# APPENDIX IV BIOGRAPHICAL SKETCHES

Total membership in Keramos, past and present, exceeds 4500, obviously precluding inclusion of all. Therefore, criteria for inclusion had to be established. Since this is a *Keramos history*, only those members who have made substantial service contributions to the fraternity should be included. How to make a selection became the question. After due consideration the following priorities were followed (listed in order of importance):

## First Priority - Keramos Activities

- 1. National office (usually more than one),
- 2. Awardee to the Greaves-Walker Roll of Honor,
- 3. Founding member of either Keramos or Beta Pi Kappa,
- 4. Activity in Keramos at the national level,
- 5. Charter member of a chapter and/or a chapter officer,
- 6. Chapter faculty adviser for extended number of years.

#### Second Priority - National Institute of Ceramic Engineers

- 1. Past president,
- 2. Other offices and major activities in NICE.

#### Third Priority - American Ceramic Society

- 1. Honorary Life Member,
- 2. President,
- 3. Orton Lecturer.

It should be apparent that many outstanding persons in the ceramic engineering field have been omitted. Also, in a number of cases, though inclusion was desired, inclusion was barred because sufficient information could not be found. It is earnestly hoped that no major errors of omission or fact have occurred.

Standard abbreviations have been used. In general, they are based on De Sola's\* compilation.

<sup>\*</sup> Ralph De Sola, Abbreviations Dictionary, Duell, Sloan and Pearce, New York, 1958.



## ANDREW I. ANDREWS 1895-1966 Illinois Chapter (Honorary) 1928

Educator, Author, Consultant, Leader of the Profession

Keramos Activities: Grand V. Pres. (1942-48), Grand Pres. (1948-50), mbr. Exec. Council (1942-52); Chm. numerous Comm. (1935-60); Part. in instal. New Jersey (1947), Missouri (1947) and Pennsylvania (1948) Chapters.

Vital Statistics: Born June 10, 1895 Baraboo, Wisc.; mar. Vera Irene Melcher, Sept. 6, 1922; daughter Mrs. I. V. (Mary Ann) Davis; died Jan. 29, 1966 Burnham, Ill.

Education: Native Baraboo, Wisc.; prim. & sec. schs. Oshkosh, Wisc.; BS Chem (1920), MS (1921) Univ. Wisc.; PhD Ind Chem (1924) Ohio State Univ.

Military Service: Ad Ens USNR (Jun 1918-Jul 1919).

Professional Career: Prof. Cer E. (1924-25) Alfred Univ.; Asst. Prof. (1925-28), Assoc. Prof. (1928-33), Prof. (1933-63), Head Cer. Engr. Dept. (1942-63), Prof. Emeritus (1963-66) Univ. Ill. Authority proc. enam. Extensive indus. consult. practice. Author or co-author approx. 100 tech. papers and several books.

Professional Societies: Mbr. (1924), V. Pres. (1938-39) Pres. (1939-40) Am. Ceram. Soc. Elected all ofcs. Enamel Div. Am. Ceram. Soc.; Sec. (1943-44), V. Pres. (1944-45), Pres. (1945-46) Ceram. Educ. Council. Sec.-Treas. (1951-52), V. Pres. (1952-53), Pres. (1953-54) Natl. Inst. Ceram. Engrs.

Co-org. (1937) and Chm. of 12 "Shop Practice Forums," Porc. Enamel Inst., Mbr Enamel Club, Am. Inst. Chem. Engrs., Alpha Sigma Chi.

Honors and Awards: Charter Fellow (1931) Am. Ceram. Soc.; First Mellor Lecturer (1959) Inst. Vitreous Enamels (England); Pres. (1961) Internat'l. Congress on Vitreous Enamels; Hon. Life Mbr. (1963), Edward Orton Jr. Memorial Lecturer (1963), Medalist Bleininger Memorial Award (1965) Am. Ceram. Soc.; Greaves-Walker Award (1965) Natl. Inst. Ceram. Engrs.; Estab. of A. I. Andrews Scholarship, Ceram. Engr. Dept., Univ. of Illinois.

Sigma Xi, Gamma Sigma Epsilon.



#### ROBERT J. BEALS Illinois Chapter (Active) 1949

Educator, Research & Development Engineer, Administrator, Citizen Soldier

**Keramos Activities:** Natl. Rec. Sec. (1962-64), Natl. V. Pres. (1964-66), Natl. Pres. (1966-68), mbr. Bd. Dir. (1962-70).

Vital Statistics: Born Nov. 12, 1923 Decatur, Ill. (to Wm. J. Bryan Beals, M. Hesper Helen Beals); mar. Sept. 14, 1952, Lois Isabelle Finley, children: Catherine Elizabeth, Robert Jennings, II, Nancy Margaret.

**Education:** Attended prim. schs. of Ill., Pa., and Fla., grad. Cowden Community H.S., Cowden, Ill.; Amherst College (1943-44) Amherst, Mass.; U.S. Military Academy (1944-45) West Point, N.Y.; BS Ch.E (1947), MS Cer.E (1950), PhD Cer.E (1955) Univ. of Illinois, Urbana.

Grad. U.S. Army Service Schs.: Chem. Corps. School, Ft. McClellan, Ala.; Inf. School, Ft. Benning, Ga.; Engrs. School, Ft. Belvoir, Va., Comd. Gen. Staff School, Ft. Leavenworth, Kans.; Nuc. Weapons Off. Employment, Ft. Sill. Okla.

Military Service: M Sgt. (1949-51 & 1954-56), 2nd Lt. Chem. Corps (1956-58), 1st Lt. Chem. Corps (1958-59), 1st Lt. Inf. (1959-60) Capt. Inf. (1960-62), Capt. Chem. Corps (1962-66), Capt. Corps Engrs. (1966-67), Maj. Corps Engrs. (1967-68), Major Chem. Corps (1968-69) Illinois Natl. Guard; Maj. Corps Engrs. (1969-72), Lt. Col. Corps Engrs. (1972-75) Ohio Natl. Guard.

Professional Career: Res. Asst. (1947-49), Asst. Instr. (1949-52), Instr. (1952-55), Asst. Prof. (1955-60). Assoc. Prof. (1960-62) Ceram. Engr. Dept., Univ. of Illinois; Assoc. Ceramist (1962-69) Argonne Natl. Lab., Argonne, Ill. Tech. Dir. (1969-71) Chas. Taylor Sons Co., Cincinnati, Ohio; Dir. R & D (1971-date) Hall China Co., East Liverpool, Ohio.

**Professional Societies:** Mbr. (1947) mbr. Bd. Trustees (1974-77), mbr. various comms., Treas. (spr. 1978), variously affiliated with Basic Sci., Refractories, Whitewares Divs.; Sec. (1961-62) V. Pres. (1962-63 resigned) Ceram Educ. Council; mbr. (1952), Sec.-Treas. (1965-66) V. Pres. (1966-67), Pres. Elect. (1967-68), mbr. numerous comms. Natl. Inst. Ceram. Engrs.

Sigma Phi Delta mbr. (1943) Pres., Bus. Mgr., Chaplain Illinois Chapt., Eastern Provence Councillor (1950-51), Natl. Pres. (1952-72) Exec. Sec. (1973-date). Professional Interfraternity Council Pres. Elect. (1966-68) Pres. (1968-70) Past Pres. (1970-74).

Author 20 prof. publ. one patent. Active in community affairs.

Honors and Awards: Fellow (1965) Am. Ceram. Soc.; Sigma Xi, Biog. in Who's Who in Nuc. Sci.



#### HARRY J. BECKEMEYER Iowa Chapter (Charter) 1941

Educator, Research Engineer, Sales Executive, Corporate Officer

Keramos Activities: Charter mbr. Iowa Chapt.; Grand Sec. (1950-52), Grand V. Pres. (1952-54), Grand Pres. (1954-56), mbr. Exec. Council (1950-58). Part. instal. Iowa (1941), Missouri (1947), Washington (1952) and Texas (1955) Chapts.

Vital Statistics: Born June 30, 1917 Hillsboro, Ill.; mar. Louise Cress Aug. 29, 1942, children: Harry J. Jr., Nancy.

Education: Prim. schs, grad. Hillsboro (Ill.) H.S.; BS Cer. E (1938), MS (1939) Univ. Illinois; PhD Chem. E (1949) Iowa State Univ.

Military Service: WWII (1943-56) sep. in rank Cdr. USN.

**Professional Career:** Instr. (1939-43), Asst. Prof. (1946-49), Assoc. Prof. (1949-51) Ceram. Engr. Dept., Iowa State Univ.; Sr. Res. Engr. (1951-58) Universal-Rundle Corp., New Castle, Pa.; Tech. Svc. Rep. (1958-59) Consolidated Feldspar Dept., International Minerals & Chemical Corp.

Dir. Ceram. Sales & Svc. (1959-68) McGean Chemical Corp., Div. Chemetron Corp., V. Pres. Sales Mgr. (1968-date) Cleveland, Ohio.

Registered Prof. Engr.

Professional Societies: Mbr. (1938), Trustee (1974-77 for Matls. & Eqp. Div.) Am. Ceram. Soc.; Sec. (1956-57), V. Chm. (1957-58), Chm. (1958-59) Whitewares Div., later mbr. Matls. & Eqp. Div. and its Educ. Advisory Bd. Mbr. Natl. Inst. Ceram. Engrs.

Honors and Awards: Fellow (1972) Am. Ceram. Soc., Greaves-Walker Roll of Honor (1972) Keramos.

Mbr. Sigma Xi, Phi Lambda Upsilon, Phi Kappa Phi.



#### DWIGHT G. BENNETT Illinois Chapter (Active) 1928

Research and Development Engineer, Authority on Porcelain Enamels

Keramos Activities: Pres. (1928-29), Rep. (1931-32) Committee on Constitution for Consolidated Fraternity; Grand Pres. (1938-40). Mbr. Exec. Council (1938-42).

Vital Statistics: Born Oct. 1, 1899 Mt. Carroll, Ill.; mar., two children.

**Education:** Attended prim. and sec. schools of Mt. Carroll, Ill., BS Cer.E (1930) Univ. of Illinois.

**Professional Career:** Dev. Engr. (1930-31) Metal & Thermit Corp.; Industrial Fellow (1931-43) Mellon Institute; Res. Prof. (1943-62), Prof. Emeritus (1962-date) Univ. of Illinois; numerous publications.

Professional Societies: Mbr. (1928) Trustee (1955-58) for Enamels Div., Am. Ceram. Soc.; Sec. (1938-41, 1946-67), Chm. (1942-43) Enamel Div., Am. Ceram. Soc.; Chm. (1938-40) Pittsburgh Sec., Am. Ceram. Soc.; mbr. Natl. Inst. Ceram. Engrs.

**Honors and Awards:** Fellow (1941) Am. Ceram. Soc.; Dedicatee (1963) The Illini Ceramist; recd (1974) Greaves-Walker Roll of Honor, Keramos; mbr. Tau Beta Pi, Sigma Xi, Sigma Tau, Phi Eta Sigma.



## CHARLES F. BINNS 1857-1934 New York Chapter (Hon.) 1928

Master Craftsman, Teacher, Researcher, Ceramic Education Pioneer

**Keramos Activities:** Hon. Charter mbr. Delta Pi Alpha (1927) which became the N.Y. Chapter Beta Pi Kappa (1928); Grand 1st Asst. Master Potter (Natl. V. Pres.) (1928-29) Beta Pi Kappa; Chm. Merger Comm. on Insignia (1930-32); Grand Treas. (1932-33) Keramos.

Vital Statistics: Born Oct. 4, 1857, Worcester, England (to Richard William Binns, Dir. Royal Porcelain Works). Mar., four daughters: Elsie Binns, Mrs. Nannie Bonnett, Mrs. Dorothy Remsen and Mrs. Norah Fraser. A son Hugh, died in young manhood. Died Dec. 5, 1934 Alfred, N.Y.

**Education:** Attended schs. of Worcester and Birmingham (England), pri. sci. and drawing, apr. to Worcester Porcelain Works.

**Professional Career:** Head London (Eng.) Sales Dept. (1886-93), Chief Exhibits (1893) World's Fair, Chicago, Tech. Dept. (1893-97) Worcester Porcelain Works; Dir. (1898-1900) Tech. Art School, Trenton, N.J.; first Dir. (1900-31) N.Y. State School of Clayworking & Ceramics, Alfred Univ. Author numerous tech. repts and pamphlets.

**Professional Societies:** Charter mbr. (1899), Trustee (1899-1902), V. Pres. (1900-01), Pres. (1901-02), chm. many comm., Am. Ceram. Soc.

**Honors and Awards:** First hon. doctorate of Alfred Univ. (1925) celebrating 25th Anniv. establ. School of Ceramics; Lect. Metropolitan Museum of Art, NYC; Establ. C. F. Binns Annual Award for excel. ceramic art.; naming Charles F. Binns Hall, Alfred Univ.



## RAYMOND E. BIRCH Ohio Chapter (active) 1925

Research Engineer, Inventor, Research Director, Industrialist

Keramos Activites: Grand Pres. (1936-38), mbr. Exec. Council (1936-40).

**Vital Statistics:** Born Dec. 18, 1905 McConnelsville, Ohio; mar. Opal Martin June 12, 1927, son Donald M.

Education: Grad. prim. and sec. schs. of McConnelsville, Ohio; B. Cer. E. (1927). Prof. Cer. E. (1937) Ohio State Univ.

Governmental Service: Advisor to Federal Bureau of Census.

**Professional Career:** Cer. Engr. (1927-28) Carlyle Labold Co.; Res. Engr. (1928-30) Engr. Expr. Sta., Ohio State Univ.; Res. Engr. (1930-45), Dir. Res. (1945-70) Harbison-Walker Refractories Co.

**Professional Societies:** Mgr. (1929), V. Pres. (1965-66) Am. Ceram. Soc.; Sec. (1934), V. Chm. (1935), Chm. (1936), Trustee (1955-58) for Refractories Div. Am. Ceram. Soc.; Sec. (1932), V. Chm. (1933), Chm. (1934), Counselor (1965) Pittsburgh Sec., Am Ceram. Soc.; Charter mbr. (1938) 1st Trustee (1938-41) Natl. Inst. Ceram Engrs.; Cofounder, V. Pres. (1945), Pittsburgh Geological Soc.

Mbr. Am Soc. Test. Matls. (Comm. C-8), Am. Inst. Mining & Met. Engrs., Soc. Glass Tech., British Ceram Soc.; British Iron & Steel Inst., Triangle. Author many papers and holder numerous patents.

Honors and Awards: Distinguished Alumnus Award Ohio State Univ. (1966); Fellow Am. Ceram. Soc. (1938); A. F. Greaves-Walker Award (1968) Natl. Inst. Ceram. Engrs.; Greaves-Walker Roll of Honor (1971) Keramos; Refractories Award, St. Louis Sec., Medalist A. V. Bleininger Award, Pittsburgh Sec.; Medalist (1977) John Jeppson Award Am. Ceram. Soc.; Fellow Am. Assoc. Adv. Sci., Fellow Geol. Soc. Am., mbr. Advisory Comm. Cer. Engr. Depts. of Ohio State Univ., Univ. of Illinois and Dept. of Met. & Matls. Sci. Carnegie-Mellon Inst., mbr. Sigma Xi.



## GEORGE A. BOLE 1884-1962 Ohio Chapter Keramos (Honorary) 1936 New York Chapter Beta Pi Kappa (Hon) 1931

Teacher, Reseacher, Inventor, Research Administrator

**Keramos Activities:** Uniquely, hon. mbr. both "original" Keramos and Beta Pi Kappa; important role in consolidation of the two fraternities; Grand V. Pres. (1932-34), mbr. Exec. Council (1932-33).

Vital Statistics: Born Feb. 29, 1884 Beaver Falls, Pa.

**Education:** Prim. and sec. schools of Beaver Falls, Pa.; BS Chem. (1906) Geneva College, Beaver Falls, MS Phys. Chem. (1912) Columbia Univ.; Honor. degrees see Honors and Awards below.

Professional Career: Instr. Chem. (1907-08) Porto Rico High School and (1908-09) Univ. Porto Rico; Surveyor (1909-12) Dam No. 6 Ohio River; Prof. Chem. (1912-14), Prof. & Head (1914-21) Ceram. Chem. Dept., Alfred Univ.; Supt. (1921-24) Ceram. Sec., Supv. Ceramist (1924-26) U.S. Bur. Mines. Columbus, Ohio; Res. Prof. (1926-54) Cer. Engr. Dept. and Engr. Expr. Sta.; Prof. Emerit. (1954-62); Mgr. Edward Orton Jr. Ceramic Foundation. Author or co-author of more than 80 tech. papers and holder of nine patents.

**Professional Societies:** Mbr. (1916), Pres. (1929-30) Chm. Fellows (1932), active in Refractories and Structural Clay Prod. Divs., Emerit. Mbr. Am. Ceram. Soc.; mbr. Am. Inst. Mining & Met. Engrs, Am. Soc. Test. Matls., Am. Foundrymen's Soc., Soc. Promotion Engr. Educ., Am. Refractories Inst., German Ceram. Soc., Am. Inst. Chemists; Sec. Ohio Ceram. Industries Assoc.

Honors and Awards: President Bernard Traveling Fellowship (1912); Charter Fellow (1931), Honorary Life mbr. (1960) Am. Ceram. Soc.; Hon. DSci (1930) Alfred Univ.; Hon. DSci (1935) Geneva College; Sigma Xi, Phi Lambda Upsilon.



#### ORELLO S. BUCKNER 1893-1978 Illinois Chapter (Cofounder) 1914

Engineer, Researcher, Inventor, Innovator, Industrialist

**Keramos Activities:** Cofounder of Keramos (1914). During organ. period served on Ritual, the Seal and Shingle comms. and mbr. name selection group.

Vital Statistics: Born Aug. 27, 1893, Urbana, Ill. (son of Rev. F. F. Buckner); mar. Virginia (Siler) Buckner, children: Jean (Mrs. David Williams), Annice (Mrs. Stephen F. Chadwick, Jr.) and Philip F. Buckner. Died Apr. 1, 1978, Key Biscayne, Fla.

Education: Grad. Newark (N.Y.) H.S.; BS Cer.E (1916) Univ. Illinois.

Professional Career: R. & D. Engr. (1916-22) Norton Co., Worcester, Mass. (incls 3 yrs. Hiroshima, Japan). Cofounder (1922), Pres. (1922-58), Chm. Bd. Dir. (1958-59), retired (1959) Bay State Abrasive Products Co. "In the early days, Mr. Buchner was architect, brick tender, blueprint interpreter and general laborer. His philosophy was, 'use it up - wear it up - make it do - do without'."\*

The company became one of three largest grinding wheel manf. "The unique and successful committee management style of the three owners....was the subject of a Harvard University Business School case history study."

Holder, jointly or solely, 12 patents on grinding wheels and allied products.

**Professional Societies:** Mbr. (1916-59) and affiliated w. Basic Sci. Div., later Glass Div., Am. Ceram. Soc. mbr. Founders Gp. (1938), mbr. Natl. Inst. Ceram. Engrs.; active participant Grinding Wheel Inst.

Honors and Awards: Emeritus mbr. Am. Cer. Soc.

<sup>\*</sup> News Release Bay State Abrasive Div. Dresser Industries, Inc.

(Photo Not Available)

## LEONARD B. COULTER 1877-1916 Ohio State Chapter (Charter) 1902 Beta Pi Kappa

Ceramic Engineer

**Fraternity Activities:** Chm. protempor. of org. mtgs. Beta Pi Kappa (1902), first Master Potter (Pres.) (1902-03) Beta Pi Kappa, ancestor of Keramos.

Vital Statistics: Born Nov. 24, 1877 near Oxford, Ohio; mar. Died Oct. 26, 1916 Niagara Falls, N.Y.

**Education:** Grad. Oxford, Ohio prim. and sec. schs.; grad. (1898) Miami Univ. (specl. chem. and phys.) Oxford, Ohio. Grad. ceram. engr. short course (1902-04) Ohio State Univ.

**Professional Career:** Supt. (1904-08) Standard Pyrometric Cone Co. (later Edward Orton, Jr. Ceramic Foundation) Columbus, Ohio; Res. Cer. Engr. (1908-16) Carborundum Co., Niagara Falls, N.Y. Author several tech. papers.

Professional Societies: Mbr. (1904-16) Am. Ceram. Soc.

Honors and Awards: Eulogy in Trans. Am. Ceram. Soc. Vol. 19, pp 65-66 (1917).



#### RALPH R. DANIELSON 1892-1965 Illinois Chapter (Active) 1914 Cofounder Keramos

Researcher, Supporter of Education, Industrial Administrator

**Keramos Activities:** Cofounder of the "original" Keramos. Guiding influence during Keramos' first two years.

Vital Statistics: Born June 3, 1892, Chicago, Ill., wife Grace Danielson; Died Feb. 5, 1965, Rahway, N.J.

**Education:** Attended schools of the Chicago area; BS Cer.E (1914) MS (1916) Univ. of Illinois.

**Professional Career:** Asst. Instr. (1914-16) Univ. of Illinois; Cer. Engr. Benjamin Electric Co. (1916-19); Enamel Technologist (1921), Chief (1921-24) Enamel Metals Sec., Natl. Bureau Standards; Dir. Res. Lindeman & Haverson Co. (1924-26); Dir. Cer. Res. (1926-44), Dir. Cer. Services (1944-57), Advisor (1957-65) Metal & Thermit Corp.

Instr. Extension Div. (1946) Rutgers Univ. Author of more than 25 papers; pioneer in enamel test methods.

**Pofessional Societies:** Mbr. (1915), Trustee (1923-28) V. Pres. (1928-29), Pres. Elect. (1952-53), Pres. (1953-54) Am. Ceram. Soc.

Organizer (1918), Sec. (1918-24), Chm. (1924-25) Enam. Div. Am. Ceram. Soc.; mbr. Founders Gp. Natl. Inst. Ceram Engrs.; Pres. Ceram. Assoc. New Jersey.

Honors and Awards: Charter Fellow (1930), Distinguished Lecturer (1958-59), Emerit. Fellow (1959-65), Posthumous Award Honorary Mbr. (1965) Am. Ceram. Soc.; Greaves-Walker Award (1964) Natl. Inst. Ceram. Engrs., Hon. DSci (1953) Rutgers Univ.



## DELBERT E. DAY Missouri Chapter (Active) 1955

Educator, Researcher, Author, Administrator, Consultant, Civic Leader

Keramos Activites: Treas. (2nd Sem. 1955-56) V.P. (1956-57), Faculty Advsor (1965-70) Missouri Chapter.

Vital Statistics: Born Aug. 16, 1936, Avon, Ill. Mar. Shirley Foraker June 2, 1956, children: Lynne Denise and Thomas Edwin.

**Education:** Grade and high school, Springfield, Ill.; BS Cer.E and Valedictorian (1958) Univ. Missouri-Rolla, MS Cer.Tech (1960) PhD (1961) Pennsylvania State Univ.

Military Service: 1st Lt. and Tech. Asst. to Dir. Waterways Expr. Sta. (1962-64) U.S. Army Corps Engrs.

Professional Career: Asst. Prof. (1961-64), Assoc. Prof. (1964-67), Prof. (1967-date) Cer. Engr. Dept., Univ. of Missouri-Rolla; Leave (1962-64) Ad U.S. Army and Visiting Prof. of Chem., Mississippi College, Clinton, Miss.; Asst. Dir. (1965-66), Assoc. Dir. (1966-67), Dir. (1967-72) Indust. Res. Center, Univ. of Missouri-Rolla; Visiting Prof. Inorg. Chem. (1971-72) Tech. Univ. of Eindhoven, Neth.; Senior Investigator (1974-date) Materials Res. Center, Univ. of Missouri-Rolla. Consultant (1958-date) to numerous industrial companies; Advisor and Consultant (1974-date) to NASA; Tech. program dir. on glass confs: Baden Baden, Germany (1973), Rolla, Mo. (1975), XII Intl. Glass Conf. scheduled for 1980. Mbr. (1972-date) Advisory Panel, Solid State Comm. Natl. Res. Council; Pres. & Dir., Rolla Community Development Corp. Author or co-author of 64 tech. papers and two books, holds one patent.

Professional Societies: Mbr. (1956), Chm. various comm. Glass Div., Sec. (1974), V. Chm. (1975) Chm. (1976) St. Louis Sec., mbr. Ross C. Purdy Award Comm. (1975-date), Rep. (1974-date) "Life Cycle of Materials" Comm. Fed. of Materials Societies. Amer. Ceram. Soc.; Mbr. (1973-74) Chm (1974-75) PACE Award Comm., Natl. Inst. Ceram. Engrs.; mbr. Curricula Comm. (1968-69) Ceram. Ed. Council; Program Chm. (1967-68), Chm. (1968-69) Mineral Engr. Div., Am. Soc. for Engr. Ed; mbr. (1965-71) Comm. D-30 (High Modulus Fibers) and mbr. (1975-date) Comm. E-38 (Resource Recovery) Am. Soc. Testing Materials. Active in many civic organizations.

Honors and Awards: Outstanding Senior (col.) awards (1958): A. P. Green Refractories Co. and the W. A. Tarr Award, outstanding R.O.T.C. Cadet (1957) Chicago Tribune Award Univ. of Missouri-Rolla; Pittsburgh Plate Glass Fellow (1958-61) Penn State Univ.; Jaycees Outstanding Young Man Award, Clinton, Miss. (1963), Rolla Mo. (1968); Men of Amer. Award (1970); Outstanding Teacher Awards: Univ. of Missouri-Rolla (1967) and Missouri Chapter of Keramos (1971); PACE Award (1971) Natl. Inst. Ceram. Engrs. Tau Beta Pi; Phi Kappa Phi; Blue Key; Sigma Gamma Epsilon; Sigma Xi. Listed in Who's Who in Midwest, Dictionary of International Biography, Creative and Successful Personalities of the World, Community Leaders in America, Engineers of Distinction.



#### CHARLES M. DODD Ohio Chapter (Active) 1927

Educator, Counselor, Administrator, Engineer

Keramos Activities: Leader establ., Faculty Advisor (1942-52) Iowa Chapt. Grand Sec. (1934-40), Grand Pres. (1942-48) Mbr. Exec. Council (1934-40, 1942-50); Part. instl. Iowa (1941), New Jersey (1947) Missouri (1947) Chapts.

**Vital Statistics:** Born Aug. 13, 1895 New Philadelphia, Ohio (son Overton L. and Martha Mitchner Dodd); mar. Marion Charlotte Tieser, Sept. 24, 1921, children: Charlotte June (Mrs. Silas B. Larson) and Charles Mitchener, Jr.

**Education:** Grad. schs. of New Philadelphia (1913); attended Hiram College (1913-14), BCer.E (1927), Prof. Cer.E (1933) Ohio State Univ.

Military Service: Sgt. Co. E. 33rd Engrs., U.S. Army with the A.E.F. (1917-18).

Professional Career: Constr. Engr. (1918-20) Eljer Co. (built 3rd Harrop tunnel kiln); Assoc. (1920-25) Dodd's (dry goods business); Head Fireman (1926) Canton Brick Co.; Asst. Cer. Engr. (1927) Robinson Clay Products Co.; Asst. Prof. (1927-28), Assoc. Prof. (1928-32), Act. Dept. Head (1932-33), Prof. & Head (1932-39) Cer. Engr. Dept. and Dir. Missouri Clay Testing and Research Labs. Univ. of Missouri-Rolla; Prof. & Head (1939-62) Cer. Engr. Dept., Prof. Cer. E. (1962-date) Iowa State Univ. During W.W. II Prof. Dodd served Iowa St. Univ. as Atg. Pers. Officer and Educ. Coordinator Navy V-12 Program (1942-45), mbr. Advisory Panel Sci. Res. Institutions of India, (1955) Natl. Academy of Sci.; Consultant to many clay products firms in Iowa and Missouri, author or co-author numerous tech. papers and repts.

**Professional Societies:** Mbr. (1926), Trustee (1947-50) for Ceram. Educ. Council and (1954-57) for Natl. Inst. Ceram. Engrs., Am. Ceram. Soc.; Sec. (1942), V. Pres. (1943), Pres. (1944) Ceram. Educ. Council.

Sec. Organizing Comm. (1937), mbr. Founders Gp. (1938), Sec. (1938), V. Pres. (1945), Pres. (1946), Rep. to Engr. Council for Prof. Dev. Region III (1944-49) and Region V (1950-53), Natl. Inst. Ceram. Engrs.; mbr. Comm. C-8 (1933-39), C-4 and C-5 (1941-55) Am. Soc. Testing Matls.; Chm. (1937-38) St. Louis Sec., Am. Ceram. Soc.; mbr. and Chm. numerous comms. above named organizations.

Honors and Awards: Fellow (1936), Am. Ceram. Soc.; Hon. mbr. (1935) Missouri Mines Chapt. Triangle; Sigma Xi, Phi Kappa Phi; Iowa State Univ. Alumni Citation (1962); award pearl encrusted Keramos badge, Iowa Chapt. Keramos as a "token of esteem for many years of service to ceramic engineering and the fraternity." Greaves-Walker Roll of Honor (1962) Keramos; Greaves-Walker Award, (1963) Natl. Inst. Ceram. Engrs.; Bio. in Who's Who in Engr. (1937), Am. Men of Sci. (1937), Who's Who in America (1953-70).



## WILLIAM L. FABIANIC New York Chapter (Active) 1928 Beta Pi Kappa

Research & Development Engineer, Administrator, Inventor

Keramos Activities: Secretary Beta Pi Kappa 1929-30.

Vital Statistics: Born July 7, 1907 Rochester, Pa.; mar. Aug. 29, 1931, Sallie Virginia Anderson; children: William S. and David A.

**Education:** Grad. Ridgeway H.S., Pa.; BS Cer.E (1930) Alfred; MS (1932) North Carolina State College, Raleigh, N.C.

Professional Career: Teaching Fellow, N.C. State Col. (1930-32); Cer. Engr. (1932-53), Refr. Engr. Admin. Engr. Div., Owens-Illinois Glass Co.; Assist. Dir. of Res. (1953-54) V.Pres. & Dir. of Res. (1954-59) Laclede Christy Plants of H. K. Porter's Refr. Div.; Dir. of Res., Refr. Div. (1959-71) H. K. Porter Co. Inc.; Consult. to Glass Ind.; V.Pres. & Dir. of Res. (1971-date) Liberty Glass. Mbr. Bd. of Dir. Liberty Glass Co. (1973).

Authored 38 tech. articles & co-authored several more. Authored & co-authored 8 patents.

Professional Societies: Sec. St. Louis Sec. Am. Ceram. Soc.; Chm. of St. Louis' first Refractories Symposium (1965), mbr. C-8 Comm. on Refr. ASTM for 15 yrs. Mbr. Inst. of Cer. Engrs., mbr. Comm. on Cer. Education (1953-56); V-Pres. (1953), Pres. (1954) Madison Cty. Chapter Prof. Engrs. Soc. of Illinois. Registered Prof. Engr. Illinois, Ohio & Missouri; mbr. Refrs. Inst. Tech. Advisory Comm.; mbr. Am. Ceram. Soc. since 1930.

Honors and Awards: Fellow (1944), Emeritus Fellow (1973) Am. Ceram. Soc. Awarded (1977) St. Louis Refrs. award for "Distinguished Service in Field of Refractories" Recipient of "Chas. Ferguson Binns" medal for "Excellence in Ceramics & Chemistry" (1930); Tau Beta Pi & Delta Sigma Phi. Listed in Who's Who in Commerce & Industry.

(Photo Not Available)

#### ALBRA H. FESSLER 1897-1959 Illinois Chapter (Active) 1920

Researcher, Inventor, Engineer, Industrial Leader

Keramos Activities: Pres. (1920-21) Illinois Chapt.; Grand V. Pres. (1934-36), Chm. Grad. Placement Comm. Natl. Chapt., Exec. Council (1934-36).

Vital Statistics: Born Oct. 18, 1897 Elkland, Pa., mar. Margaret Barton McIntyre, children: Jane Barton, Robert Painter, Richard Henry. Died June 22, 1959, Panama City, Fla.

Education: Attended Elkland, Pa. pub. schools; BS Cer.E (1921) Univ. of Illinois.

**Governmental Services:** Indust. Advisor (1946-48) U.S. Military Governor of Korea; Indust. Advisor for the Economic Cooperation Admin., Washington, D.C.

**Professional Career:** Cer. Engr. (1921-23) U.S. Bur. Mines; Supt. (1923-25) Hamilton Clay Prod. Co.; Cer. Engr. (1925-27) developing electrical porcelains, Westinghouse Electric Mfg. Co.; Cer. Engr. to Chief Cer. Engr. (1927-44) A. C. Spark Plug Div., General Motors Co. Published numerous tech. papers. Held a large number of U.S. patents.

**Professional Societies:** Mbr. (1923), active in Whitewares Div. Am. Ceram. Soc.; mbr. Founders Group (1938) Natl. Inst. Ceram. Engrs.; mbr. Soc. of Rheology; mbr. Detroit Engrs. Club; active in civic organizations.

Honors and Awards: Fellow (1931) Am. Ceram. Soc.; registered Prof. Engr. Michigan.



## J. EARL FRAZIER Pennsylvania Chapter (Hon.) 1953

Professional Engineer, Inventor, Industrialist, Philanthropist

**Keramos Activities:** Since initiation has been an enthusiastic supporter. Life Member (1970).

Vital Statistics: Born July 4, 1902, Houseville, Pa. (son Chauncey Earl and Mary Ellen Gibson Frazier) mar. Frances Sprague Lang (1936), children: John Earl II, M.D. and Thomas Gibson, M.D.

**Education:** Attended schs. of Washington, Pa.; BS (1922) Washington & Jefferson College; MS (1924) Massachusetts Inst. of Tech.; ScD (1938) Univ. of Brazil.

Professional Career: Chemist/Engr. (1924-26) Owens-Illinois, Inc.; Fuel Engr. (1926-28), Asst. Sec. & Asst. Treas. (1928-30), Sec.-Treas. (1930-38), Sec.-Treas. & V.P. (1938-45), Pres. & Treas. (1945-date) Frazier-Simplex, Inc. His work has been directed toward improvement of processing, materials handling and storage equipment for the glass and steel industries. He holds 33 patents, numerous publ. contributions to Am. Ceram. Soc., Am. Inst. of Mining & Met. Engr., Colliers Encyclopedia and the Venezuelan Government publications.

**Professional Societies:** Mbr. (1924), active in Glass Div., served on many panels and comms. V. Pres. (1967-68), Treas. (1968-69), Pres. elect. (1969-70), Pres. (1970-71) Am. Ceram. Soc.; mbr. Natl. Inst. Ceram. Engrs., Ceram. Educ. Council, Natl. Soc. Prof. Engrs., and numerous other professional, civic and business organizations.

Honors and Awards: Fellow, Soc. Glass Tech. (England), Hon. Benjamin Franklin Fellow Royal Soc. of Arts (England), Fellow Am. Assoc. Adv. of Sci.; Recipient Bleininger Award (1969) Pittsburgh Sec., Jeppson Award & Medal (1976), Hon. Life mbr. (1978) Am. Ceram. Soc. In April of 1978 was elected to the National Academy of Engineering of the U.S.; mbr. Phi Beta Kappa, Sigma Xi. Distinguished Citizens Award, Washington, Pa., Knight of St. Pat. Alfred Univ.; Recipient Greaves-Walker Roll of Honor, Keramos; The Keramos Chapter of Pennsylvania named the student library the Keramos-Frazier Library, Pennsylvania State Univ.



## ARTHUR L. FRIEDBERG Illinois Chapter (Active) 1939

Educator, Administrator, Author

Vital Statistics: Born Mar. 25, 1919 River Forest, Illinois; mar. Feb. 4, 1944, Marian Davis; children: Richard and Anne.

Education: BS Cer.E (1941), MS (1947), PhD (1952) U. of Ill., Urbana.

Military Service: Lt., U.S. Navy (1943-46). Naval Air Sta., Quonset Pt., R.I; Aerology Program, U. of Chicago; Fleet Weather Control, Pearl Harbor, H.I.; Scripps Inst. of Oceanography, La Jolla, Ca.; CINCPAC, Guam.

**Professional Career:** Res. Assist. (1946-47), Res. Assoc. (1947-52), Assist. Prof. (1952-54), Assoc. Prof. (1954-57), Prof. (1957-date), Head Cer. Engr. Dept. (1963-1978) U. of Illinois. Author and co-author of 3 books or monographs; author or co-author of nearly 50 technical articles.

Professional Societies: Mbr. (1946), Trustee (1970-73), Mbr. Publications Comm. (1971-75), Mbr. Medal of Sci. Comm. (1975), Am. Ceram. Soc., mbr. Natl. Inst. of Cer. Engrs., mbr. Cer. Education Council, mbr. Am. Soc. for Engr. Education, mbr. Am. Assoc. for Advmt of Sci (Fellow), ASTM Comm. C-22, Ross C. Purdy Award Comm. mbr., Am. Cer. Soc. (1969-1973)

**Honors and Awards:** Fellow (1957) Am. Cer. Soc., Stanley Pierce Award (1973) Univ. of Ill. College of Engr. Listed in "Who's Who in America," "Who's Who in Engineering,: "Who's Who in United States," and "American Men & Women of Science."



#### ARTHUR F. GREAVES-WALKER 1881-1954 Ohio Chapter (Beta Pi Kappa) 1902 Cofounder

Engineer, Educator, Author, Leader, Champion of Ceramic Engineering as a Recognized Profession

Keramos Activities: Cofounder (1902) Beta Pi Kappa at Ohio State Univ., 3rd Asst. Master Potter (Treas.) (1902-03). Master Potter (pres.) (1903-04) Ohio Chapt.; Reestablished (1924) at N. C. State College; on becoming "national" (1928) elected first Grand Master Potter (Natl. Pres.) (1928-32); when merged with Keramos elected first Grand Pres. (1932-34), Grand Herald (1934-40, 1942-54). Mbr. Exec. Council (1932-54); Faculty Advisor (1925-46) North Carolina Chapter.

Vital Statistics: Born Mar. 9, 1881 London, Eng., emigrated to U.S.A. (1891); mar. (1905) Mary Ann McKinley, child Arthur McKinley (see bio.); died Apr. 18, 1954 Mt. Clemens, Mich. enroute to 56th Annual Mtg. Am. Ceram. Soc.

**Education:** Attended Houghton Preparatory School, Cleveland, Ohio, grad. (1904). Ceram. engr. short course, Prof. Cer.E (1931) Ohio State Univ.; Hon. DSci (1938) Alfred Univ.

Governmental Service: Mbr. (1898-1905) U. S. Naval Reserve; Chief (1917-18) Indust. Furnace Div., U. S. Fuel Admin. and Consultant (1917-18) on Refractories, U. S. War Industrial Board; consulting Cer. Engr. (1925-27), consulting Nonmetals Engr. (1940-46) U. S. Bur. Mines; Chief (1942) Nonmetals Sec., War Production Board; Deputy Chief (1942-45), Chief (1945-46) Metals and Minerals Br., Office of Production R&D, War Production Board; Exec. Sec. (1945) Metals & Minerals Subcomm., Tech. Indust. Intel., Joint Chiefs Staff. (All WW I and WWII assignments in Washington, D. C.)

Professional Career: Chief Chem. & Mng. Engr. (1904-06) Olive Hill Fire Brick Co., Ky.; Gen. Supt. (1906-10) Utah Fire Clay Co., Salt Lake City, Utah; Chief Engr. (1910-11) C. W. Raymond Co., Dayton, O.; Supt. (1911-13) So. Clay Mfg. Co., Couldale, Ala.; Assist. Gen. Mgr. (1913-17) Sun Brick Co., Toronto, Ont.; Prod. Mgr. (1918-24) Am. Refractories Co., Pittsburgh, Pa., V. Pres. (1923-24) Stevens, Inc., Atlanta, Ga.; organizer (1924-25). Prof. & Head (1924-46) Ceram. Engr. Dept. and (1926-32) Mining Engr. Dept., N. C. State College, Raleigh. Establ. and headed ceram. dev. lab. (1946-53) Engr. Indust. Expr. Sta., Univ. of Florida, Gainsville.

Senior partner (1924-54) Greaves-Walker Engineers consult. firm. Author several books, author or co-author of 75 bulletins and tech. papers. Author of innumerable newspaper articles. Assoc. Edt. (1922-27) Journ. Am. Ceram. Soc., Assoc. Edt. (1923-24) Ceram. Indust., Assoc. Edt. (1927-36) Ceram. Age. Registered Prof. Engr.

Professional Societies: Mbr. (1906), V. Pres. (1918-19), Pres. (1923-24), Chm. (1920-22) Refract. Div., Chm. (1923-24) Pittsburgh Sec., Chm. (1935-36) Trustee (1939-42) Struct. Clay Products Div. Am. Ceram. Soc.; organizer, cofounder and first Pres. (1938-39), mbr. Exec. Comm. (1938-41), Chm. (1939-46) Comm. on State Boards of Engr. Examiners Natl. Inst. Ceram. Engrs.; cofounder and first Sec. (1935) Assoc. Ceram. Educators which became (1938) Ceram. Educ. Council, Am. Ceram. Soc.; V. Pres. (1915), Pres. (1916),

Councilor (1916-36) Canadian Ceram. Soc.; mbr. (1940-46) Engrs. Council for Prof. Development; mbr. Am. Soc. Matls. Engr., Am. Soc. Mil. Engrs., Soc. Promotion Engr. Educ., Am. Inst. Mining & Met. Engrs. and numerous state organizations.

Honors and Awards: Charter fellow (1932), 22nd Hon. Life Mbr. 1954) Am. Ceram. Soc.; Hon. DSci. (1938) Alfred Univ.; Fellow Am. Assoc. Adv. Sci.,; memorial honors include establ. (1) The Arthur F. Greaves-Walker Student Reading Room (1954) N. C. State Univ., (2) The Arthur Frederick Greaves-Walker Award (1961) by Natl. Inst. Ceram. Engrs., (3) The Greaves-Walker Roll of Honor (1963) by Keramos, and (4) Greaves-Walker Scholarship (1970) at N. C. State Univ. by the ceram. engr. alumni.

Mbr. Tau Beta Pi, Phi Kappa Phi, Blue Key, Sigma Xi. Biographies publ. in Bull. Am. Ceram. Soc., Who's Who in Engr., Who's Who in Am. Educ., Am. Men of Sci., Internatl. Blue Book, Who's Who in America.



### A. McKINLEY GREAVES-WALKER 1907-1940 N. C. Chapter Beta Pi Kappa (Active) 1926

Engineer, Inventor, Student

Keramos Activities: 1st Asst. Master Potter (1926-27), 2nd Asst. Master Potter (1927-28), 1st Asst. Master Potter (1928-29) N. C. Chapt. Beta Pi Kappa; Grand 2nd Master Potter (Nat'l Sec.) (1930-32) Beta Pi Kappa; participant merger Beta Pi Kappa and Keramos (Feb. 8-10, 1932).

Vital Statistics: Born Dec. 1 1907 Salt Lake City, Utah; son of Mr. and Mrs. A. F. Greaves-Walker (see bio.) mar. Adelaide Morgan, daughter Cynthia; died Apr. 19, 1940 in the New York Central Lake Shore Limited disaster.

**Education:** Attended prim. and sec. schools in several states, grad. St. Nicholas School, Raleigh, N. C.; BS Cer.E (1929) N. C. State College; MS (1931) Ohio State Univ.

**Professional Career:** Instr. (1929) N. C. State College, Engr. (1930) Frigidaire Corp.; Cer. Engr. (1931-36), Asst. to Chief Tech. Dir. (1936-40) Libbey-Owens Ford Glass Co. playing key role in many tech. dev. Holder several patents, author several tech. papers. Registered Prof. Engr. Ohio.

**Professional Societies:** Student mbr. (1926) mbr. (1932) active in Glass and Refractory Divs. Am. Ceram. Soc.; mbr. Univ. Club, Toledo, Ohio.

**Honors and Awards:** Mbr. Tau Beta Pi, Blue Key, Sigma Xi. Fellow (1930-31) Tau Beta Pi (first awarded to a ceram. engr. student).



#### CARL H. GRIFFIN 1885-1940 Ohio Chapter (Beta Pi Kappa) 1902 Cofounder

Engineer, Researcher, Administrator

Keramos Activities: Cofounder (1902) Beta Pi Kappa, 2nd Master Potter (Sec.) (1902-03), 1st Asst. Master Potter (V. Pres.) (1903-04) Ohio Beta Pi Kappa.

Vital Statistics: Born July 15, 1885 Quaker City, Ohio; mar. children: Martha, Edith, Vera and Carl Griffin. Died Nov. 19, 1940, Daytona Beach, Florida.

Education: B. Cer.E (1904) Ohio State Univ.

**Professional Career:** Res. Engr. (1904-05), Foreman Elastic and Silicate Depts. (1905-12) Norton Co., Worcester, Mass.; Asst. Supt., Plant Supt. (1912-21), Resident Mgr. (1921-39) Deutsche Norton Gmb., Wesseling, Germany; Retired (1939) Daytona Beach, Fla.

Professional Societies: Mbr. (1904) Am. Ceram. Soc.



## WILLIAM C. HACKLER 1923-1975 Virginia Chapter (Active) 1941

Educator, Pioneer in Application of Computer Technology to Ceramic Problems, Leader in Youth Activities

Keramos Activities: Treas. (1941-42), Pres. (1946-47) Virginia Chapter; Faculty Advisor (1956-58 and 1963-67) N. C. Chapter.

Vital Statistics: Born Aug. 12, 1922 Saltville, Va.; mar. July 24, 1947 Rebecca Hiltzheimer, children: Cullen Lee and Mark Andrew. Died Apr. 8, 1975 Blacksburg, VA.

**Education:** Attended schools of Saltville, Va.; BS Cer.E (1943), MS (1947) Virginia Polytechnic Inst., PhD (1954) N. C. State Univ.

Military Service: 2nd Lt.-Capt. (1943-46) 104th Inf. Div., U. S. Army in Germany. He remained in the active reserves in R & D work and was promoted to Major, U.S.A.R.

Professional Career: Instr. Cer.E (1947-48) N. C. State Univ.; Res. Cer. Engr. (1948-49) Locke Insulator Co., Baltimore, Md.; Asst. Res. Prof. & Head Cer.E Sect. (1952-56) Univ. of Florida, Gainesville; Assoc. Prof. (1956-64) Prof. Cer.E (1964-67) N. C. State Univ.; Prof. (1967-75) Chm. Cer. Engr. (1971-75) Dept. Metals & Cer.E., Virginia Polytechnic Inst. and State Univ., Blacksburg. Held short term summer assignments at Oak Ridge Natl. Lab. (1956), Oak Ridge, Tenn., the Carborundum Co., Niagara Falls, N.Y. (1957), the Corning Glass Works (1962). Author or co-author some 10 articles in tech. periodicals or book sections, active in areas of statistical design, program learning, structure and properties of glass.

Professional Societies: Mbr. (1944) Trustee (1974-75) Am. Ceram. Soc., Sec. (1970-71), V. Pres. (1971-72), Pres. (1972-73) Ceram. Educ. Council; mbr. Natl. Inst. Ceram. Engrs., Am. Soc. Testing Matls., Am. Soc. Engr. Educ. Am. Soc. Qual. Control.

Honors and Awards: Fellow (1946-47) Terry Brick Corp., Kingston N. Y.; Fellow (1974) Am. Ceram. Soc.; Sigma Xi; Silver Beaver Award, Boy Scouts of America.

(Photo Not Available)

# DONALD B. HALL 1905-1930 North Carolina Chapter (Active) 1925 Beta Pi Kappa

Research Engineer

Keramos Activities: 3rd Asst. Master Potter (Treas.) (Spg. 1926), 4th Asst. M. P. (Herald) (1926-27), M.P. (Pres.) (1927-28) North Carolina Chapter Beta Pi Kappa. Grand 2nd Asst. M. P. (Natl. Sec.) (1928-30) Beta Pi Kappa.

**Vital Statistics:** Born Feb. 10, 1905 Hornell, N. Y., mar., two children. Died Aug. 3, 1930, Roseville, Ohio, burial Hornell, N. Y.

**Education:** Attended prim. and high shoools at Hornell, N. Y.; attended (1924-25) Alfred Univ., (1925-28) N. C. State College.

**Professional Career:** Res. Engr. (1928-30) Struct. Clay Tile Assoc., Roseville Plant, Ohio State Univ. "Mr. Hall's death will greatly handicap the Structual Clay Tile Association's research for some time. Mr. Hall's particular contribution was the development of machinery for the prodution of light-weight structural material." (Bull. Am. Ceram. Soc. 9 (9) 274 (1930).



## LARRY L. HENCH Ohio Chapter (Active) 1960

Educator, Researcher, Author, Consultant, Pioneer in Bioceramics

Keramos Activities: Organizer (1971) Florida Chapter.

Vital Statistics: Born Nov. 21, 1938 Shelby, Ohio. Mar. June 10, 1962 Suzanne Parker, children: Alan Andrew and Stephen David.

**Education:** Attended Shelby elementary sch., grad. Tiro (Ohio) H.S.; BCer. E (1961) PhD (1964) Ohio State Univ.

Governmental Services: Consultant, U. S. Army (1968-71), Natl. Sci. Found. (1973-date), Natl. Inst. Health (1974-date), Brazilian Ministry of Industry (1976-date).

Professional Career: Grad. Teaching Asst. (1963-64) Ohio State Univ.; Res. Engr. (1964) Battelle Memorial Inst., Columbus, Ohio; Asst. Prof. (1964-68), Assoc. Prof. (1968-70), Head Prof. Ceram. Div. (1970-72) Dept. Met. Matls. Engr., Prof. & Head Ceram. Div. (1972-date) Dept. Matls. Sci. & Engr., Co-Dir. (1973-date) Center for Res. on Human Prosthesis, Dir. (1974-date) Biomedical Engr. Program, Univ. of Florida.

Lecturer Pictinny Arsenal, U. S. Army (1969-71), Indian Inst. Tech., Madras, India (1974), Distinguished Bioengineer-in-Residence Univ. of Illinois (1975), The Free Univ., Amsterdam, Netherlands (1976). Consultant in glass tech. to indust. firms (1965-date). U. S. Rep. and V. Chm. (1966-date) subcomm. S-9 "Electrical Properties" Internatl. Commission on Glass.

Author or co-author of more than 100 tech. and sci. papers, co-editor four books, co-author six books, coholder five patents. Mbr. editorial boards: J. Biochem. Matls. Res. (1975-date), Ceramurgica Internatl. (1975-date), J. Bioengr. (1977-date).

Professional Societies: Mbr. (1961), Dir. (1968) Southeastern Sec. Am. Ceram. Soc.; V. Program Chm. (1970), Program Chm. (1971), V. Chm. (1972-73), Chm. (1974-75) Glass Div. Am. Ceram. Soc.; mbr. Ceram. Educ. Council; mbr. Natl. Inst. Ceram. Engrs.; mbr. (1969-72) Dev. Young Engrs. Comm., Engrs. Council Prof. Dev.; chm. (1969) Engr. Dev. Comm., Natl. Inst. Ceram. Engrs.; mbr. (1977) Solid State Sci. Comm., Natl. Res. Council; mbr. (1977) Matls. Advisory Panel, Natl. Sci. Found.; mbr. Soc. Glass Tech., Am. Soc. Engr. Educ., Soc. Biomaterials.

Honors and Awards: Central Ohio Ceram. Sec. Award, Penn. Glass Sand Scholarship, Foundry Educ. Found. Fellowship, Edward Orton, Jr. Ceram. Found. Fellowship, Eminent Engr. Award Tau Beta Pi (1970), Texnikoi (Engr. Ohio State Univ.) Outstanding Alumnus Award (1972), PACE Award, Natl. Inst. Ceram. Engrs. (1972), Dow Outstanding Faculty Award (1973), S.E. Sec., Am. Soc. Engr. Educ. Award (1974), John Marquis Memorial Award Whitewares and Eqp. Divs., Am. Ceram. Soc. (1974); College Engr. Univ. Florida Outstanding Service Award (1974). Fellow (1976) Am. Ceram. Soc., Florida Blue Key Distinguished Prof. Award (1976), Clemson Award Soc. Biomaterials (1977).

Mbr. Sigma Xi, Sigma Gamma Epsilon, Alpha Sigma Mu, Tau Beta Pi.



## PAUL G. HEROLD Ohio Chapter (Active) 1932

Engineer, Educator, Researcher, Industrialist

Keramos Activities: Faculty Advisor (1949-52) Missouri Chapt., Grand Sec. (1943-48), Grand Pres. (1952-54), mbr. Exec. Council (1943-56).

Vital Statistics: Born May 13, 1909 Mansfield, Ohio, mar. Aug. 31, 1934 Grayce Leona Sutley, children: Mary (Mrs. John L. Witwer) and Margaret (Mrs. Rodney L. Kendig); 2nd mar. May 13, 1972 Virginia Lee Wilcox.

Education: Attended schools Canajohari, N. Y., Miamisburg, Columbus and New Philadelphia, Ohio, and Chicago, Ill.; BCer.E (1931), MS (1932) PhD (1934) Ohio State Univ.; Postdoctoral study (1935) Univ. of Illinois.

Professional Career: Res. Engr. (1934-36) AC Spark Plug Co.; Instr. (1936-37), Asst. Prof. (1937-38), Assoc, Prof. (1938-41), Prof. (1941-65), Head (1938-55) Ceram. Engr. Dept., Missouri School of Mines (now Univ. of Missouri-Rolla); Dir. (1941-55) Missouri Clay Testing & Res. Labs., Rolla. Senior Engr. (1955-63) Radio Corp. of America.

Prof. Metall. (1963-72), Head (1969-72) Metall. Dept., Colorado School Mines; Pres. (1972-date) San Saba Mining Co., Idaho Springs, Colo.; V. P. (1973-date) Metals Testing, Inc. Panama City, Panama; Dir. (1973-date) Western Minerals Corp., Torrance, Calif.;) Pres. (1977-date) Paul G. Herold Co., Grant Pass, Ore.

Professional Societies: Mbr. (1930), Chm. (1953-54) Refractories Div. Am. Ceram. Soc.; Past Pres. Ceram. Educ. Council; mbr. Natl. Inst. Ceram. Engrs.; mbr. Am. Inst. Mining & Met. Engrs., Am. Soc. Engr. Ed. (Chm. Indust. Div. 1970), mbr. Alpha Chi Sigma.

Honors and Awards: Edgar Plastic Kaolin Fellow (1934-36); Fellow Am. Ceram. Soc.; mbr. Tau Beta Pi, Sigma Xi, Kappa Kappa Psi; registered Prof. Engr. Colorado and Missouri. Biography in Who's Who in America.



## MAJOR E. HOLMES 1882-1946 New York Chapter (Active) 1933

Educator, Researcher, Inventor, Administrator

**Keramos Activities:** Chm. (1934-36) Comm. on Prof. Status, comprehensive rept. of 1936 formed the basis of subsequent prof. recog. act. of ceram. engrs. Act. in accreditation of ceram. engr. curricula.

Vital Statistics: Born Jan. 8, 1882 LaGrange, Ky.; died May 2, 1946, Alfred, N. Y.

**Education:** Attended pub. schs. LaGrange, Ky. and Kempton, Ind., grad. (1901) Kempton (Ind.) H.S.; attended (1903-04) Valpariso Univ.; BA (1908) Univ. of Indiana; MA Phys. Chem. and Econ. Geol. (1910), PhD Chem. (1918) Cornell Univ.

**Governmental Service:** Developed special dry cell batteries for U. S. Gov. during W.W.I (1917-18).

**Professional Career:** H.S. teacher (1901-02) New York, Ind. and (1902-03) Kempton (Ind.) H.S.; Prin. (1904-05) Goldsmith, Ind. publ. schs.; Prin. (1905-06) Jefferson Tp. Consol. Schs., Kempton, Ind.; Instr. (senior yr. 1907-08) Univ. of Indiana; Instr. (1908-10) Cornell Univ.

Res. Engr. (1910-18) National Carbon Co., Cleveland, O.; Mgr. Chem. Dept. (1920-22), Actg. Gen. Mgr. (1922-23) National Lime Assoc., Washington, D. C.; Dev. Engr. (1923-24) U. S. Gypsum Co., Chicago, Ill.; Dev. Engr. (1924-26) Dolomite Inc., co-op R&D with U. S. Bur. Mines on stabl. dolomite refractories, Columbus, O.

Estab. and Head (1926-32) Ceram. Engr. Dept., estab. and Dir. (1926-32) Missouri Clay Testing and Res. Labs., Missouri School of Mines, Rolla. Dean (1932-46) New York State College of Ceramics, Alfred Univ.; estab. (1935) New York Ceramic Expr. Sta.

**Professional Societies:** mbr. (1921), V. Pres. (1942-43), Mbr. (1939-42) Comm. on Hon. Mbr., Chm. (1940-41) Comm. on Sect. and Divs. Am. Ceram. Soc.; Co-org., Chm. curricula Comm., Pres. (1940-41) Ceram. Educ. Council.

Org. (1933) Mbr. Bd. Dir. (1933-46) Ceram. Assoc. of N. Y.; mbr. Chm. subcomm. on lime, Chm. subcomm. on refractory nomenclature Am. Soc. Testing Matls.; Chm. Dry-Pres comm., Natl. Brick Manf. Assoc., mbr. Am. Chem. Soc., Natl. Inst. Ceram. Engrs., Am. Inst. Chem. Engrs., Soc. Promotion Engrg. Educ., Alpha Chi Sigma.

Author or co-author more than 30 tech. articles and bulletins, holder of nine patents. **Honors and Awards:** Fellow (1931) Am. Ceram. Soc., Sigma Xi.



## RALPH K. HURSH 1885-1956 Illinois Chapter (Honorary) 1915

Educator, Researcher, Author Supporter and Counselor to Keramos

Keramos Activities: With Ray T. Stull became first honorary mbrs. elected at the 2nd mtg. (Feb. 10, 1915). Prin. Faculty Advisor (1915-52) Illinois Chapt.; Rep. at 1st joint mtg. of Keramos and Beta Pi Kappa (Cleveland, Ohio, Feb. 1931). Elected Chm. Comm. on "Eligibility" year for 1931-32; first Grand Sec. (1932-34) Keramos.

Vital Statistics: Born 1885 Woodstock, Ill. Mar. Frances N. Feind, June 28, 1914; son: Robert W. Died July 12, 1956, Urbana, Ill.

**Education:** Attended (1903-04) Western Illinois State Teachers College. Recd. BS (1908) Univ. Illinois.

**Professional Career:** Stock and Shipping Clerk (1908-09) Ohio Mining & Mfg. Co.; Jr. Ceram. Chem. (1909-11) Natl. Bur. Stds.; Prof. Cer.E (1911-54), Prof. Emeritus (1954-56) Univ. of Illinois. Active in res. of modeling, drying and firing of ceramics. Most notable contribution — development of porcelains for beta iron tubes. Author numerous tech. papers.

Professional Societies: Mbr. (1909), Emerit. mbr. (1950), Treas. (1917-23) Am. Ceram. Soc. Active in Chicago Sec., Am. Ceram. Soc., Ceram. Educ. Council and Natl. Inst. Ceram. Engrs. Mbr. Am. Soc. Testing Matls., Illinois Clay Mfg. Assoc. Alpha Chi Sigma, Am. Chem. Soc.

**Honors and Awards:** Charter Fellow (1930), 3rd Recipient (1951) Ross C. Purdy Award, Am. Ceram. Soc.; elected by Exec. Comm. Keramos first Hon. Mbr. (1955); mbr. Sigma Xi, Sigma Tau.



## ERNEST L. KASTENBEIN New Jersey Chapter (Active) 1952

Researcher, Teacher, Inventor

**Keramos Activities:** Sec. (1952-53), Faculty Advisor, (1964-72 & 1975-date) N. J. Chapter; twice mbr. Nomin. Comm. Natl. Officers.

Vital Statistics: Born June 20, 1923 Hackensack, N. J., mar. Sept. 20, 1947 Elizabeth Woodyard.

Education: Prim. and sec. sch. Rutherford, N. J.; BS Cer.E (1953) Rutgers Univ.

Professional Career: Gen. business (1946-49); Res. Asst. (1948-49), Res. Assoc. (1953-57), Asst. Res. Specl. (1957-60), Assoc. Res. Specl. (1960-66), Assoc. Res. Prof. (1966-72), Assoc. Prof. (1972-date) School of Ceramics, Rutgers Univ.; active in electronic ceram. res. w. U. S. Army Electronics Command. Author or co-author of more than 30 major tech repts. & papers; holder five patents w. several others pending.

Professional Societies: Mbr. (1950) Am. Ceram. Soc.; mbr. (1965-67), Chm. (1967-68) Program Comm., Sec. (1968-69), V. Chm. (1969-70), Chm. Elect (1970-71), Chm. (1971-72) Whitewares Div., Am. Ceram. Soc.; mbr. (1953), Chm. (1971-72) Stud. Sum. Empl. Comm., Chm. (1975-76), Advisor (1976-date) Metropolitan Sec., Am. Ceram. Soc.; active Ceram. Assoc. N. J. (1955-date).

**Honors and Awards:** Assoc. mbr. (1953) mbr. (1963) Sigma Xi. Recipient (1977) Pask-Coffeen-Rigterink Award.



#### R. MAYNARD KING 1893-1976 Ohio Chapter (Hon.) 1928

Teacher, Researcher, Author

Keramos Activities: Grand Herald (1940-42); Advisory Ohio Chapter (1934-38 1940-55).

Vital Statistics: "Born and reared in Texas," 1893. Died Nov. 5, 1976.

Education: BA Chem. (1916) Univ. of Texas; MS Cer.E (1923) Ohio State Univ.

**Professional Career:** Chief Chemist (1916-19) Alcoa Tenn. Works; Res. Engr. (1919-21) Electrode Plants at Badin, N. C. and Niagara Falls Works Alcoa; Supt. (1921-22) Carbon Electrode Plant, Alcoa Tenn. Works; Associated in R & D (1923-27) American Lava Corp., Wells Fire Brick Co. and Lukens Steel Co.

Asst. Prof. (1927), Assoc. Prof. (1936), Prof. (1944), Prof. Emeritus (1960) Ohio State Univ. Author or co-author of more than 50 tech. papers, many in the area of enamel adherence.

**Professional Societies:** Mbr. (1922), Chm. (1935-36) Enamel Div., mbr. Comm. on Publication, Emeritus mbr. (1959), actively affiliated with Ceramic-Metal Systems Div., Am. Ceram. Soc.; Sec. (1946-47), V. Pres. (1947-48), Pres. (1948-49) Ceram. Educ. Council; mbr. Founders Gp. (1938), Natl. Inst. Ceram. Engrs.

Honors and Awards: Fellow (1934) Am. Ceram. Soc., mbr. Sigma Xi.



## JOHN H. KOENIG Ohio Chapter (Honorary) 1939

Educator, Researcher, Author, Consultant, Administrator

Keramos Activities: Fostered establ. New Jersey Chapt., faculty advisor (1947-50, 1953-60) New Jersey Chapt., Grand Sec. (1952-54), Grand V. Pres. (1954-56), Grand Pres. (1956-58); mbr. Exec. Council (1952-60).

Vital Statistics: Born Apr. 9, 1909 St. Marys Ohio, mar. Jan. 4, 1941 Shirley Ann Smith, children: Clara Elizabeth, John Richard, Belva Madelin, Shirley Ann, Sarah Kathryn.

Education: Prim. schools St. Marys Ohio; Grad. North High Sch.; Columbus, Ohio; BchE (1931), MS CerE (1936), PhD CerE (1938); Prof. ChE (1939) Ohio State Univ.

Military and Governmental Service: Lt. USN (1942-45) Chief Components Sec., Electronics Div. Bur. Ships; consultant to R&D Board Dept. Defense; consultant to QM R&D and to Matls. Advisory Board (both) of the National Res. Council; mbr. Advisory Comm. on Metallurgy Oak Ridge Natl. Lab.

Professional Career: Res. Chemist (1931-35) Gen. Electric Co., Pittsfield, Mass.; Res. Engr. (1938-42) Hall China Co. East Liverpool, Ohio; Dir. (1945-69), Dir. Emeritus (1969-date) School of Ceramics and the New Jersey Ceram. Station, Rutgers Univ,; Sec.-Treas. (1945-69) Councilor (1969-date) Ceramic Assoc. of N.J.; mbr. Bd. Dir. Acta Metallurgica. Registered Prof. Engr.; author or co-author 80 tech. papers and co-author one book; rancher (cattle & grain) (1969-date) Western Colorado.

Professional Societies: Student mbr. (1937), mbr. (1938), V.P. (1959-60), Pres. elect. (1961-62), Pres. (1962-63) Am. Ceram. Soc.; Sec. (1953-54), V. Chm. (1954-55), Chm. (1955-56) Whitewares Div.; co-organizer and first Chm. (1959-60) Electronics Div., Am. Ceram. Soc.; Sec. (1953-54), V.P. (1954-55); Pres. (1955-56) Ceram. Educ. Council. Mbr. Natl. Inst. Ceram. Engrs., Am. Soc. Engr. Educ. Mbr. (1950) mbr. Bd. Dir. (1957-60) active in work comms. C-15, Manufactured Masonry Units, C-21 Ceram. Whitewares and C-22 Porcelain Enamels. Am. Soc. Testing Mtls.

**Honors and Awards:** U. S. Potters Assoc. fellowship (1936-38) at Ohio State Univ.; Fellow (1942), John Jeppson Award, Honorary Life mbr. (1973) Am. Ceram. Soc. Gave Edgar Marburg Lecture (1964). Merit Award (1969) Honorary Mbr. (1977) Am. Soc. Testing Mtls.; Pres. (1962-65) VI International Congress on Glass.

Award (1958) for Outstanding Achievement in Ceramics, Ceram. Assoc. N. J.; Lindback Award (1963) for outstanding teaching; Honorary mbr. (1964) Canadian Ceram. Soc.



## W. WURTH KRIEGEL 1907-1980 North Carolina Chapter (Active) 1939

Educator, Administrator, Researcher, Author, Editor, Citizen Soldier

Keramos Activities: Faculty Advisor (1946-52, 1958-63, 1968-70) N.C. Chapt.; Grand (Natl.) Herald (1954-56, 1964-1980), Grand Sec. (1956-58) began Keragram and SOP, Grand V. Pres. (1958-60), Grand Pres. (1960-62) obtained tax-exempt incorp., dev. Bylaws; mbr. Bd. Dir. (1954-1980). Partic. instl. Virginia (1940) and Georgia (1950) Chapts.

Vital Statistics: Born Dec. 4, 1907 Seattle, Wa. (f. William Wurth, Lexington, Ky., m. Mid Opal Hatch Kriegel, Copemish, Mich.) mar. Mary Evelyn Mainwaring, Sept. 9, 1934, children: Gerald W. and Shirley Ann (Mrs. Wilington E. White); died May 31, 1980 Seattle, Wa.

Education: Attended pub. schs. W. Washington, grad. (1925) Queen Ann H.S., Seattle, BS CE (1929), BS CerE (1932) Univ. Washington; MS (1936) Montana Sch. Mines, Butte; Dr. Ing. (1939) Tech. Univ. Hannover (Ger.).

Military and Governmental Service: 2nd Lt. (1929-31), 1st Lt. AD w.C.C.C. (1933-34); 1st Lt.-Lt. Col. (1941-46) CAC (AAA) AUS, asg. AG (1945); Lt. Col. (1946) Sig. C USAR, Lt. Col. (1961-1980) USA-ret. Sec. (1949-51) N.C. Port. Cement Comm; Consultant: Ceram. Lab. (1955-57) Oak Ridge Natl. Lab., Crystal Sec. (1956-57) Naval Res. Lab., Senior Sci. Advisor (1960-67) U. S. Army Res. Office-Durham.

Professional Career: Design & Opr. Engr. (1930-31) Aberdeen Clay & Color, Aberdeen, Wa.; Cer. Engr. (1931-33) Gladding McBean & Co., Renton, Wa., Grad. Asst. (1934-35) Instr. (1935-39) Montana Sch. Mines and Cer. Engr. Mont. Bur. Mines & Geol., Butte; Instr. (1939-40) Asst. Prof. (1940-44), Assoc. Prof. (1940-46), Prof. & Head (1946-54) Ceram. Engr. Dept., Grad. Admin. & Prof-in-Chg. Ceram. Engr. (1954-71) Matls. Engr. Dept., Prof. Emert. (1971-1980) N. C. State Univ. Visit. Prof. and Consult. (Jun-Nov. 1966) Univ. New South Wales, Univ. Townsville, Univ. Melbourne, Monash Univ., Austral. A.E.C. and Comm. Sci. & Indust. Res. Organ. all of Australia.

Co-organ. (1948), act. partic. (1948-70) Clay Plant Operators' Forum; Dir. (1964) N. C. Jr. Sci. & Hum. Symposium; Co-organ. & codir. (1960, 1964 & 1970) "Univ. Conferences on Ceramic Science," Hon. Chm. (1977) Conf. Author or co-author 40 tech. papers and repts. Sen. Edt. Proc. 1960, 1964 and 1970 Confs. Jr. mbr. (1939-50) Greaves-Walker Engrs. Registered Prof. Engr. (1941-1980).

Professional Societies: Stu. mbr. (1929), mbr. (1934), mbr. Bd. Trustees (1953-56) for C.E.C. Am. Ceram. Soc.; Sec. (1950-51), V. Pres. (1951-52), Pres. (1952-53) Ceram. Educ. Council; mbr. (1939-1980), chm. numerous comms., rep. (1948-72) ad hoc ECPD curricula comms. Natl. Inst. Ceram. Engrs.; Sec. (1956-57), v.-chm. (1957-58), chm. (1958-59), mbr. ceram. comm. (1960-63) Mineral Engr. Div., Am. Soc. Engr. Educ.; mbr. (1950-56) Comm. C-22 Am. Soc. Test. Matls.; former mbr. Am. Assoc. Adv. Sci., Soc. Metals, Austral. Ceram. Act. Retired Officers Assoc.

Honors and Awards: Fellow (1929-30) U.S. Bur. Mines of Univ. Wash.; Fellow (1937-

38) Inst. Internatl. Educ. at Tech. Univ. Hannover, Ger.; Fellow (1954), Emeritus (1971-1980) Am. Ceram. Soc.; Partic. (1957-58) "Year-in-Industry" Engr. Dept., E. I. duPont de Nemours Co., Wilmington, Del.; Recip. (1973) Greaves-Walker Roll Honor, Keramos; mbr. Sigma Rho, Tau Beta Pi, Phi Kappa Phi, Sigma Xi. Bio. publ. in Who's Who in Engr., Who's Who Am. Educ. Who's Who in Commerce & Indust., Who's Who in the South & Southwest, Who Knows and What, Directory Am. Scholars, Am. Men Sci.



## FRED S. MARKERT 1901-1954 Illinois Chapter (Active) 1922

Engineer, Corporate Officer

**Keramos Activities:** Pres. (1923-24), carried through incorp. (1924) Keramos under laws of Illinois.

**Vital Statistics:** Born July 22, 1901 East St. Louis, Ill., mar. June 4, 1927 Francine Elnora MacDowell, Chicago, Ill.; children: Dorothy Mae and James McDowell. Died Apr. 6, 1954.

Education: BS CerE (1924), Prof. CerE (1933) Univ. Illinois.

**Professional Career:** Cer. Engr. & Chemist (1924-25) Belleville Enameling & Stamping Works (renamed Peerless Enameling Co.), Belleville, Ill.; Engr., Chief Engr., Works Gen. Mgr., Asst. Gen. Mgr. (1925-36), V. Pres. (1936-54) Ferro Corp., Cleveland, Ohio.

**Professional Societies:** Mbr. (1945) Am. Ceram. Soc.; mbr. (1924-54), Sec. (1927-28) N. Ohio Sec., Am. Ceram. Soc., affil. Enamel Div., mbr. Triangle.



# THOMAS D. McGEE Iowa Chapter (Active) 1946

Educator, Researcher, Inventor, Consultant, Research Administrator

**Keramos Activities:** Herald (1947-48), Advisor (1961-73) Iowa Chapter; Natl. Treas. (1968-72), Natl. V. Pres. (1972-74); Natl. Pres. (1974-76) initiated movement for revision of Ritual, encouraged preparation of chapter histories, mbr. Bd. Dir. (1968-78).

Vital Statistics: Born June 9, 1925 Tripoli Iowa; mar. Dec. 28, 1948 Avis Morse, children: Evelyn, Timothy, James, Mathew.

Education: Grad. publ. schs. and H.S. Fayette, Iowa; BS ME & BS CerE (1948), MS IndE (1958), PhD CerE & MetE (1961) Iowa State Univ.

Professional Career: Res. Engr. (1948-54), Res. Engr. Supv. (1954-56) A. P. Green Refractories Co., Mexico, Mo.; Asst. Prof. (1956-61) Assoc. Prof. (1961-65), Prof. Cer. Engr., Matls. Sci. & Engr. Dept., Iowa State Univ., Ames. Program Mgr. (1967-73) development of "Center of Excellence" (Interdisciplinary res. by five depts. & seven prin. investigators "Prop. Ceram. Matls."), sponsor Wright-Patterson AFB; Consultant to electronic & refractory matls. industries. Author or co-author of more than 30 tech. papers, holder of 10 patents. Registered prof. engr.

Professional Societies: Mbr. Program Comm. (1972-75), mbr. (1972-date, Chm. 1975) Review Comm., Historian (1975), Sec. (1975-76) V. Chm. (1976-77), Chm. (1977-78) Refractories Div., Am. Ceram. Soc.; mbr. (1972-74) Natl. Res. Review Panel; mbr. Ceram. Educ. Council, Natl. Inst. Ceram. Engrs., Am. Soc. Engr. Educ., Soc. Glass Tech., Am. Assoc. Adv. Sci.

Honors and Awards: Sigma Xi, Phi Kappa Phi, Osborne Club.



#### ALAN D. MILLER Washington Chapter (Active) 1955

Teacher, Counsellor, Researcher, Administrator, Consultant

Keramos Activities: Pres. (1956-57), Advisor (1967-date) Washington Chapt. Vital Statistics: Born May 29, 1931, Everett, Wa.; mar. Aug. 18, 1956, Corine Riddell, children: Linda Lee (Mrs. Thad Lindquist), Donald Russell, Keith Allan, Kimberly Ann.

**Education:** Prim. schs. various towns Wash., grad. Ballard H.S., Seattle; BS CerE (1957), PhD (1967), Univ. Washington.

**Professional Career:** Instr. Cer. Engr. (1957-58) Univ. of Washington; Res. Superv. (1958-64) Pratt & Whitney Aircraft Co., Middletown, Conn.; Res. Asst. Prof. (1967-68), Asst. Prof. Gen. Engr. (1968-69), Asst. Prof. Cer. Engr. (1969-75), Assoc. Prof. Cer. E (1975-date), Dir. Matls. Analysis Cost Center, Univ. of Washington; Consultant instrumental techniques solving industrial problems.

**Professional Societies:** Mbr. (1957) Am. Ceram. Soc.; Gen. Chm. (1969), Program Chm. (1975) Pac. Coast Regional Mtg., Counsellor (1972-date) Pac. N.W. Sec., affiliated Basic Sci. Div. Am. Ceram. Soc.; Sec.-Treas. (1976-77), V.P. (1977-78) Ceram. Educ. Council; mbr. Natl. Inst. Ceram. Engrs.; mbr. Am. Soc. Engr. Educ.; Author more than 15 tech. papers & repts.

Honors and Awards: Traineeship (1964-67) Natl. Sci. Found.; Tau Beta Pi, Sigma Xi.



## LeROY H. MINTON 1882-1931 Ohio Chapter Beta Pi Kappa 1902 Cofounder

Engineer, Administrator, Consultant Leader

**Keramos Activities:** Cofounder (1902) Beta Pi Kappa at Ohio State Univ.; 4th Asst. Master Potter (Herald) (1903-04).

Vital Statistics: Born 1882 Covington, Ohio (son Abram Wilson and Lauretta Himes Minton — desc. famous English potters); mar. Grace Mayclapp June 1, 1904; children: LeRoy Jr., Miriam Grace, Catherine Elizabeth. Died Dec. 15, 1931, Matuchin, N. J.

**Education:** Prim. schs.; grad Covington (Ohio) H.S., E.M. (in Cer.) 1904 Ohio State Univ.

Professional Career: Cer. Chemist (1904-06) Mosaic Tile Co., Zanesville, O.; Cer. Chemist (1906-13) Perth Amboy Terra Cotta Co., Perth Amboy, N. J.; Supt. (1913-14) Wilkes-Barre Terra Cotta Co.; Supt. Plant 2 (1914-21), Gen. Supt. & mbr. Bd. Dir. (1922-27) General Ceramics Co., Metuchan, N.J.; also V. Pres. (1926-27) American Shaw Gas Kiln Co., mbr. Bd. Dir. Seal Joint Co.; International authority. Consultant (1928-31) New York City. Civic Leader

**Professional Societies:** Mbr. (1906), active mbr. (1916), mbr. Bd. Trustees (1917-20), Pres. (1920-21), mbr. (1921-23), Chm. (1923-27) Publications Comm., Am. Ceram. Soc.; an "officer and committeeman and finally as President of the New Jersey Clay Workers Associaton and continuously since as a member of the executive committee…."

"His contributions to ceramic literature were many and valuable but probably his most effective work in a public way was in organizing and managing in an executive capacity when the American Ceramic Society was emerging from the strictly scholastic into an industrial society."

Honors and Awards: Charter Fellow (1930) Am. Ceram. Soc., Eulogized by resolution of the Bd of Trustees, Am. Ceram. Soc. (Bull. Am. Ceram. Soc. 11 (1) 15 (1932)).



### LANE MITCHELL Illinois Chapter (Active) 1932

Educator, Engineer, Geologist, Supporter of National Security

Keramos Activities: Grand Sec. (1940-43), Grand V.P. (1948-50), Grand Pres. (1950-52), Grand Herald (1956-64). Mbr. Ex. Council/Bd. Dr. (1940-43, 1948-64); partic. instl. Iowa (1941), Pennsylvania (1948), Georgia (1950), Washington (1952) and South Carolina (1958) Chapts. Leader establ., Faculty Advisor (1950-73) Historian (1973-date) Georgia Chapt.

Vital Statistics: Born 1907, Atlanta, Ga.; mar. 1936 Mildred Morris, son Robert Lane.

**Education:** Grad. prim. and H.S. Atlanta, Ga., BS CerE (1929) Georgia Inst. Tech.; MS CerE (1931) Univ. Illinois; Rutgers Univ. (1932); Emory Univ. (1933); PhD (1941) Pennsylvania State Univ.; Pre-Radar Sch. (1943) Harvard Univ.; Radar Sch. (1944) Mass. Inst. Tech.; Natl. Sec. Seminar (1955) Indust. College Armed Forces.

Military Service: Comm. (1943) U. S. Navy; Pers. O. (1944-45) Harvard Pre-Radar School; Chief Air Engr. Svs. (1945) Bu.Ships; CO Naval Res. Mobilization Team, Atlanta; Natl. Strategy Seminar (1959), Moderator (1960) Natl. War College; Bu.Pers. Curriculum Writer (1961); Cdr. USNR-Ret.

Professional Career: Instr. English & Journalism (1932-34) Boys H.S. Atlanta; Asst. State Geologist Ga. (1934-36); Asst. Prof. & Assoc. Prof. (1936-41), Prof. & Director (1946-73), Director Emeritus (1973-date) School Ceramic Engr. Georgia Inst. Tech., Atlanta.

**Professional Societies:** Mbr. (1927), mbr. Basic Sci. Div., active mbr. S.E. Sec., mbr. Bd. Trustees (1956-59), V. Pres. (1968-69) Am. Ceram. Soc.; Sec. (1947-48), V. Pres. (1948-49), Pres. (1949-50) Ceram Educ. Council; mbr. Natl. Inst. Ceram. Engrs. mbr. Bd. Dir. Metallurgy-Ceramic Found.; cofounder, mbr. Bd. Ga. Mineral. Soc.; mbr. Clay Mineral Soc.; Ga. Academy of Sci.; mbr. Bd. Southern Porcelain Co., Universal Ceramics, Inc.; former mbr. Am. Soc. Mining & Met. Engrs., Am. Soc. Testing Matls., Am. Soc. for Engr. Educ.; mbr. Retired Officers Assoc. Active in civic affairs. Author numerous tech. papers & book "Ceramics."

Honors and Awards: Fellow (1949) Am. Ceram. Soc.; Hewitt Wilson Award (1956) S.E. Sec. Am. Ceram. Soc.; U.D.C. Cross Mil. Svc. (1956); Hon. Life Member (1956) Ga. Mineral Soc.; Greaves-Walker Roll of Honor (1965) Keramos; Wisdom Award of Honor (1970). Listed in Who's Who in America, Who's Who in Engr., Who's Who in Am. Educ., Who Knows and What, Am. Men of Sci., Atlanta and Environs.



### WILLIS E. MOODY North Carolina Chapter (Active) 1948

Engineer, Consultant, Educator

Keramos Activities: Adv. (1952-56) North Carolina Chapter; first Life Mbr.; chm. numerous natl. comms.

Vital Statistics: Born Mar. 30, 1924 Raleigh, N. C.; mar. Mar. 27, 1947 Mary Susan McAfee, children: Susan E., Michael T., Peggy A., Willis E. III, William S.

Education: Grad. Murphy Sch. and Hugh Morrison H.S., Raleigh; BS CerE (1948), MS (1949) PhD (1956) North Carolina State Univ.; Adv. Nuc. Met. (sum. 1957) Inst. Atomic Res., Ames, Iowa; Appl. Dislocation Theory to Ceram. (sum. 1961) NSF Inst. at Univ. California-Berkeley.

Military Service: Lt.-Capt. (Navigator 1943-46) U. S. Army Air Corp.

Professional Career: Kiln Supt. Qual. Cont. Supv (1949-50) Spark Plug Div., Electric Auto-Lite Co., Fostoria, O.; Supv. Res. Dev. & Qual. Cont. Ceram. Matls. (1950-51) Laboratory Equipment Corp., St. Joseph, Mo.; Instr. Cer. & Met. (1951-56) N. C. State Univ.; Res. Participant (sum. 1954 & 1955) Oak Ridge Natl. Lab.; Set up program nuc. reactor matls. (sum. 1956) 3-M Co., St. Paul. Min., Assoc. Prof. (1956-61), Prof. (1961-date) Cer. Engr. School, Georgia Inst. Tech., Atlanta. Author or co-author some 20 major publications & reports. Consultant. Registered Prof. Engr.

Professional Societies: Mbr. (1949) Trustee (1965-68) mbr. nominating comm. (1968) Am. Ceram. Soc.; Treas. (1961-62) Dir. (1962-63) S.E. Sec. Am. Ceram. Soc.; Sec. (1960-61), V. Pres. (1961-62), Pres. Elect. (1962-63) Pres. (1963-64) Ceram. Educ. Council; Sec.-Treas. (1977-78) Natl. Inst. Ceram. Engrs,; mbr. Ceram. E. Comm. (1960-61) mbr. Matls. Comm. (1961-65) V. Chm. (1970-71) Chm. (1971-72) Matls. Div., Am. Soc. Engr. Educ.; Chm. Finance Comm. (1963-65), Chm. Mtg. Places Comm. (1968-76), Chm. 1970 Mtg., Councilor (1969-71) Clay Minerals Soc.; mbr. Am. Physical Soc., Am. Assoc. for Adv. Sci.

Honors and Awards: Fellow (1964) Am. Ceram. Soc., Sigma Xi, Sigma Pi Sigma, Tau Beta Pi. Bio. sketches in: Who's Who in South and Southwest, Am. Men of Sci., Who's Who in Engr., Who's Who in Am. Educ., E.J.C. Engrs. of Distinction.



# ROBERT E. MOORE Missouri Chapter (Active) 1955

Educator, Researcher, Author, Consultant

**Keramos Activities:** Treas. (1954-55, 1st sem. 1955-56), Faculty Advisor (1st sem. 1977-78) Missouri Chapt.; Natl. Recording Sec. (1974-76), Natl. V. Pres. (1976-78), mbr. Bd. Dir. (1974-date).

Vital Statistics: Born June 1, 1930 Randolph, Neb.

**Education:** St. Patrick's Sch., Cathedral Latin H.S., St. Louis, Mo. and Bloomfield H.S., Bloomfield, Neb.; BS CerE (1956) PhD (1962) Univ. Missouri-Rolla; MS Silic. Sci. (1957) Univ. Toledo (Ohio).

**Professional Career:** Res. Assoc. (1956-57) Mycalex Corp. of Am.; Instr.; Asst. Prof. (1957-64); Assoc. Prof. (1964-66), Prof. (1966-date) Chm. (1965-date) Cer. Engr. Dept., Univ. of Missouri-Rolla. Consultant to the electrical porcelain, refractories, ceramic using industries and the Atomic Energy Commission. Author or co-author approx. 20 presented papers. Chm. co-chm. eight conferences.

**Professional Societies:** Mbr. (1956) mbr. Comm. on Programs & Mtgs. (1972-73); Affil. Refract. Div., Am. Ceram. Soc.; Sec-Treas. (1971-72), V. Pres. (1972-73), Pres. Elect. (1973-74), Pres. (1974-75) Ceram. Educ. Council; Sec. (1972-73), Pres. Elect. (1973-74), Pres. (1974-75) Natl. Inst. Ceram. Engrs.

Honors and Awards: W. A. Tarr Award (1956); Fellow (1956-57) Synthetic Mica Co. at Univ. of Toledo; Fellow (1973) Am. Ceram. Soc.; mbr. Sigma Xi, Tau Beta Pi, Sigma Gamma Epsilon, Blue Key, Phi Kappa Phi.



#### EDWARD E. MUELLER Missouri Chapter (Charter) 1947

Educator, Researcher, Inventor, Administrator

Keramos Activities: Faculty Advisor (1950-53) New Jersey Chapt. and (1953-59) Washington Chapt.; Gen. Sec. (1974-date), mbr. Bd. Dir. (1974-date).

Vital Statistics: Born July 26, 1924 Wood River, Ill. Mar. Aug. 29, 1946 Sally Schweitzer, children: Mrs. Mark W. Lamprey, David M., Richard E.

Education: Grad. grade and H.S., Wood River, Ill.; Illinois State Normal (Math. 1942-43); Villanova College (Naval ROTC 1945-46); BS CerE cum laude (1948) Univ. Missouri-Rolla, MS (1952), PhD Ceram. (1953) Rutgers Univ.

Military Service: Veteran W.W. II (1943-46) U. S. Navy.

Professional Career: Instr. Ceram. (1948-53) Rutgers Univ., New Brunswick, N.J.; Asst. Prof. (1953-55) Assoc. Prof. Ceram. Engr., Asst. to the Provost (sum. 1959) Univ. of Washington, Seattle; Asst. Dir. Res. (1959-61) Pemco Corp. (merged into the Glidden Co.) Dir. Ceram. Res. of latter (1961-65) Baltimore, Md.; Dean & Prof. Ceram. Engr. (1965-73) Prof. Ceram. Engr. (1973-date) N. Y. State College of Ceram. at Alfred Univ., Alfred. Author or co-author some 20 publications, holder of seven patents. Consultant to variety of firms and agencies. Active in community affairs. Registered Prof. Engr.

Professional Societies: Mbr. (1947), mbr. Publ. Comm. (1962-64 & 1966-69), mbr. Edit. Bd. (1966-70), chm. (1966-69), mbr. Program & Mtgs. Comm. (1960-65), chm. (1964-65), mbr. Archives Comm. Am. Ceram. Soc.; Sec., Treas., V. Chm. Pac. N.W. Sec., Program Chm. Baltimore-Washington Sec., Sec., V. Chm., Chm. Western New York Sec. Am Ceram. Soc.

Mbr. (1953), Pac. N.W. Rep. (1955-58), mbr. Survey Comm. (1958-60, Chm. 1959-60), Sec.-Treas. (1962-63), V. Pres. (1963-64), Pres. Elect. (1964-65) Pres. (1965-66), Rep. Bicentennial Comm. of Joint Council, Natl. Inst. Ceram. Engrs.

Sec.-Treas. (1965-73), mbr. Bd. Dir. (1973-date) Ceram. Assoc. of N. Y. Also mbr. Am. Assoc. for Higher Educ., Am. Assoc. of Univ. Admin., Canadian Ceram. Soc., Iron & Steel Inst., Inst. Metals, Am. Soc. for Engr. Educ.

Honors and Awards: Fellow (1964) Am. Ceram. Soc., Sigma Xi, Phi Kappa Phi, Alpha Phi Omega, Alpha Psi Omega.



## JAMES I. MUELLER Missouri Chapter (Charter) 1947 Washington Chapter (Charter) 1952

Educator, Consultant, Researcher, Administrator, Lecturer, Citizen Soldier

Keramos Activities: Organ., co-petitioner, charter mbr., first Pres. (1947-48) Missouri Chapt.; fostered establ., charter mbr. (1952), Faculty Advisor (1952-54, 1959-65) Washington Chapt.; Natl. Sec. (1954-56), Natl. V. Pres. (1956-58), Natl. Pres. (1958-60), first Gen. Sec. (1962-74), mbr. Bd. Dir. (1952-74).

**Vital Statistics:** Born June 26, 1916 Cincinnati, Ohio (son of August L. and Lydia Heyn Mueller); mar. Mar. 4, 1942 Betty J. Richards, children: James I. Jr., Betsy R., John W., Michael D.

**Education:** Attended prim. and sec. schs. Norwood, Ohio; B CerE (1939) Ohio State Univ.; PhD (1949) Univ. Missouri-Rolla.

Military and Governmental Service: 2nd Lt.-Maj. (1941-46) Pac. Theat. Corps. Engr. U. S. Army. Maj. (1947-49) Mo. NG.; Maj.-Lt. Col. (1949-61) Chem. O., 41st Inf. Div. Wash. NG; Lt. Col. (1971-76) USAR; Lt. Col. (1976-date) USA-Ret.

Mbr. (1968-70) Cmdrs. Adv. Panel, 6th U. S. Army, mbr. (1969-72) Matls. Adv. Panel NASA.

**Professional Career:** Ceram. R&D Engr. (1939-41) National Tile Co., Anderson, Ind.; Asst. Prof. (1949-51), Assoc. Prof. (1951-55), Prof. (1955-date) Dept. Mining, Met. and Ceram. Engr. Univ. of Washington; prin. res. superv. (1949-date) approx. \$7 million; consultant (1949-date) to more than 35 organs.; author or co-author approx. 50 publ. papers and repts.

Professional Societies: Mbr. (1939), V. Pres. (1959-60), Treas. (1976-78), mbr. numerous comms., chm. (1976-78) Finance Comm., chm. (1976-78) History & Archives Comm., chm. (1975-76) Bicentennial Coord. Comm. Am. Ceram. Soc.,; Sec. (1953-54), V. Pres. (1954-55), Pres. (1955-56), chm. (1974-75) Accreditation Criteria Comm., Ceram. Educ. Council; mbr (1949), chm. (1949-50), counsellor (1956-65) Pac. NW Sec., mbr. (1963-73) Oregon Sec., mbr. (1970-date) So. Calif. Sec. Am. Ceram. Soc.

Mbr. Natl. Inst. Ceram. Engrs.; mbr. (1949-73) Am. Soc. Engr. Educ.; mbr. (1962-date), Exec. Comm. (1972-date) Pac. NW Chapt. Am. Defense Preparedness Assoc., mbr. Assoc. U. S. Army.

Honors and Awards: Fellow (1959), Hon. Life Mbr. (announced for 1978) Am. Ceram. Soc.; Distinguished Engrs. Award (1971) Wash. Chapt. Tau Beta Pi, Greaves-Walker Roll of Honor (1969) Keramos, Commendation Medal (WOLC) U. S. Army; James I. Mueller Scholarship establ. (1969) Univ. Washington; mbr. Sigma Xi, Tau Beta Pi, Kappa Kappa Psi.

(Photo Not Available)

# IDRIS A. NELSON 1889-1919 Illinois Chapter (Cofounder) 1914

**Keramos Activities:** Cofounder (1914) Keramos at Univ. Illinois. Acting chm. first mtg. of record (undated, held prior to Feb. 10, 1915). Elected first Pres. (Feb. 10, 1915). Obviously an extremely effective leader; put together an enduring organization.

Vital Statistics: Born Apr. 7, 1889 Canton, Ill. (son of Reginald and Alice Hines Nelson) mar. Ruth Isabell Musender June 14, 1917, Urbana, Ill. Died Jan. 27, 1919, Galesburg, Ill.

Education: Grad. Canton (Ill.) H.S.; AB in Sci., BS CerE (1915) Univ. Illinois. Professional Career: Ceram. Chem. (1912-13) C. W. Raymond Co., Dayton, Ohio; Ceram. Chem. (1913-19) Purington Paving Brick Co., Galesburg, Ill.

Professional Societies: Am. Ceram. Soc.



#### JAMES A. NELSON Illinois Chapter (Active) 1940

Engineer, Educator, Researcher, Industrial Consultant

Keramos Activities: Faculty Advisor (1952-74) Illinois Chapter.

Vital Statistics: Born Oct. 5, 1919 Bureau, Ill.; mar. Oct. 15, 1960 Peggy Karas, children: Karen and Martin.

Education: Prim. schs. Bureau, grad. Princeton (Ill.) H.S.; BS CerE (1941), MS (1952), PhD (1958) Univ. Illinois.

Military and Government Related Services: 2nd Lt.-Capt. (1941-46) U. S. Army. Graduate Field Artillery School, Ft. Sill, Okla. and Parachute School, Ft. Benning, Ga.; Service in Pacific Theater W. W. II; mbr. (1960-64) Aerospace Mnf. Techniques Panel, Natl. Academy Sci.; mbr. Project Advisory Comm., Div. Highways, Dept. Public Wks. and Bldgs., State of Illinois.

**Professional Career:** Metallurgist (1941) U. S. Steel Corp.; Refract. Field Engr. (1946-48) Universal Atlas Cement Co.; Res. Assoc. (1948-52), Instr. (1952-58), Asst. Prof. (1958-60), Assoc. Prof. (1960-68), Prof. (1968-date) Dept. Ceram. Engr., Univ. of Illinois. Active researcher and consultant. Author and co-author of numerous reports and papers. Registered professional engineer.

**Professional Societies:** Mbr. Am. Ceram. Soc.; mbr. Educ. Comm., St. Louis Sec., Am. Ceram. Soc.; mbr. Refractory Matls. Comm., Am. Foundrymens' Soc.; mbr. Comm. C-8, Am. Soc. Testing Matls.; mbr. Natl. Inst. Ceram. Engrs.

Honors and Awards: Fellow (1963) Am. Ceram. Soc.; Tau Beta Pi (Ill. Chapter Advisor); Phi Kappa Phi.



#### MARK OGAN 1874-1912 Ohio Chapter Beta Pi Kappa (1902) Cofounder

Ceramic Engineer

Keramos Activities: Cofounder (1902), first 2nd Asst. Master Potter (Sec.) (1902-3), Ohio Chapter, Beta Pi Kappa.

Education: Born Oct. 12, 1874, Nelsonville, Ohio, attended schools in Nelsonville and nearby towns; entered (1901), completed short course in clayworking (1904). "Although unused to school methods he rapidly became one of the best pupils . . . . He was intensely in earnest and left nothing undone . . . . Rarely is a student found who so fully realizes the importance of thoroughness."\*

Professional Career: Engr. & Electrician (several years prior 1901) the electric plant McArthur, Ohio; all depts. (1903-04) Atlantic Terra Cotta Co., Rocky Hills, N. J.; Foreman (1904) M. E. Gregory Terra Cotta Co., Corning, N. Y.; Chemist & Estimator (1904-c.08) St. Louis Terra Cotta Co., St. Louis, Mo.; Mgr. (c.1908-11) Terra Cotta Dept., Carnegie Brick & Pottery Co., Telsa, Calif.; Chemist & Supt. (1911-12) Northern Clay Products Co., Auburn, Washington.

Professional Societies: Mbr. Am. Ceram. Soc.

Honors and Awards: "... (Ogan) was a singularly winning and lovable man. Although a citizen of Auburn for less than a year, (his) death (caused from improperly diagnosed appendicitis attack) was mourned by the whole community, so fully had he won the confidence and affection of all.... His life emphasizes the tremendous influence which persistent adherence to an ideal will exert. He selected the terra cotta industry\*\* as his goal, although beginning his education late and with a poor foundation, he made himself one of the most competent and efficient men in his line in the country."\*

<sup>\*</sup> Trans. Am. Ceram. Soc. Vol. 14, pp. 51-52 (1912)

<sup>\*\*</sup> Author's comment: During the first two decades of the 20th Century, the terra cotta industry was considered to be, technologically, the pre-eminent ceramic industry.



# EDWARD ORTON, JR. 1863-1932

Ohio Chapter (Honorary) 1902 North Carolina Chapter (Honorary) 1927 Beta Pi Kappa

Educator, Engineer, Geologist, Patriot, Founding Father Ceramic Engineering and the American Ceramic Society

**Keramos Activities:** Only hon. mbr. orig. Chapt. Beta Pi Kappa, thus first hon. mbr. Keramos. His acceptance endorsed the new (and first) prof. engr. frat. Gen. Orton again elected hon. mbr. by N. C. Chapt. (1927) reaffirming approval. Tragically, he died same day (Feb. 10, 1932) that the merger of Beta Pi Kappa and Keramos was consumated.

**Vital Statistics:** Born Oct. 8, 1863 Chester, N.Y. (f. Dr. Edward Orton, first Pres. Ohio State Univ., m. Mary Jennings Orton); mar. Oct. 3, 1888 Mary Princess Anderson of Columbus, Ohio. Mrs. Orton died in 1927. 2nd mar. 1928 Mina Althea Orton of Pulaski, N. Y. Gen. Orton died Feb. 10, 1932, Columbus, Ohio. The second Mrs. Orton died Dec. 13, 1969. She was made (Apr. 28, 1969) hon. mbr. Keramos.

**Education:** Educated in the Columbus schools. EM (1884) Ohio State Univ. Hon. degrees see Honors and Awards below.

Military Service: With U. S. entry into WW I (1917) Prof. Orton (age 53) volunteered asg. Plattsburg (N.Y.) Tng. Camp; Maj-Col. (1917-18) QMC, USA. Responsible for dev. famous Liberty motor and truck. Wrote Natl. Defense Act passed by Congress w/o change. B. Gen. (c. 1924) USAR.

**Professional Career:** Chem. & Supt. of Blast Furnaces (1884-88) incl. first U. S. manf. ferro-silicon Bessie Furnace, New Straitsville, Ohio; Mgr. (1888-93) several clayworking plants; began (1893) agitation for and gained passage Ohio legislation directing Ohio State Univ. Trustee estab. (1894) first dept. tech. study ceramics. First Dir. (1894-1917) Ceram. Engr. Dept., Dean (1902-06 and 1910-16) College Engr. Ohio State Univ.; Ohio State Geologist (1899-1906) re-establ. econ. geol. in Ohio; headed survey Estes Park, Colo. area; establ. Standard Pyrometric Cone Co. by terms of his will became Edward Orton, Jr. Ceramic Foundation, the earnings of which must be used for ceramic research.

Estbl. Edward Orton Memorial Library of Geology in father's memory. Leader of civic affairs, incl. State Historical Soc., Columbus Gallery of Fine Arts, Community Fund, Columbus Chamber Commerce, etc.

**Professional Societies:** Cofounder, structured, authored constitution, first Sec. (1898-1917), Pres. (1930-31), Founder & Chm. Fellows, Am. Ceram. Soc; mbr. Am. Soc. Promotion Engr. Educ.; mbr. Am. Soc. Testing Matls.; mbr. Natl. Brick Mfg. Assoc.; mbr. Soc. Auto. Engrs.; Hon. Mbr. Brit. Ceram. Soc. Author several books and numerous articles and reports.

Honors and Awards: Hon. D.Sc (1922) Rutgers Univ.; LLD (1931) Alfred Univ.; prof. CerE (1931) Ohio State Univ.; Fellow Am. Assoc. Adv. Sci., Fellow Geol. Soc.; peak in Colo. Rocky Mts. named in his honor; Am. Ceram. Soc. publ. memorial (Vol. II, No. 3, pp. 43-68, 1932). Bio in Who's Who in America; Awarded Distinguished Service Medal for Conspicuous (military) Service; accorded full military funeral. Am. Ceram. Soc. honored Gen. Orton's memory by creating Edward Orton, Jr. Memorial Lectures.



#### W. RICHARD OTT Virginia Chapter (Active) 1964

Engineer, Educator, Internationalist

Keramos Activities: V. Pres. (1964-65) Virginia Chapt.; Natl. Treas. (1966-68), nom. Natl. Record. Sec.

Vital Statistics: Born Jan. 20, 1943 Brooklyn, N. Y.; mar. Jeanette Winter Colby June 27, 1964, children: Regina Winter, Christina Winter, Walter R. Jr.

**Education:** Grad. prim. sch. and Garden City (N.Y.) H.S.; BS CerE (1965) Virginia Polytechnic Inst.; MS CerE (1967) Univ. Illinois; PhD (1969) Rutgers Univ.

Professional Career: Process Engr. (1965-66) Corhart Refractories Co., Buckhannon, W. Va.; Teach. Asst. (1966-67) Univ. Illinois; Res. Asst. (1967-69) Rutgers Univ.; Staff Res. Engr. (1969-70) Champion Spark Plug Co., Detroit, Mich.; Asst. Prof. (1970-74), Assoc. Prof. & Dir. Grad. Program (1975-date) Dept. Ceram.; Asst. Dean (1974-date), Atg. Assoc. Dean (1976-date) College Engr., Rutgers Univ.; Adjunct Assoc. Prof. (1976-date) Dept. Dental Matls., N.Y.U. College of Dentistry, N.Y.C.

Faculty Res. Assoc. (sum. 1971) Savannah River Lab. A.E.C.; Tech guidance (w Rutger colleages) to developing nations and peoples in use of indigenous matls. Author or co-author of more than 20 publs. Registered Prof. Engr. Penn. and N. J.

Professional Societies: Mbr. Basic Sci. Div., Chm. (1970-75) Comm. on Student Brs., Am. Ceram. Soc.; mbr. (1970-date), Chm. (1973-74) mbr. comm., Sec. (1974-75), V. Pres. (1975-76), Pres. (1976-77) Ceram. Educ. Council; Chm. (1972-date) Prof. Comm. on Ceram. Engr., mbr. Exec. Comm., Matls. Div., Am. Soc. Engr. Educ; mbr. Exec. Bd. (1975) Ceram. Assoc., N. J.; mbr.: Soc. Glass Tech., Natl. Inst. Ceram. Engrs., Internatl. Confed. on Thermal Anal., N. Am. Thermal Anal. Soc.

Honors and Awards: Ralph Teetor Award (1973) Soc. Auto. Engrs.; PACE Award (1974) Natl. Inst. Ceram. Engrs.; Sigma Xi; Sigma Gamma Epsilon. Listed: Am. Men & Women of Sci., Outstanding Educators of Am.



#### CULLEN E. PARMELEE Illinois Chapter (Active) 1924

Engineer, Salesman, Lecturer, Industrialist

**Keramos Activities:** Pres. (1924-25) Illinois Chapt. Leader in estab. Ohio Chapt. (1925) resulting in Keramos becoming "National."

Vital Statistics: Born June 29, 1903 Highland Park, N. J.; mar. Mary Edgar Hebbard of Montclair, N. J., children: Jean Parmelee, Mary Parmelee Reid, Louise Parmelee Sylvester.

**Education:** Prim. sch. Highland Park, N. J. grad. (1920) Urbana (Ill.) H.S.; BS CerE (1925) Univ. Illinois.

**Professional Career:** Res. Engr. (1925-27) Pittsburgh Plate Glass Co.; Clay Prod. Fellow (1927-28) Mellon Inst. Indust. Res., Pittsburgh, Pa.; Engr. and Sales (1928-36) Carrier Engineering Corp., Newark, N. J., Philadelphia, Pa., Cleveland, Ohio, St. Louis, Mo.; Engr. and Sales (1936-38) Airtemp New York Corp.; Air Cond. Design (1938-39) Ford, Bacon and Davis, consulting engrs.; Engr. Sales (1939-53) A. F. Hinrichen, New York; Pres. (1953-73) Parmelee and Hull, Inc., sales agents, heat. air cond. and ventilating equip.; retired 1973. Lecturer in air cond. (1938-47) Grad. Sch., Columbia Univ.

**Professional Societies:** Mbr. (1925-32) Am. Ceram. Soc., Am. Soc. Heat., Refrig. and Vent. Engrs. (Pres. 1962 North Jersey Chapt., mbr. numerous natl. comms.); mbr. Montclair (N.J.) Soc. Engrs. (Pres. 1963).



# CULLEN W. PARMELEE 1874-1947 Illinois Chapter (Honorary) 1917

Leading Educator, Investigator, Organizer of Educational and Research Programs

Keramos Activities: Active participant and advisor (1917-42) Illinois Chapt. Rep. Illinois Chapt at merger (Keramos and Beta Pi Kappa) Convocation, Feb. 8-10, 1932. Mbr. comm. resolving disagreements concerning name, badge and eligibility sections.

Vital Statistics: Born June 27, 1874 (f. Lauren Sylvester Everett Parmelle, m. Mary Alida Payne, both of Conn.) Brooklyn, N.Y.; mar. Julia Russel Davis of Asbury Park, N. J. Oct. 3, 1901, children: Cullen Everett (see Bio.), Eleanor Paulding and Theodore Davis. Died Aug. 20, 1947, Pilgrim, Mich.

**Education:** Prim. schs. of Manaquan, Asbury Park and Ocean Park, N. J., grad. and valedictorian Asbury Park (N.J.) H.S.; BS Chem. W. Hon. (1896), MS (1926) Rutgers Univ. Sabbatical year (1930-31) studying tech. and sci. dev. in Europe.

Governmental Service: Dist. Chief (1918) Indust. Furnace Sec., U. S. Fuel Admin. Professional Career: Chem. (1896-1901) New York and Boston Dyewood Co., New York City; Instr. Chem. (1901-02), Org. (1902) Dept. Clay Working & Ceramics, Instr. (1902-05), Assoc. Prof. Appl. Chem. (1905-08). Prof. Ceram. (1908-16) Rutgers Univ. Prof. (1916-42), Actg. Head (1922-23) Head (1923-42) Ceram. Engr. Dept., Prof. Emerit. (1942-47) Univ. Ill. Consultant, Illinois Geol. Survey. Author three books, numerous bulletins and more than 100 tech. publ. covering wide area of sci. interests.

Professional Societies: Org. (1914) N. J. Clay Workers' Assoc., Sec. (1914-16); Assoc. Mbr. (1903) Mbr. (1906), Trustee (1908-11), V. Pres. (1911-12), Pres. (1914-15), chm. numerous comms., active Chicago Sec., Pres. Ceram. Educ. Council, Am. Ceram. Soc.; mbr.: British Ceram. Soc., German Ceram. Soc., mbr. Founders Gp. (1938), Natl. Inst. Ceram. Engrs., Am. Refractories Inst., Ill. Clay Mnfrs. Assoc. (Sec-Treas number yrs.)

Honors and Awards: Charter Mbr. Fellows (Assoc. Dean 1933-34, Dean 1934-35) Am. Ceram. Soc., awarded first Life Mbr. (1942) to noncharter mbr., Am. Ceram. Soc.; Hon. Mbr. (1937) Deutsche Keramische Ges.

Phi Beta Kappa (as Sr. at Rutgers) Sigma Xi (Pres. Ill. Chapt. 1942), Gamma Pi Upsilon, Phi Kappa Phi. Extended Bio. Bull. Am. Ceram. Soc. 21 7 117-20 (1942).



### THEODORE J. PLANJE Missouri Chapter (Charter) 1947

Professional Leader, Educational Administrator

Keramos Activities: Faculty Advisor (1953-58) Missouri Chapt.; Natl. Recording Sec. (1964-66), Natl. V. Pres. (1966-68), mbr. Bd. Dir. (1964-68).

**Vital Statistics:** Born Mar. 17, 1919 St. Louis, Mo.; mar. Miriam L. Kelting, sons: Theodore J. Jr. and Curtis E.

**Education:** Attended prim. sch. St. Louis, Mo.; grad. Newburg (Mo.) H.S.; BS CerE (1940), PhD (1950) Univ. Missouri-Rolla; Grad. Studies (1940-41) Massachusetts Inst. Tech.

Military and Governmental Service: 2nd Lt.-Capt. (1941-46) Electron & Radar O., AACS, USAF. Tech. Advisor (1970-date) Missouri Dept. Mines.

Professional Career: Instr. (1946-50), Asst. Prof. (1950-52), Assoc. Prof. (1952-54), Prof. (1954-date), Chm. (1955-64) Ceram. Engr. Dept.; Dean (1964-date) School Mines & Metall., Univ. Missouri-Rolla.

Consultant (1946-date) refractory, glass, indust. porc., struc. clay prod. and metal industries; author or co-author tech. publ., holder one pioneer patent. Registered prof. engr. Missouri.

Professional Organizations and Societies: Mbr. (1946), V. Pres. (1968-69), Treas. & Mbr. Exec. & Fin. Comm. (1970-71), Pres. Elect (1971-72) & Chm. Task Gp. for Natl. Comm. Matls. Policy; Pres. (1972-73) Am. Ceram. Soc.; Sec. (1966-67), V. Chm. (1967), Chm. Refract. Div., Am. Ceram. Soc.; Pres. (1959-60) Ceram. Educ. Council; mbr. Natl. Inst. Ceram. Engrs.; Chm. (1963-64) Minerals Div., Am. Soc. Engr. Educ.; Mbr. Am. Inst. Min. & Metall. Engrs.

Del. (1970-date) Missouri Comm. on Publ. Higher Educ.; Chm. Mineral Resources Comm., & mbr. Energy & Environmental Comm., Natl. Assoc. State Univs. & Land-Grant Colleges; Mbr. Natl. (and Mo.) Soc. for Prof. Engrs.; Natl. Assoc. Medical Vocabulary; Mbr. Natl. Defense Exec. Res.-Emergency Minerals Admin. Registered Prof. Engr. Missouri.

Honors and Awards: Rundle Fellow (1940-41) Massachusetts Inst. Tech.; Fellow (1961) Am. Ceram. Soc.; recd. (1973) St. Louis Refractories Award; Regional Lecturer (1961-62, 1973-74) Sigma Xi; Hon. mbr. Pi Epsilon Tau, Phi Kappa Phi, Alpha Sigma Nu, Sigma Xi.

Listed in Who's Who in Am.; Who's Who in Am. Educ.; Am. Men & Women of Sci and others.



## ROSS C. PURDY 1875-1949 Illinois Chapter (Honorary) 1930

Ceramic Technology Leader, Foster Father of the American Ceramic Society, Editor, Author and Engineer

Keramos Activities: Played significant role in Keramos, particularly the annual mtgs. and biennial convocations. (Author's note: As long as R.C.P. was Gen. Sec., Am. Ceram. Soc. he was cast in the role of antagonist by A.F. G.-W. In truth neither could have performed effectively without the other. W.W.K.)

Vital Statistics: Born Mar. 3, 1875 Jasper, N.Y. (son of Andrew and Mary (Coffin) Purdy); mar. (1901) Myra J. Watts, three daughters: Reliance Spencer (Leiter), Constance Hopkins (Cone) and Lois Brewster (Turner). Died Jan. 6, 1949, Columbus, Ohio.

**Education:** Attended publ. schs. Lawrenceville, Pa. and in Victor, North Tonawanda and Buffalo, N. Y., grad. Buffalo (N.Y.) H.S.; student (1894-96) Syracuse Univ.; Certif. Grad. (1898), cont. study (1898-99), Cer. Engr. (1908) Ohio State Univ. Hon. degrees see Honors and Awards below.

Professional Career: Chem. & Asst. Supt. (1899-1901) Mosaic Tile Co., Zanesville, Ohio; Chem. & Foreman (1901) Roseville Pottery Co., Zanesville, Ohio; Glaze Chem. (1902) Buckeye Pottery Co., Macomb, Ill.; Instr. (1902-05), Asst. Prof. (1907-11), Prof. (1911-12) Cer. Engr. Dept. Ohio State Univ.; Asst. Prof. Ceram. Engr. (1905-07) Univ. Illinois and Ceramist Illinois Geol. Survey; Dir. Lab. Res. (1912-19) Norton Co., Worcester, Mass.; Consulting Engr. (1919-22); Organ. Sec. (1921-22), Gen. Sec. & Edt. (1922-46) Am. Ceram. Soc. Author or co-author of more than 50 publ. Holder of several patents. Consultant to the ceramic industry.

Professional Societies: If Edward Orton, Jr. was father of the American Ceramic Society then Ross Coffin Purdy must be considered as being its benign but stern foster father. From its founding (1898) "For 19 years it functioned as an academic organization, publishing annual Transactions and holding an Annual Meeting....and a plant excursion..... It was Ross Purdy's idea that industrialists as well as educators and research men should be cared for by the Society. Already in 1918, he was responsible for the creation of Industrial Divisions..... Local sections were created... and student branches were developed ...."\* Purdy became organizational Sec. (1921) and was elected Gen. Sec. (1922) the position he continued to hold until retirement in 1946. For these 24 years "Ross Purdy was The American Ceramic Society....-so recognized in this country and abroad."\*\* Purdy's campaign to gain international recognition of the Society was inaugerated by his conducting in 1928 a tour of Europe by 70 members. Receptions, technical sessions and banquets in France, Czechoslovakia, Switzerland, Germany, Holland and England were staged. On the home front it was he who interested the development of ceramic research in the U.S. Bur. Mines and the Natl. Bur. Standards.

Honors and Awards: Charter fellow, Hon. Life Mbr. (1942) Am. Ceram. Soc.; mbr. Founders Gp. Natl. Inst. Ceram. Engrs.; Hon. Mbr. Canadian Ceram. Soc.; Fellow Am. Assoc. Adv. Sci.; Hon. mbr. Czechoslovak Ceram. Soc.; Hon. Fellow Soc. Glass Tech.;

Hon. Mbr. Indian Ceram. Soc.; Hon. Life Mbr. Ohio Ceram. Industries and U.S. Potters' Assoc.

Hon. D. Sci. (1936) Alfred Univ.; Dedicatee Illini Ceramist (1938); Establ. Ross Coffin Purdy Award for "the most valuable contribution to the technical literature," Am. Ceram. Soc.; mbr. Sigma Xi. Listed in Who's Who in Am., Am. Men of Sci., Internatl. Blue Book, Natl, Cyclop Am. Bio., Who's Who Among Assoc. Exec.

Honored Guest at many testimonial dinners and recipient of numerous costly and precious momentos. Honors too numerous to record.

<sup>\*</sup> Alexander Silverman, Bull. Am. Ceram. Soc. 21 6 88 (1943).

<sup>\*\*</sup> J. I. Mueller "Our Ceramic Heritage" Bull. Am. Ceram. Soc. 55 4 465 (1976).



### GUY E. RINDONE Pennsylvania Chapter (Active) 1948

Educator, Researcher, International Leader Science of Glass

Keramos Activities: Faculty Advisor (1960-73) Penn. Chapt.; Natl. Record. Sec. (1968-70), Natl. V. Pres. (1970-72), Natl. Pres. (1972-74), mbr. Bd. Dir. (1968-76).

Vital Statistics: Born Aug. 11, 1922 Buffalo, N.Y.; mar. July 6, 1943 Rachel Peterson, children: Wayne and Gary.

Education: Attended schs. Buffalo, N.Y., grad. Buffalo H.S.; BS Glass Tech. (1943) Alfred Univ.; MS Cer (1946), PhD Cer. (1948) Pennsylvania State Univ.

Governmental Service: Mbr. USAF ofc. Sci. Res. Chem. Eval. Panel; mbr. Comm. on Production of Glass in Space (1970-date) Univ. Space Res. Assoc. Consultant to NASA.

Professional Career: Chemist (1942) Linde Air Products Res. Lab.; Glass Tech. (1943-45) Sylvania Electric Products, Inc.; Grad. Asst. Glass Sci. (1945-47), Res. Asst. Ceram. (1947-49), Asst. Prof. Ceram. (1949-61), Assoc. Prof. Ceram. Sci. (1961-68), Prof. Ceram. Sci. (1969-date), chm. Ceram. Sci. Sec., Matls. Sci. Dept. (1969-date) Pennsylvania State Univ.

Consultant to industry. Author or co-author 58 publ. articles, Editor and co-editor three books; holder of 11 U.S. and four foreign patents.

Professional Societies: Mbr. (1946), Delegate (1971-date) to Internatl. Comm. on Glass; Trustee (1971-74), V. Pres. (1977-78) Am. Ceram. Soc.; V. chm. (1959-60), chm. (1960-61), co-chm. (1961) Symposium Nucl. & Crys., mbr. (1960-date) Steering Comm. Glass Div., Am. Ceram. Soc., chm. (1962) Tech. Program, VI Internatl. Congress on Glass; mbr. Soc. Glass Tech., England; Counselor, Sec-Treas., Dir. Penn. Ceram. Assoc.; mbr. Am. Assoc. Adv. Sci.

Honors and Awards: Fellow (1961) Am. Ceram. Soc.; Frank Forrest Award for Outstanding Publs. (1963); Fellow (1975) Soc. Glass Tech.; Sigma Xi (Sec. Penn State Chapt. 1978); Phi Lambda Upsilon, Sigma Tau, Tau Beta Pi.



#### GILBERT C. ROBINSON North Carolina Chapter (Active) 1938

Educator, Engineer, Researcher, Patron Clay Products Industry

Keramos Activities: Sec. (1939-40) N. C. Chapt.; sponsor establ. (1958) S. C. Chapt. at Clemson Univ.; Faculty Advisor (1958-date) S. C. Chapt.; Natl. V. Pres. (1962-64), Natl. Pres. (1964-66), mbr. Bd. Dir. (1962-68).

Vital Statistics: Born July 20, 1919 Lykens, Pa.; mar. Apr. 8, 1947 Barbara Maxwell, children: Gilbert Chase Jr., Charles Chandler, Timothy Maxwell, Barbara Ann.

Education: Attended schs. North Carolina, grad. Virginia Episcopal School, Lynburg, Va.; BS CerE (1940) N. C. State College; Hon. Sc.D. (1970) Alfred Univ.

Military Service: W. W. II (electronics specl. 1944-46) U.S. Navy.

**Professional Career:** Successively Field Geol. (N.C. & Ga.), Chemist (Norris, Tenn. Lab.), Supv. Anal. Sec. (at Ga. Inst. Tech.), Chem. Engr. (Wilson Dam, Ala.) 1940-44 Tenn. Valley Auth.; Organ. (1946) Ceram. Engr. Dept., Prof. & Head (1946-date) Cer. Engr. Dept., Clemson Univ. Consultant to numerous ceram. firms. Conducted numerous symposia and tech. mtgs. Author or co-author numerous tech. papers. Popular and imaginative tech. lecturer.

Professional Societies: Mbr. (1939), Trustee (1962-65, 1966-69, 1972-75) Am. Ceram. Soc.; Chm. (1954), Program Dir. (1958-61), Counselor (1966-date), S. E. Sec. Am. Ceram. Soc.; Sec. (1954), V. Chm. (1955), Chm. (1956) Struct. Clay Prod. Div., Am. Ceram. Soc.; Sec. (1955), V. Pres. (1956), Pres. (1957) Ceram. Educ. Council; mbr. Natl. Inst. Ceram. Engrs.; mbr. comms. C-12 and C-15 Am. Soc. Testing Mtls.; Dir. (1956) S. C. Soc. Prof. Engrs.; Exec. Dir. Chad Heath Foundation (conducts res. for brick manf. of S.E. and S.W. U.S.A.); active in community affairs. Registered Prof. Engr. South Carolina.

Honors and Awards: Fellow (1956) Am. Ceram. Soc.; recd. Hewitt Wilson, S.E. Sec. Am. Ceram. Soc.; Pence Memorial Speaker (1964) S.W. Sec. & Struct. Clay Products Div. Hon. Sc.D (1970) Alfred Univ. Invited lecturer: Am. Soc. Metals Oak Ridge (Tenn.) Chapt., Allied Chemical Corp. Res. Lab., Ethyl Corp. Res. Lab. Pac. Coast Regional Mtg. (1968) Am. Ceram. Soc. Mbr. Tau Beta Pi, Sigma Xi.



### EDWIN RUH New Jersey Chapter (Active) 1948

Administrator, Author, Educator

Keramos Activities: Herald (1948) N. J. Chapt.; Natl. Record. Sec. (1966-68), Natl. V. Pres. (1968-70), Natl. Pres. (1970-72), mbr. Bd. Dir. (1966-74).

Vital Statistics: Born Apr. 22, 1924 Westfield, N. J.; mar. June 14, 1952 Elizabeth Jeanne Mundy, children: Edwin Jr. and Beth Jeanne.

Education: Attended Breen Brook Sch., grad. Washington H.S. Bound Brook, N. J.; BS Cer (w. hon.) (1949), MS Cer. (1953) PhD Cer. (1954) Rutgers.

Military Service: Staff Sgt. (1943-46) 87th Inf. Div., U. S. Army, European Theat. W.W. II.

Professional Career: Res. Engr. (1954-57), Asst. Dir. Res. (1957-70), Dir. Res. (1970-73), Dir. Adv. Tech. (1973-74) Harbison-Walker Refractories Co., Pittsburgh, Pa.; V. Pres. Res. (1974-76) Vesuvius Crucible Co., Pittsburgh, Pa.; Assoc. Head (1976-date) Dept. Metall. & Matls. Sci. Carnegie-Mellon Univ. Author more than 25 tech. publ., and patents. Edt. Metall. Trans.

**Professional Societies:** Mbr. (1949), comm. on Programs & Mtgs. (chm. 1967-68), comm. Ross Coffin Purdy Award, Co-chm. local comm. for 65th Annual Mtg., Trustee (1970-73) Am. Ceram. Soc.; Sec. (1959-60), V. Chm. (1960-61), Chm. (1961-62) Refractories Div., Chm. (1960) Pittsburgh Sec. Amn. Ceram. Soc.

Mbr. Natl. Inst. Ceram. Engrs., Am. Inst. Mining Metall. Pet. Engrs. (chm. 1970-71 Pittsburgh Sec.), Brit. Ceram. Soc., Germ. Ceram. Soc., Am. Assoc. Adv. Sci., Am. Chem. Soc., Engrs. Soc. W. Penn.; consulting activity in U. S. and Latin America.

Honors and Awards: Fellow (1960) Am. Ceram. Soc.; recd. (1963) PACE Award, Natl. Inst. Ceram. Engrs.; Greaves-Walker Roll of Honor (1976) Keramos; Sigma Xi.

Listed: Am. Men & Women of Sci., Engrs. of Distinction by EJC.



# RALSTON RUSSELL, JR. Ohio Chapter (Active) 1931

Educator, Researcher, Author, Ceramic Leader

Keramos Activities: Herald (1931-32), Faculty Advisor (1957-65, 1972-date) Ohio Chapt.; Natl. Pres. (1968-70), mbr. Bd. Dir. (1968-72).

Vital Statistics: Born Nov. 4, 1910 Pomeroy, Ohio; mar. Nov. 15, 1962 Jacqulyn Sue Pace.

**Education:** Attended publ. schs. Pomeroy, Ohio; BCerE (1932), MS (1933), PhD (1939), prof. Cer.E (1948) Ohio State Univ.

Governmental Service: Sci. Consultant (1945) under JCS, European Theat., U.S. Gov. elect. and tech. ceram. indust. Germany. Has served on various gov. advisory councils.

Professional Career: R&D Engr. (1933-37) A. C. Spark Plug Div., General Motors Corp., Flint, Mich.; Res. & Ceram. Engr. (1937) General Ceramic & Steatite Co., Keasby, N. J.; Res. Engr. (1937-40) Engr. Expr. Station, Ohio State Univ.; Dir. Ceram. Res. & Sec. Mgr. (1940-46) Westinghouse Electric Corp., East Pittsburgh, Pa.; prof. and mbr. Grad. Faculty (1946-date) Ceram. Engr. Dept., Ohio State Univ.

Organ. and Dir. (1964-67) Refractories Res. Center; Registered Prof. Engr. Ohio, Penn. and D.C.; author or co-author of 110 tech. publ.; holder several U.S. and foreign patents. Consultant to the ceram. industries.

**Professional Societies:** Mbr. (1930), Chm. (1941-42) Whitewares Div., Chm. (1952) Central Ohio Sec., mbr. Bd. Trustees (1952-55, 1974-77), Pres. Elect. (1974-75), Pres. (1975-76), mbr. Exec. Comm. (1974-date) Am. Ceram. Soc.

Pres. (1958-59) Ceram. Educ. Council; Sec.-Treas. (1947-49) V. Pres. (1949-50), Pres. (1950-51) Natl. Inst. Ceram. Engrs.; mbr. Natl. Soc. Prof. Engrs., Am. Soc. Testing Matls., Am. Assoc. Adv. Sci., Am. Soc. Engr. Educ. (founder, 1966, Matls. Div.), Am. Chem. Soc., British Ceram. Soc., Am. Soc. Metals, Canadian Ceram. Soc. Mbr. visiting comm. (1968-date) Engrs. Council Prof. Dev. Active in campus and community affairs.

Honors and Awards: Recipient (1951) U.S. Army Award of Merit; Fellow (1941), Edward Cramer Award (1974) Am. Ceram. Soc.; Hon. Life. Mbr. (1960) Ohio Union Council; Alfred J. Wright Award (1961) Ohio State Univ.; John B. Conard Award (1965); Outstanding Paper Award (1965, 1967, 1969) Edward Orton, Jr. Ceramic Foundation; Fellow (1968) Inst. of Ceramics, Ltd.; Greaves-Walker Award (1970) Natl. Inst. Ceram. Engrs.; Greaves-Walker Roll of Honor (1975) Keramos; Knight St. Patrick Award (1976) N.Y. State College of Ceramics, Alfred Univ.; mbr. Tau Beta Pi, Phi Eta Sigma, Sigma Gamma Epsilon, Sigma Xi.



#### SAMUEL R. SCHOLES 1884-1974 New York Chapter (Active) 1933

Researcher, Author, Educator, Administrator, Friend

Keramos Activities: Faculty Advisor (1933-50) New York Chapt.; Grand Treas. (1934-62), mbr. Exec. Council (1934-62). Author "A Song of Keramos" (1942).

Vital Statistics: Born Jan. 22, 1884 Marquette, Wisc.; mar. (1914) Lois Elizabeth Boren of Pittsburgh, Pa., children: Samuel R. Jr., Addison B., James B. and Lois Ann; died Aug. 16, 1974 North Hornell, N.Y.

**Education:** Attended common and high school, Green Lake, Wisc.; BA Math-Chem (1905) Ripon (Wisc.) College; PhD Chem. (1911) Yale Univ.

Professional Career: Apprenticed carriage-blacksmith trade; Instr. Phys. & Math. (1905-08) Wausau (Wisc.) H.S.; Instr. Chem. Lab (1908-10) Sheffield Sci. Sch., Yale Univ., Chem. (1913-20) H. C. Frye Glass Co. and part-time Asst. Dir. (1914-17) Mellon Inst. (formerly Indust. Res. Lab.); lecturer in Chem. (1917-18) Geneva College, Beaver Falls, Pa.; Supt. (1920-21) Utility Glass Works, Lonaconing, Md.; Chem. (1921-29, 1931-32) Federal Glass Co., Columbus, Ohio; also lectured (1926-28) Ceram. Engr. Dept., Ohio State Univ.; Tech. Dir. & Chem. (1929-31) Fostoria Glass Co., Moundsville, W. Va. Prof. & Chm. (1932-52) and establ. Dept. Glass Tech., also Dean (1946-48), Assoc. Dean (1948-52). Emeritus Prof. Glass Tech. (1952-74) N.Y. State College Ceram. Alfred, N.Y. Author more than 75 publs., author or edit. several books. Holder several patents.

Professional Societies: Mbr. (1917), Chm. (1920) Sec. (1935-40) Glass Div. Am. Ceram. Soc.; Mbr. (1935-52) Sec. Comm. C-14 since 1944, Am. Soc. Testing Matls.; Mbr. (1911-21), Chm. (1918-19), Councillor (1919-20), establ. The Crucible Pittsburgh Sec. Am. Chem. Soc.; mbr. (1917-21) Am. Inst. Chem. Engrs.; mbr. Soc. Engr. Educ.

Honors and Awards: Fellow in Math (1904-05) Ripon College; Loomis Fellow in Chem. (1910-11) Yale Univ.; H. C. Frye Glass Co. Fellow (1911-13) Univ. Pittsburgh; Charter Fellow (1931), Dean of Fellows (1939), Pittsburgh Sec.'s Albert Victor Bleininger Medal (1952), 25th Hon. Life Mbr. (1958) Am. Ceram. Soc.

Fellow (1934) Am. Assoc. Adv. Sci., Fellow (1940) Soc. Glass Tech. Establ. (1962) Samuel R. Scholes Lectureship, Alfred Chapt. Sigma Xi; Hon. D.Sci. (1952) Alfred Univ.; first Greaves-Walker Roll of Honor (1957) Keramos, named in his honor is the new (1973) Ceram. College Library and the Samuel R. Scholes Scholarship, Alfred Univ.

Mbr. Sigma Xi (Alfred Club 1st Pres.), listed in Who's Who in Am.; Who's Who in Am. Educ., Am. Men of Sci.



## ROBERT F. SHERWOOD New York Chapter (Honorary) 1931 Beta Pi Kappa

Engineer, Industrialist, Administrator

Keramos Activities: Mbr. Natl. Comm. Educ. (1933-35), Grand Pres. (1940-42), mbr. Exec. Council (1940-48). Partic. instal. Virginia (1940) and Iowa (1941) Chapts. Active negotiator in establ. New Jersey Chapt.

**Vital Statistics:** Born Apr. 4,  $189\overline{7}$  Hornell, N.Y., wife: Aileen L. Sherwood who died Dec. 1958.

**Education:** Prim. sch., grad. (1915) Hornell (N.Y.) H.S.; attended (1915-18) returned (1920) BS Cer.E, Prof. Cer.E (1939) Alfred Univ.

**Government Service:** Ceram. Advisor (1956-57) to government of Pakistan, U.S. Operations Missions.

Professional Career: Ceram. Asst. (1915-21) Natl. Bur. Standards, Washington, D.C.; Ceram. Engr. (1921-22) Muncie Clay Products Co., Muncie, Ind.; Ceram. Engr. (1922-30) Pass & Seymore, Inc., Syracuse, N.Y.; Ceram. Engr. (1931-34) Smith & Stone, Ltd., Georgetown, Ont.; Ceram. Engr. (1934-35) Sherwood Porcelain Co., Ltd., Hamilton, Ont.; Ceram. Engr., Sales Exec. & Exec. V. Pres. (1935-45) Pres. (1945-55) United Feldspar & Minerals Corp.; Assoc. (1955-56) Ford, Bacon & Davis, Engrs. N.Y.C., see Gov. Serv. above.

Professional Societies: Mbr. (1919), Chm. (1936-38) Rules Comm. Am. Ceram. Soc.; Sec. (1926-29), Chm. (1929-30) Chm. numerous comms. Whitewares Div., Am. Ceram. Soc.; mbr. Natl. Inst. Ceram. Engrs., Ceram. Assoc. N.J., Canadian Ceram. Soc.

Honors and Awards: Fellow Am. Ceram. Soc.



#### THOMAS S. SHEVLIN Ohio Chapter (Active) 1941

Researcher, Educator, Professional Engineer, Author

Keramos Activities: Treas. (1941-42) Ohio Chapt.; Natl. Treas. (1974-76), Natl. Record. Sec. (1976-78), Natl. V. Pres. (1978-80), mbr. Bd. Dir. (1974-date).

Vital Statistics: Born July 14, 1920 Marietta, Ohio; mar. Kathryn A. Johnson, children: Mary, Ann, John, Thomas.

Education: Attended prim. schs. in Ohio, grad. (1937) Columbus (Ohio) North H.S.; B CerE (1942), MS (1947) PhD (1954) Ohio State Univ.

Military Service: Lt. (1942-46) Corps. Engrs. and Air Corp., U.S. Army.

Professional Career: Lab. Asst. (1940-42), Res. Assoc. (1946-55) Engr. Expr. Sta., Asst. Prof. (1955-61) Ceram. Engr. Dept. Ohio State Univ.; Assoc. Prof. (1961-64) Univ. Washington (Prin. Investigator, 1963-64, NASA Proj.). Sr. Res. Engr. (1964-65), Supv. Ceram. Res. (1965-69) Central Res. Labs., Supv. (1969-72), Sr. Res. Specl. (1972-74) Integral Heating Proj., New Bus. Ventures Div.; Res. Specl. (1974-date) Central Res. Labs., 3M Co. Author or co-author of numerous tech. papers and repts.

**Professional Societies:** Mbr. (1946); Sec. (1961-62), V. Chm. (1962-63), Chm. (1963-64) Refractories Div.; Sec. (1950), V. Chm. (1951), Chm. (1952), Counselor (1953-61) Central Ohio Sec., Am. Ceram. Soc.

Sec.-Treas. (1975-76), V. Pres. (1976-66), Pres. Elect. (1977-78) Natl. Inst. Ceram. Engrs. Mbr. Ceram. Educ. Council. Registered Prof. Engr. Active in civic affairs.

Honors and Awards: Fellow (1956) Am. Ceram. Soc. Mbr. Tau Beta Pi, Sigma Xi.



# WILLIAM J. SMOTHERS Illinois (Non-Resident Active Mo.) 1940

Research Engineer, Research Director, Author, Editor

Keramos Activities: Grand Sec. (1958-59) Grand V. Pres. (1960-62), Natl. Pres. (1962-64) compl. reorg. Mbr. Exec. Council-Bd. Dir. (1958-66).

Vital Statistics: Born Mar. 17, 1919 Poplar Bluff, Mo.; mar. Marjorie Hunter Sept. 5, 1943; children: John, Bonnie.

**Education:** Attended prim. schools and grad. Poplar Bluff (Mo.) H.S.; BS CerE (1940), MS (1942), PhD (1944) Univ. Missouri-Rolla.

**Professional Career:** Res. Engr. (1944-50) Bowes Seal Fast Corp.; Head (1950-54) Indus. Engr. Div., Inst. Sci. & Tech., Univ. Arkansas; Dir. Ceram. Res. (1954-63) Ohio Brass Co., Barberton, Ohio; Mgr. Refractory Sec. (1963-date) Homer Res. Labs., Bethlehem Steel Corp., Bethlehem, Pa.

Org. (1954) first Gordon Res. Conf. on Solid State Studies in Ceram. Author numerous tech. papers, patents and two books.

Professional Societies: Mbr. (1944), trustee (1960-63) for Basic Sci. Div., mbr. (1961-70) and Chm. (1963-70), V. Pres. (1964-65), Treas. (1969-70), Pres. Elect. (1970-71), Pres. (1971-72), Am. Ceram. Soc. Edt. (1972-date) the Am. Ceram. Soc. publs. (Bulletin, Journal and Abstracts). Mbr. Refractories Div.

Honors and Awards: Fellow (1958) Am. Ceram. Soc.; Fellow Am. Assoc. Adv. Sci.; Recd. (1975) Toledo Glass and Ceram Awards NW Ohio Sec., Am. Ceram. Soc.; Greaves-Walker Roll of Honor (1978) Keramos. Mbr. Tau Beta Pi, Phi Kappa Phi.



# WILLIAM L. STAFFORD North Carolina Chapter (Active) 1927 Beta Pi Kappa

Research, Development & Production Engineer, Executive, Consultant

Keramos Activities: Grand 4th Asst. Master Potter (Natl. Herald, 1928-29) Beta Pi Kappa; Grand V-Pres. (1940-42), Grand Sec. (1960-62) Keramos; Mbr. (1928-29, 1940-42, 1960-62) Exec. Council.

Vital Statistics: Born Sept. 29, 1905 Harrisburg, N.C.; mar. Dorthy M. Bresnahan Aug. 30, 1930; children: Blakeney and Janet L. (Shoemaker).

Education: Attended publ. schs. N.C., grad. (1924) Mooresville (N.C.) H.S.; BS CerE (1928) North Carolina State College Univ.

Professional Career: Thermal insulation and refractory matls. and prods. of Johns-Manville Corp. (1928-73): Product (incl. R&D) Engr. (1928-37) Lompoc, Calif.; org. and start-up (1937-38) insulating refractories plant, Chester, W. Va.; prod. and process dev. (1939-41) Ohio State Univ. and adapted to production, Zelienople, Pa.; R&D Engr. and Mgr. (1942-66) Mansville, N.J. (incl. consult. and promotion 1952 in Japan); spec. asgt. (1966-68) selection, tng., organiz. of supv. pers. and start-up insul. refrac. plant Casalput-serlengo, Italy; Mgr. High Temp. Prod. (1968-70-mand. ret.) Johns-Manville Europe (incl. France, Belgium, the Netherlands, Germany, Italy & Czechoslovakia); contd. as Mgr.-Consultant (1970-73). Consultant in high temp. matls. (1973-77).

**Professional Societies:** Mbr. Refract. Div., Am. Ceram. Soc., Mbr. Natl. Inst. Ceram. Engrs.

Honors and Awards: Fellow (1943) Am. Ceram. Soc.



# FREDERICK L. STEINHOFF Illinois Chapter (Active) 1916

Writer, Editor, Publisher, Promoter of Ceramics

Keramos Activities: Grand Pres. (1934-36), Mbr. Exec. Council (1934-38) Publisher (through Industrial Publications, Inc.) Roster of Keramos Fraternity 1953.

Vital Statistics: Born Sept. 3, 1894 Chicago, Ill. (son Ernest F. J. and Elizabeth (Heine) Steinhoff); mar. Ester Alma Siberman of Chicago.

Education: Prim. schs., grad. Lane Tech. H.S. Chicago, Ill.; Lane Jr. College (1913-15); BS CerE (1917) Univ. Illinois.

Military and Governmental Service: Asst. (wo appt.) Fuel Consv. and Aloc. (1917-18) Fuel Admin., U.S. War. Industries Bd.; Engr. Officer Tng. School (W.W.I, 1918), rel. w. Armistice signing.

Professional Career: Insp. Boilers & Power Plants (1912-13) Commercial Testing & Engineering Co., Chicago; Coal Analyst (1915-17) Geological Survey, State of Illinois; Subscription Salesman (1916-17) Industrial Publications, Inc.; subq. (1917-60) Assoc. Edt., Mgr. Edt., Bus. Edt., Publ. firms ceram mags. 1960-64 Exec. V. Pres., Treas. & Edt. Dir., Consultant (1964-73) Industrial Publications.

Estab. and first Edt. (1923) Ceramic Industry. Typically he wrote in first issue: "It is to help the (ceramic) industry achieve its higher ideals the Ceramic Industry has entered the field." Author numerous articles. Encouraged publ. of books on ceramics by such persons as A. F. Greaves-Walker, Samuel R. Scholes and Cullen W. Parmelee.

**Professional Societies:** Mbr. (1917), mbr. numerous comms., managed (Chicago, 1932) first ceram. exposition, Am. Ceram. Soc., Co-org. (1919) and officered Chicago Sec. Am. Ceram. Soc.

One of six petitioners to trustees Am. Ceram. Soc. for change in Const. and Bylaws to permit org. Natl. Inst. Ceram. Engrs. mbr Founders Gp. (1938). Co-sponsor (1925) first mtg. enamel plant supts. at Univ. Illinois.

Honors and Awards: Fellow Am. Ceram. Soc.; Greaves-Walker Roll of Honor (1970) Keramos.



# NORMAN H. STOLTE New York Chapter (Charter) 1927 Delta Pi Alpha

Professional Engineer, Researcher

**Keramos Activities:** Off. delegate (1929) New York Chapt. to first Natl. Convocation Beta Pi Kappa; Grand 1st asst. Master Potter (Natl. V. Pres.) 1929-32 Beta Pi Kappa.

Vital Statistics: Born Dec. 17, 1904 Cleveland, Ohio; mar. Gertrude Wagner June 27, 1936, child: Patricia Anne.

Education: Prim. schs. grad. (1924) West Technical H.S., Cleveland, Ohio; BS CerE (1928) Alfred Univ.; MS (1932) North Carolina State College.

Professional Career: Instr. Chem. (1928-30) Alfred Univ.; Instr. Cer. Engr. (1930-32) North Carolina State Col.; Cer. Engr. (1933-40, 1946-53) Enamel Products Co., Cleveland, Ohio; Cer. Engr. (1940-42) Clyde Porcelain Enamel Co., Clyde, Ohio; Chief. Chem. (1942-46) Magnesium Reduction Co., Toledo, Ohio; Res. Cer. Engr. (1953-69) Harshaw Chemical Co., Cleveland, Ohio.

Registered Prof. Engr.; Author numerous tech. publ.; maj. res. in high temp. (glass) lubricants.

**Professional Societies:** Mbr. (1927), affiliated Ceram.-Metals Systems Div., Am. Ceram. Soc. Mbr. (1938) Natl. Inst. Ceram. Engrs. Cofounder Porcelain Enamel Inst.

Donated (1969) prof. library (reported largest single collection) to the J. Earl Frazier (Ceram.) Library, Pennsylvania State Univ.

Honors and Awards: Fellow (1946) Emeritus Fellow (1970) Am. Ceram. Soc.



#### RAY T. STULL 1875-1944 Illinois Chapter (Honorary) 1915

Engineer, Educator, Administrator, Molder of "Original" Keramos

Keramos Activities: With Ralph K. Hursh elected first two honorary mbrs. (Feb. 10, 1915). Constant advisor during first (organizational) year. According to Greaves-Walker "Keramos" was Stull's suggestion because of its Sanskrit origin and its significance to ceramic engineers.

**Vital Statistics:** Born Mar. 2, 1875 Elkland, Pa. Died Jan. 5, 1944 in his office, National Bureau of Standards, Washington, D.C.

**Education:** Prim. schs. grad. high school of Elkland, Pa.; State Normal School (1896-97) Mansfield, Pa.; EM Cer (1902) Ohio State Univ.; grad. study in minerals (1907-15) Univ. Illinois.

Professional Career: Chem. (1902-04) American Terra Cotta & Ceramic Co., Chicago, Ill. Supt. (1905-07) Mt. Savage Enamel Brick Works, Mt. Savage, Md.; Supt. (1907) Steiger Terra Cotta & Pottery Co., San Francisco, Calif.; Instr.-Prof. Cer. Engr. (1907-15) and Actg. Head (1910-15) Cer. Engr. Dept., Univ. Illinois. During the latter period campaigned for and secured appropriations for present (1977) Ceramics Bldg.

Cer. Engr. (1915-17) Dunn Wire Cut Lug-Brick Co., Conneaut, Ohio; Chief Ceramist and Supt. (1917-23) U.S. Bur. Mines. Expr. Sta., Columbus, Ohio; Asst. Gen. Indust. Agent (1923-25) Central of Georgia Ry, Atlanta, Ga.; Consult. (1925-27) to C. of Ga. Ry and the ceram. indust.; Sr. Tech. in Ceram. (1927-44) Natl. Bur. Standards, Washington, D.C. Author or co-author approx. 40 tech. publ. and holder of two U.S. patents.

**Professional Societies:** Mbr. (1904), V. Pres. (1915-16), Pres. (1918-19), active in Structural Clay Products and Refractories Divs., Am. Ceram. Soc.

**Honors and Awards:** Charter Fellow Am. Ceram. Soc.; mbr. Founders Gp., Natl. Inst. Ceram. Engrs.; Honorary mbr. Illinois Clay Mnfrs. Assoc.

Sigma Xi, Alpha Chi Sigma. Fourth issue Illini Ceramist (1940) dedicated to R.T.S.



# HARRY W. THIEMECKE Ohio Chapter (Active) 1930

Engineer, Researcher, Administrator, Active Participant

Keramos Activities: Grand Sec. (1948-50), Grand V. Pres. (1950-52), Mbr. Exec. Council (1948-52); Part. instal. Pennsylvania Chpt. (1948).

Vital Statistics: Born Feb. 8, 1906 Pittsburgh, Pa.; Mar. Grace Corene Broughton, children: Cora Lee (Mrs. Edwin G. Vann) and Donna Corene (Mrs. Harry P. Altick).

**Education:** Prim. and sec. schs. of Pittsburgh, Pa.; B CerE (1930), MS (1931) Prof. CerE (1940) Ohio State Univ.; Grad. study Carnegie-Mellon Univ., Pittsburgh Univ., St. Vincent's College, Latrobe, Pa.

**Professional Career:** Lab. Asst. (1923-26) Res. Dept., Chem. Div., Westinghouse Electric Co.; Sum. work: National Fireproofing Co. (1927), A. C. Spark Plug Div., General Motors Corp. (1928), Northwest Terra Cotta Co. (1929), Western Electric Co. (1930).

Matl. & Process Engr. (1931-34) Westinghouse Electric Co., Derry, Pa.; Cer. Engr. (1934-46), Dir. (1946-72), Res., Dev. & Control Dept., Homer Laughlin China Co., Newell, W. Va.

Instr. in Math, Chem. Phys. and Ceram. Tech. (1935-40) Extension School, West Virginia Univ., Newell, W. Va.

Author noteworthy publs. mostly on whiteware. Registered prof. engr. Ohio and West Virginia.

Professional Societies: Mbr. (1930), trustee (1956-59 for Whitewares Div.), V. Pres. (1966-67), mbr. and Chm. numerous comms. incl. comms. for John Jeppson (1966-69), Albert V. Bleininger (1947-48, 1951-54), Chm. (1953-54) and Ross C. Purdy (1948-51), Chm. (1950-51) Awards, Am. Ceram. Soc. Sec. (1939-40) Chm. (1940-41) Councilor (1941-42), mbr. and/or Chm. numerous comms. Whitewares Div.; held all ofcs. Pittsburgh Sec. Am. Ceram. Soc. Mbr. Comm. C-21 and active several sub-comms. (1949-72) Am. Soc. Testing Matls.; active in Ohio Ceram. Indus. Assoc., U.S. Potters Assoc., Ohio Soc. Prof. Engrs., Natl. Inst. Ceram. Engrs., Alpha Chi Sigma.

Honors and Awards: War Memorial Scholarship (1926-30) Westinghouse Elec. & Mnfg. Co.; Fellowship (1930-31) Ohio State Univ. Fellow (1939, mbr. Panel 1965-68) Am. Ceram. Soc. Medalist (1971) A. V. Bleininger Award.

Elected to Texnkoi, Sigma Gamma Epsilon, Tau Beta Pi, Sigma Xi. Listed in Who's Who in Engr.



#### CHESTER C. TREISCHEL 1894-1975 Illinois Chapter (Cofounder) 1914

Engineer, Organizer, Industrial Executive

**Keramos Activities:** Cofounder (1914) original Keramos; V. Pres. (2nd Sem. 1914-15), Pres. (1915-16) Illinois "Alpha."

**Vital Statistics:** Born Sept. 27, 1894 Martinville, Ill. (son Charles and Corrine (Lottinville) Treischel); mar. Elizabeth Reedy Sept. 1919; daughter Mrs. Leroy H. Wilcox. Died May 9, 1975 New Canaan, Conn.

Education: Attended Momence H.S., Watseka H.S. and Kankakee H.S.; BS CerE (1916) Univ. Illinois.

Professional Career: Cer. Engr. (1916-17) Kankakee Tile & Brick Co., Kankakee, Ill.; Cer. Engr. & Constr. Engr. LeHigh Stone Co.; Dev. Cer. Engr. (1917-22) General Electric Co., Schenectady, N.Y. and (1922-23) Pittsfield, Mass.; Mgr. (1923-71) Ceram. Dept. R. T. Vanderbilt Co., New York City.

Professional Societies: Mbr. (1915), Sec. (1923-24), V. Chm. (1924-25), Chm. (1925-26), Trustee (1926-27) Whitewares Div., Mbr. (1921-71) Matls. & Eqp. Div. Am. Ceram. Soc. Founder both Philadelphia and Trenton Sections Am. Ceram. Soc. Mbr. Founders Gp. Natl. Inst. Ceram. Engrs.

Honors and Awards: Charter Fellow (1932) and Emeritus Fellow (1971-75) Am. Ceram. Soc.



### MILTON A. TUTTLE New York Chapter (Active) 1940

Outstanding Teacher, Engineer, Athletic Coach

Keramos Activities: Natl. Treas. and mbr. Bd. Dir. (1962-68).

Vital Statistics: Born Sept. 27, 1920 New Albany, Pa.; mar. Esther W. Miller June 28, 1948 (also N.Y. Chapt. mbr. Keramos, BS CerE, MS Alfred Univ. PhD (1948) Univ. Ill.), children: Bruce, John and Amy.

Education: Prim. sch. Dist. No. 1 West Almond, N.Y., grad. Almond (N.Y.) H. S.; BS CerE (1941), MS (1942) Alfred Univ.; PhD (1948) Univ. Illinois; attended Summer Educ. Seminars: Nuclear Engr. (1960) N.C. State Univ., Reactor Phys (1961) N.C. State Univ., Electronics for Scientists (1963) Oregon State Univ., Fast Reactor Workshop (1965) Argonne Natl. Lab.

Military Service: 1610 QM Trk. Co. (1943-46) ETO; awarded five Battle Stars.

Professional Career: Res. Assoc. (1942-44) N.Y. State Expr. Sta., Alfred Univ.; Assoc. Prof. Ceram. Engr. (1948-51) N.C. State Univ.; Specl. Instr. Grad. School (1951-53), Assoc. Prof. (1953-65), Prof. (1965-date), Head (1970-73) Ceram. Engr. Dept., N.Y. State College Ceram., Alfred Univ. Res. Consultant (Sum. 1953) Locke Div., G.E. Corp., Olean, N.Y. Author several tech. publs., coholder one patent.

**Professional Societies:** Mbr. (1941) affiliated Refractories Div., mbr. (1948-date) Ceram. Educ. Council Am. Ceram. Soc.; mbr. (1953-date) Natl. Inst. Ceram. Engrs., Am. Soc. Engr. Educ.

Honors and Awards: Fellow (1941-42) Edward Orton Jr. Ceram. Foundation; Summer Fellow (1960, 1961, 1965) Am. Soc. Engr. Educ.; Fellow (1964) Am. Ceram. Soc.; recd. (1964) Western Electric Fund Award — excellence in teaching; recd. (1975) Chancellor's Award for Excellence in Teaching by State Univ. of New York faculty. Alfred University's Sports Hall of Fame.



### MERTON L. VAN DRESER Iowa Chapter (Active) 1949

Engineer, Researcher, Inventor, Research Administrator

**Keramos Activities:** Sec. (1950-51) Iowa Chapt.; Natl. Record. Sec. (1972-74), Natl. V. Pres. (1974-76), Natl. Pres. (1976-78); mbr. Bd. Dir. (1972-date); installed (1975) Florida Chapt.; persistent promoter of this history.

**Vital Statistics:** Born June 5, 1929 Des Moines Iowa; mar. Evelyn L. Manny; children: Peter and Jennifer Sue.

**Education:** Prim. schs., grad. East Des Moines H.S.; BS CerE (1951) Iowa State Univ. **Military Service:** 1st Lt. (1951-54) Corps Eng. U.S. Army, Aviator, fixed and rotary wing aircraft.

**Professional Career:** Process Engr. and Tech. Supt. (1954-57) Owens Corning Fiberglas Corp., Kansas City, Kan.; Res. Engr. (1957-60) Sec. Head Prod. Dev. (1960-63), Lab. Mgr. (1963-65), Assoc. Dir. Res. (1965-69), Dir. Refractory Res. (1969-72), Dir. Non-Met. Res. (incl. analytical, refract., chem. & Al raw matls. res.) Kaiser Aluminum & Chemical Corp., Pleasanton, Calif. Author 10 papers, holder eight patents.

Professional Societies: Mbr. (1949), V. Pres. (1973-74) Am. Ceram. Soc.; Chm. (1971) N. Calif. Sec., Gen. Chm. (1970) Pac. Coast Regl. Mtg. Am. Ceram. Soc.; mbr. Ceram. Educ. Council; mbr. Brit. Ceram. Soc.; mbr. Natl. Inst. Ceram. Engrs.; mbr. The Met. Soc., AIME, mbr. Tech. Adv. Comm., The Refrac. Inst.; hon. mbr. Am. Soc. Testing Matls.

Honors and Awards: Fellow (1967) Am. Ceram. Soc.; mbr. (1975-78) Adv. Bd., Ceram. Engr. Dept., Univ. Illinois; Prof. Achievement Citation (1978), College of Engr., Iowa State Univ.; Bio. publ. in Am. Men & Women Sci., Who's Who in America.



# ARTHUR S. WATTS 1876-1963 Ohio Chapter (Active) 1925

Educator, Consultant, Author, Inventor, Researcher

Keramos Activities: Active in establ. Ohio Chapter (1925) and throughout the merger of Keramos and Beta Pi Kappa (1931-32), Chm. Exec. Comm. for Consolidation and Chm. Comm. on name and ritual. Chm. pro tem. of merger Convocation (Feb. 8, 9, 10, 1932). First Grand Herald and mbr. Exec. Council (1932-34); Faculty Advisor (1925-34, 1938-40) Ohio Chapt.

Vital Statistics: Born Mar. 27, 1876 Zanesville, Ohio (son of Arthur H. and Reliance Hilton Watts); mar. Olive Graham 1917, sons: Arthur Graham and Richard Lee. Died March 4, 1963, Columbus, Ohio.

**Education:** Publ. schs. and grad. (1894) Zanesville (Ohio) H.S. Student Metall. (1897-99) Ceram. (1899-1901) and pvt. asst. to Edward Orton Jr. Recd. "certif. of completion" (1901) of Ceram. short course.

Attended (1909-10) Keramische Fachschule, Bunzlau and (1910-11) Charlottenburg Technische Hockschule, near Berlin. Prof. CerE (1928) Ohio State Univ. Hon. degrees see Honors and Awards below.

**Professional Career:** Clerk and Asst. Supt. (1894-97) Clark Stoneware Co.; Cer. Engr., (1901) Fred M. Locke Co., Victor, N.Y., (1902-03) Bell Pottery Co., Finlay, N.Y., (1904) New Lexington Insulator Co., New Lexington, Ohio and (1904-09) Locke Insulator Co., Victor, N.Y.

Quarry Tech. (1911-13) U.S. Bur. Mines; Assoc. Prof. (1914-15), Prof. & Chm. (1915-46) Dept. Ceram. Engr., Prof. Emeritus (1946-63) Ohio State Univ. Active consultant to the porcelain industry. Author or co-author more than 100 tech. papers, holder number of U.S. and foreign patents.

**Professional Societies:** Mbr. (1901), V. Pres. (1909), Pres. (1912), Edt. Transactions (1914-17). Trustee (1938-41, first rep. Ceram. Educ. Council) Am. Ceram. Soc., Pres. (1935-37) Assoc. Ceram. Educators which became Ceram. Educ. Council; mbr. Founders Gp. (1938) Natl. Inst. Ceram. Engrs.; mbr. and/or chm. many comms. of above mentioned organs.

Mbr. Am. Soc. Engr. Educ., Am. Soc. Testing Matls., British Ceram. Soc. Trustee Edward Orton Jr. Ceramic Foundation.

Honors and Awards: Charter Fellow (Assoc. Dean, 1935, Dean, 1936), Life Mbr. (1946), Hon. Mbr. (1949) Am. Ceram. Soc.

Medalist (1956) Alfred Victor Bleininger Award, Pittsburgh Sec., Am. Ceram. Soc. Recd. first (1961) Greaves-Walker Award, Natl. Inst. Ceram. Engrs. Hon. D.Sci. (1950) Alfred Univ., Hon. D.Sci. (1951) Ohio State Univ.

Arthur S. Watts Scholarship Fund establ. 1942 by Cer.E. Alumni classes 1914-41. Mbr. Sigma Xi, Tau Beta Pi, Alpha Chi Sigma.

Extended bio. Bull. Am. Ceram. Soc. 25 7 243-45 (1946).



## JOHN W. WHITTEMORE 1897-1963 North Carolina Chapter (Honorary) 1935

Engineer, Educator, Administrator

Keramos Activities: Rep. Exec. Council for Virginia Subchapter (1935-40); encouraged establ. Virginia Chapt. (1940), Faculty Advisor (1940-48).

**Vital Statistics:** Born Sept. 27, 1897 Sioux City, Iowa; mar. Clifford Kelly; daughters: Mary Ann (Mrs. Philip Harm) and Joan (Mrs. Jerry South). Died April 13, 1963 Blacksburg, Va.

**Education:** Prim. schs., grad. (1916) Sioux City (Iowa) H.S.; Morningside College (1916-17) Sioux City; BS CerE (1921), Prof. CerE (1927) Iowa State Col.; part. (1951-52) "Year-In-Industry" Engr. Dept., E. I. duPont De Nemours Co., Wilmington, Del.

Governmental Service: Ceram. Tech. Advisor (Sum. 1945) U.S. Foreign Economic Admin. (Germany).

**Professional Career:** Constr. Engr. (1921) w.O. J. Whittemore, Sr.; Foreman (1921) Supt. (1922-26) Sioux City Brick Co.; Cer. Engr. (1926-28) Louisiana Dept. Consv. and org. Dept. Ceram. Engr. Louisiana State Univ.

Prof. & Head (1928-52) Dept. Ceram. Engr. and Assoc. Dean (1943-52), Dean (1952-63) Engineering & Architecture and Dir. Engr. Expr. Sta., Virginia Polytechnic Institute.

Professional Societies: Mbr. (1918), Chm. (1936-37) Struct. Clay Products Div., Sec. (1943-44) Chm. (1944-45) Whitewares Div., Chm. (1939-46) Comm. on Standards, V. Pres. (1947-48) Pres. (1948-49) Am. Ceram. Soc. Pres. (1938-40), Trustee (1941-44 to Soc. Bd.) Ceram. Edu. Council; mbr. Founders Gp. (1938) Sec. (1946-47) V. Pres. (1947-48) Pres. (1948-49) Natl. Inst. Ceram. Engrs. Mbr. Am. Soc. Testing Matls.

**Honors and Awards:** Fellow Am. Ceram. Soc., recd. Award of Merit, Am. Soc. Testing Matls.; Hon. D.Sci. (1955) Alfred Univ.; mbr. Tau Beta Pi, Sigma Xi, Omicron Delta Kappa.

John W. Whittemore Scholarshp estab. and portrait presented by college assoc. and alumni.



#### ARTHUR E. WILLIAMS 1886-1931 Illinois Chapter (Cofounder) 1914

Engineer, Glass Technologist, Dedicated Investigator

Keramos Activities: Cofounder original Keramos, mbr. "pin" selection comm. and of first pledging comm.

Vital Statistics: Born June 21, 1886 Cleveland, Ohio (son Nicholas and Alice May (Edwards) Williams); mar. Laura M. Miller Oct. 12, 1912; children: Arthur E., Jr. and Ruth Williams. Retired (1929) because of ill health; moving to Montana. Died Feb. 13, 1931 Lewistown, Mont.

Education: Attended Cleveland (Ohio) H.S., Univ. Academy, Ohio State Univ.; BS CerE (1910), MS CerE (1916) Univ. of Illinois.

Governmental Service: "During the World War (WWI), Mr. Williams, who had devoted his life to the glass industry from its chemical side, was with the Bureau of Standards in Washington. Mainly through his efforts, knowledge of lens glass formerly manufactured almost exclusively in Germany, was developed to the point where it could be produced in America. A much feared shortage of field glasses and telescopes for observation work was thus averted."

Professional Career: Supt. (1910-11) Monmouth Brick & Tile Co., Ceram. Engr. (1911-12), Factory Supt. (1912-14) West Brick Co., Danville, Ill.; Instr. (1914-16) Ceram. Engr. Dept., Univ. Illinois, Assoc. Ceram. Chem. (1916-21) Natl. Bur. Standards (Also see "Governmental Service" above); Glass Tech. (1921-29) Hartford Empire Co., Hartford, Conn.

**Professional Societies:** Mbr. (1910) active participant in Soc. affairs, officer Glass Div., Am. Ceram. Soc.

**Honors and Awards:** Charter Fellow, Am. Ceram. Soc.; eulogized in resolutions of the Board of Trustees and the Fellows, Am. Ceram. Soc. (Bull. Am. Ceram. Soc. 10 5 124-27 (1931).

(Photo Not Available)

# FRANCIS J. WILLIAMS 1908-1955 New York Chapter (Charter) 1927 Delta Pi Alpha-Beta Pi Kappa

Researcher, Research Director

**Keramos Activities:** Charter mbr. and first Pres. (1927) Delta Pi Alpha becoming first Master Potter (1928) New York Chapt. Beta Pi Kappa; Grand 3rd Asst. Master Potter (Natl. Treas. 1928-32) Beta Pi Kappa.

Vital Statistics: Born 1908; mar. 1932; died Mar. 19, 1955 Houston, Tex. Education: BS CerE (1928) Alfred Univ.; PhD (1932) Ohio State Univ.

Professional Career: Natl. Bur. Standards (1928-32) Columbus, Ohio Br.; Asst. Prof. (1932-36) Pennsylvania State Univ.; first National Lead Co. Fellow (1936-) Mellon Inst., Pittsburgh, Pa.; Dir. (19 -55) Res. & Dev. Labs., Baroid Sales Div., National Lead Co., Houston, Tex.

**Professional Societies:** Mbr. (1931) Am. Ceram. Soc. affiliated w/Matls. & Eqp. Div.; mbr. Alpha Chi Sigma.

Honors and Awards: Sigma Xi.



#### HAROLD G. WOLFRAM 1896-1951 Illinois Chapter (Active) 1922

Engineer, Researcher, Administrator

Keramos Activities: V. Pres. (1921-22) Pres. (1922-23) Illinois Chapt.; mbr. (1934-35) Natl. Comm. on Placement, Grand V. Pres. & mbr. Exec. Council (1936-38).

Vital Statistics: Born Dec. 14, 1896 Des Plaines, Ill. Died May 22, 1951 Columbus, Ohio.

Education: B.S. CerE. (1923) Univ. Illinois.

Military Service: Corps. of Engrs. (WWI) U.S. Army.

**Professional Career:** Chief (1923-26) Enameled Metals Sec., Natl. Bur. Standards; Dir. Res. (1926-37) V. Pres. in Chg. Production & Customer Svc. (1938-49) Pemco Corp., Baltimore, Md.; Res. Assoc. (1949-51) for Edward Orton Jr. Ceram. Foundation, Ohio State Univ.

**Professional Societies:** Mbr. (1923), Chm. (1936-37) Trustee (1937-40) for the Enamel Div., Am. Ceram. Soc. Mbr. Founders Gp., (1938) Third Pres. (1940-41) Trustee for Natl. Inst. Ceram. Engrs., mbr. Natl. and Maryland societies of Prof. Engrs.; Author numerous tech. papers.

Honors and Awards: Fellow Am. Ceram. Soc.; mbr. Sigma Xi, Sigma Tau.

