

15/5/31
Liberal Arts and Sciences
Chemistry
George L. Clark Papers, 1914-1968

Box 1:

Bibliographies, lists of reprints
Bibliography of Papers Relative to Ceramic Materials by G. L. Clark and Associates (c. 1945)
List of publications in bound volumes returned to Mrs. G. L. Clark which are not included in reprint collections, May 15, 1969.
Reprints 1914-1933 0 On acid and alkaline reactions to earth metals, crystallography, spectroscopy, x-ray and x-ray applications.

Box 2:

Reprints 1934-1950 - greater emphasis on applied x-rays

Box 3:

Reprints 1951-1963 -
Manuscripts
"Analysis of Highly-hydrated Dolomitic Lime by a Geiger Counter X-Ray Diffractometer"
"Quantitative Spectroscopic Analysis of Spray Residues in Apples"
"The Quantitative X-Ray Determination of Amorphous Phase in Wood Pulps as Related to Physical-Chemical Properties" - 1954
"Radiolysis of Sensitized Indicator Solutions" - 1954
Five papers grouped together for publication, c. 1951: "X-Ray Diffraction Study of Several Branched-Chain Fatty Acids"; "Crystal Structure of Chromic Phosphate"; "Lattice Constants of Isquassion and Neoquassin Crystals by Weissenberg Method" and "Studies of the Structures of Reinforcing Carbon Blocks and Graphitized Carbons"
Encyclopedia manuscripts - A series of encyclopedia articles on x-ray, applied x-ray, radiation and radioactivity.
Book - Applied X-Rays, (New York, McGraw Hill, First edition, 1927)

Box 4:

Encyclopedias
Reviews: reviews clipped from American and German scientific publications. Also contains publicity folders about the encyclopedias.
Reinhold 1954-1961 - (4 folders) Correspondence regarding content of encyclopedia, publishing details, royalties. Correspondence with contributors, related pamphlets, notices, some manuscript items.
McGraw-Hill 1953 and 1962-65 correspondence regarding contributions to Handbook of X-Rays, with manuscript.
Encyclopedia Britannica 1957 and 1965-66, correspondence and manuscripts on contribution on x-ray.
Grolier 1966 - Correspondence and manuscript on contribution on microscopy.
Encyclopedia Americana 1963 and Excerpta Medica, 1955 - Correspondence regarding contributions with related x-ray photographs.

Box 5:

Research in cooperation with industry and institutions.

Acheson Colloids Ltd, 1953-59. Correspondence and memoranda on experiments on x-ray diffraction analysis, and investigation and testing of ideas developed by George Bailey.

Art Institute of Chicago 1058 - Correspondence, x-ray photograph and clippings on the discovery of a disguised self-portrait of the artist Georges Seurat.

Atlantic Refining Co. 1961-62 - Correspondence and contract for consultation services.

Delco-Remy 1941-1963 (17 folders, partly in Box 6) Correspondence, manuscripts, photographic plates and negatives and pencilled notes on consultation and research.

Box 6:

Research, continued

Delco-Remy, 1964-67

Detroit Arsenal - Ordnance Corps 1954 - Correspondence

Felmley-Dickerson Co. 1956 - Correspondence re: investigation of welds through use of x-ray at Chanute Air Force Base.

General Electric 1960 - Correspondence and report regarding investigation into a patent-infringement case at the request of General Electric.

New York Sugar Trade Laboratory 1954 - Correspondence, report manuscript and related reprints on the research of Louis Sattler regarding x-ray analysis of sugar refining processes.

Ohio Oil Co. (later Marathon Oil Co.) 1954-61 - (9 folders, partly in box 7) Correspondence (primarily with Dr. Glen Templeman, head research chemist, Ohio Oil Co.), reports, manuscripts, work sheets, data charts, photographs of various research projects and consultation services.

Box 7:

Research

Ohio Oil Co. 1957-63

Parker Pen Co. 1955-57 - Correspondence and contract for consultation services.

Schlitz Brewing Co. 1954-57 - Correspondence, receipt for services and research report.

Box 8:

Research

U. S. Army Chemical Corps 1951-59 - Bimonthly progress reports of research by the University of Illinois Chemistry Department for Chemical Corps 1951-53, and correspondence and research reports, 1954-59.

U. S. Army Signal Corps 1946-48 - Quarterly progress reports of research at the University of Illinois for Signal Corps.

Independent research

Fluoridation 1957 - Collected articles, reprints, and a research report manuscript.

Lasers 1962-64 - Collected articles, reports by others and photographs.

Tape - Prof. George L. Clark interviewed by Josef F. Wright, October 17, 1956.
 Speed - 3 3/4 ips, channel parts 1 and 2--left channel 1, monaural, side 1; part 3--left channel, monaural, side 2

Tape meter: (000) Side 1, Original tape 1. Prof. Clark discusses: establishment of x-ray laboratory at M.I.T., 1924, medical and non-medical uses of x-ray, early x-ray studies on rolled tin-plate and patent leather, establishment of x-ray laboratory at the University of Illinois (1927) within the Department of Chemistry to serve the needs of all departments, the comprehensive laboratory course on x-ray technique at the University of Illinois, and graduate research that has come from the course, x-ray research at the University of Illinois for industry, polyethylene and how it is formed.

Tape meter (400) Side 1, Original tape 2. Rubber polymers, the synthesis of natural rubber by use of x-ray, Clark's role in the research.

Tape meter: (000) Side 2, Original tape 3. X-ray structure of aluminum alloys used in lighter-than-air ships and interference by Aluminum Co. and Department of War of publication of x-ray research that showed unsuitable nature of aluminum for aircraft; uses of x-ray examination for wear on heavies-than-air craft; x-ray examination of automobile engines with stroboscopic photograph series; use of x-ray in brewing, particularly deterioration of beer on exposure to light; deterioration of mild on exposure to light; search for uranium in lignite deposits of South Dakota (ends abruptly as though it was incomplete).

See 39/1/8 Box 1 Public Information, Director's Office, Scientific Research Accomplishments File, 1957. File for 1956 contains a resume of this interview.

Box 9:

Biographical, personal and family materials

Biographical sketches: chronological list of important dates in his life 1914-50 and 1927-66 including list of research consultations. Biographical outline, biography (3p.), and biographical sketch taken from the taped interview, 1956.
 Biographical entry for American Institute of Physics History, and related materials, 1963.

Family letters and clippings 1951-53

Photographs - Clark, friends and colleagues

Clippings, 1945-59 - Primarily of his scientific achievements

Poetry - Scraps of collected poetry and lecture on chamber music

University of Illinois Affairs

Correspondence, university of Illinois administration, faculty 1956-65

Lloyd Morey, David D. Henry, Paul Bryant, C. c. DeLong, Gustav Froelich, Anthony J. Janata, Harold E. Carter, C. Ladd Prosser, Roger Adams, Dr. Alexander Douglas, Maynard Brichford.

Students - List of Ph. D. candidates, some correspondence and photographs, teaching records, a few syllabi and examinations.

University of Illinois Aerial Photography Committee 1960 - Correspondence and report.

National Research Fellowship in Chemistry at Harvard, 1921-22
 William Blanchard, J. Stieglitz, William Duane

- Appointment at M.I.T., 1924
 - R. T. Haslam
- Social and Professional Societies
 - Beta Theta Pi, Phi Beta Kappa (DePauw) - Correspondence
 - American Chemical society - Correspondence 1954-63. Correspondence, including biographical sketches about Clark.
 - Sigma Xi - Correspondence and initiation ritual.
 - Other associations and societies - Correspondence
 - American Association of Spectrographers
 - American Crystallographic Association
 - Detroit Roentgen Ray and Radium Society
 - New York Academy of Sciences
 - Society of Applied Spectroscopy
- Awards, Honors, Recognition, Testimonials 1955-62
- Testimonial for Lloyd Hill - Including manuscript of speech by Clark, 1956.
- Lectures, Symposia 1957-60, Correspondence
 - Illinois State Academy of Science
 - Borg-Warner Research Center
 - Eureka College - commencement address, including manuscript
 - University of Wisconsin
 - Polytechnic Institute of Brooklyn
 - Society of Applied Spectroscopy - St. Louis Section (manuscript)
- Sabbaticals, job offers
 - Department of the Navy 1959 - Correspondence
 - DePauw University 1961 - Correspondence
 - George Herbert - Research Triangle (North Carolina) 1959-60 - Correspondence
 - Other:
 - Biological Society of North America 1954
 - McGraw-Hill 1957
 - Kenyon College 1961
 - Stanford Research Institute 1955
- Correspondence
 - Non-scientific correspondence with colleagues
 - Ludwig Andrieth Andre Guinier
 - I. J. Becnel Arthur Johnson
 - Marcello Boldrini Kathleen Lonsdale
 - M. J. Buerger Kuau Pau
 - E. J. Crane Linus Pauling
 - W. P. Dyke T. G. Rochow
 - A. N. Elsheimer Edward A. Smith
 - Lewis E. Etter
 - Paul P. Ewald
 - Scientific correspondence (4 folders) 1950-65
 - Thomas Anderson
 - H. L. Andrews
 - Angerstein & Angerstin, Attorney, with attached report
 - Austin Anthis, Institute of Paper Chemistry
 - Stewart Brown, with related material
 - Fred Carl, Fabricost Division, G.M.
 - Charles A. Brim, U.S.D.A.

Howard W. Etzel, National Science Foundation
P. P. Ewald
D. A. I. Goring (Pulp and Paper Research Institute of Canada) with related materials
P. H. Hermans (N. V. Onderzoekingsinstituut Research, Utrecht)
Ernest O. Herreid
J. F. Herrick (Mayo Clinic)
J. Leroux (Department of National Health and Welfare, Canada) (and related reports)
S. J. Martenet (E. Rauk and Sons, fertilizer, Indianapolis)
Moore and Munger, Attorneys, with memorandum
A. C. Pfister (Allen-Bradley Co.)
K. C. Poulsen (Dow Chemical)
T. F. Protzman (A. E. Staley Co.)
Will H. Shearon, Jr.
Wendall H. Smith
E. Sperber (Astra Laboratories, Sweden)
Leroy Titton (U. S. Department of Commerce, with attached report)
Warren I. Towle - Mallinckrodt Chemical Works
R. C. Williamson - University of Florida

Box 10:

Symposium invitations, arrangements and publications, 1960
Letters from Ph. D.'s, 1959-60
Binder containing testimonial letters from friends, associates and former students presented to Dr. Clark at the May 27, 1960 Retirement Banquet

Box 11:

Testimonial letters presented at the dedication of the x-ray laboratories at the Chemistry Department of the University of Illinois, May 21, 1952 honoring Dr. Clark's 25th year as Chairman of the Analytical Division from M. Laue, M. Siegbahn, P. Debye and colleagues at Illinois.
Correspondence concerning publications, research, positions, meetings relating to x-ray, electron microscopes and chemical encyclopedias:
M-Z, 1965
A-Z, 1966
A-Z, 1967
A-Z, 1968