Guide to the Douglas Dean Osheroff Papers

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Stanford, California
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Overview
Call Number: SC1181
Creator: Osheroff, Douglas D.
Title: Douglas Dean Osheroff papers
Dates: 1969-2003
Physical Description: 5 Linear feet
Summary: Laboratory notebooks.
Language(s): The materials are in English.
Repository: Department of Special Collections and University Archives
Green Library
557 Escondido Mall
Stanford, CA 94305-6064
Email: specialcollections@stanford.edu
Phone: (650) 725-1022
URL: http://library.stanford.edu/spc

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Cite As
[identification of item], Douglas D. Osheroff Papers (SC1181). Dept. of Special Collections and University Archives, Stanford University Libraries, Stanford, Calif.

Biographical/Historical note
Douglas Dean Osheroff (born August 1, 1945) is a physicist known for his work in experimental condensed matter physics, in particular for his co-discovery of superfluidity in Helium-3. For his contributions he shared the 1996 Nobel Prize in Physics along with David Lee and Robert C. Richardson.
Osheroff was born in Aberdeen, Washington. His father, William Osheroff, was the son of Jewish immigrants who left Russia. His mother, Bessie Anne (Ondov), a nurse, was the daughter of Slovak immigrants (her own father was a Lutheran minister). Osheroff earned his Bachelor’s degree in 1967 from Caltech, where he attended lectures by Richard Feynman and did undergraduate research for Gerry Neugebauer.
Osheroff joined the Laboratory of Atomic and Solid State Physics at Cornell University as a graduate student, doing research in low-temperature physics. Together with David Lee, the head of the laboratory, and Robert C. Richardson, Osheroff used a Pomeranchuk cell to investigate the behaviour of 3He at temperatures within a few thousandths of a degree of absolute zero. They discovered unexpected effects in their measurements, which they eventually explained as phase transitions to a superfluid phase of 3He. Lee, Richardson and Osheroff were jointly awarded the Nobel Prize in Physics in 1996 for this discovery.
Osheroff received a Ph.D. from Cornell University in 1973. He then worked at Bell Labs in Murray Hill, New Jersey for 15 years, continuing to research low-temperature phenomena in 3He. In 1987 he moved to the Departments of Physics and Applied Physics at Stanford University, where he also served as department chair from 1993-96. His research is focused on phenomena that occur at extremely low temperatures.
Osheroff was selected to serve on the Space Shuttle Columbia investigation panel, serving much the same role as Richard Feynman did on the Space Shuttle Challenger panel.
He currently serves on the board of advisors of Scientists and Engineers for America, an organization focused on promoting sound science in American government.

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Osheroff is an avid photographer and introduces students at Stanford to medium-format film photography in a freshman seminar titled "Technical Aspects of Photography." In addition, he has taught the Stanford introductory physics course on electricity and magnetism on multiple occasions, most recently in Spring 2008, as well as undergraduate labs on low temperature physics.

Among his physics outreach activities, Osheroff participated in the science festivals for middle and high school students, is an official guest of honor at the International Young Physicists' Tournament 2013.

He married Phyllis Liu-Osheroff in 1970.

**Scope and Contents**
The materials consist of laboratory notebooks.

**Access Terms**
Laboratory notes.
Particles (Nuclear physics)--Laboratories.
Physics--Experiments.
Physics--History.
Physics--Research.
Physics--Study and teaching.
Box 1  **Lab notebook 6 Sep 1973 - 7 Dec 1977**
- Physical Description: 1 Notebook
- Language of Material: English
- Scope and Content Note
  Notebook containing handwritten notes on 3He Purification (Sep 6, 1973-Sep 12, 1975) and Silver Sinter (July 20, 1975-Dec 7, 1977).

Box 1  **Lab notebook 1 Aug 1974 - 28 Mar 1975**
Box 1  **Lab notebook 29 Aug 1974 - 14 July 1975**
- Scope and Content Note
  Lab notebook titled "Data Reduction" with entries dated August 29, 1974-July 14, 1975. The name Brinkman is written in the front cover.

Box 1  **Lab notebook 30 Mar 1975 - 7 June 1976**
Box 1  **Lab notebook 14 July 1975 - 25 May 1976**
Box 1  **Lab notebook 6 Nov 1975 - 11 Jan 1984**
- Scope and Content Note
  Lab notebook with entries dated Nov 6, 1975-Jan 11 1984. Notebook titled 3He Purification II.

Box 1  **Lab notebook 28 Apr 1976 - 7 Apr 1977**
- Scope and Content Note

Box 1  **Lab notebook 16 Jan 1977 - 12 Apr 1978**
- Scope and Content Note
  Lab notebook with entries dated Jan 16, 1977-April 12, 1978. Cover has the handwritten title "He A. Yanof."

Box 1  **Lab notebook 13 Apr 1977 - 28 Sep 1978**
- Scope and Content Note
  Lab notebook with entries dated Apr 13, 1977-Sep 28, 1987. Book cover has the handwritten title, "Cryo Calc II."

Box 1  **Lab notebook 3 Aug 1977 - 10 Jan 1978**
Box 1  **Lab notebook 29 Dec 1977 - 5 Feb 1979**
- Scope and Content Note
  Lab notebook with entries from December 1977 - February 1979. Handwritten title on cover "Silver Sinter II."

Box 1  **Lab notebook 10 Jan 1978 - 22 Apr 1978**
Box 1  **Lab notebook 27 Apr 1978 - 18 Sep 1978**
Box 1  **Lab notebook 18 Sep 1978 - 26 Nov 1978**
- Scope and Content Note

Box 1  **Lab notebook 21 Nov 1978 - 12 June 1981**
Box 1  **Lab notebook 28 Nov 1978 - 30 July 1980**
Box 1  **Lab notebook 29 Nov 1978 - 21 Aug 1979**
Box 1  **Lab notebook 26 Jan 1979 - 14 May 1979**
- Scope and Content Note
  Lab notebook cover has "WIRE EXPI - SEE ALSO P1" handwritten on it.
Box 1
Lab notebook 21 Aug 1979 - 27 Nov 1979

Scope and Content Note
Lab notebook has handwritten title "New Cryostat" on the cover.

Box 1
Lab notebook 12 Nov 1979 - 27 Feb 1981

Box 2
Lab notebook 6 Oct 1979 - 8 July 1979

Box 2
Lab notebook 9 July 1980 - 22 Feb 1981

Box 2
Lab notebook 24 Feb 1981 - 1 Dec 1981

Box 2
Lab notebook 9 July 1981 - 16 June 1983

Box 2

Scope and Content Note
Lab notebook has the name Lois Pollack written on the book spine and inside the book cover.

Box 2
Lab notebook 7 June 1982 - 17 Aug 1982

Scope and Content Note
Lab notebook has the name Lois Pollack written on the book spine and inside the book cover.

Box 2
Lab notebook 6 Feb 1984 - 7 May 1984

Box 2
Lab notebook 7 May 1984 - 21 Nov 1984

Box 2
Lab notebook 30 Oct 1984 - 1 May 1987

Scope and Content Note
Lab notebook titled "Data Red."

Box 2
Lab notebook 21 Nov 1984 - 18 Apr 1985

Box 2
Lab notebook 18 Apr 1985 - 17 July 1985

Box 2
Lab notebook 18 July 1985 - 2 Nov 1985

Scope and Content Note
Lab notebook with the name Ruel inside the front cover.

Box 2
Lab notebook 3 Oct 1985 - 21 June 1987

Scope and Content Note
Lab notebook with "FL Van Nice" written in the front cover.

Box 2
Lab notebook 3 Nov 1985 - 16 Mar 1986

Scope and Content Note
Lab notebook with the name "Ruel" handwritten on the front cover.

Box 2
Lab notebook 27 Feb 1986 - 26 June 1992

Box 2
Lab notebook 16 Mar 1986 - 9 July 1986

Box 2
Lab notebook 10 July 1986 - 21 Oct 1986

Box 2
Lab notebook 21 Oct 1986 - 13 Jan 1987

Box 2
Lab notebook 13 Jan 1987 - 4 Feb 1987

Box 2
Lab notebook 19 May 1987 - 14 Aug 1987

Photographs 2003

Box 3
Memorial Church 2003