in the time available.

Beginning at essentially the point where Professor McMillan left off in his lecture, I shall first describe our work on plutonium. The beginning of this can be considered to have taken place in the fall of 1940 when I asked a graduate student, Arthur C. Wahl, to consider the