FILE NAME: CERAMICS (CER)

DATE: 1955 May 1

DOC#: CER047

DOCUMENT DESCRIPTION: Journal Abstract - Which Dusts in the Ceramic and Glass Industries are a Danger to Health?

CERAMIC ABSTRACTS

May 1, 1955 SECTION

Compiled by the American Ceramic Society

Abstracters

Wilfred Ashworth
Walter Bank
D. J. Barbour
L. R. Barrett
L. N. Baumer
F. W. Beall
Mildred Benton
A. C. Bevan
A. J. Biddulph
A. L. Bisio
R. H. Bollinger
Leslie Bor
British Ceramic Research Association
C. M. Cameron
I. Campbell
R. W. Cline
W. W. Coffeen
D. J. Coutant
S. Dello Strologo
Wilhelm Eitel
T. H. Elmer
S. A. Forman
J. J. Frankel
C. H. Greene
R. A. Gregory
Max Hartenheim
M. P. Haydon
F. G. Heck
G. M. Hutt
E. P. Hyatt
A. D. Indyk
Bernard Jaffe
B. Z. Kamich
M. J. Kerper
N. J. Kreidl
S. M. Lang
Karl Leander
W. Loewenthal
F. Lorek
B. L. Majumder
Fay March
L. M. Merritt
G. N. Mohanty
L. S. O'Bannon
V. R. Palmeri
A. T. Prince
H. Salmang
A. B. Searle
J. O. Semmelman
L. E. Shipley
H. E. Simpson
Société Française de Céramique
J. A. Sugden
Hans Thurnauer
M. D. Turner
W. O. Williamson
Kazuo Yamasaki
J. E. Young

II—Art and Archeology

Animal roundup. PHIL ALLEN. *Ceramics Monthly*, 3 [2] 20 (1955).—A child forms animals from a single slab of clay. 5 photos. D.J.C.

Carve your wheel-thrown pots. TOM SELLERS. *Ceramics Monthly*, 2 [11] 19 (1954).—Broken pieces can be carved into useful and attractive shapes. 4 photos. D.J.C.

Carving from a block of clay. EDRIS ECKHARDT. *Ceramics Monthly*, 3 [1] 18-19, 30, 32 (1955). 7 photos. D.J.C.

Ceramic beads. PEG TOWNSEND. *Ceramics Monthly*, 3 [1] 26 (1955).—Clay beads are made by hand and fired on nichrome wires imbedded in a clay post. 5 photos D.J.C.

Ceramic rings. GEN ANN HARRIS. *Ceramics Monthly*, 3 [1] 27 (1955).—Clay costume rings achieve a jewel-like effect with colored glazes and silver or old overglaze. 2 photos. D.J.C.

Clay—plasticity & shortness. EDGAR LITTLEFIELD. *Ceramics Monthly*, 3 [1] 28 (1955).—The plasticity of clay depends on grain size and colloid content. D.J.C.

Decorate with grog. ANON. *Ceramics Monthly*, 2 [11] 24 (1954).—Grog or other coarse material pressed into clay can create interesting textural decoration. 2 photos. D.J.C.

Enameled copper cuff links. PETER ROSTI. *Ceramics Monthly*, 3 [1] 25 (1955).—Step-by-step instructions are given. 10 photos. D.J.C.

Enameling for the beginner: VI, Gold and silver foil. JEAN O'HARA. *Ceramics Monthly*, 2 [12] 14-15 (1954).—The richness of precious metals under enamels can be achieved at less cost with metallic foil. 10 photos. For parts IV, V see *Ceram. Abstr.*, 1955, Feb., p. 25*b*. D.J.C.

Enameling on metal: I, Effects and defects. JEAN O'HARA. *Ceramics Monthly*, 3 [1] 33 (1955).—Luster accents and firescale are discussed. 2 photos. II. *Ibid.*, [2] 30.—Metallic lusters under a thin coat of flux produce an interesting crackle texture. Steel wool can cause ugly defects. 2 photos. D.J.C.

Enamel-on-screen pendant. ANON. *Ceramics Monthly*, 2 [11] 25 (1954).—Copper screen can be fired onto enamel or used as a stencil for textural treatment. 3 photos. D.J.C.

Festive fun for everyone. EDRIS ECKHARDT. *Ceramics Monthly*, 2 [11] 13-16 (1954).—Cay Christmas figures are easily shaped from clay. 25 photos. D.J.C.

Form of ceramic vessels. FRANZ KURE. *Keram. Z.*, 6 [11] 573-75 (1954).—The esthetic value of a vessel depends on its successful fulfillment of its practical purpose. The shape results from the considered sequence of the use of the ware, the artist's personal idea of shape, his previous experience, and the effect of the raw material and its method of manipulation. An accord between shape, material, and the decoration is essential. J.A.S.

How to make a platter. JOHN KENNY. *Ceramics Monthly*, 3 [1] 22 (1955).—A layer of clay draped over a clay hump forms a platter. 10 photos. D.J.C.

How to pull a handle. TOM SELLERS. *Ceramics Monthly*, 3 [2] 17 (1955).—S. gives instructions for hand-forming a handle for a wheel-thrown pot. 7 photos D.J.C.

"Incrustation" (inlay) decoration of early stone age vessels. W. GEILMANN AND W. GEBAUHR. *Ber. deut. keram. Ges.* 31 [10] 329-36 (1954).—The megalithic ware of Lower Saxony and the Rössener ware are decorated with white or black cementitious fillings in incised patterns on the fired ware. The chemical analyses of such fillings are recorded. The white materials can be divided into three groups, (1) a mixture of bone ash and quicklime (Springmuhle, Göttingen), (2) essentially pure $CaCO_3$ (Mondsee), and (3) a mixture of white clay and $CaCO_3$ (Nackenheim). A black filling consisted of wood charcoal bonded probably with casein (milk curds) adhesive. Accurate reproductions were made with a white filling of 1 part quicklime and 5 parts bone ash (hardened under moist conditions for 3 to 4 weeks), and a black filling of charcoal mixed with an adhesive of 1 part quicklime and 5 parts wet curds. There should be no difficulty in preparing colored filling materials. 10 figures, 8 references. J.A.S.

Kachina dolls. PEG TOWNSEND. *Ceramics Monthly*, 3 [2] 18-19 (1955).—Indian figures inspire ceramic jewelry to be formed in a press mold. 6 photos. D.J.C.

Fernand Leger, ceramist. OTIS GAGE. *Craft Horizons*, 15 [1] 10-15 (1955).—Leger has brought his painting approach to 23 ceramic reliefs exhibited at the Janis Gallery, New York. He uses only red, yellow, and black on a white ground, each of which is fired separately. 9 photos and cover. F.M.

Majolica technique. BEA MATNEY. *Ceramics Monthly*, 3 [2] 22-23 (1955).—Decoration is applied with underglaze color over unfired glare. 6 photos. D.J.C.

Models and molds: I, Creative form. DOROTHY PERKINS. *Ceramics Monthly*, 3 [2] 14-15 (1955).—P. defends the creative merit of mold-formed ware. 7 photos. D.J.C.

tative precipitation of uranium values and a minimum coprecipitation of vanadium values from a leach liquor obtained by extracting a carnotite ore with an aqueous solution of sodium carbonate comprises heating the leach liquor to 194°F., adding sulfuric acid thereto until an immediate pH value of 6.0 to 7.1 is attained, holding the reaction mixture at 194°F. for about 2 to 4 hr., and then separating the uranium containing precipitate from the supernatant liquor. D.J.B.

XIV—General and Historical

Bulk transportation by rail. JOHN M. GLEASON. *Am. Ceram. Soc. Bull.*, 34 [3] 72–73 (1955).—G. describes a new type of special hopper car for the efficient and economical shipment of dry powdered and granular materials. Where materials are now being shipped in paper sacks, conversion to bulk shipment in the new cars would effect substantial savings. 1 figure.

Color in factories. C. STÖRMER. *Glas-Email-Keramo-Tech.*, 5 [12] 443–44 (1954).—A brief review is given of the psychological value of color, particularly of pastel shades, for both workrooms and machines. In choosing the colors, the effect of artificial light must not be overlooked. It is recommended that moving parts of machines and hazardous sites in the workroom be painted yellow, and that the traditional bright red be retained for fire hazards. The use of colors to identify supply lines should be restricted to terminations (taps, valves), junctions, and patches spaced along the straight runs. J.A.S.

Good design makes sense and dollars too. HOWARD BOURNER. *Ceram. Ind.*, 63 [2] 60–61 (1954).—Design in packaging is discussed. 6 figures. T.H.E.

How, when, and where to use ceramics. J. H. KOENIG AND E. J. SMOKE. *Ceram. Age*, 63 [6] 25–27 (1954).—The merits of ceramic products are briefly described. Structural clayware, enameled metals, refractories, chemical porcelain, electrical porcelain, ferrites, titanates, etc., are covered. R.H.B.

Perfect packing pays. HENRY BOLLMAN. *Ceram. Ind.*, 62 [5] 65 (1954).—Packing of pottery for shipment is discussed. T.H.E.

Which dusts in the ceramic and glass industries are a danger to health? K. G. SCHMIDT. *Ber. deut. keram. Ges.*, 31 [11] 355–63 (1954).—Silicosis, its pathology, the factors contributing to its incidence, and the technique of atmospheric dust counting are reviewed. Disagreeable nasal and bronchial complaints are caused by the inhalation of SiO_2 particles $>5\mu$, but these particles are too large to enter the alveoles of the lung and therefore do not cause silicosis. The harmful particles are $<5\mu$, but a large proportion of the very finest particles are expelled again with the breath. Tridymite and cristobalite are even more dangerous than quartz (firebrick dust is therefore very harmful). Vitreous SiO_2 is harmless or almost so, and the silicate glasses are quite harmless. A mixture of coal and quartz dusts (around coal-fired kilns?) is particularly harmful; the addition of feldspar, mica, or kaolin diminishes the effect of quartz dust, but it is uncertain whether mica dust alone is harmless. Clays are harmful according to their free quartz content. Mixed dusts of quartz and fluorspar (in enamel plants) are particularly harmful. Pure corundum and silicon carbide are harmless, but asbestos and talc may cause nonsilicotic fibrosis. Among other harmless dusts are olivine, augite, hornblende, gypsum, chalk, and Fe; the latter gives shadows in the X-ray picture of the lung which may be mistaken for silicosis. Mention is also made of the health hazards occasioned by elements or compounds of Pb, As, Cr, Cd, Hg, S (in some mines), Mn, Zn, and Be. 11 figures, 39 references. J.A.S.

Widening horizons for porcelain enamel in home products. G. A. HUTT. *Ceram. Age*, 63 [6] 27, 29, 30, 33 (1954).—The economic and social factors responsible for the growth of enameled products are discussed. R.H.B.

SEPARATE PUBLICATION

Graduate Theses Accepted by Virginia Polytechnic Institute, 1951–1954. *Bull. Virginia Polytech. Inst.*, 47 [10] 22 pp (Aug. 1954).—Thesis titles of the School of Ceramic Engineering are as follows: "Time as a factor in the dissociation of calcium sulfate," by William B. Harrison; "Critical study of high temperature load testing of small-scale refractory shapes," by Dunbar J. Baker; "Further study of small-scale firebrick samples under load at high temperatures," by Ronald H. Lester; and "Approach to equilibrium of mixtures of CaO, Al_2O_3, and SiO_2 heated to various temperatures," by Sylvester A. Vitolo.

ENAMEL DIVISION EDITORIAL COMMITTEE APPOINTED

W. V. Knowles, Chairman of the Enamel Division, announces the appointment of the following personnel for the Editorial Committee of that Division: R. D. Cooke, *Chairman*, B. T. Sweely, and T. D. Hartshorn.

NEW MEMBERS RECEIVED IN JUNE AND JULY

CORPORATION

Great Lakes Steel Corp., Conrad W. Given (voter), Tecumseh Road, Ecorse, Detroit, Mich.

PERSONAL

Ethel M. King, Acme Brick Co., Danville, Ill.

Membership Workers' Record

Corporation: E. P. Poste, 1. *Personal:* Office, 1. Total, 2.

ROSTER CHANGES IN JUNE AND JULY

PERSONAL

Blake, A. E., P.O. Box No. 9, Essex Falls, N. J. (1511 Dickinson St., Brookline, Pa.)
Christensen, John B., Jr., P. O. Box 1533, Hondo, Calif. (345 W. 90th St., Los Angeles, Calif.)
Craig, J. W., Mines Branch, Sussex St., Ottawa, Ontario, Canada (La Porte, Saskatchewan, Canada.)
Gallup, John, Research and Development Laboratory, RCA Radiotron Co., Inc., Harrison, N. J. (Rutgers University, New Brunswick, N. J.)
Gross, Carl H., R. D. 4, Bridgeport, Conn. (1137 Regent St., Schenectady, N. Y.)
Hunting, Everett C., 2417 Park Ave., Plainfield, N. J. (Atlantic Terra Cotta Co., Perth Amboy, N. J.)
Johnson, H. E., Celite Corp., Lompoc, Calif. (Johns-Manville Corp., Manville, N. J.)
Kraner, Hobart M., Corhart Refractories Co., Louisville, Ky. (327 Morrison Ave., Greensburg, Pa.)
Kraus, C. E., Merwin Lane, Southport, Conn. (110 W 40th St., New York, N. Y.)
Kuechler, A. H., Dickinson Fire & Pressed Brick Co., Dickinson, N. D. (50 Richards Rd., Columbus, Ohio.)
Long, R. N., Canonsburg Pottery Co., Canonsburg, Pa. (108 Moull St., Newark, Ohio.)
McCann, Sidney W., Pfaudler Werke, Schwetzingen, Baden, Germany. (39 Vassar St., Rochester, N. Y.)
McDowell, Samuel J., 175 W. Main St., Newark, Ohio. (Corning Terra Cotta Co., Corning, N. Y.)
Miller, John B., 420 Washington St., Niagara Falls, N. Y (Pittsburgh Plate Glass Co., Mt. Vernon, Ohio.)
Morgan, Raymond W., 2543 N. 67th St., Milwaukee, Wis. (6105 N. Talman Ave., Chicago, Ill.)
Pittenger, J. E., 111 Dudley Ave., Narberth, Pa. (5102 Hazel Ave., Philadelphia, Pa.)
Plank, Ross D., 220 I St., S.E., Auburn, Washington. (4075 LaFayette Place, Culver City, Calif.)
Planz, Nicholas, Heimersheim Ahr, Bez., Coblenz, Germany. (A. O. Smith Corp., Milwaukee, Wis.)
Rainey, Lloyd B., New Brighton, Pa. (Continental Clay Products Co., Oliver Bldg., Pittsburgh, Pa.)
Sondles, Merrill C., Paden City Pottery Co., Paden City, W. Va. (618 Taylor Ave., Cambridge, Ohio.)

Underwood, C. A., 3 Central
Weiss, Henry, Olympic Club
Milbrae, Calif.)
Williams, Francis J., 69 N
bus, Ohio.)

Word has been received
on July 28, 1932. Mr. Sarh
ville and had been a membe

The Objectives of a

To interest the Amer

(1) To put the word
audience, into general use
(2) To educate the
understand and appreciate
to those imported.
(3) To further harmo
industries and individual
(4) To make individu
organizations more produc
campaign
(5) To help maintain
tive toward further impro
(6) To sell the advan
creased sales and a larger

To familiarize cooperat
(*a*) Plan Book show
projected type of adver
(*b*) Consistent campa
results of campaign
In these contacts wit
gained which will be impor
Personal interviews w
of the trade press and pre
ceramic promotion plan
The problem as we se
rather (1) a problem of
States a very much larger
imports; (3) to stimulate
discover and exploit new
meet the competition of
largely on the specialty

[1] *Ceramic Age*, July,
[2] Trustee representat
SOCIETY.

DEFENDANT'S
EXHIBIT NO. 14
FOR IDENTIFICATION
DATE: 2-19-99 RPTR: