

Ernest Orlando Lawrence Berkeley National Laboratory

Records Transmittal

Division	Department	Archives and Records Office Use Only
Information Technologies		
Group		Filing Code
Archives & Records		ARO-6784
Location	69R0102	LBL Accession Date
Transferee	Nelson, Karen	1/26/2015
Head of Department		FRC Accession No.
John Stoner		434 15

Records Title

Logbook Documenting The First Synthesis Of Plutonium (Pu)

Inclusive Date of Records

1940 1941

No of Containers

1 Flat Storage Box (Medium)

Brief description of records

Logbook documenting the first synthesis of Plutonium (Pu) in 1941 by Glenn Seaborg, Edwin McMillan, Arthur Wahl, and Joseph Kennedy. Noted as "sample A" in the log, plutonium in the form of isotope 238 Pu was first synthesized and identified on February 23-24, 1941. This isotope was produced by the bombardment of uranium with deuterons in the 60-inch cyclotron at the University of California Berkeley. Kennedy, Wahl and Seaborg were soon joined by Emilio Segrè. Together they discovered the isotope 239Pu, produced by the bombardment of uranium with neutrons and demonstrated that this isotope was fissionable with slow neutrons on March 28, 1941. Seaborg and McMillan were awarded the Nobel Prize in Chemistry in 1951. The log also documents experiments by Seaborg and Emilio Segrè, who won the Nobel Prize in Physics in 1959, with technetium (Tc) which is used in medical radiotherapy. Arthur (Art) Wahl was a graduate student at UC Berkeley at the time. Kennedy received his PhD from UC Berkeley and was only 26 when he became acting head of the Chemistry and Metallurgy Division for The Manhattan Project at Los Alamos. He died of cancer at age 40.

Materials

Bound Volumes

Records Retention

- Historically Valuable Documents. Do not destroy. A detailed folder listing is included with the Records Transmittal
- Destroy/Review on a scheduled basis with a minimum retention of _____ years. Disposal/Review Date: _____ Perm

This is in accordance with:

- The National Archive General Retention Schedule. Citation _____ RCS/R&D/1B14A
- The Department of Energy Retention Schedule. Citation _____

Disposal Authorization:

The legal retention of the records listed on this Records Transmittal has elapsed. Since I foresee no use of these records, I authorize their disposal.

Signature of Department Head

Date

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Division <input type="text" value="Information Technologies"/>	Department <input type="text"/>	Filing Code ARO-6784
Group <input type="text" value="Archives & Records"/>		
Records Title <input type="text" value="Logbook Documenting The First Synthesis Of Plutonium (Pu)"/>		

Container **Of**

Logbook

1 Plutonium (Pu) Research Log