

Ernest Orlando Lawrence Berkeley National Laboratory

Records Transmittal

Division	Department	Archives and Records Office Use Only
Information Technologies & Services	Technical and Electronic Information Dept.	
Group		Filing Code
Library/ Archives and Records		ARO-4843
Location	69R0102	LBLN Accession Date
Transferee	Stoner, John W	10/21/2003
Head of Department		FRC Accession No.
Jane Tierney		434 04

Records Title

Ernest Orlando Lawrence Personal Papers Microfilm Collection and Other E.O.L. Documents

Inclusive Date of Records

1931 1982

No of Containers

1 FRC Box

Brief description of records

This accession contains non-record material from ARO shelves. Included are microfilm rolls, declassified correspondence [copies], documents relating to having Lawrence inducted into the Inventor's Hall of Fame, memorials from his death, and a book authored by his father Carl Gustavus Lawrence.

The microfilm documents the scientific career of Dr. Ernest O. Lawrence, founder and first director of the Radiation Laboratory (later renamed the Lawrence Radiation Laboratory (LRL) and subsequently renamed as the Lawrence Berkeley Laboratory (LBL) and later as the Ernest Orlando Lawrence Berkeley National Laboratory (LBLN)) at the University of California, Berkeley, and the development and administration of the Laboratory.

The records are comprised of 35 reels of microfilm. The original documents reside in The Bancroft Library; University of California Berkeley; Berkeley, CA 94720-6000; USA; 510-642-6481. Microfilming was done in 1970 and the records were transferred to The Bancroft in 1972 and 1973. This microfilm was originally held in the LBNL Library and was transferred to the Archives and Records Office in June 2003 by the then retiring Laboratory Librarian, Carol D. Backhus.

This accession includes the following sub-series: General Files (Correspondence); University of California Radiation Laboratory (Business Records); Equipment Records; National Defense Research Committee and Office of Scientific Research and Development; Atomic Energy Commission and Manhattan Engineer District; Materials Testing Accelerator; Patents and Travel; Degrees, Fellowships and Memberships; Appointments; Lecture Notes; and Declassified Papers, 1941-1958. The records include letters, memoranda, telegrams, reports, and transcripts of telephone conversations, invitations, news clips, notes, and expense records. Lawrence's personal and professional files provide a complete picture of advances in cyclotron technology, the establishment of cyclotrons at other institutions, the research done by Lawrence and others at the Radiation Laboratory both before and during World War II, and the research work at other institutions as reported by colleagues. For the years after 1945, the records focus mainly on the administration and research work of the Laboratory's "Hill" area with some information on activities at the Livermore and Los Alamos installations.

Topics documented in these records include the National Defense Research Committee, the Office of Scientific Research and Development, the Atomic Energy Commission, the Manhattan Engineer District, the Material Testing Accelerator, the atomic bomb, the Blumer family, cyclotrons, the hydrogen bomb, nuclear medicine, nuclear physics, anti-Semitism and science, the development of television, linear accelerators, patents, and honorary fellowships, awards and organizational memberships.

Born on August 8, 1901 in Canton, South Dakota. Dr. Ernest Orlando Lawrence received his A.B. degree in 1922 from the University of South Dakota and his Ph.D. degree in physics in 1925 from Yale University. He joined the University of California faculty in 1928 and invented the first cyclotron two years later. From the days of that first model, Lawrence followed a pattern of building bigger and more sophisticated machines: 11 inches (1930), later expanded to 27 inches (1934) and 37 inches (1937); next came the 60-inch medical cyclotron (1939), the 184-inch cyclotron (1946), and the Bevatron (1954), the latter based on a design of William Brobeck. In 1939, Lawrence received the Nobel Prize for his remarkable invention. In 1936, the Radiation Laboratory was officially founded. The Laboratory was an important center for nuclear physics, chemistry, and biomedical research beginning in the 1930's. During World War II, Lawrence worked closely first with the National Defense Research Committee on microwave research and submarine detection and then with the Office of Scientific Research and Development's Section S-1, subsequently the Manhattan Engineer District, on the magnetic separation method for isolating uranium 235. In 1952, Lawrence established a new laboratory at Livermore, California (later named the Lawrence Livermore National Laboratory) to do weapons and other applied research. An old interest in television inspired him to work on a color television tube in the early 1950's. This grid style picture tube, the Lawrence tube or Chromatron, was used in the portable color television sets of a Japanese company in the late 1960's. Lawrence died on August 27, 1958 in Palo Alto, California.

Materials

Microfilm

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:

This is in accordance with:

- The National Archive General Retention Schedule. Citation
- 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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Container **Of**

- | | |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Box | 1 BUSINESS RECORDS -- Roll No. 1 -- Accounting Office and Comptroller; Sproul, President Robert G -- Lawrence Radiation Laboratory |
| Box | 2 BUSINESS RECORDS -- Roll No. 2 -- Atomic Energy Commission 1958; Manhattan Engineer District; "A" Bomb Letters -- Lawrence Radiation Laboratory |
| Box | 3 BUSINESS RECORDS -- Roll No. 3 -- Administration 1934-1942; Historical Reports 1959 -- Lawrence Radiation Laboratory |
| Box | 4 BUSINESS RECORDS -- Roll No. 4 -- Livermore Lab. 1949-1958; Publicity-University Explorer -- Lawrence Radiation Laboratory |
| Box | 5 BUSINESS RECORDS -- Roll No. 5 -- Various Donors American Cyanamid; Visitors Various 1952-1958 -- Lawrence Radiation Laboratory |
| Box | 6 BUSINESS RECORDS -- Roll No. 6 -- General File A to AK Misc.; Atomic Energy Research Establishment -- Lawrence Radiation Laboratory |
| Box | 7 BUSINESS RECORDS -- Roll No. 7 -- General File-BA to BAQ; General File-C1 Misc -- Lawrence Radiation Laboratory |
| Box | 8 BUSINESS RECORDS -- Roll No. 8 -- General File-CO-CP Misc; General File-Cooksey, Charlton D. -- Lawrence Radiation Laboratory |
| Box | 9 GENERAL FILE -- Roll No. 9 -- Donald Cooskey-Diary Notes 1940-49; Defense Dept. Joint Orient Conf. -- Lawrence Radiation Laboratory |
| Box | 10 GENERAL FILE -- Roll No. 10 -- Defense Dept. M.L.C. & R.D.B.; GE-GL Miscellaneous -- Lawrence Radiation Laboratory |
| Box | 11 GENERAL FILE -- Roll No. 11 -- GM-GO Miscellaneous; Hodges, Fred J. -- Lawrence Radiation Laboratory |
| Box | 12 GENERAL FILE -- Roll No. 12 -- Hoover, Herbert; Knudsen, Vern -- Lawrence Radiation Laboratory |
| Box | 13 GENERAL FILE -- Roll No. 13 -- Kruger, P. Gerald; Me Miscellaneous -- Lawrence Radiation Laboratory |
| Box | 14 GENERAL FILE -- Roll No. 14 -- MF-Moo Miscellaneous; Nat. Advisory Cancer Council -- Lawrence Radiation Laboratory |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Box | 15 GENERAL FILE -- Roll No. 15 -- National Broadcasting Company 1941; Paramount Pictures, Inc. -- Lawrence Radiation Laboratory |
| Box | 16 GENERAL FILE -- Roll No. 16 -- Pauley, Edwin W.; Reprint Corres. 1943-1946 -- Lawrence Radiation Laboratory |
| Box | 17 GENERAL FILE -- Roll No. 17 -- Research Corporation 1931-1935; Salisbury, Winfield W. -- Lawrence Radiation Laboratory |
| Box | 18 GENERAL FILE -- Roll No. 18 -- Gandoz Chemical Works; USSR 1934-1949 -- Lawrence Radiation Laboratory |
| Box | 19 GENERAL FILE -- Roll No. 19 -- U.S.S.R. 1950-1958; Zworykin V.K. -- Lawrence Radiation Laboratory |
| Box | 20 EQUIPMENT -- Roll No. 20 -- 184" Cyclotron 1938-1940; 90" Cyclotron -- Lawrence Radiation Laboratory |
| Box | 21 60" CYCLOTRON -- Roll No. 21 -- 60" Cyclotron 1939-1940; 60" Cyclotron 1952 -- Lawrence Radiation Laboratory |
| Box | 22 60" CYCLOTRON -- Roll No. 22 -- 60" Cyclotron Jan.-June 1953; 60" Cyclotron June.-Dec. 1956 -- Lawrence Radiation Laboratory |
| Box | 23 60" CYCLOTRON -- Roll No. 23 -- 60" Cyclotron 1957; 60" Cyclotron-Ohio State University 1954-1956 -- Lawrence Radiation Laboratory |
| Box | 24 NAS, NDRC and OSRD -- Roll No. 24 -- Atomic Fission Committee; Scientific Panel -- Lawrence Radiation Laboratory |
| Box | 25 MANHATTAN DISTRICT -- Roll No. 25 -- U.S. Engineers Berkeley; Monthly Progress and Personal Records -- Lawrence Radiation Laboratory |
| Box | 26 MANHATTAN DISTRICT -- Roll No. 26 -- General Electric Company; Los Alamos-Project 36 Correspondence -- Lawrence Radiation Laboratory |
| Box | 27 M.T.A., PATENTS & TRAVEL -- Roll No. 27 -- M.T.A. Program Livermore 1950; Travel Japan 1951 -- Lawrence Radiation Laboratory |
| Box | 28 LAWRENCE FUND, DEGREES, FELLOWSHIPS & MEMBERSHIPS -- Roll No. 28 -- Special Fund EASTMAN KODAK CO.; Director, Monsanto Chemical Co. -- Lawrence Radiation Laboratory |
| Box | 29 MEDALS AND AWARDS -- Roll No. 29 -- Elliot Cresson Medal-1937; Sylvanus Thayer Award-1958 -- Lawrence Radiation Laboratory |

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| Box | 30 APPOINTMENTS -- Roll No. 30 -- Consulting Board, Columbia University; Institute of Cancer Research; U.S. Scientific Advisory Committee; Brussels Exhibition-1958 -- Lawrence Radiation Laboratory |
| Box | 31 PERSONAL, FAMILY AND MEMORIAL SERVICES, ETC. -- Roll No. 31 -- Bibliography; Seaborg Article-Science -- Lawrence Radiation Laboratory |
| Box | 32 E.O. LAWRENCE SPEECHES -- Roll No. 32 -- Transmutations of sodium by Deutons-1934; Speech Requests 1946-1958 -- Lawrence Radiation Laboratory |
| Box | 33 LECTURE NOTES -- Roll No. 33 -- Unipolar Induction; Physics 2B Electricity and Magnetism-1931 -- Lawrence Radiation Laboratory |
| Box | 34 Roll No. 34 -- Date: Jan. 1972 -- Ernest O. Lawrence Papers -- 60" Cyclotron -- Box 3 -- File #1018, Drawer 4, folders 1 to 11 |
| Box | 35 Roll No. 35 (Original) -- Date: Jan. 1972 & Feb. 1974 -- Ernest O. Lawrence Papers -- Folders 45 thru 59 -- Declassified papers as of Feb. 1974 for the years 1941 to 1958 |
| Folder | 36 Lawrence photographs, including one of him with Patricia Frankenfled daughter of the Registrar at the Univ. of South Dakota taken 5 June 1938 - [see note in code folder] |
| Folder | 37 Ramblings of a Pioneer Pedagogue by Carl Gustav Lawrence [father of Ernest, book published by John Lawrence in 1969] |
| Folder | 38 Ernest Orlando Lawrence 1901-1958 - Remarks by Clark Kerr at the Memorial Service August 1958 |
| Folder | 39 E.O. Lawrence's Death - Sympathy Correspondence, Memorial Service Tributes 1958 |
| Folder | 40 Ernest Orlando Lawrence 1901-1958 A Biographical Memoir by Luis W. Alvarez 1970 [autographed] |
| Folder | 41 Speech by Molly Lawrence about the Early Days of the Lab for the 45th Anniversary of the Lab |
| Folder | 42 Induction of Lawrence into the Inventor's Hall of Fame 1982 |
| Folder | 43 200 Man-Years of Life The Story of Ernest Orlando Lawrence by Daniel Wilkes Lawrence Radiation Laboratory University of California, Berkeley Reprinted from The Physics Teacher, Vol. 3, No. 6. September 1965 |