success of working out a chemical process and other aspects of plutonium production. It was their responsibility to determine the radioactive characteristics and the relative yields of the fission products. And they did a first-class job on this. Their yield curve was published soon after the war was over. This was a very definitive work that stood for many years and it took a long time to improve upon it.

CHARLES D. CORYELL When I arrived at the Metallurgical Laboratory from UCLA on May 5, 1942, I had absolutely no previous experience in nuclear chemistry. I was charged by the Project Director, Arthur H. Compton, and the Director of Chemistry, Frank H. Spedding, with building up a group to study the fission products—that batch of 36 elements from zinc through terbium formed in the fission of uranium.

It was impossible to find nuclear chemists, so beginning with Nathan Sugarman we collected a group of physical and analytical chemists. Self education was a very important part of our job. We also learned a lot in the very excellent course Glenn Seaborg gave evenings in July and August 1942. I worked long and late to prepare a respectable set of lecture notes to help later newcomers.

Seaborg appointed Isadore Perlman and Spofford English as chemical and instrumental liaison between his plutonium group and ours. Spof taught me to count, using ^{238}Pu and alpha counters that were very sensitive to shock. If you sneezed once, you got 10 extra counts.

I had been recommended for the project by Compton's first chemistry advisor, Herbert N. McCoy, apparently as a consequence of heated discussions we had had about oxidation states of rare earths. My Ph.D. thesis involved divalent silver, a very powerful oxidant. It is not quite as powerful as ozone, but it is much more dynamic. Ozone was then being used in an effort to oxidize plutonium beyond the hexavalent oxidation state. Our great hope was to get an octavalent state that might have a volatile tetroxide. That hope hasn't yet been realized, and Seaborg doesn't think that it will be. My experiments with divalent silver helped get plutonium oxidized faster, and led to a secret patent, now declassified.

My group had another occasion to be involved with plutonium after the first reactor CP-1 started on December 2, 1942. One could see the pile under the seats in the stadium if one had business. Shortly after start-up, Sugarman and I made a visit to see what constructive pile research we fission-product chemists could do. Walter Zinn and George Weil showed us around cordially, and we saw the huge irregular pile of