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KARL TAYLOR COMPTON PAPERS, 1906-1961

Manuscript collection - MC 416

EXTENT

6.66 cubic feet

PHYSICAL DESCRIPTION

6 records cartons
2 manuscript boxes

ACCESSION NUMBERS

1977-60, 1981-16, 1983-7, 1983-52, 1990-70

CONDITIONS GOVERNING ACCESS

There are no restrictions on access to this collection.

PHYSICAL ACCESS

The collection is stored off-site.

BIOGRAPHY

Karl Taylor Compton, 1887-1954, B.S. 1908, M.S. 1909, College of Wooster; Ph.D. in physics, 1912, Princeton University, was president of the Massachusetts Institute of Technology from 1930 to 1948, then chairman of the Corporation until his death in 1954. He taught physics at Reed College, then at Princeton University, where he also was director of research at the Palmer Laboratory and chairman of the Physics Department. His areas of research included the passage of photoelectrons through metals, ionization and the motion of electrons in gases, the phenomena of fluorescence, the theory of the electric arc, and collisions of electrons and atoms.

In World War I he was assigned to the American Embassy in Paris as an associate scientific attaché. At MIT Compton transformed both the administrative and academic structure, strengthened the scientific curriculum, and developed a new approach to education in science and engineering. He served as chairman of the Section of Physics of the National Academy of Sciences, 1927-1930, and in 1930 helped organize the American Institute of Physics. In 1933 President Roosevelt asked Compton to chair the new Scientific Advisory Board. When the National Defense Research Committee was formed in 1940, Compton became chief of Division D (detection: radar, fire control, etc.) and in 1941 was placed in charge of those divisions concerned with radar within the new Office of Scientific Research and Development (OSRD). From 1943 to 1945 he was chief of the Office of Field Services of OSRD and scientific advisor to General MacArthur. After the Japanese surrender, Compton went to Japan as part of the Scientific Intelligence Mission. In 1948 he was appointed by President Truman to head the Research and Development Board, formed to oversee scientific preparedness in the postwar period.

SCOPE AND CONTENT NOTE

The collection contains biographical information about Compton, including correspondence between George Harrison, Julius Stratton, and Margaret Hutchinson Compton about Harrison's biography of Compton. Compton's date books, 1919, 1934-1935, 1942-1954, some with detailed entries, and Karl and Margaret Compton's appointment calendars provide some information about the Comptons' daily activities. Essays and newspaper clippings about playing football document Compton's years as a student at the College of Wooster; a copy of a College of Wooster memorial program for his mother, Otelia Compton, and an address given there by Compton in 1927 reveal his continuing relationship with his alma mater.

Correspondence with his parents and other family members provides further information about his college years, as well as some insight into his early days at Princeton and his World War I work for the National Research Council. Physics lecture notes from Reed College and Princeton University illustrate his years as a college professor at both schools. The collection also includes book manuscripts and notes, and reprints of Compton's scientific papers on photoelectricity and ionization of gasses; and reprints of publications, lectures, and addresses on the roles of academia, government, and industry, the growth of MIT and engineering education, and the development of atomic weapons.

A checklist of his publications is included.

RELATED MATERIAL

MIT. Office of the President, 1940-1959. Records of Karl T. Compton and James R. Killian. (AC 4)

Box	Folder	Contents
1	1	Bibliography of the Scientific Papers of Karl Taylor Compton
1	2	Checklist of the Writings of Compton
1	3	Published Writings: 146, 162, 167-168, 170, 172-174
1	4	Published Writings: 179-199
1	5	Published Writings: 200-227
1	6	Published Writings: 228-250
1	7	Published Writings: 251-270
1	8	Published Writings: 271-295
1	9	Published Writings: 296-317
1	10	Published Writings: 340-356
1	11	Published Writings: 358-379
1	12	Index of Lectures and Addresses, 1930-1933
1	13	Lectures and Addresses: n.d. [includes Reed College Chapel talks, n.d in folder]
1	14	Lectures and Addresses: 1927-1929
1	15	Lectures and Addresses: 1 January 1930 – 31 May 1930
1	16	Lectures and Addresses: 1931
1	17	Lectures and Addresses: 1 June 1930 – 31 December 1930
1	18	Lectures and Addresses: 1 January 1931 – 31 May 1931
1	19	Lectures and Addresses: 1 June 1931 – 31 December 1931
1	20	Lectures and Addresses: 1 January 1932 – 6 February 1932
1	21	Lectures and Addresses: 7 February 1932 – 30 April 1932
1	22	Lectures and Addresses: 1 May 1932 – 30 June 1932
1	23	Lectures and Addresses: 1 July 1932 – 31 December 1932

Box	Folder	Contents
1	24	Lectures and Addresses: 1933
1	25	Lectures and Addresses: 1 January 1933 – 28 February 1933
1	26	Lectures and Addresses: 31 March 1933 – 30 April 1933
1	27	Lectures and Addresses: 1 May 1933 – 31 December 1933
1	28	Lectures and Addresses: 1 January 1934 – 31 December 1934
1	29	Lectures and Addresses: 1 January 1935 – 31 May 1935
2	1	Lectures and Addresses: 1 June 1935 – 31 December 1935
2	2	Lectures and Addresses: 1 January 1936 – 31 October 1936
2	3	Lectures and Addresses: 1 November 1936 – 31 December 1936
2	4	Lectures and Addresses: 1 January 1937 – 30 June 1937
2	5	Lectures and Addresses: 1 July 1937 – 31 December 1937
2	6	Lectures and Addresses: 1 January 1938 – 31 March 1938
2	7	Lectures and Addresses: 1 April 1938 – 31 October 1938
2	8	Lectures and Addresses: 1 November 1938 – 31 December 1938
2	9	Lectures and Addresses: 1 January 1939 – 30 April 1939
2	10	Lectures and Addresses: 1 May 1939 – 31 December 1939
2	11	Lectures and Addresses: 1 January 1940 – 31 March 1940
2	12	Lectures and Addresses: 1 April 1940 – 31 May 1940
2	13	Lectures and Addresses: 1 June 1940 – 31 December 1940
2	14	Lectures and Addresses: 1 January 1941 – 30 June 1941
2	15	Lectures and Addresses: 1 July 1941 – 31 December 1941
2	16	Lectures and Addresses: 1 January 1942 – 31 December 1942
2	17	Lectures and Addresses: 1 January 1943 – 31 December 1943

Box	Folder	Contents
2	18	Lectures and Addresses: 1 January 1944 – 31 March 1944
2	19	Lectures and Addresses: 1 April 1944 – 31 December 1944
2	20	Lectures and Addresses: 1 January 1945 – 31 August 1945
3	1	Lectures and Addresses: 1 September 1945 – 31 December 1945
3	2	Lectures and Addresses: 1 January 1946 – 30 April 1946
3	3	Lectures and Addresses: 1 May 1946 – 31 October 1946
3	4	Lectures and Addresses: 1 November 1946 – 31 December 1946
3	5	Lectures and Addresses: 1 January 1947 – 17 March 1947
3	6	Lectures and Addresses: 18 March 1947 – 31 October 1947
3	7	Lectures and Addresses: 1 November 1947 – 31 December 1947
3	8	Lectures and Addresses: 1 January 1948 – 28 February 1948
3	9	Lectures and Addresses: 1 March 1948 – 30 June 1948
3	10	Lectures and Addresses: 1 July 1948 – 31 December 1948
3	11	Lectures and Addresses: 1 January 1949 – 28 February 1949
3	12	Lectures and Addresses: 1 March 1949 – 30 April 1949
3	13	Lectures and Addresses: 1 May 1949 – 31 December 1949
3	14	Lectures and Addresses: 1 January 1950 – 31 June 1950
3	15	Lectures and Addresses: 1 July 1950 – 31 December 1950
3	16	Lectures and Addresses: 1 January 1951 – 31 August 1951
4	1	Lectures and Addresses: 1 September 1951 – 31 December 1951
4	2	Lectures and Addresses: 21 January 1952 – 28 February 1952
4	3	Lectures and Addresses: 1 March 1952 – 31 December 1952
4	4	Lectures and Addresses: 1 January 1953 – 31 July 1953

Box	Folder	Contents
4	5	Lectures and Addresses: 1 August 1953 – 13 October 1953
4	6	Lectures and Addresses: 14 October 1953 – 31 December 1953
4	7	Lectures and Addresses: 1 January 1954 – 31 December 1954
5		Lecture notes for physics classes taught at Princeton University
5		Book manuscripts, working notes
5		Correspondence
6		Lecture notes for classes taught at Reed College
6		Date books, 1919, 1934-1935, 1942-1954
6		Condolence letters to Margaret Hutchinson Compton and Arthur Holly Compton
6		Correspondence
6		Newspaper clippings, Wooster College football team
7		Correspondence with family
7		Student essays
7		College of Wooster memorial programs for his mother, Otelia Compton
7		Karl Taylor Compton address, College of Wooster, 1927
8		Biographical information
8		Correspondence about George Harrison's biography of Compton
8		Karl and Margaret Compton's appointment calendars