Box 1:

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Thermodynamics of Engineering Science—Correspondence, 1954-64 (2 folders)
Analytical Thermodynamics—Correspondence, 1958-68
Direct Energy Conversion—Correspondence, 1965-76
Dynamics of Multiphase Systems—Correspondence, 1965-72
Instrumentation for Fluid Particle Flow—Correspondence, 1985-96
Particulates and Continuum: Multiphase Fluid Dynamics—Correspondence, 1988-92
Particulate Two Phase Flows—Correspondence, 1990-92

Journal Articles, 1955-64 (2 folders)
  1968-70 (2 folders)
  1970-77 (2 folders)
  1970-94 (2 folders)

Box 2:

  1982-93 (2 folders)
  1985-90 (2 folders)

GENERAL CORRESPONDENCE

  1954-95
  1958-65
  1961-62
  1968
  1969
  1970
  1971
  1972

Box 3:

  1973-74
  1974
  1974-75
  1976
RECOMMENDATION LETTERS
Access to a file of an individual named below will only be granted after a researcher has provided either: a) evidence the individual is deceased or: b) a letter from the individual granting permission to access the file.

1971
Gary Morr
Erh Lin
Gerald Colver
Elaine Washington
Dennis Lane
Patrick Alexander Burrell
Stephen Kin-Keung Tung
Larry Rodgers
Thomas Payne
Andy Hui  
James Stukel  
Peter Wolff  
John Koch  

1972  
Tze-Show Chow  
Sang Woo Lee  
James J. Stukel  
Frank Morrison, Jr.  
Abdel El Kouh  
R. L. Peskin  
A. Ben Huang  
Yong Nak Lee  
Stephen Kin-Keung Tung  
John Koch  
David Allman  
Sanghee Hong  
John Hammond  
John Martin Hughes  
Fernando Rodriguez Chirinos  
Larry Rodgers  
Paul Thiess  
Norman Warbinski  
Donald Lee Fenton  
Gary Michael Wegner  
Gary Morr  
Thomas Petrie  
Brian Burdiak  
Feng-Nan Lin  

1973  
Frederick Hammitt  
G. J. Trezek  
Darsh T. Wasan  
Henri G. Rigo  
Feng-Nan Lin  
Donald Vaitkus  
Wen L. Chow  
Peter Wolff  
Stephen Colburn  
Goodarz Ahmadi  
Douglas Pessoni
Behrouz Oliazadeh
Larry Rodgers
Ron Pape
Stephen Tung
Sanghee Hong
Velma Gadbury
Richard Schulze
Stephen Zahos
Francisco Puleo
Paul Thiess

1974-75
Richard Peskin
June Kempka
Tze-Show Chow
R. C. Jordan
George Trezek
Abdel Elkouh
Benjamin Gal-Or
Robine Lee
A. Ben Huang
Ting W. Lee
Larry Rodgers
Paul Thiess
Gerald Colver
Sanghee Hong
G. F. Rowe
Perry Blackshear, Jr.
Edwin Boston
Samuel Pan
James Wedding
Chang-lin Tien
Ralph Benway
Sharon Ho
Marvin Krasnow
Preston McDaniel, Jr.
Jeffrey Wang
Ronald Pape
C. W. Tan

1976
Wen-Ching Yang
J. S. Mason
Donald Fenton
Gerald Colver
Ronald Thomas Gibbs
Ronald Pape
Chiang Liauw
James Curry
Craig Dutton
John Wu
Homayoun Ghaffari-T.
Donald Myronuk
John Starkweather
Paul Thiess
James Wedding
James Saunders, Jr.
S. K. Griffiths
Ronald Gibbs
Larry D. Reed
Chang-lin Tien
James Huntzicker
Judy Dahl
Michael Rieber
Sang Woo Lee
Chor-Weng Tan
Zalman Lavan
Stephen Sias

1977
Ronald T. Gibbs
William John Meyers
C. H. Chen
M. Nakai
R. O. Buckius
Michael Briski
Lon Ballard
Herman Krier
Kwong-Tsun Ma
Marvin Krasnow
Jacobo Agrest
John Krazinski
Richard Peskin
T. R. Dali
Samuel S. Pan
Homayoun Ghaffari-T.
Donald Fenton
Jim Liu
James G. Daley
Dimitri Gidaspow
Gerald Colver
Donald Watkins
Chiang Liauw
Ronald Pape

1978
S. S. Bharwani
Martin Wolff
Itzhak Elperin
David Chato
Alek Chen
Satish Saxena
John David Tyrrel
Saeed Rezakhany
Mohammad Farshbaf
R. O. Buckius
Horacio Perez-Blanco
Tze-show Chow
Ronald Gibbs
James Saunders, Jr.
Marvin Krasnow
B. T. Chao
Lun Shun Yao
David Lohbauer
Robert W. Porter
James R. D. Lee
Andrea Sha
Anna Yu-min Cheng
Song-Chin Lu
Samuel S. Pan
Vipinchandra L. Shah
Wayne Jouse

1980
Horacio Perez-Blanco
Luigi Fasso
Felix Chen
David Chato
Gerald Colver
J. S. Yu
Ralph Hewitt
Mohamed Benkessirat
Robert Neal Niemeier
Larry Wilson
Donald Watkins
Carl Chow
Brian Duff
Abdel Djemil
Eric Kinder
Abdelkader Benchamma
Hsiao Chu Lin
Haeok Lee
Jeyhoon Khodadadi
Kai Kong
Paul Y. Oh
Matthew Carroll
Ronald Gibbs
Michael Sievers
Alek Chen
James Liljegren
Bruce Boughton
Taeyoung Han
Robert Porter
Sen Nieh
Ali Heydari
Robine Lee
Jeff Creen
Song Cai
Jim Liu
Seraj Bharwani
Chiang Liauw
Chandan Rao
S. A. Ho
Andrea Sha
William Hsiong
Richard Chittenden
David Eisenman

1982
Hisashi Kono
Harold Bergee
Tung-Mao Shih
Felix Litman
Steve Kim
Mitchell Sledge
Mohamed Benkessirat
Jiin-Lang Lee
Patrick McGovern
David Underwood
Chieh Chen
Henry Jung
Sen Nieh
Shantha Ravi Kumar
Michael Rieber
Stephen Sias
Charles Miao
Chivey Wu
Henry Tung
Young-Don Choi
Hamid Arastoopour
Weimin Kwank
Paul Chang
Nan-yan Wang
Albert Rinozzi
A. K. Ghosh
Chang Sohn
Felix Chen
Kyung Shim
Donald Watkins
Ellie Ng
Abdelkader Benchamma
Joseph Prusa
Ronald Gibbs
Mehdi Bahadori
Larry Rodgers
Laurence Wilson
Fadhel Berrahou
Mehdi Bahadori
Carl Chow
Chiang Liauw

Box 5:

1984

Hisham Naser-El-Din
Donald Watkins
Gerald Colver
Douglas Darling
Zhu Chao
Ilkwan Cho
James Klausner
Qiong Li
Chao-Hsin Lin
Renwei Mei
Seshu Dharmavaram
Joseph Philips
Domenico Maurizio Fenderico
Keng Leong
Tung-Mao Shih
Jim Saunders
Sen Nieh
Henry Jung
Joanne Librande
Chivey Wu
James Henry Saunders, Jr.
Shimao Ni
Liming Chang
Mamoru Ishii
Jian-Wen Li
Davood Moslemian
Marvin Krasnow
R. W. Lyczkowski
Donald Vaitkus
Paul Steranka, Jr.
Michael Frauens
Kai Kong
Raed Sherif
Haeok Lee
David Chato
Jeffrey Norton
William T. Sha
Hamid Arastoopour
M. C. Roco
James Lee
Michael Frauens
Henry Jung
Felix Chen
J. V. S. Prasad
Russel D. Skocypec
Hoang Nguyen
Chang-Tsan Hua
James Klaus
Felix Litman
Sandanand Gokhale
Harold Bergee

1987
Hamid Arastoopour
Nigel Clark
Chao-Hsin Lin
Haoming Guo
Leonard Shih
Daniel Brandolino
June Kempka
Douglas Darling
Shyang-Lin Kuo
Jeffrey Norton
Seshasayi Dharmavaram
Rory Flemmer
Marvin Krasnow
Carl Chow
Sen Nieh
Alex Balboa
Hsiao Chu Lin
Nicholas Vlachos
Shimao Ni
James Klausner
Kuan Chen
Craig Langer
Ahmed Busnaina
Maurizio Fenderico
Hisam Nasr-El-Din

1989
Hamid Arastoopour
Stanislaw Sieniutycz
James Klausner
K. R. Sridhar
Horacio Perez-Blanco
Lucia Liljegren
Curtis Clark
Yong Nak Lee
Gunol Kocamustafaogullari
Michael Adewumi
Jiangang Sun
Todd Richard Lucht
Chao-Hsin Lin
Douglas Darling
M. K. Desai
Shaojiu Zhou
Darryl Baker
Nigel Clark
Chung-Shin Yuan
Stephen Kim
Christine Im-Sun
Donald Walters

1990
Zhuoxiong Mao
Michael Adewumi
Hamid Arastoopour
Leshan Wang
Dandong Wang
David Luerkens
Tammy Smith
Xiaoqing Huang
Henry Jung
K. R. Sridhar
Matt Slaughter
Nick Shin
Chih Wu
Tov Elperin
Jose M. Saiz Jabardo
Aili Ting
Joon S. Lee
Nigel Clark
Chao-Hsin Lin
Horacio Perez-Blanco
Lucia Liljegren
Angie Schroeder
Jeffrey Kautz
Douglas Darling
James Klausner
Tung-Mao Shih
1991
Hayley Shen
Shimao Ni
Harsh Patel
Herchang Ay
John Gish
Hamid Arastoopour
Ping Cheng
Bo Mi
John Plumpe
Sen Nieh
Zhou Shuang
Chao Zhu
Dandong Wang
Nicholas Vlachos
Aili Ting
Jason Cole

1992
James Klausner
Richard van de Wall
Barbara Liu Lin
Linda Hsueh-ling Chiang
Evangelos Karvounis
John Plumpe
Harsh Patel
Xiaoqing Huang
Michael Roco
Chao Zhu
Sen Nieh
Hayley Shen
Chang Sohn

1993
John Plumpe
James Klausner
Mike Roco
Chao Zhu
Rebecca Silver
Xiaolan Hu
Evangelos Karvounis
Chih Wu
V. Rudolph
L. S. Fan
Guoqing Zhang
Harri Kytomaa
Richard van de Wall
David Siegel

1994
Eric Hiller
Alek Chen
L. S. Fan
Michael Adewumi
Johnny Bao
James Klausner
Baolan Shi
Qiong Li
Amy Lee
Chao Zhu
Dmitry Vedensky
Xiaoqing Huang
V. Rudolph

1995
Baolan Shi
L. S. Fan
Kyung Park
Jaikrishnan Kadambi
Tov Elperin
Chao Zhu
Michael Adewumi
Eric Hiller
Richard Peskin
Avi Levy
Alexander A. Shraiber
Thin Pham
Xiaoqing Huang

1996
Lucia Liljegren
John Plumpe
Johnny Bao
Lixing Zhou
Andrea Culumber
Douglas Anderson
Ping-Wha Lin
Baolan Shi
J. R. Kadambi
Chao Zhu
Kelly Homan
Wennan Zhang
L. S. Fan

1997
Kelly Homan
Alexander A. Shraiber
Andrea Culumber
Lucia Liljegren

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American Society of Mechanical Engineers–Air Pollution Control Division, 1968-74
1971, 1974
Fellow, 1973
Argentina Lectures, 1974-78 (2 folders)
Argonne National Laboratory–Correspondence, 1975
1976-78
1983-85

Box 6:

Fossil Energy Research Implementation Workshop, 1978

Army Research Office–Workshop, 1978
Atlas Chemical Industries, Inc.–Correspondence, 1970-71
Atomic Energy Commission, 1957-61
Australia Trip–Correspondence, 1988
Biographical Information–S. L. Soo, 1965-73
1992
Carbon-Oxygen Fuel Cell–Correspondence, 1972
Research Reports, 1972
Caterpillar Tractor Company, 1963-66
Research Project, 1967
“Appendix F–Coal Transportation: Unit Trains–Slurry and Pneumatic Pipelines,” ca. 1975
“Appendix H–Medium Btu Coal Gasification,” ca. 1975
Document 190–Michael Rieber and Shao Lee Soo, “Route Specific Cost Comparisons: Unit Trains, Coal Slurry Pipelines and Extra High Voltage Transmission,” May 1976
“Summary and Conclusions I,” August 1977
“Coal Slurry Pipelines II,” August 1977
“Barge Transport IV,” August 1977
“Conveyor Belts V,” August 1977
“Truck Haulage VI,” August 1977
“Yellow Ball Rail VIII,” August 1977

Box 7:

Center for Research on Sulfur in Coal, 1984-86
China-Japan Fluidization Symposium–Third, 1988
Clinton (IL) Nuclear Power Plant–Analysis of Steam Turbines, 1982-86 (2 folders)
Coal Desulfurization–Correspondence, 1984-90
Coal Gasification–Correspondence, 1975-82
Soo Process, 1977-81
Coal Research–Correspondence, 1986-89 (2 folders)
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Combustion Institute–“Particle-Gas-Surface Interactions in Pollution Control Devices,” 1973
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Correspondence, 1995-96
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  “Report on the Study of Supercharging the Cooper-Bessemer Gas Generator,” 1952
  Correspondence, 1955
Crowe, Clayton–Correspondence, 1976-77
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Box 8:

Detroit Edison, 1970
Dimick, Robert, 1963-64
Engineering College (University of Illinois)–Executive Committee, 1983-91
Engineering Experiment Station (University of Illinois)–Correspondence, 1959, 1961
  Reports, 1960, 1967
  Feasibility of Coal Mine Cooperatives: A Preliminary Report and Analysis,” April 1975
  Shao Lee Soo and Michael Rieber, “Report and Evaluation of the ILOK 4-Micron
  Coal Grinding Process,” December 1975
Film and Cooling Research–Notes and Papers, 1991-92
Fluidyne Engineering Corporation, 1977
Foreign Travel Applications and Correspondence, 1987-89
French, J. L.–Correspondence, 1962-65
Handbook of Powder Technology–Correspondence, 1973-76
Harvard University–Notes for Hydro- and Aerodynamics Class Taught by Professor R.
  von Mises, 1950 (2 folders)
Illinois Power Company, 1974
Industrial Wastes Conference (22nd)–“Collection of Fine Particles: Devices and Their
  Evaluation,” 1975
Institute of Chemical Metallurgy (China)–Chinese Academy of Sciences, 1991-92
International Journal of Multi-Phase Flow–Correspondence, 1973-76
International Telephone and Telegraph Company, 1968-70
Intersociety Conference on Transportation (3rd)–“On the Feasibility of Long Distance
  Pneumatic Pipeline Transport of Coal,” 1975
Extended Surface Thermionic Converter, 1963-67
Rotary Electrostatic Precipitator, 1966
Inquiries Regarding, 1967-74
Design Notes
Heat Flux Tube, 1967-69

Box 9:

Oscillating Mass Flow Probe, 1971
Jet Propulsion Laboratory–Correspondence, 1984
Journal of Pipelines–Correspondence, 1980
Klausner, James–Correspondence, 1987
Kleinschmidt, R. V.–Power Plants
Research Technique
Gas Turbine
Korea Institute of Science and Technology–Correspondence, 1979-80
McGrew, Frank–Correspondence, 1968-73
Mechanical and Industrial Engineering Department (University of Illinois)–Correspondence, 1975-80
Merriam, Marshall, Shapiro and Klose, Attorneys at Law–Correspondence, 1967-71
1971-72
1975-78
Morgantown Energy Technology Center, 1987-88
Multiphase Mechanics–Correspondence, 1978-79
M. W. Kellogg Company–Correspondence, 1970-71
“Simulation of Flow of Liquid-Vapor Mixtures at Micro Gravity Conditions in Space,” (2 folders)
Universities Space Research Association–Committee, 1972-73

Box 10:

1973-74 (2 folders)
University Space Engineering Research Program, 1987-88
National Science Foundation–Correspondence, 1960-66
1967
1968
1969
1970
1971
1975-78
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1980-83
1983-85
1986-88
Memos, Announcements, Meetings, and Minutes, 1962-66
Research Projects–“Transport Properties and Processes in Partially Ionized Gas,”
1959-66
“Non-Equilibrium Transport Properties of Partially Ionized Nitrogen,”
1963-65
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1966
1966-68
Carbon-Oxygen Fuel Cell, 1969-74
Electrofluidic Generator, 1972-77 (2 folders)
1977-79
1978-80
Electrohydrodynamic Generator, 1976-80
“Fluctuations in Pipe Flow of a Dense Suspension and Transport Parameters,” 1987-95
1993-95

Box 11:

“Effect of Diffusion on Collection and Impaction of a Sphere”
Smoot, Ronald–Correspondence, 1963-64
Symposium Workshop--Two-Phase Flow and Heat Transfer, 1975-76
Undergraduate Instructional Scientific Grant, 1964-67
News Items–Soo-Related, 1952-70
Office of Coal Research–Grant Information, 1969
Office of Coal Research and Utilization–Correspondence (University of Illinois)–Correspondence, 1974
Owens-Corning Fiberglas Corporation–Correspondence, 1976-78, 1983
Particle Technology, 2nd World Congress–Kyoto, Japan, 1990
Peoples’ Republic of China–Peking Lectures, 1980-81
Visiting Scholars, 1979
1979-80
Perez-Blanco, Horacio–Correspondence, 1980
Personnel–Correspondence, 1960-65
1960-71
Personnel Requests–Correspondence, 1960-67
Photo Diodes–Research Notes
Pittsburgh Plate Glass Company–Correspondence, 1962-66
Pneumatic Transport System–Correspondence, 1971-74
Princeton University–Mechanical Engineering Department Project, 1955-62
Project SQUID–Renewal Proposal, 1959
Talks, 1961-63
Outline of Study on Thermal Electrification and Removal of Electrons by Solid Particles, 1964
Final Report, 1964
Proposal Reviews–Correspondence, 1962-98 (3 folders)
Pullman Kellogg Company–Correspondence, 1977-79
Redman Heenan Froude, Limited–Correspondence, 1972-73
Reprint Requests, 1959-60
1961-62
Research-Cottrell, Inc.–Correspondence, 1966
Research Projects–Correspondence, 1953-61
Rheem Manufacturing Company, 1967-69
Science Information Exchange–Research Project Reports, 1962-75

Box 12:

Sha, W. T., 1976-85
1977-79
Snyder, Ray–Correspondence, 1966-74
“Steam and Heating Engineer,” December 1970
Stearns, C. W.–Correspondence, 1965
Stout, Glenn–Correspondence, 1974-75
Stukel, James J–Correspondence, 1965-71
Superconductivity–Notes by R.C. Dimick
Theory of Turbulence–Notes
Thermal Research and Engineering Corporation–Proposal for the Research and Development of a System for Producing Extreme High Temperature Air by Chemical Burning, 1958
Proposal for a System Analysis on Application of Gas-Solid Two-Phase
Suspension in a Gas Turbine Power Plant, 1958
Proposal for a Basic Study on Application of Gas-Solid Two-Phase Suspension for Reactor Cooling, 1959
Correspondence, 1959-60
Thermodynamics Lab–Visitors Book, 1967
Trane Thermal Company–Correspondence, 1978
United Air Specialists, Inc.–Correspondence, 1968-70
United States Department of Energy–Correspondence, 1984-86
United States Department of Transportation–Conference on America’s Freight System in the ’80s and ’90s, 1976
United States Environmental Protection Agency–Correspondence, 1978-81
United States House of Representatives, Committee on Science and Technology–Hearings on Coal Pipeline Transportation, 1976 (3 folders)
University of Hawaii–Correspondence, 1959-61
University of Tennessee–Aerospace Lecture, 1961
University of Toronto–Correspondence, 1969
University Research Board (University of Illinois)–Correspondence, 1960-61
Von Karman Institute for Fluid Dynamics (Belgium)–Lectures, 1972-73
1973
Wedding, James–Correspondence, 1989-98
Yarway Corporation, 1967-71
1973
Yunchuan Aisinjioro-Soo Distinguished Lectureship, 1992-95 (2 folders)

Box 13:

ADDITIONAL PUBLICATIONS

1961-1963

S.L. Soo "Gas Dynamic Processes Involving Suspended Solids" A.I.Ch.E. Journal September, 1961
1967-1993

S.L. Soo "Diffusion in Multiphase Flow" *Iranian Journal of Science and Technology* 1978
S.L. Soo et al. "Measurement of Local Statistical Properties of Particle Motion in a Dense Gas-Solid Suspension" *Advanced Powder Technology* 1993

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CAC Document No. 223 Vol. 2 (3 folders)

Box 14:

A Steam Process for Coal Gasification
S.L. Soo "Formation of Bubbles in a Fluidized Bed" 1974

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Publications about flow
S.L. Soo "Pipe Flow of a Dense Suspension" 1986
S.L. Soo et al. "On Boundary Conditions of Particle Phase and Collection Efficiency in Cyclones" 1991
S.L. Soo et al. "The Steady Horizontal Flow of a Wall Jet Into a Large-Width Cavity"
1998

A Note on erosion by moving dust particles
S.L. Soo "Long Distance Pneumatic Transportation" 1984
S.L. Soo "Comparative Formulations of Multiphase Flow" 1989

Steam Coal Pump
Steam Ejector Coal Pump
S.L. Soo et al. "Effect of Electrostatic Charge Distribution on the Dynamics of Solid Particle in a Gaseous Suspension" 1985
Proceedings of the 20th Intersociety Energy Conversion Engineering Conference" 1985
Proceedings Third Annual Pittsburgh Coal Conference 1986
S.L. Soo et al. "A Corona Discharge Probe System for Measuring Phase Velocities in a Dense Suspension"1989
S.L. Soo et al. "Development of a Steady Flow of Liquid Film Over a Domed Cylinder" 1993

Loose Publications
S.L. Soo "Effect of Simultaneous Diffusion and Fall-Out from Plumes of Stacks and Jet Engines" 1970
S.L. Soo et al. "Generation of Fine Particles of Coal by Compaction" 1983
S.L. Soo et al. "Generation of Fine Dust Via Compaction of Granular Materials" 1983
Proceedings of the 20th Intersociety Energy Conversion Engineering Conference 1985
S.L. Soo et al. "Effect of Electrostatic Charge Distribution on the Dynamics of a Solid Particle in a Gaseous Suspension" 1985
S.L. Soo "Interaction of Gravity and Electrostatic Effects in Pipe Flow of a Gas-Particle Suspension" 1985
S.L. Soo et al. "A Corona Discharge Probe System for Measuring Phase Velocities in a Dense Suspension" 1989
S.L. Soo "Challenges in the Fundamentals of Multiple Flow"1990
S.L. Soo "Diffusion, Reactions, Transport, and Modeling"

Chinese Books (2 folders)

Box 15 OS:

27 oversize plans and drawings, ca. 1960s-1980s

Box 16:

COURSE NOTES AND MATERIALS

Applied Science 285 – Advanced Thermodynamics, ca. 1949
Engineering 330b – Structural Mechanics and other courses, 1948-1950
Engineering 244a – Elasticity cal& Plasticity (Professor Westergaard), 1949
Manuscript on Theory of Elasticity, Harold Wesergaard, ca. 1952
Mathematics, 1949-1950
Nuclear Rockets and Fusion Reactions, ca. 1950s
Jet Propulsion Research Program (Dept. of Aeronautical Engineering, Princeton University), 1957-1958
“High Temperature – High Pressure Test Loop Study” WADC (Wright Air Development Center) Technical Report 57-601, 1957
MIT Notes on Aerodynamics of Compressible Fluids, 1950
Machine Design, ca. 1950s
Heat Transfer, ca. 1950s
Mechanical Engineering 323 & Thermodynamics 222 (Princeton University), 1956-1959
Physics 553 – Modern Mechanics (Princeton University), ca. 1950s
Heat Exchangers, 1958-1962
Cooper-Bessemer Corporation
Free Piston Engine Design, 1956
Engine Cooling, 1952-1955
High Pressure Hot Gas Generator, 1954
Brown Boveri Review, 1954
Gas Turbine Centrifugal Refrigeration for Air-Conditioning, 1955
F.R. Gas Gen. Locomotive, ca. 1950s
Controls – 5500 Plant, 1952-1953
Magnetic Drive and Control of Free Piston Engine, 1955
Report on the Study of Supercharging the Cooper-Bessemer Gas Generator, 1952

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Report on the Study of Wet-Compression in the Cooper-Bessemer Gas Generator, 1951
Straight Gas Turbine, 1952-1955
Project 204-D, 1951
Turbine Design Notes, ca. 1950s
San Jose State College, 1960-1961
Notes, ca. 1950s
Power Jets Report No. 2173/AC.19, 1954
Air Conditioning, 1955
Variable Temperature, 1945, 1953
An Analysis of Periodic Flow of Heat in Engines, 1952
Gas Steam Cycle, 1952
Notes on Design of Ducting and Accessories, 1955
Report on the Study of the Pressure Wave Effect of the Free-Piston Gas Generator Turbine Plant, 1952
C-B 185-D, 1951
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Wet Compression, 1953
Baldwin Unit, ca. 1950s
Marine Boiler, 1953
The Use of Centrifugal Compressors on Natural Gas Pipe Lines, 1952
Progress Report on the Wet-Compression-Ignition Engine Cycle, Cooper-Bessemer Project 185-D, Harvard University, 1951
Compound Free Piston Gas Generator Turbine Cycles, 1954
An Analysis of Periodic Flow of Heat in Engines, 1952
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Axial Gas Compressor, 1953-1955
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Publications and Notes, ca. 1954
Stator Angles-Helme, 1954
Polytechnic Institute of Brooklyn, 1960
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Natural Convection over a Flat Plate in an Accelerated System, 1958
National Advisory Committee for Aeronautics, Technical Note No. 1201, Performance of Axial-Flow Fan and Compressor Blades Designed for High Loadings, ca. 1950s
“Reversible Heating and Air-Conditioning,” a Report to the Cooper-Bessemer Corporation, 1955
Axial Data, ca. 1950s
Small Gas Turbines, Correspondence, Notes, and Figures, 1954-1955
Correspondence re: Gas Turbine II, 1953-1954
Design Data: Continuous Combustion 5500 Horsepower Gas Turbine Market Research, 1955

Box 18:

CATERPILLAR TRACTOR COMPANY

Performance Turbines, ca. 1960s
Wade Gate, ca. 1960s
Nozzle-less Housing, ca. 1961
Data Sheets, ca. 1960s
Supersonic Radical Compressors, ca. 1960s
Gas Engines, 1963-1964
Scavenging, 1962
Valve Flow Areas and Pressure Drops, 1965
Engine Development, ca. 1963
Engine Study Notes, ca. 1960s
Engine Research, ca. 1960s
Fluid Amplification, 1965
Advanced 600 Horsepower Gas Turbine Engine, 1960
Figures and Research Data, ca. 1960s
Notes (5 folders), ca. 1950s-1960s
Notes, ca. 1962-1963
Notes, 1966-1967
Piston Velocity and Acceleration, ca. 1965
Working Notes, 1963-1967
Notes and Articles, 1958-1965
High Power Pressure, 1962
Publications, 1952-1967
American Society of Mechanical Engineers (ASME) Publications, 1965-1967

Box 19:

Correspondence, Notes, and Plans, 1960
H. H. Korst Engineering Consultants Progress Report
“Boundary Layer Motion and Separation in Vanless Diffusers,” 1961
“Nozzle-less Housing for Turbines,” 1962
“Notes on Turbine Design,” 1962
“Wavy Spiral Heat Exchanger I,” 1963
“Numerical Computation of Scavenging in a Super-charged Engine,” 1963
“Annular Diffusers III,” 1964
List of Reports to Caterpillar Tractor Co., 1964
Revised Auxiliary Functions,” 1965

GRADIENT AND SOLAR POND RESEARCH

Research materials from Argonne National Laboratory, 1979
Mechanical and Industrial Engineering Seminar, 1979-1980
On Thermal Energy Storage and the Use of Commix-SA for its Evaluation &
Enhancement, ca. 1979
Low Temperature Grain Drying Alternatives (Gene C. Shove), 1978
Solar Pond Proposal, ca. 1979
Grain Conditioning Conference Proceedings, 1975-1979
Stability Considerations and a Double-Diffusive Convection Model for Solar
Ponds, 1979
Alcohol, 1979-1980
Drying and Storage Requirements for Grain, ca. 1979
Thermal Energy Storage, ca. 1979
Characteristics of a Double Diffusive Interface of High Density Stability Ratios,
ca. 1970s
Saturated Solar Ponds – Modified Equations and Results of a Laboratory
Experiment (Thesis), 1979
Observation and Analysis of a Full-Scale Experimental Salt Gradient Solar Pond
(Dissertation), 1979
Fluid and Thermal Mixing in a Model Cold Leg and Downcomer with Loop
Flow, ca. 1982
Solar Salt Gradient Ponds (2 folders), ca. 1977-1981

Box 20:

THERMAL HYDRAULICS AND SOLAR RESEARCH

Republic Steel, ca. 1978
Solar Energy Science, Atlanta, ca. 1984
PFauter Hobbing Machines, 1985
Harris Corporation, 1984
White Sign, 1986
Time-O-Matic, 1986
Caterpillar Tractor, 1984
Caterpillar Tractor (Hobbing Machines), 1985-1986
Ashland Chemical Company, 1982-1986
Gas-Solid, Argonne National Laboratory Test Loop, 1984-1985
Unsteady Turbulent Two-Phase Flow, 1984
Genoble – Soo (2 folders), ca. 1970s-1980s
Genoble – Soo, Groetzbach, Multiphase Flow, 1983
Cryo Cooling, 1986-1987
Hydraulic Flows, 1986
Thermal Hydraulics, 1976-1981
Liquid Metal Boiling Working Group, 1977
Production and Maintenance of Salt Gradient, 1980
Solar Energy Research – Argonne National Laboratory, 1988

CONSULTING

Kumar Consulting Services, 1984-1987
Coal Storage, 1985

GAS TURBINE RESEARCH

General Electric, 1982-1983

Box 21:

Chicago White Metal Casting Co., 1986
Newton No. 2 CIPS, 1983-1986
CIPS, 1984-1987
Foster, George W., 1986-1987
CIPS-BFPT, 1982-1983
CILCO, 1983-1984
Vinyl Chloride, ca. 1983
CPC Pekin, ca. 1979

MECHANICAL SCIENCE AND ENGINEERING LOGO PROJECT

Correspondence and Logos, 2006