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NATIONAL RESEARCH COUNCIL ARCHIVES

STATISTICAL THERMODYNAMICS
LECTURES GIVEN BY D.K.C. MACDONALD

1961-1963

Finding Aid

Prepared by Lynn Delgaty
in October, 1993

Title: D. K. C. MacDonald Collection

Dates: 1961-1963.

Extent: 20 audio reels, 5 cm of textual records.

Biographical Sketch: Dr. David Keith Chalmers MacDonald (1920-1963) was born in Glasgow, Scotland. He graduated from the University of Edinburgh with a Ph.D. in 1946. As a Nuffield Research Fellow and an ICI Research Fellow at the University of Oxford, he received an MA in 1948 and D.Phil. in 1949. In 1951, Dr. MacDonald joined NRC to head a research group in the field of low temperature and solid state physics for the Division of Pure Physics. He remained with NRC until his death in 1963. In addition to his research, D.K.C. MacDonald published three books, gave university lectures and was especially known for his public talks, given frequently to both adults and children. He was named Honorary Chairman of the Department of Physics at Ottawa University, a title he held from 1955-1960. He was later named Honorary Professor. In 1960 he was awarded the Gold Medal of the Canadian Association of Physicists and in 1963, the Gold Medal of the Professional Institute of the Public Service of Canada. Dr. MacDonald suffered from an increasingly disabling disease, muscular dystrophy. Yet he continued to work, even from his hospital bed, until a week prior to his death in July of 1963.

Custodial History: These lectures were recorded and transcribed by Olgierd Celinski of Interactive Learning Inc., of Ottawa. They were intended to help the 4th year Physics students at the University of Ottawa who had attended the lectures in 1961 and 1962. The collection was transferred to NRC Archives by Dr. Herzberg in September of 1993. It was arranged and described the following month.

Scope and Content: Fonds consists of transcripts and magnetic tape recordings of Dr. MacDonald's lectures pertaining to statistical thermodynamics. File list available.

Arrangement and Scope of the Collection

Transcripts	1961-1962	O5 cm	Vol. 1.01-1.16
Audiotapes	1961-1963	12,000 ft	Vol. 1.17-1.36

Access Restrictions

While the introduction to the notes maintains that D.K.C. MacDonald gave his permission for the recordings to be made, there is no known written documentation to support it.

Transcripts of Lectures

01	01	Transcript of an introductory lecture on Statistical Thermodynamics (PY450) given by Prof. D.K.C. MacDonald, [Sept. 1961]/ edited by Olgierd Celinski. 13 pgs.	Sept. 1961
01	02	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, October 5th, 1961/ edited by Olgierd Celinski. 17 pgs.	Oct. 1961
01	03	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, October 19th, 1961/ edited by Olgierd Celinski. 23 pgs.	Oct. 1961
01	04	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, October 26th, 1961/ edited by Olgierd Celinski. 24 pgs.	Oct. 1961
01	05	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, October 26th, 1961/ edited by Olgierd Celinski. 6 pgs.	Oct. 1961
01	06	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, November 2nd, 1961/ edited by Olgierd Celinski. 12 pgs.	Nov. 1961
01	07	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, November 15th, 1961/ edited by Olgierd Celinski. 15 pgs.	Nov. 1961
01	08	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, November 23rd, 1961/ edited	Nov. 1961

Vol.	File	Description	Dates
		by Olgierd Celinski. 24 pgs.	
01	09	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, January 4th, 1962/ edited by Olgierd Celinski. 14 pgs.	Jan. 1962
01	10	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, January 11th, 1962/ edited by Olgierd Celinski. 18 pgs.	Jan. 1962
01	11	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, January 25th, 1962/ edited by Olgierd Celinski. 22 pgs.	Jan. 1962
01	12	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, February 1st, 1962/ edited by Olgierd Celinski. 16 pgs.	Feb. 1962
01	13	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, February 8th, 1962/ edited by Olgierd Celinski. 18 pgs.	Feb. 1962
01	14	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, February 15th, 1962/ edited by Olgierd Celinski. 16 pgs.	Feb. 1962
01	15	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, March 1st, 1962/ edited by Olgierd Celinski. 16 pgs.	Feb. 1962
01	16	Transcript of a lecture on Statistical Thermodynamics given by Prof. D.K.C. MacDonald, March 15th, 1962/ edited by Olgierd Celinski. 12 pgs.	Mar. 1962

Magnetic Tape Recordings

01	17	Magnetic tape recording of lecture #4, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, November 15th, 1961.	Nov. 1961
01	18	Magnetic tape recording of lecture #5,	Nov. 1961

Vol.	File	Description	Dates
		course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, November 23rd, 1961.	
01	19	Magnetic tape recording of lecture #7, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, January 25th, 1962.	Jan. 1962
01	20	Magnetic tape recording of lecture #9, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, c. February, 1962.	Feb. 1962
01	21	Magnetic tape recording of lecture #10, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, March 1st, 1962.	Mar. 1962
01	22	Magnetic tape recording of lecture #1, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, c. September, 1962.	Sept. 1962
01	23	Magnetic tape recording of lecture #2, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, c. October, 1962.	Oct. 1962
01	24	Magnetic tape recording of lectures #3 and #14, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	25	Magnetic tape recording of lectures #4 and #15, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	26	Magnetic tape recording of lectures #5 and #16, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	27	Magnetic tape recording of lectures #6 and #18, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963

Vol.	File	Description	Dates
01	28	Magnetic tape recording of lectures #7 and #17, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	29	Magnetic tape recording of lectures #8 and #19, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	30	Magnetic tape recording of lectures #9 and #20, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	31	Magnetic tape recording of lectures #10 and #21, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	32	Magnetic tape recording of lecture #11, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	33	Magnetic tape recording of lecture #12, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	34	Magnetic tape recording of lecture #13, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	35	Magnetic tape recording of lecture #22, course no. PY450, Statistical Thermodynamics, /D.K.C. MacDonald, 1962-63 academic year.	1962-1963
01	36	Magnetic tape recording: contents unknown, February 28th, 1962 /D.K.C. MacDonald.	Feb. 1962

Vol. File Description

Dates