MC 35

Notebooks and Papers

Box 1

Acquisition: Miscellaneous
Processed: Elizabeth Gulacsy
Finding Aid Updated: Laura Habecker, 2020

The New York State College of Ceramics at Alfred University, Scholes Library

Series Descriptions

Box 1-3:

Collection of class notes & syllabi prepared predominantly by College faculty.

G/ (Now Box 4)

Collection of student papers, prepared for different subjects and classes. Obtained from faculty offices throughout the years. [Vertical or Faculty Files]

Early Papers

Papers from students, both Art and Engineering. From 1905 through 1950. Locations vary according to provenance.

See also: Individual collections:

- Campbell, Robert M.
- Crandall, William B.
- McMahon, John
- Pitney, William C.
- Rhodes, Daniel

Contents

Box 1

Class notes received from Alan Betz Williams, BS 1942 [1939-1942]
Ceramics 102 & 103 Introduction to ceramics and raw materials. "Systematic Study of Ceramic Engineering and Ceramic Raw Materials." Dean Holmes, June 7, 1939. [Spring 39 & Fall 39].
Ceramics 104 Processing of Clays. "Winning, preparation & Forming." Dean Holmes. [Spring 40].
Ceramics 105 Drying and Firing. Dean Holmes. [Fall 40].
Ceramics 108 Whiteware Calculations. [Spring 41].
Ceramics 112 Furnaces and kilns. Dean Holmes. [Spring 42].
Ceramics 114 Refractories. Dean Holmes. [Spring 1942].
Ceramics 115 Lime, Gypsum and Cement. Prof. Amberg. [Fall 41].
Ceramics 154 Testing Ceramic Materials. "Testing the Physical Properties of Clay." Prof. Merritt. [Spring 40].
Senior Plant Trip. Prof. Merritt and Sutton. [Spring 42].
Firing of Ceramic Ware.

Box 2

From William E. Pitney, MFA 1950 [1948-1950?]
Ceramics 200 Raw Materials for Glass Making. Prof. George A. Kirkendale?

From Robert M. Campbell
Laboratory Reports in Class in Advanced Ceramic Technology 1930-1931. Professor Charles F. Binns. Notes taken by Wesley A. Mills, William E. Ross, Alfred A. Titsworth, Paul Maroney.
Ceramics 103. *Syllabus of a lecture course on clay*. Dean M. E. Holmes [1938]

Unknown sources
Ruth V. Lyon's notebook: Pottery II. (BFA 1929)

"*Ceramic Notes*" Inscription in book: Henry E. Marley, 4-8-32. Compilation of notes from different universities and lectures.

"The RAM Process"

"PhD Qualifying Exams 1986-1991"
"PhD Qualifying Exams 1992-1996"
"PhD Qualifying Exams 1997-2001"

Box 3

Evelyn Tennyson (B.A. 1924 – Mrs. G. Openhym)
Class Notes. Some graded papers 1920-1922

History of Ceramics Notes. Taken from lectures given by Charles F. Binns. 1922.

Ceramic Elective Research. 1923-1924

Ruth Canfield. Handwritten notebooks on "*Dyes and Dying*" and "*Bookbinding*"

Leon B. Bassett. "*Raies Ultimes*" notebooks.

Richard C. Martin. "*The Complete Illustrated Notes for Computer Techniques*." (CES 209, January 1978)

19??- Snyder, Robert L. *Chemical Properties of Materials.* Prepared as curriculum material for CES 230.
19?? Snyder, Robert L. *Laboratory Experiment in X-Ray Diffraction: The Identification of a Crystalline Material.254*
19?? Snyder, Robert L. *Advanced Fortran Programming.*
19?? Snyder, Robert L. *All you ever wanted to know about Fortran but were afraid to ask.*

1956- Binns, Charles F. *Lectures on Ceramics.* 7th printing. Mimeographed at the BOX OF BOOKS. Copy owned by Ruth Canfield. Donated by Donald Booth.

Undated. *Ceramic Raw Materials. Lectures by Professor R. M. Campbell and Dean M. E. Holmes*. Course 103. Donated by Van Derck Frechette.

1987- Shelby, J. E. & Ortolano, R. *Structure of Crystals and Glasses.* CES 210. assisted by L. Downie and L. Brickwedel.

Syllabi:

CES 102 Introduction to Ceramic Engineering II - 1995/Burdick, 1981, 1975/Funk

Ceramics 123, Test Questions - 1949

CES 201 Engineering Graphics - 1988/Carlson, 1986/Earl

CES 209 Computer Techniques - 1991/Johnson, 1984/Burdick, 1981/Taylor, 1981/LaCourse

CES 210 Crystal Chemistry – 1981/Monroe

CES 214 Introduction to Material Science – 1990/LaCourse & Amarakoon, 1993/Clare, 1993/Jones

CES 230 Chemical Properties of Materials – 1981/Crayton

CES 243 Physical Chemistry I: Thermodynamics – Crayton

CES 244 Physical Chemistry: Atomic and Molecular Behavior – Rossington

CES 401 Petrography – 1993/Frechette, 1981/Frechette

CES 408 Properties of Ceramics II: Optical, Electrical and Magnetic – 1981/Pye, 1979/Pye

CES 411 X-Ray Techniques – 1981/Snyder, 1980/Snyder
CES 415 Lime, Gypsum and Cements – 1981/Frechette, 1975/Frechette
CES 416 Electroceramics – 1993/Taylor, 1982/Tuttle
CES 429 Transmission Electron Microscopy – 1984/Randall & Monroe, 1981/Monroe, undated version
CES 436 Organic and Inorganic Polymers – 1981/Rossington, undated version
CES 437 Physicochemical Equilibrium – 1981/Rase
CES 439 Ceramic Coatings – 1991/Taylor
CES 441 Fractography – 1981/Frechette
CES 442 Ceramic Fabrication Principles – 1987/Reed
CES 445 Ceramic Science – 1992/Macmillan
CES 447 Oxice Ceramics – undated/Burdick
CES 455 Ceramics for Energy Applications – 1979/Burdick
CES 458 Principles of Tribology – 1992/Macmillan
CES 477 Elementary Spectroscopy – 1981/Condrate, 1978/Condate
CES 482 Electronic Properties and Devices – undated/Martin
CES 484 Industrial Combustion – 1981/Dinger
CES 487 Computer Automation – 1981/Snyder
CES 488 Science and Technology of Magnetic Ceramics – 1992/Amarakoon
ART 254 Glaze Calculations – Course Requirement
ART 355 Ceraamic Materials – 1978/Higgins

Box 4

G/C.1

Hauth, ?. Recent studies on the fluorescence of glass.
Heystek, H. Zircon.
Bissell, Don. The packing of particles and particle shape. 1946
Heystek, H. Stresses in glazes. 1946
Bhatia, B. B. The crazing of glazes.
Bhatia, B. B. The atomic arrangement in glass.
Bhatia, B. B. Ceramic dielectrics. 1947
Chandappa, N. Electrical properties of glass and their measurements. 1947. Ceramics 123
Chandappa, N. Chemical durability.
Khan, A. R. Iron as a colorant in glass. 1947
Khan, A. R. Constitution of glass.
Khan, A. R. Opal and alabaster glasses.
Knudsen, Christen. The inversions in a silica brick and how they can be promoted. 1947. Ceramics 124

G/C.2

Scheffer, Karl. Fundamental reactions in basic and related refractories. 1947. Ceramics 124

Scheffer, Karl. The spalling phenomenon. 1947. Ceramics 123
Scheffer, Karl. Slag reactions in practice. 1947. Ceramics 123
Wygant, James. A brief survey of the silicones. 1947. Ceramics 124
Hoffman, L. C. Particle size determination and interpretaion. 1947
Lin-Pao, Liu. High temperature measurement of surface tension. 1947
Lin-Pao, Liu. High temperature measurement of viscosity of glass.
Thakur, R. L. Alumina in glasses.
Thakur, R. L. Chemical durability of glasses. 1947
Brownell, Wayne. Analyzing clay minerals by petrographic and thermal methods. 1947-1948. Ceramics 123
Crandall, William. High temperature automatic regulators adaptable to ceramics. 1947. Ceramics 123
Johnson, A. G. The hardness of glass. 1947

G/C.3

Jones, George. Commercial applications of the spinels. 1948. Ceramics 123
Lindquiet, Claude. A review of the fundamental theories of viscosity and some ceramic applications. 1948
Murray, L. John. X-ray diffraction, and the electron microscope as applied to ceramics. 1948
Ploetz, George L. The crystalline forms of aluminum oxide. 1947
Sheheen, Alexander T. The photoelastic effect in glass. 1948
Hagberg, Carl E. The froth flotation process for the beneficiation of minerals. 1947-1948. Ceramics 123
Brownell, Tayne E. The rate and size of crystal growth. 1948. Ceramics 124
Crandall, William B. High temperature photography. 1948. Ceramics 124

G/C.4

Faust, Ernest H. Measurement of thermal conductivity of ceramic materials. 1948. Ceramics 124
Lawrence, Walter F. Graphical representation and analysis of data. 1948. Ceramics 124
Murray, L. John. The ceramic engineer in the field of portland cement manufacture. 1948. Ceramics 124
Steinbach, John. Symposium on the dielectric constant. 1948. Ceramics 124
Ploetz, George, L. Ceramic dielectrics and electrical insulators with low values of dielectric constant. 1948. Ceramics 124
DeRemer, J. W. High dielectric constant ceramics. 1948

G/C.5

Sheheen, Alexander T. Symposium of the dielectric constant. 1948. Ceramics 124
Burdick, Robert B. Thermal decomposition of solids. 1949. Ceramics 123
Weaver, Leroy R. Thermal Decomposition of kaolinite group. 1949.
Steinbach, John. Kinetic aspects.

Bernstein, Leonard. Thermal analysis of quarty and its use in calibration in thermal analysis studies. 1949. Ceramics 123
Chiu, Hung Wen Glass refractories and glass stones. 1949. Ceramics 123
Dickens, Donald A. Some fundamental concepts of adsorption phenomena. 1949 Ceramics 123
Parker, Harry. Silica gel. 1949. Ceramics 123
Skinner. Adsorption of moisture by glass.
Stetson, William. Adsorption. 1949
Parker, Harry. The electrical properties of lyophobes. 1949. Ceramics 123

G/C.6

Steinbach, John. Froth flotaion. 1948. Ceramics 123
Wilson, Roger E. Water supply. 1948
Breitsman, W. J. Froth flotation as applied to the cement industry. 1948. Ceramics 123
Chiu, Hung Wen. Discussion on statistical quality control. 1949
Lack, Joseph. A short discussion of the normal curve and efficient statistics. 1949.
Katz, Joseph M. Defects in glass produced by stones from refractories. 1949. Ceramics 123
Kane, John L. Catalysts in mullite formation. 1948.
Lorey, G. Edwin. Fused mullite. 1948. Ceramics 123
Schane, Edward W. Electrophoretic dewatering of clay suspensions. 1948
Jones, George A. Comment on paper, "magnetic susceptibility". 1948
Washburn, Lucius, C. Deflocculation of clays a summary. 1949. Ceramics 123
Kane, Daniel. "Formal discussion" on deflocculation. 1949. Ceramics 123
Dickens, Donald A. Formal discussion on "deflocculation". 1949
Burdick, Robert B. An introduction to the x-ray powder method as applied to the study of clays. 1949. Ceramics 124
Jones, George A. Formal discussion of Robert B. Burdick's paper on the application of x-ray techniques to clay minerals. 1949. Ceramics 124
Jones, George A. Constitution of glass. 1949. Ceramics 124

G/C.7

Burdick, Robert B. The role of bond strength in glass formation. 1949. Ceramics 124
Lorey, G. Edwin. A survey of polarographic and chromatographic analyses. 1949. Ceramics 123
Bernstein, Leonard. Differential polarography. 1949, Ceramics 124
Parker, Harry. Polarimetric determinations. 1949.
Parker, Harry. Piezoeletricity and pyroelectricity. 1949. Ceramics 124
Kane, Daniel. Discussion of Parker "piezoelectrid". 1949. Ceramics 124
Kane, John L. Piezoelectrics in ultrasonics. 1949.
Washburn, Lucius H. Transformation region of glass-a symposium. 1949. Ceramics 127

Wilson, Roger E. Some surface phenomena of glass. 1949. Ceramics 124
Washburn, Lucius H. Discussion of Roger Wilson's paper. 1949.
Alliegro, Richard. Sintering in the absence of liquid. 1952.
Gersch, Herbert. Heterogeneous catalysis. 1952. Ceramics 124
Soxman, Edwin J. Agglomeration of powder compacts part II- infiltration. 1952. Ceramics 124

G/C.8
Suraiya, V. J. Diffusion of gases into glasses. 1953.
Akmoran, Huban. Mineral wool. 1953
Bouvier, Madeleine. Review and comparison of four tests applied to refractories in Europe and in the united states. 1953. Ceramics 124
Osborne, David G. Thermal conductivity and porosity in ceramic materials. 1953. Ceramics 123
Tao, Yung. The action of gases on refractory materials. 1953. Ceramics 123

G/C.9
Curran, Martin T. Concepts of plasticity. 1954. Ceramics 124
Curran, Martin T. Silicon carbide : its formation and crystallographic structure. 1954.
Curran, Martin T. The oxidation of metals and alloys. 1954.

G/C.10
Charland, T. L. Spinels a literature survey. 1954.
Busteed, Donald J. Abrasives and the grinding operation. 1950. Ceramics 123
Droyor, Donald H. Viscosity of glass. 1949. Ceramics 123
Eiwen, George E. Glass fractures. 1949. Ceramics 123

G/C.11
Heasley, James H. The mechanical strength of glass. 1949. Ceramics 123
Huffcut, Harold W. Infrared drying. 1949. Ceramics 123
Sephton, N.I. Infrared. 1949.
Pixley, George W. Formal discussion on the subject of infrared drying. Ceramics 123
Indyk, Albert D. Steatite for high frequency insulators. 1949. Ceramics 123
DeProsse, Victor A. A formal discussion presented on conjunction with the paper steatite for high frequency insulators. 1949. Ceramics 123
Weyl, W. A. Dielectric constant and power loss as affected by the distribution of the binding forces.
Busteed, Donald J. High frequency steatite. 1949 Ceramics 123
Karkhanavala, M. D. Cords and striae in glass. A literature survey. 1949. Ceramics 123
Parikh, Niranjan. M. Cords and striae in glass.

Kirsch, A. J. Properties of refractories to consider in their industrial application. 1949. Ceramics 123
Carlson, ? Formal discussion of A. J. Kirsch's paper "Properties of refractories to consider in their industrial application".

G/C.12
Knudsen, Friedrich P. Terra sigillata the theory and recent developements. 1950. Ceramics 123
Parker, Nora. Terra sigillata and thermal shock.
Murthy, M. Krishna. Polarographic method of analysis. 1950. Ceramics 123
Williams, Robert M. Formal discussion of "Polarographic method of analysis" by M. K. Murthy.
Parikh, Niranjan M. Glass-to-metal seals. 1949. Ceramics 123
Eiwen, George, E. Glass to glass seals. 1949. Ceramics 123
Indyk, Albert D. Glass to metal seals. Ceramics 123
Parker, Nora. Ion exchange and the colloidal behavior of clay. 1949. Ceramics 123
Knudsen, Friedrich P. Ion Exchange and colloidal behavior. Ceramics 123
Losch, L. Formal discussion for Nora Parker's paper ion exchange and the colloidal behavior of clay.
Rase, Daniel E. Some techniques employed in the phase equilibrium studies. 1949. Ceramics 123

G/C.13
Dreyer, Donald H. Phase diagram techniques. Ceramics 123
Huffcut, Harold W. Formal discussion techniques employed in phase equilibrium studies. Ceramics 123
Johnson, Richard. Advantages and limitations of the phase rule. 1949. Ceramics 123
Sephton, Howard I. Letters patent. 1950. Ceramics 123
Garrison, Donald L. Infringements. 1950.
Johnson, R. C. Formal discussion "letters patent".
Tiwary, Rameshwary P. Chemical durability of glass. 1949
Kirsch, A. J. Chemical durability paper. Ceramics 123
Murthy, M. Krishna. Chemical duribility.
Williams, Robert M. Rheology. 1949. Ceramics 123
Tournaud, John D. Formal discussion on Robert M. William's paper, "rheology". 1949.
Williams, Lee E. Heavy liquid seperation. 1949. Ceramics 123
Brooks, Robert Howard. A formal discussion on heavy media seperation. 1949. Ceramics 123

G/C.14
Busteed, Donald J. Principals and theory of crystal growth. 1949. Ceramics 124

Dreyer, Donald H. Crystal growth of ceramic material. 1950. Ceramics 123
Indyk, Albert D. Slip casting - theory and control.
Murthy, M. Krishna. Differential thermal analysis. 1950.
Rase, Daniel E. Radioisotopes – some properties and uses. 1950. Ceramics 124
Tiwary, Rameshwary P. Strain in glass and its release.
Thakur, R. L. Analysis of fracture in glasses.
Alenius, Carl A. Cemented carbides. 1951
Sheets, Herbert. Discussion of paper on "cemented carbides". Ceramics 123

G/C.15
Hay, J. Basic open-hearth slags. 1951
Spangenberg, William C. Prepared discussion of Mr. Hay's paper on basic open-hearth slags.
Ludwig, Urban. Structure of glass. Ceramics 123
Alenius, Carl A. Discussion of Urban Ludwig's paper "structure of glass".
Spangenberg, William C. Hardness and hardness measurements. 1951. Ceramics 123
Timko, Marvin. Discussion of the paper on hardness and hardness measurement.
Hay, J. Discussion of lecture on "hardness and hardness measurements". 1951. Ceramics 123
Sheets, Herbert. High temperature pyrometry. 1951. Ceramics 123
Ludwig, Urban. Prepared discussion of Mr. Sheets paper "high temperature pyrometry".
Ludwig, Urban. Glass dielectrics. 1951. Ceramics 124
Alenius, Carl A. Titanate dielectrics. 1951.
Schaa, Ferdinand A. Jr. Discussion of the paper "titanate dielectrics". 1951
Spangenberg, William C. A symposium on dielectrics: steatite dielectrics *** a natural development. Ceramics 124
Carl, John E. Discussion of paper steatite dielectrics—a natural development. 1951. Ceramics 124
Timko, Marvin T. Discussion of paper steatite dielectrics**** a natural development. 1951.

G/C.16
Swartz, David. Polymophism of Silica. 1951
Sutton, W. H. Prepared discussion of D. L. Swartz's paper on: "polymorphism in silica". 1951
Nerenstone, Marc A. An introduction to ferrites. 1951.
Schrader, D. Discussion of "an introduction to ferrites".
Janakirama-Rao, Bh. V. Crystal growth in glass. 1951. Ceramics 123
Alliegro, Richard. Silicon carbide. 1951.
Wood, Russell K. Prepared discussion on silicon carbide.
Gersch, Herbert. Discussion of paper relating to silicon carbide.
Soxman, E. J. The mechanism of color phenomena in ceramic products. 1951.

Gersch, Herbert. Synthetic abrasives. 1952. Ceramics 123

G/C.17

Nerenstone, Marc. The opacification of enamels by titania. 1952. Ceramics 123
Soxman, E. J. Corrosion by metal-gas reactions. 1952.
Taylor, Charles H. A brief review of the growth of single crystals of quartz. 1951.
Akmoran, H. Field emission microscopy.
Rosen, Louis. Questions which arise with regard to solid state reactions and rate of reaction in ceramic products. 1952.

G/C.18

Tessema, Mamo. Bennington Potters; Graduate Fellowship. 1962.
Tessema, Mamo. Sculpture: Graduate Project Report. 1962.
Tessema, Mamo. Report on the American Association of Museums Tour. 1962.
Harshorn, Ron. Painted Ceramic Sculpture.
Magruder, Malcolm T. Project Proposal. 1972.
Probst, Patricia A. Graduate Project Reports. 1966-1967
Cannon, John W. The Artist Teacher, His Problems. 1959. Course 444A.
Bellew (Zehnder), Monica. Project Report. 1963.
Tichler, Marsha. Project Statement (Revised). 1964.
Barnes, Gordon A. Graduate Project Report. 1961-1962
Gold, Charles. Seminar Fall 1961.
Triguba, Marvin E. Taylor, Smith & Taylor Co.: Fellowship Report. 1958

G/C. 19

Gilluly, William F. The Mechanism of Plastic Deformation in Polycrystalline Solids at Elevated Temperatures. January 30, 1952 Advanced Ceramic Technology
Gilluly, William F. Some Theoretical Aspects as to Why Some Compounds Crystallize Readily While Others Do Not. November 12, 1951
Rosen, Louis. Hydrothermal Cystallization Final Examination. January 28, 1952 Ceramics 123
Holmquist, Stig. Review of Two Component Systems with Zirconia. January 1955 Ceramics 125
McMurtry, Carl. Metal-Oxygen Systems. January 25, 1955 Ceramics 125
Holmquist, Stig. Hydration of Portland Cement in Ordinary Temperature. January 1955 Ceramics 115
Dulin, F.M. Sintering. January 18, 1955 Ceramics 123
Holmquist, Stig The Influence of Inert Firing Atmosphere on Ceramic Materials. April 3, 1955 Ceramics 124
Holmquist, Stig Prepared Discussion of the Paper Entitled "The Influence of Inert Firing Atmospheres on Ceramic Materials". April 20, 1955

G/C. 20

Collin, Robert L. A Review of Solid Phase Reactions August 18, 1944 X-Ray Laboratory

Hay, John. Determination of Pore Size and Pore Size Distribution. April 1, 1955 Ceramics 124

Tao, Yung. Solid Solution in Polycomponent Silicate Systems. May 1953 Ceramics 124

Arkmoran, Huban. Surface Dealkalization of Finished Glassware. May 1953 Ceramics 124

Carpenter, David. A Discussion of Luminescence. November 1961 Chemistry 535

Dulin, F.M. Discussion of Mr. Brigham's Paper.

G/C. 21

Schlehr, Raymond [Student papers received from his daughter, Marcia R. Schlehr, after his death September 6, 1996 Mr. Schlehr worked for several glass companies after his graduation in 1932, including Can Lowey, Demuth Glass Works, Glass Fihus, Budgeville Glass, Brockway Glass, Ford Motor Co.]

Ceramics Lectures Notebook (1928 – 1930)

Ceramic Calculations Notebook (1928 – 1931) Includes reports from other students

Notebook (1930-1931) Includes papers presented to Prof. Amberg

G/C. 22

Miscellaneous tests and problems:

Ceramics 123

Petrography (1953)

Boyce, Robert E. History of United States Potters Association, 1875-1952

Fell, John R. Teaching Art to the Physically Handicapped. 1956

Young Suk, Kim Evolution of the Bosang-Arabesque Pattern on Inlaid Celadon Bowl.1986

Thayer, Warren Design of Series of Resistance for Electric Furnace Control. 1970

Groes. Daniel Pottery in the Institution. 1968

G/C. 23

Brady, Justin M. Porcelain Problem. 1953

Broudo, David. Senior Thesis. 1946

C.,P.W. Thoughts on Ceramic Design of Today.

Constantine, Elizabeth. The American Response to Mechanization.

Harley, V. Ceramics of Pre-Columbian Central America. 1946

Kobernuss, Grace. History of German Pottery. 1945

Langseth, Emma. A Brief History of Norwegian Pottery.

G/C. 24

Macaulay, Ruth. Ceramics in the Minoan Culture.

Mesibov, Barbara. America Comes of Age. 1953
Pachl, Margaret. The Influence of the Ceramics of Egypt, Persia and Mesopotamia on the Ceramics of Europe.
Patton, Jane. History of Ceramics. 1945
Shupe, Gwen. Term Paper. 1953
Sica, Marie L. The Origin and Development of Salt-Glazing. 1949
Tracy, Richard. Insensibility and Insensitivity English Pottery 1750-1850. 1949
Winslow ? Report on Egyptian Paste. 1953

G/C. 25