

Dr. Robert Fleischer Papers

2011.007

Quantity: 18 Boxes

Access: Open to research

Acquisition: Gift of Dr. Robert Fleischer, 2011

Processed By: Abigail Stambach in Summer 2011

Biographical Note:

Robert Fleischer received his PhD in applied physics from Harvard University in 1957. In 1960, he joined the research staff of General Electric's Global Research Center in Niskayuna, New York. His research interests included hardening of solids and nuclear tracks in solids. During his tenure at GE, his research in fission track led to the founding of two companies, Nuclepore and Terradex. He was also a part of the design team that created a cosmic ray detector for the Apollo 16 Space Mission. He retired from GE after 32 years of service. In 1997, he joined the Geology Department of Union College as a research professor. His research focused on radioactivity in the environment. He worked with material from the 1945 Hiroshima bomb site to determine neutron dosimetry and studied personal exposure to radon from eyeglasses. Fleischer published over 350 scholarly articles as well as co-authored and co-edited several books. He also held nineteen patents and was awarded many awards over the course of his career. Fleischer died on March 3, 2011.

Scope and Content Note:

The Dr. Robert Fleischer Papers collection consists of research files, publications, correspondence, lecture notes, images and overhead projector transparencies, awards and other papers produced during the career of Dr. Robert Fleischer. The bulk of the collection consists of his research files from his tenure at General Electric and Union College. This includes notes, lab notebooks, graphs, charts and research articles. Most of the correspondence in the collection pertains to his research as well as publications. There is also material related to the Geology Department of Union College. This includes department newsletters, photographs, accounts and correspondence. Fleischer wrote numerous scholarly articles and books. Copies of these publications can be found in the collection.

Box Listing:

Box 1:

Biographic Material

Research material related to General Electric's Global Research Center

Box 2:

Images and overhead projector transparencies

Box 3:

Publications

Nuclear Tracks in Solids: Principles and Applications by Robert L. Fleischer, P. Buford Price and Robert M. Walker

Intermetallic Compounds: Principles and Practice by J.H. Westbrook and R.L. Fleischer, 3 vols.

“Solid-Solution Hardening” by Robert L. Fleischer in *The Strengthening of Metals*, Donald Peckner, ed.

Radon Measurements by Etched Track Detectors, Saeed A. Durrani and Raddmir Illic

“Serendipitous Radiation Monitors” by Robert L. Fleischer in *American Scientist*, July-August 2002

“Ion Tracks in Solids” by Robert L. Fleischer in *Science to Technology*, December 1995

Various Journals articles

Box 4:

Research

Tetragonal Distortions

Grip

Solution Hardening

Subs Solutions Hardening

Solid Solutions Hardening

Non-Uniform solute

Box 5:

Lectures notes

Lectures correspondence

Correspondence

Coresspondence - mech. prop.

References A-C

References D-F

References G-I

References J-L

References M-O

References P-R

References S-U

References V-Z

Research:

Radon and Cancer Dose. Calculator

Smoking and Lung Cancer

Radon indoor

Box 6:

Book: Much Ado About (Practically) Nothing by David E. fisher

Geology Department newsletters, yearbook pictures and other Union related papers

Research:

Radon and Radiation

Emanating Power
Radon: Properties and Flow Theory
Seism. Triggering Weapons
Radon Diffusion
Radon articles
Radon: Instrument and Techniques
Seism. Radon
Radon in Water

Box 7:

PEW Summer Research Info
Emails
Notes/Overheads transparencies
Articles
Newsletters
Csikai Information
American Academy of Arts and Science
Ernest Orlando Lawrence award
NASA award
Ohira Accounts
Union Accounts
Union College papers
Health Physics Society
ASM
Awards

Box 8:

Slides and images related to lectures
Radon: regulation litigation
Radon and Mines
Publications
Correspondence with David Karl
Air II research
Afina Research

Box 9:

Security Forms
Meetings Information
Bibliographical Information
Publication Reviews
Publication lists
GERL
Academy of Engineering

Publications

Box 10:

Publication Information

Citations

Cairo information

Travel information

NOAA & NCAR

Earthquake photographs

Space photographs

Conference photographs

Alpha Recoil Review

Exhibits

Photograph negatives

Images

Olin Center Dedication

Box 11:

Research

Irrad. damage stability

Cottrell correspondence

PB diffusion cherniay

ELD paper

Femilab 1985

Silicone and radon

Radon Homes map

Wasserburg correspondence

U mapping

soil humidity

ORE CAN

Californium- 252 sources

Californium-252

Plutonium, Californium

Pu Sources

Cairo paper

Price Symposium

CAHN-TMS

MRS Ions Track

Droplet Evaporation

Serendipitous Track

Exit publications

Recoils

Kalystautas Nanospruct

AirutB MS
Meteoritics
Depleted Uranium
Monopoles in monitor
Bob Walker
Yale 2004
Ave. Radon - homes
Acta Debricina
Clmo Pyrox Slip Lines

Box 12:

Order slips
Travel accounts
Dunbar/Schmitt
RPI accounts
2006 accounts
Correspondence up to 2004
Brown Talk
Meeting abstracts
Correspondence mailings
Lectures
Track course
talks, meetings
TTI Front

Box 13:

Graphs
Tracks to Innovation
CDC
Research
 TTI6 Others
 TTI7 Lost
 TTI-1 Etching
 TTI2 Holes
 TTI3 Radon
 TTI4 Time
 TTI5 Cosmic Rays
 IC-Pop 4-7
 IC-Pop Vol. 3
Hadley
Farcell
MacDonald
Chang
Menorick

Herrmann
Likes
Museum Science
Dudley Observatory
Meyer, Walsh and Quierolo
Zalesky and Wishler
Oakridge HP Proposal
Radon Book
Royalties
Contract
Photos
Publicity and Progress Reports

Box 14:

Research

Radon-Signal Separation Paper
ADGC CR-39
Radon Dosimetry Homes
Lung Cancer and Radon
Track Mechanics
Lithium - Boron
Mats Scotia Calculator
Models - Radon
Radon Daughter theory
Radon in the environment 1988 nuclear tracks
Boron
Terradex history
Terradex patents and brochures
Reports to Terradex
Tracks miscellaneous
Tracks nuclear physics
Tracks Space cosmic rays
Dosimetry
monopoles
Tracks- Lexan
Tracks-Mechanism
Radon Homes and Grounds
Tracks TBD
Possible etchants
Geophysics
Hail- ice
Health mine
Hiroshima

Box 15:

Research

Miscellaneous
Hormesis
Alpha
Book's Bond Energies
Highest Energies cosmic rays
Cosmic rays, miscellaneous
Craters
Diffusion
Earthquakes
Elemental abundances
Internet
Boundary energy
Irradiation
Membranes
Nuclear Waste
Extinct Radioactivity
Nucleosynthesis
Oxidation
Vapor pressures
Zircon
Uranium and Thorium in the seawater
Range and Electrons
Statistics
Thermal Expansion
Turbine Engines
Uranium, Thorium
Journal articles
Plastics
Point Imperfections I
Elastic Properties and Lattice Constants
Non-metals elastic properties and lattice constants
Metals and metallic elastic properties and lattice constants

Box 16:

Research

IC PQP 1+2
Financial IC PQP 1:2
RLF SSH Vol. 3
RLF IC PQP 3
Metcalf/Insect Migration
Grafton
DU Proposal/ROVACH NUR

234/238 Mintpar
Cancer
Silletti/Bargnesi
Pikes Peak
Doremus/Hyratioon 2Pb
Deform FTD.
Doris Lo
Cavitation
R-values: New NTD
Track Mechanic Klaumuenzer
Recoils
Egypt Glass
Plutoinum Leaching
Foni Tracks
Steck
Recruiting
Membranes- Radon
Siders Tracks

Box 17:

Research

BCC and FCC
Angles
GB Segregation
Interstitials
Structure and T brittle to ductile
Solution hardening
fracture
turbines
order hardening
Hiroshima
eyeglasses
eyeglasses disclosure
Hiroshima porcelain

CJ Cilmore

Dislocation lectures

National Institute of Environment Health Science

Box 18:

Research

Tobacco
W-Field Future ELD
Perelygin
V calibration

Radon in Olin
Wasserburg
Cores
Deformation Dating
Lead in Zircon
Plutoinium in Zircons/Bondar Radon
Hiroshima Pre-Button
Hiroshima HP
Miscellaneous Research
Lab notebooks