

President: P. S. Kier, Kier Fire Brick Co., Pgh.
 Secretary: F.W. Donahoe, #316 Oliver Bldg., Pittsburgh
 MELLON INSTITUTE UNIVERSITY OF PITTSBURGH.
 1-year, continuous, Fellowship dated May 1, 1918.
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE REFRACTORIES
 ON POTS & BLOCKS AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES.
 \$6,000 a year for 1 year; no bonus. ++
 FELLOWS: Raymond M. Howe, M.S. (Pittsburgh)
 6/1/1918 Bruner M. Burchfiel, A.B. (Southwestern)
 2/15/1919 Earle N. Jessop, B.S. (U. of Pittsburgh)
 Asstnt: 4/1/18, S.M. Phelps (from Brantford, Ont.)
 ++ increased to \$7000
 in February, 1919
 REFRACTORIES

AMERICAN Refractories Institute
 Refractories Manufacturers Association I. P. #1 #116 so
 Pittsburgh, Pa. File 125-1
 President: P. S. Kier, #2243 Oliver Bldg., Pgh.
 Secretary: F. S. Donahoe, #220 S. Michigan Ave., Chicago
 MELLON INSTITUTE UNIVERSITY OF PITTSBURGH
 1-year Fellowship dated May 1, 1917.
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE REFRACTORIES
 ON POTS & BLOCKS AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES.
 \$6,000 a year for 1 year
 No bonus; bonus of \$500 voluntarily paid to Mr. Howe
 by the donor in 1918.
 FELLOWS: Raymond M. Howe, M.S. (U. of Pgh.) SENIOR F.
 1/1/1918 Robert Ferguson, B.S. (U. Pgh.) 3/1/1918-
 (resigned for government service, War.)
 REFRACTORIES

OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES EXCEPT GLASS HOUSE REFRACTORIES
 ON POTS & BLOCKS AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES.
 FELLOWS: Raymond M. Howe, M.S. (Pittsburgh) Senior
 Bruner M. Burchfiel, A.B. (Southwestern) resigned
 + S. Phelps (undergraduate U. of Toronto) 9/1/19
 Earle N. Jessop, B.S. (U. of Pgh.) resigned 9/1/19
 9/1/1919.. Mark Sheppard, B.S. (Alfred University)
 11/1/1919 * Robert Ferguson, B.S. (U. of Pittsburgh)
 *reentry after service during War period; see for former
 work card of fellowship no. 1 same donor
 *Mr. Phelps made Fellow May 1, 1919, at beginning of this
 fellowship

AMERICAN REFRACTORIES INSTITUTE
Refractories Manufacturers Ass'n. I. P. #2 #194-100
Pittsburgh, Pa. (Co., Chicago, Ill.) file 185-3
President: J. E. Cavender, Chicago Retort & Fire Brick
Retiring Pres: P. S. Eler, Eler Fire Brick Co., Pittsburgh
Secretary: F. W. Donahoe, #640 Oliver Bldg., Pgh., Pa.
MELLON INSTITUTE UNIVERSITY OF PITTSBURGH
1-year (continuous) Fellowship dated May 1, 1919; ended
on March 1, 1920, for convenience to donor fiscal year
-- OBJECT: (see other side of this card)
Sum: \$10,000 a year for 1 year; no bonus
FELLOWS: (see other side of this card)

REFRACTORIES

over

1175

Pittsburgh, Pa. file 125-4
 Secretary: F. W. Donahoe, 840 Oliver Bldg., Fgh., Pa.
 President: J. D. Ramsay
 AMERICAN REFRACTORIES INSTITUTE
 1-year Fellowship dated March 1, 1921

CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE REFRACTORIES
 ON POTS & BLOCKS & BAUXITE BRICK FOR GLASS-HOUSE PURPOSES
 Sum: \$12,000 a year for 1 year (month in advance)
 FELLOWS: Raymond M. Howe, M.S. (U. of Pgh.) SENIOR
 S. Phelps (undergraduate U. of Toronto)
 Mark Sheppard, B.S. (Alfred University) 7/1/20
 Robert Ferguson, B.S. (U. of Pgh.)
 7/1/1920, W. R. Kerr (U. of Pgh.) Assistant, ref.
 REFRACTORIES over

AMERICAN REFRACTORIES INSTITUTE ser. 272
 Refractories Manufacturers Ass'n. I. F. #5 file 125-5
 Pittsburgh, Pa.
 Secretary: F. W. Donahoe, 840 Oliver Bldg., Fgh., Pa.
 President:
 1-year Fellowship dated March 1, 1921.
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE REFRACTORIES
 ON POTS & BLOCKS & BAUXITE BRICK FOR GLASS-HOUSE PURPOSES
 Sum: \$12,000 a year for 1 year (monthly in advance)
 FELLOWS: Raymond M. Howe, M.S. (U. of Pgh.) SENIOR
 S. Phelps (undergraduate U. of Toronto)
 Robert Ferguson, B.S. (U. of Pgh.)
 ASS'T: 10/1921; A.M. Wightman - hourly basis
 ASS'T: W. R. Kerr (U. of Pgh.)
 5/27/21 Asst Jerome L. Boyer (M.I.T.) 6 wks.
 REFRACTORIES ended Sept. 1, 1921

AMERICAN REFRACTORIES INSTITUTE ser. 320
 Refractories Manufacturers Assn. I. F. #6 file 125-6
 Pittsburgh, Pa.
 Chairman M.I. Com: Porter S. Kier, Kier Fire Brick Co., Fgh.
 Secretary: F. W. Donahoe, 840 Oliver Bldg., Pittsburgh
 1-year fellowship dated March 1, 1922
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE (cont'd over)
 Sum: \$15,000 a year (monthly in advance)
 FELLOWS: Raymond M. Howe, M.S. (Pitt), Senior
 S.M. Phelps (undergrad., U. of Toronto)
 Robert Ferguson, B.S. (U. of Pittsburgh)
 Oct. 1/22: Jules Labarthe, B.S. (U. of California)
 5/15/22: Asst: Foster Robertson, (Senior, U. Toronto) 7/31/22
 W.R. Kerr (Pitt student) Assistant
 A.M. Wightman hourly assistant
 REFRACTORIES *return to Toronto to
 finish work towards AB.

ASSISTANTS:
ended
Oct. 1, 1922

(object, continued)

REFRATORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASS-HOUSE PURPOSES

Oliver Bldg., Pittsburgh, Pa. 125-7-file

Secretary, F.A. Donahoe; President, A.P. Taylor

1-year fellowship dated March 1, 1923

OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL

CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE (over)

S.M. Phelps (from Brantford, Canada)

Robert Ferguson, B.S. (Pitt) - 3/10/1924

Jules Labarthe, B.S. (U. of Calif.) 5/1/1923

reentry: 3/1/23, Foster Robertson, B.A. (U. of Toronto)

Assistant: W.R. Kerr (student, Pitt)

" 6/18/23 C.G. Denney, B.S. (Penna. St. Coll.)

" 7/1/23 Karl W.G. Smith (student; hrly. prob.)

" Oct. 1923 Carl S. Andrews student Pitt

REFRACTORIES

over

AMERICAN REFRACTORIES INSTITUTE

Refractories Manufacturers Ass'n. I. F. #8

ser. 418

Oliver Bldg., Pittsburgh, Pa.

125-8-file

Sec'y, F.W. Donahoe; Chairman H.I. Res. Com., Porter S. Kier

1-year fellowship dated Mar. 1, 1924; ended July 1, 1925

OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL

CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE (over)

Sum: \$15,000 a year (monthly in advance)

FELLOWS: M.C. Booze, B.S. in Cer. (U. of Ill.) SENIOR F.

S.M. Phelps (from Brantford, Canada)

Foster Robertson, B.A. (U. of Toronto)

7/1/24... F.A. McCann, B.S. (U. Ill.) ended Feb. 19, 1925

FELLOW: W.R. Kerr (student, U. of Pittsburgh)

FELLOW: C.G. Denney, B.S. (Penna. State Coll.)

Asstnt: Carl S. Andrews (Pitt student)

Asstnt: 2/20/24... A.C.

Hughes (hrly. Pitt stud.)

Secretary: Mary E. Gibson

REFRACTORIES

made Fellow 3/1/24

OVER

American Refractories Institute I. F. #9

ser. 435

Oliver Building, Pittsburgh, Pa.

125-9-file

Pres: Porter S. Kier, Kier Fire Brick Co., Oliver Bldg. Pgh.

Sec. Inst: M.C. Booze, 2202 Oliver Bldg., Pgh.

1-year fellowship dated July 1, 1925

OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL

CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE (over)

Sum: \$15,000 a year (monthly payments)

FELLOWS: M.C. Booze, B.S. in Cer. (U. Ill.) Senior: 7/1/26

S. Phelps (of Brantford, Can.)

Foster Robertson, A.B. (U. of Toronto)

W.R. Kerr (U. of Pittsburgh)

C.G. Denney, B.S. (Penna. State Coll.)

7/6/1925 S.M. Swain, B.S. (Alfred U.)

Asstnt: Carl S. Andrews (Pitt student)

Asstnt: A. C. Hughes

(Pitt student, part time)

Secretary: Mary Gibson

REFRACTORIES

over

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(object, continued)

REFRATORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASS-HOUSE PURPOSES

Object, continued

REFRATORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASS-HOUSE PURPOSES

note: during 1924 and 1925

note: certain slag erosion tests on refractory brick and
mortar conducted by West Penn Power Co. at M.I. by
P. Nicholls, Fuels Section Bur. Mines. Report on by L.E.
Henkison, Bureau of Mines No. TP828.EZ (presented by
Mr. Hankison Nov. 4, 1939 to Bur. Mines)

(object, continued)

REFRATORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASS-HOUSE PURPOSES

note: re 1924 and 1925 slag erosion tests of West
Penn Power Company see preceding card, Fellowship 125-8
(back of)

Fire Brick Co., Oliver Bldg., Pgh.
 Secretary: Miss Dorothy Texter, A.R.I., Oliver Bldg.
 1-year fellowship dated July 1, 1927 to May 1, 1928
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES (continued back of card)
 Sum: \$20,000 a year (monthly payments)
 FELLOWS: W. R. Kerr (U. of Pittsburgh)
 C. G. Denney, B.S. (Penna State Coll.)
 E. B. Read, B.S. (Kenyon College)
 S. M. Swain, B.S. (Alfred C.)
 Robert Ferguson, B.S. (U. of Pgh.)
 A. C. Hughes, B.S. (U. of Pittsburgh)
 12/10/28 Asst Vance Cartwright M.S. Cer. Eng. (U. Wash.)
 REFRACTORIES
 over for
 ASSISTANTS over

American Refractories Institute I. F. #10 ser. 515
 Oliver Building, Pittsburgh, Pa. file 125-10
 Chairman M.I. Com: Porter S. Kier, Kier Fire Brick Co.,
 Oliver Bldg., Pgh., Pa. Secretary: Miss Dorothy Texter
 1-year fellowship dated July 1, 1926; *from Jan 1 1927*
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES EXCEPT GLASS-HOUSE (over)
 Sum: \$20,000 a year (monthly payments) (then Senior F.)
 FELLOWS: S.M. Phelps (Drom Brantford, Can.) Acting Head/
 Foster Robertson, A.B. (U. Toronto) Sept. 1, 1926
 W.R. Kerr (U. of Pittsburgh)
 C.G. Denney, B.S. (Penna. State Coll.)
 6/2/1926 E.B. Read, B.S. (Kenyon Coll.)
 S.M. Swain, B.S. (Alfred U.)
 reentry 1/15/27: Robert Ferguson, B.S. (Pitt)
 Asstnt: A.C. Hughes, B.S. (Pitt)
 Asstnt: 9/23/26: H.W. (Peters Feb. 1, 1927)
 REFRACTORIES over

American Refractories Institute I. F. #12 serial 658
 Oliver Building, Pittsburgh, Pa. (file 125-12)
 Chairman M. I. Committee: Porter S. Kier, Kier Fire
 Brick Co., Oliver Bldg., Pittsburgh
 Secretary: Miss Dorothy Texter, A.R.I., Oliver Bldg.
 1-year fellowship dated May 1, 1928, to May 1, 1929
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES (continued back of card)
 Sum: \$20,000 a year (monthly payments) (date left)
 FELLOWS: S. M. Phelps, SENIOR
 W. R. Kerr (U. of Pittsburgh)
 C. G. Denney, B.S. (Penn State C.) 7/1/1928
 E. B. Read, B.S. (Kenyon College)
 S. M. Swain, B.S. (Alfred C.) 7/1/1929
 Robert Ferguson, B.S. (U. of Pittsburgh)
 A. C. Hughes, B.S. (U. of Pittsburgh)
 FELLOW: Vance Cartwright, M.S. in Cer. E. (U. Wash.)
 *(made Fellow 5/1/1928) OVER for Assistants
 REFRACTORIES FLSP. (1 month on next flshp.)

OBJECT (continued)

EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS
AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

1927, Fellowship Secretary: Miss Mary Gibson

object, continued

REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR
GLASS-HOUSE PURPOSES

note: re 1924 and 1925 slag erosion tests by West Penn
Power Company see card for Fellowship 125-8 (back of)

(object, continued)

EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS
AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

Assistants:

Secretary: Mary Gibson

5/1/1928..George R. Daniel, B.Cer.E., (Ohio State U.)

10-1-1928. Kenneth Lowe (no degree) (student U. Ill. & Pgh

10-22-1928..Miss Elizabeth Beech, Secretary, B.S. (C.I.T.)

Chairman M. I. Committee: Porter S. Kier, Kier Fire
Brick Co., Oliver Bldg., Pgh.
Secretary: Miss Dorothy Texter, A.R.I., Oliver Bldg.
1-year fellowship dated May 1, 1929, to May 1, 1930
OBJECT: THE INVESTIGATION OF (continued back of card)

W. R. Kerr, (U. of Pittsburgh) left 2-1-1930
Robert Ferguson, B.S. (Pitt)
E. B. Read, B.S. (Kenyon College)
A. C. Hughes, B.S. (U. of Pittsburgh) 12-1-1929
Vance Cartwright, M.S. Cer. E. (U. Wash.)

note: Stephen M. Swain, E.S. (Alfred U.) left 7-1-1929

REFRACTORIES

OVER for assistants

American Refractories Institute I. F. #11 serial 764
Oliver Building, Pittsburgh, Pa. (125-11) file

Chairman M. I. Committee: Porter S. Kier, Kier Fire
Brick Co., Oliver Building, Pgh.

Secretary: Miss Dorothy Texter, A.R.I., Oliver Bldg.
1-year fellowship dated May 1, 1930;

OBJECT: THE INVESTIGATION OF (continued back of card)

Sum: \$20,000 a year (monthly payments)

FELLOWS: S. M. Phelps, SENIOR

Robert F. Ferguson, B.S. (U. of Pgh.)

E. B. Read, B.S. (Kenyon College)

Vance Cartwright, M.S. Cer. E. (U. Wash.)

Fellow 1-1-1931 Earl C. Petrie, B. Cer. (Ohio State U.)

for Assistants see

other side of card

OVER

REFRACTORIES

American Refractories Institute I. F. #15 #824 ser
Oliver Building, Pittsburgh, Pa. File=125-15

Pres., 1932: W. B. Coullie, Oliver Building, Pgh.

~~G. W. Kier, Saline, Pa. (died 2-1932)~~

~~Porter S. Kier~~, Chairman MI Committee (died in 1931)

Secretary: Miss Dorothy Texter, A.R.I., Oliver Bldg. Pgh.

1-year fellowship dated May 1, 1931; ended June 1, 1932.

OBJECT: THE INVESTIGATION OF (continued back of card)

Sum: \$20,000 a year (monthly payments)

FELLOWS: S. M. Phelps, SENIOR

Robert F. Ferguson, B.S. (U. of Pgh.)

E. B. Read, B.S. (Kenyon College)

Vance Cartwright, M.S. Cer. E. (U. of Wash.)

Earl C. Petrie, B. Cer. (Ohio State U.)

REFRACTORIES

adviser: Dr. Tillotson
over for assistants

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OBJECT (continued)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS AND
BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

ASSISTANTS:

George R. Daniel, B.Cer.E. (Ohio State U.)
Kenneth Lowe (student U. Pgh.) left 8-15-1929
8-19-29.. Thomas A. Carr (high school student)
1-1-30... Earl C. Petrie, B.Cer. (Ohio State U.)
2-3-30... William J. Porter (no degree)

fellowship secretary: Elizabeth Beech
Mary Gibson, part time

OBJECT (continued)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS AND
BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

Assistants:

George R. Daniel, B.Cer.E. (Ohio S.U.)
5-1-1930.. Earl C. Petrie, B.Cer. (Ohio State U.) made a
FELLOW on 1/1/1931 over
Thomas A. Carr (high school student) 2-1-1930
William J. Porter (no degree)
2-1-1931.. Joseph P. Morrison (Pitt student) resigned
Secretary.... Miss Elizabeth Beech, B.S. Cer. I.T. (May 1, '31)
4-23-1931.... " Annabel Turner, B.S. (Cer. Inst. Tech.)
Fellowship Secretary

Ceramic Products Co.
Mt. Savage, Md.

OBJECT (continued)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS
AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

Assistants:

* George R. Daniel, B.Cer.E. (Ohio S.)
✓ William J. Porter left Apr. 1, 1932
2-1-1931..... ✓ Joseph P. Morrison (Pitt student) 6/1/1932

secretary: Annabel Turner, B.S. (C.I.T.)

*Mr. Daniel on special work called "ceramic products"
His cost to Fellowship donor reimbursed to donor by

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American Refractories Institute I. F. #16 #880 ser
 Oliver Building, Pittsburgh, Pa. file-105-16
 Pres.: E. E. Scullin, above address
 Secretary: Miss Dorothy Texter, A.R.I., Oliver Bldg. Pgh.
 1-year fellowship dated June 1, 1932; ended May 1, 1933
 OBJECT: THE INVESTIGATION OF (continued back of card)
 Sum: \$15,000 a year (monthly)
 FELLOWS: S. M. Phelps, SENIOR left
 Robert F. Ferguson, B.S. (U. of Pgh.) 7/1/1932
 E. B. Read, B.S. (Kenyon College)
 Vance Cartwright, M.S.Cer.E. (U. of Wash.)
 Flshp. Secretary: Miss Annabel Turner, B.S. (C.I.T.)
 REFRACTORIES over for Assistants
 adviser: Dr. Tillotson

American Refractories Institute I. F. #17 #927 ser
 Oliver Building, Pittsburgh, Pa. file-125-17
 President: J. E. Lewis, above address
 Secretary: Miss Dorothy Texter, A.R.I., Oliver Bldg. Pgh.
 1-year fellowship dated May 1, 1933;
 OBJECT: THE INVESTIGATION OF (continued back of card)
 Sum: \$15,000 a year (monthly payments)
 FELLOWS: S. M. Phelps (SENIOR)
 E. B. Read, B.S. (Kenyon College)
 Vance Cartwright, M.S.Cer.E. (U. of Wash.)
 Ass't: Aug. 1, 1933..Earl C. Petrie, B.Cer. (Ohio State U.)
 flshp. secretary: Miss Annabel Turner, B.S. (C.I.T.)
 REFRACTORIES
 adviser: Dr. Tillotson
 over

American Refractories Institute I. F. #18 serial #985
 Oliver Building, Pittsburgh, Pa. file-125-18
 officers: Dr. Fred A. Harvey, Harbison-Walker Refractor
 ies Company, Farmers Bank Building, Pittsburgh, Pa.;
J. E. Lewis, A. R. I., Oliver Building;
Miss Dorothy Texter, Secretary, A.R.I., Oliver Bldg. Pgh.
 1-year fellowship dated May 1, 1934;
 OBJECT: THE INVESTIGATION OF (continued back of card)
 Sum: \$15,000 a year (monthly payments)
 FELLOWS: S. M. Phelps (SENIOR)
 E. B. Read, B.S. (Kenyon College)
 Vance Cartwright, M.S.Cer.E. (U. of Wash.)
 Earl C. Petrie, B.Cer. (Ohio State U.)
 flshp. secretary: Miss Annabel Turner, B.S. (C.I.T.)
 REFRACTORIES
 adviser: Dr. Tillotson
 over

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(object continued)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES EXCEPT
GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE
BRICK FOR GLASS-HOUSE PURPOSES.

Assistant:

George E. Daniel, B.S. (1932), M.S. (1934), Ph.D. (1936)
Assistant: 1932-1934; ended March 1, 1934

1932
*Mr. Daniel on special work called "ceramic products"
His cost to Fellowship reimbursed to donor by
Ceramic Products Co., (Mt. Savage, Maryland) - 15¢
C.C. Campbell, President, Cer. Prod. Co., offices (1932)
in Kewaunee, Wisconsin. Company financed by:
Geo. H. Kauffman & his associates of Kauffman Lattimer Co.
in Columbus, O., Mr. Campbell & his associates of Kewaunee
Mfg. Co. Invention of H.S. Coleman, of M.I.
and Fellow Phelps.

(object, continued)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS
AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

Assistant:

March, 1934....Nathan Berman, hourly basis - left
(Pitt student)

(object, continued)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS
AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

Assistant: not paid by Institute but by donor.

Gilbert Arnold (hourly probably)

(no date of beginning or ending; probably
(throughout the year)

American Refractories Institute I. F. #19 125-19 file
 Oliver Building, Pittsburgh, Pa. Ser. 1039
 officers: Sec'y: Miss Dorothy Texter, above address
 President: Robert A. Hitchcock, 1808 Walnut St., Phila., Pa.
 (other officers on back of this card)
 OBJECT: THE INVESTIGATION OF (continued back of card)
 Sum: \$15,000 a year (monthly payments)
 FELLOWS: S. M. Phelps SENIOR FELLOW date left
 E. B. Read, B.S. (Kenyon College)
 Earl C. Petrie, B.Cer. (Ohio State U.)
 Vance Cartwright, M.S.Cer.E. (U.Wash.) 7/20/35
 7/23/35....Robt. W. Limes, B.Ce. (Ohio State) Assistant
 flshp. secretary, Miss Annabel Turner, B.S. (C.I.Tech.)
 REFRACTORIES FLSHP adviser: Dr. Tillotson
 over

American Refractories Institute I. F. #20 125-20 file
 Oliver Building, Pittsburgh, Pa. (S. 1090)
 officers: Mr. Frank Platt, President (Room 2047)
 Secretary: Mrs. Dorothy Texter Kincaid (above)
 (other officials on back of this card)
 1-year fellowship dated May 1, 1936;
 OBJECT: THE INVESTIGATION OF (continued back of card)
 Sum: \$15,000 year, billed: \$1,000 month, testing work
 plus invoice for deficit; plus \$500 month, research work
 FELLOWS: S. M. Phelps, SENIOR FELLOW
 E. B. Read, B.S. (Kenyon College)
 Earl C. Petrie, B.Cer. (Ohio State U.)
 Robert W. Limes, B.Cer. (Ohio State U.)
 3-1-37...Adrian C. Hughes, B.S. (Pitt)
 (Secretary, Miss Annabel Turner, B.S. (C.I.T.))
 (see other side card)
 REFRACTORIES adviser: Dr. Tillotson
 over

American Refractories Institute I. F. #21 125-21 file
 Oliver Bldg., Pittsburgh, Pa. (S. 1154)
 officers: ~~President, Platt~~, Oct., 1937, now Presid
 ent, W. J. Westphalen (V.P. ~~Laclede~~-Christy Clay
 Products Co., St. Louis, Mo.) Mrs. Dorothy Texter
Kincaid, Secretary, Oliver Building; (over for others)
 1-year fellowship dated May 1, 1937;
 OBJECT: THE INVESTIGATION OF (continued back of card)
 Sum: \$15,000 a year, billed
 FELLOWS: S. M. Phelps, SENIOR
 E. B. Read, B.S. (Kenyon College)
 Earl C. Petrie, B.Cer. (Ohio State U.)
 Robert W. Limes, B.Cer. (Ohio State U.)
 X Adrian A. Hughes, B.S. (Pitt) 9/13/1937
 secretary: Miss Annabel Turner, B.S. (C.I.T.)
 REFRACTORIES adviser: Dr. Tillotson
 over

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PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS
AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

July 1, 1935..Arthur L. Pingree, donor assistant
(not on M. I. payroll)

(object, continued)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND
BLOCKS AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES
other officials

Dr. Fred A. Harvey, of Harbison-Walker Refractories
Company, Farmers Bank Building, Pittsburgh, Pa.
(Division of Research)

company assistant (mostly at night)

Arthur L. Pingree

(see previous card #19)

1-1-1937..John P. Maloney (Assistant) regular

*(note: a continuous, year-to-year research fund of \$6000
a year (\$500 a month); see this year's contract
letter attached, effective January 8, 1937

(officers, continued)

W. B. Coullie (Gen. Sales Mgr.) Harbison-Walker Re-
fractories Co., Farmers Bank Bldg., Pittsburgh, Pa.

Dr. Fred A. Harvey, of Harbison-Walker Refractories
Co., Farmers Bank Bldg. (Div. of Research)

ASSISTANTS:

date entered, other than after 1-1-1937 Date left

John P. Maloney
6/21/37..Tom Seaver, B.S. (Pitt) hourly 7/15/37

OBJECT (CONTINUED)

PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS AND
BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

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(ser. 1224)
officers: President, W.J. Westphalen (VP Laclede-Christy
Clay Prod. Co., St. Louis, Mo.); Secretary, Mrs. Dorothy
Texter-Hincaid, Oliver Bldg., Pgh. resigned 10/1/39
Next secretary: Miss Martha Buerkle
1-year Fellowship dated May 1, 1939

1-year Fellowship dated May 1, 1939 + \$6000 Research Fund
FELLOWS: S.M. Phelps, SENIOR

E.B. Read, B.S. (Kenyon College)
Earl C. Petrie, B.Cer. (Ohio State U.)
Robert W. Limes, B.Cer. (Ohio State U.)

Assistants: see other side of card

Secretary: Miss Annabel Turner, B.S. (Car. I.T.)

REFRACTORIES

adviser: Dr. Tillotson
over

American Refractories Institute I. F. #23 125-25 File

Oliver Building, Pittsburgh, Pa. (serial 1297)

officers: President, W.J. Westphalen, c/o Laclede-Christy
Clay Prod. Co., St. Louis, Mo.; Secretary, Miss Martha Buer-
kle (bills), Pittsburgh office; W.B. Coullie, Chrm. M.I.
Committee (Pittsburgh); Roger A. Hitchins (a trustee),
President of National Refractories Co., 1520 Locust St.
Philadelphia, Pa.;

1-year fellowship dated May 1, 1939;

OBJECT: (THE INVESTIGATION OF (continued back of card)

Sum: \$15,000 a year billed + \$6000 Research Fund

FELLOWS: S.M. Phelps, Senior

E.B. Read, B.S. (Kenyon College)
Earl C. Petrie, B.Cer. (Ohio State U.)
Robert W. Limes, B.Cer. (Ohio State U.)

Assistants: see other side of this card

REFRACTORIES

adviser: Dr. Tillotson
over

EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND
BLOCKS AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

Assistants

John P. Maloney

7/19/38..Betty L.Greene, substitute secretary
during vacation Miss Turner) left 7/30/38

(object, continued)

PROBLEMS RELATED TO GLASS-HOUSE REFRACTORIES
EXCEPT GLASS-HOUSE REFRACTORIES ON POTS AND BLOCKS
AND BAUXITE BRICK FOR GLASS-HOUSE PURPOSES

Assistants:

John P. Maloney

date left

Secretary....Miss Annabel Turner, B.S.(C.I.T.)

6-28-1939....Miss Jean E.Flegal, substitute.... Aug.19,1939
(in summer 1939;from donor;not
(on M.I.payroll)

7-1-1939....Tom Seaver, B.S.(Pitt)..... Sept.8,1939

American Refractories Institute I. F. #24 125-24 file
 Oliver Building, Pittsburgh, Pa. (serial 1332)
 Officers: W. J. Northrup, Pres., and Leland Christy Clay
 Secretary, J. G. Elliot, 1111 University Ave., Wash. D. C.
 1-year fellowship dated May 1, 1940;
 OBJECT: THE INVESTIGATION OF (continued back of card)
 Sum: \$15,000 a year billed + \$6000 Research Fund* (over)
 FELLOWS: S. M. Phelps, SENIOR
 E. U. Road, B.S. (Kenyon College)
 Earl C. Petrie, B.Cer. (Ohio State U.) 8-31-1940
 Robert W. Limes, B.Cer. (Ohio State U.)
 6-1-1940..Thomas L. Hurst, Ph.D. (U. of Ill.)
 Assistants: see other side of this card
 REFRACTORIES } adviser: Dr. Tillotson
 *over.

(object (continued)
 PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES EXCEPT
 GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE
 Assistants: BRICK FOR GLASSHOUSE PURPOSES:
 John P. Maloney (reg.) date left
 8-5-1940....Geo. K. Dumbauld, B.Ch.E. (Ohio State U.)
 June 24, 1940. David A. Young, part-time; paid by Donor; 8-23-40
 Secretary....Miss Annabel Turner, B.S. (Car. I.T.)
 *Research Fund of \$6000 (billed \$500 a month) dating back
 to Fellowship 125-20, authorization effective Jan. 8, 1937
 (serial 1090). Repeated each year May 1.

MEMBERS - Amer. Refractories Inst. 1940

Acme Brick Co., Fort Worth, Texas
 Acme Fire Clay Works, New Cumberland, W. Va.
 Actna Fire Brick Company, Oak Hill, Ohio
 Alabama Clay Prod. Co., 335 Martin Bldg., Birmingham, Ala.
 Athens Brick & Clay Co., Athens, Ga.
 Atlantic Refractories Co., 504 Mulberry St., Macon, Ga.
 Babcock & Wilcox Co., 19 Rector St., New York, N. Y.
 Betson Plastic Fire Brick Co. 1417 Jefferson Av. Buffalo, N. Y.
 Bird Archer Co. 4337 N. American St., Phila., Pa. (N.Y.)
 Botfield Refractories Co., Swanson & Clymer Sts., Phila.
 Burns & Hancock Fire Brick & Clay Co., Montezuma, Ind.
 Chicago Fire Brick Co. 1467 Elston Ave., Chicago, Ill.
 Chicago Retort & Fire Brick Co. 208 LaSalle St., Chicago, Ill.
 Climax Fire Brick Co., Climax, Pa.
 Coors Porcelain Co., 8th & Ford Sts., Golden, Colo.
 Crescent Brick Co. 3015 Grant Bldg. Pittsburgh, Pa.
 Frederick J. Dando, Irondale, Ohio
 Davis Fire Brick Co., Oak Hill, Ohio
 Denver Fire Clay Co., 2301 Blake St., Denver, Colo.
 Denver Sewer Pipe & Clay Co., P.O. Box 2329, Denver, Colo.
 The Diamond Fire Brick Co., Canon City, Colo.
 Dixie Fire Brick Co., Inc. 824 Woodward Bldg., Birmingham, Ala.
 Eastern Clay Products, Eifort, Ohio (ham, Ala.)
 Egan Webster & Co. 3012 Koppers Bldg., Pittsburgh, Pa.
 Elgin-Butler Brick Co., PO Box 816, Austin, Texas.
 Emsco Refractories Co. 5601 S. Boyle Ave., Vernon, Calif.
 Eureka Fire Brick Works, 1100 Jones Law Bldg., Pgh., Pa.
 Federal Clay Product Co., Mineral City, Ohio
 Flexibrick Co., 4209 W. Greenfield Ave., Milwaukee, Wis.
 J. H. France Refractories Co., Snow Shoe, Pa.
 Freeport Brick Co., Freeport, Pa.
 Garfield Refractories Co., Holliviar, Pa.
 General Refractories Co. 1600 Real Estate Trust Bldg., Gladding, McRann & Company (Phila., Pa.)
 2901 Los Feliz Blvd., Los Angeles, Calif.
 1500 First Avenue South, Seattle, Wash.
 1275 Harrison Street, San Francisco, Calif.
 Globe Brick Company, East Liverpool, Ohio
 Golden Fire Brick Company, P.O. Box 292, Golden, Colo.
 Great Lakes Foundry Sand Co. 720 United Artists Bldg., A. P. Green Fire Brick Co., Mexico, Mo. (Detroit, Mich)
 Grip Manufacturing Co. 1532 Eater St., Phila., Pa.
 Hammond Fire Brick Co., Fairmont, W. Va.
 Harbison-Walker Refract. Co. Farmers Bank Bldg., Pgh.
 Haws Refractories Co., Johnstown Savings Bank Bldg., Hope Fire Clay Co., McArthur, Ohio. (Johnstown, Pa.)
 The Howard Co., 250 Boulevard, New Haven, Conn.
 Illinois Clay Prod. Co., 214 Barber Bldg., Joliet, Ill.
 Ione Fire Brick Co. Russ Bldg., San Francisco, Calif.
 The Ironton Fire Brick Co., Ironton, Ohio
 Johns-Manville, 22 East 40th St., New York, N. Y.
 Kittanning Brick Co., Box 262, Kittanning, Pa.
 Laclede-Christy Clay Products Co. 1711 Ambassador Bldg.

ASSOCIATE MEMBERS - checked 1940

American Colloid Co. 363 W. Superior St., Chicago, Ill.

Mr. Paul Bechtner, Mgr.

Armstrong Cork Co., Beaver Falls, Pa.

Mr. W. L. Barr, Chief Chemist

Professor G.E. Brown, Dept. Ceramics, Rutgers U., New Brunswick, N. Jersey

Champion Spark Plug Co. 8525 Butler Ave., Detroit, Mich.

Mr. F. H. Riddle, Director of Research

Clearfield Machine Company, Clearfield, Pa.

Mr. J. M. Gallaher, Works Mgr.

The Cleveland Quarries Co. 1125 Builders Exchange Bldg.

Mr. E. A. Burr, Secy. Cleveland, Ohio

Corning Glass Works, Corning, N. Y.

Mr. G. V. McCauley

Professor Paul E. Cox, Dept. Ceramic Eng., Iowa State Coll., Ames, Iowa.

Professor C. M. Dodd, Dept. of Ceramics, U. of Missouri, Rolla, Mo.

Professor A. F. Greaves-Walker, Ceramic Eng., N. Carolina State College, Raleigh, N. C.

Gulick-Menderson Company, 524 Fourth Avenue, Pittsburgh

Mr. U. J. Miller

Hartford-Empire Company, Drawer 1620, Hartford, Conn.

Mr. R. F. Hatch

Mr. R. A. Heindl, Bureau of Standards, Wash., D. C.

Prof. A. F. Henry, Georgia School Tech., Atlanta, Ga.

Prof. M. E. Holmes, N.Y. State Coll. Ceramics, Alfred, N.Y.

Prof. H. K. Murash, U. of Illinois, Urbana, Ill.

Prof. W. A. Kodlar, Div. Ceramics, W. Va. University, Morgantown, W. Va.

Libbey-Owens Ford Glass Co., Charleston, W. Va.

Mr. W. F. Brown

Prof. T. N. McVay, Cer. & Mineralogy, U. of Alabama, University, Ala.

National Engineering Co. 549 N. Washington Blvd.,

Chicago, Ill. Mr. L. B. Knight, Jr., V. Pres.

Prof. F. H. Norton, Mass. Inst. Tech., Cambridge, Mass.

Prof. C. W. Parmelee, Dept. Cer. Eng., U. Ill. Urbana, Ill.

Amerl. Ceramic Society, 2525 N. High St. Columbus, Ohio

Mr. Ross C. Purdy, Gen. Secretary

Stupakoff Laboratories, Inc. 6627 Hamilton Ave., Pgh., Pa.

Mr. S. H. Stupakoff, Pres.

Prof. Nelson W. Taylor, Penna. State Coll. State Coll. Pa.

Dr. E. Ward Tillotson, Asst. Dir. Mellon Inst. Pgh., Pa.

Vesuvius Crucible Co. P.O. Box 8275, Swissvale, Pa.

Mr. P. L. Arensberg, Pres.

Prof. A. S. Watts, Ohio State U., Columbus, Ohio

Dr. E. R. Weidlein, Director, Mellon Inst. Pgh., Pa.

West Gas Improvement Co. 424 Madison Ave. New York, N. Y.

Mr. S. J. Beale, Gen. Mgr.

Mr. Clyde Williams, Director, Battelle Memorial Inst. Columbus, Ohio

Prof. Hewitt Wilson, U. of Washington, Seattle, Wash.

Mr. D. C. Wyser, 136 Brookside Ave., Ridgewood, N.J.

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American Refractories Institute I. F. #25 File 125-25
~~Oliver Building, Pittsburgh, Pa. 15111~~
 1042: St. Louis, Mo., Railway Exchange Bldg.
 officers: W.J. Westphalen, Pres., 1812 Railway Exchange Bldg.
 (Miss Euerkle's office closed in Feb. 1942)
 1-year fellowship dated May 1, 1941;
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES:
 Sum: \$15,000 a year billed + \$6,000 Research Fund A*
 *(this is a special fund billed each year)
 FELLOWS: S. M. Phelps, SENIOR (no degree)
 (for complete fellowship personnel see back this card)
 REFRACTORIES adviser: Dr. Tillotson

American Refractories Institute I. F. #26 File 125-26
 St. Louis, Mo., Railway Exchange Bldg. (serial 1541)
 officers: W. J. Westphalen, President, St. Louis office
 *(current bills to); W.B. Coullie, Chrmn. M.I. Committee
 c/o Harbison-Walker Co., Farmers Bank Bldg., Pgh., Pa.
 Dr. Fred A. Harvey, c/o Harbison-Walker Refractories Co.,
 Pittsburgh, Pa. (delinquent bills to);
 1-year fellowship dated May 1, 1942;
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES:
 Sum: \$15,000 year billed + \$6,000 Research Fund A*
 *(this is a special fund billed each year)
 FELLOWS: S.M. Phelps, SENIOR (no degree)
 for complete fellowship personnel see back of this card
 REFRACTORIES adviser: Dr. Tillotson
 OVER

American Refractories Institute I. F. #27 No. 125-27 file
 St. Louis, Mo., Railway Exchange Bldg. (serial 1631)
 officers: Mr. W.J. Westphalen, President (St. Louis office)
 W.B. Coullie, Chrmn. M.I. Com., c/o Harbison-Walker Co.,
 Farmers Bank Bldg., Pgh.; Dr. Fred A. Harvey, c/o Harbison-Walker Refractories Co., Pgh., Pa. (delinquent bills to)
 1-year fellowship dated May 1, 1943;
 OBJECT: THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES:
 Sum: \$15,000 year billed + \$6,000 Research Fund A*
 *(this is a special fund billed each year)
 FELLOWS: S. M. Phelps, SENIOR FELLOW
 for complete fellowship personnel see back of this card
 REFRACTORIES adviser: Dr. Tillotson
 OVER

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Fellowship personnel

FELLOWS: S. M. Phelps, SENIOR FELLOW
 E. B. Read, B.S. (Kenyon College)
 Robert W. Limes, B.Cer. (Ohio State U.)

Assistants: (see bottom of this card)**

Research Fund 125-25A date left

FELLOW: Thomas L. Hurst, Ph.D. (U. of Ill.) Sept. 20, 41
 11-1-41... Osgood J. Whittemore, Jr., M.S. in Cer.E.
 (U. of Washington) Assistant left

ASSISTANTS: George K. Dumbauld, B.Ch.E. (Ohio S.U.) 1/3/42
 John P. Maloney (reg.)

Secretary..... Miss Annabel Turner, B.S. (Car. I.T.)

Fellowship personnel

date left

FELLOWS: S.M. Phelps, SENIOR FELLOW ✓
 E.B. Read, B.S. (Kenyon College) ✓
 Robert W. Limes, B.Cer. (Ohio State U.) 6/24/42 ✓
 (Left 6/24/42 then paid 4 weeks in lieu vacatn.)

9-8-42... F. Kenyon Clarke, B.S. (Alfred Univ.) ✓

Assistants: Osgood J. Whittemore, Jr., M.S. (U. Wash.) ✓
 John P. Maloney (reg.) ✓
 6-15-1942... Joshua C. Whetzel, Jr. (stud. Va. Mil. Acad.) ✓
 8-16-42... George W. Calderwood ✓ off Sept. 1, 1942

Secretary: Miss Annabel Turner, B.S. (Car. I.T.)

9-24-42... Peter L. Shanta (Pitt student) prt tr 11-16-42

FELLOWSHIP PERSONNEL

FELLOWS: S. M. Phelps, SENIOR FELLOW
 E. B. Read, B.S. (Kenyon College)
 F. Kenyon Clarke, B.S. (Alfred U.)

Assistant Osgood J. Whittemore, Jr., M.S. (U. Wash.)
 " John P. Maloney (reg.)
 " George W. Calderwood (no degree) Ill. Acad.)

Secretary: Miss Annabel Turner, B.S. (Car. I. Tech.)
 12-28-43... Mary Jane Dickson, (Car. I.T., senior) temp 1 week

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FELLOWSHIP	American Refractories Institute 125-28	
ADDRESS	Railway Exchange Bldg., St. Louis, Mo. 18717 also: c/o Harbison-Walker Ref. Co., Farmers Bank Bldg., Pittsburgh, Pa.	
OFFICERS	M.I. Com. (H-W Co. Pgh.); Dr. Fred A. Harvey (H-W Co.)	
DATE BEGAN	May 1, 1944	DATE ENDED
SUM	\$15,000 year + \$6,000	PAYABLE monthly pyts.
OBJECT	THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES;	
* FELLOW	* S. M. Phelps, SENIOR FELLOW	
PUBLISHED NAME	"Refractories"	ANSWER Dr. Tillotson

* CONTINUED ON BACK OF CARD

FELLOWSHIP	American Refractories Institute 125-29 1799	
ADDRESS	Railway Exchange Bldg., St. Louis, Mo. also: c/o Harbison-Walker Ref. Co., Farmers Bank Bldg., Pittsburgh, Pa.	
OFFICERS	W. B. Coullie, Chrmn. M.I. Com. (St. Louis); Dr. Fred A. Harvey (H-W Co.) - DIED	
DATE BEGAN	May 1, 1945	DATE ENDED
SUM	\$15,000 year + \$6,000	PAYABLE monthly pyts & bills
OBJECT	THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES;	
* FELLOW	* S. M. Phelps, SENIOR FELLOW	
PUBLISHED NAME	"Refractories"	ANSWER Dr. Tillotson

* CONTINUED ON BACK OF CARD

FELLOWSHIP	American Refractories Institute 125-30	
ADDRESS	Railway Exchange Bldg., St. Louis, Mo. 1871 also: c/o Harbison-Walker Ref. Co., Farmers Bank Bldg., Pittsburgh, Pa.	
OFFICERS	W. B. Coullie, Chrmn. M.I. Com. (Pgh. off. H-W Co.) H. J. Westphalen, President (St. Louis off.)	
DATE BEGAN	May 1, 1946	DATE ENDED
SUM	\$15,000 year + \$6,000	PAYABLE monthly pyts & bills
OBJECT	THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES;	
* FELLOW	* S. M. Phelps, SENIOR FELLOW	
PUBLISHED NAME	"Refractories"	ANSWER Dr. Tillotson

* CONTINUED ON BACK OF CARD

1196

(reg.) and \$6,000 for the A Research Fund.

FELLOWS — ASSISTANTS — SECRETARIAL STAFF

DATE BEGAN	NAME	DEGREE	UNIVERSITY	DATE ENDED
	S.M. Phelps, SENIOR FELLOW (no deg.)			
	E.B. Read, B.S. (Kenyon College) FELLOW			9-9-1944
	F. Kenyon Clarke, B.S. (Alfred U.) F			
	*Osgood J. Whittemore, Jr., M.S. (U. Wash.) ...			May 7, 1944
	*on A account, research			
	John P. Maloney (reg.) A; F. Tech I;			
	George W. Calderwood (no deg.) A; F. Tech I;			
8-22-44	Victor A. D'Ambrose, Laboratory Helper			9-2-44
10-1-44	Eric W. Graebert (no deg.) laboratorian			
	Secretary: Miss Annabel Turner, B.S. (Car. I. Tech.)			
11-15-44	William R. Deitz, B.S. (Washburn Mun. U.) R. Assoc.			

FELLOWS — ASSISTANTS — SECRETARIAL STAFF

DATE BEGAN	NAME	DEGREE	UNIVERSITY	DATE ENDED
	S.M. Phelps, SENIOR FELLOW (no deg.)			
	✓ F. Kenyon Clarke, B.S. (Alfred U.) FELLOW			1-31-46
	✓ John P. Maloney (reg.); F. Tech.			
	✓ George W. Calderwood (no deg.) F. Tech.			
	✓ Eric W. Graebert (no deg.) Lab'ian;			
	✓ William R. Deitz, B.S. (Washburn Mun. U.) R. Assoc.			
	✓ Annabel Turner, B.S. (Car. I. T.) F. Secretary			
1-15-46	*Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW			
	* (re-employment after military service)			

FELLOWSHIP REVIEW — HOLLOW INSTITUTE

Form 71

FELLOWS — ASSISTANTS — SECRETARIAL STAFF

DATE BEGAN	NAME	DEGREE	UNIVERSITY	DATE ENDED
	S. M. Phelps, SENIOR FELLOW (-)			
	John P. Maloney (reg.); F. Tech.			
	George W. Calderwood (-) F. Tech.			
	Eric W. Graebert (-); Laboratorian			
	William R. Deitz, B.S. (Washburn Mun. U.) R. Assoc.			4-30-1947
	Annabel Turner, B.S. (Car. I. T.) F. Secretary			
	*Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW			
	* (reemployment after military service)			
6-1-46	George J. Morris, B.S. (Pa. St. C.) R. Assoc.			1-31-47
2-1-47	Paul LeRoy Smith (-) ANALYST			

FELLOWSHIP REVIEW — HOLLOW INSTITUTE

Form 71

1197

FELLOWSHIP American Refractories Institute I. F. 125-32
 ADDRESS Railway Exchange Bldg., St. Louis, Mo. 1946
 also: c/o Harbison-Walker Refract.Co. Farmers Bank Bldg., Pittsburgh, Pa.
 OFFICERS W.B.Coullie, Chrmn.M.I.Con.(Pgh.off.)(H-W Co)
 W.J.Westphalen, President (St.Louis Off.)
 DATE BEGAN May 1, 1947
 AMOUNT \$15,000 a year + \$6,000 monthly pyts & bills
 OBJECT THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASS HOUSE PURPOSES;
 *FELLOW *S. M. Phelps, SENIOR FELLOW
 PUBLISHED NAME "REFRACTORIES" ADVISOR Dr. Tillotson
 ** (this \$6,000 for research work only)

* CONTINUE ON BACK OF CARD

FELLOWSHIP American Refractories Institute I. F. 125-32
 ADDRESS Railway Exchange Bldg., St. Louis, Mo. 2013
 W. J. Westphalen, President (St. Louis); & billed
 * W.B.Coullie, Chrmn.M.I.Con., 1208 Park Bldg., Pgh., Pa.
 OFFICERS *(his phone: ATLANTIC 3132)
 DATE BEGAN May 1, 1948
 AMOUNT \$15,000 year + \$6,000** monthly pyts & bills
 OBJECT THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASS HOUSE PURPOSES;
 *FELLOW *S. M. Phelps, SENIOR FELLOW
 PUBLISHED NAME "REFRACTORIES" ADVISOR Dr. Tillotson
 ** (this \$6,000 for research work only)

* CONTINUE ON BACK OF CARD

FELLOWSHIP American Refractories Institute I. F. 125-33
 ADDRESS Railway Exchange Bldg., St. Louis, Mo. 2080
 W.J.Westphalen, President (St.Louis); & billed
 OFFICERS W.B.Coullie, Chrmn.M.I.Con. 1208 Park Bldg., Pgh., Pa.
 DATE BEGAN May 1, 1949
 AMOUNT \$15,000 year + \$6,000** monthly pyts & bills
 OBJECT THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASS HOUSE PURPOSES;
 *FELLOW *S.M.Phelps, SENIOR FELLOW
 PUBLISHED NAME "REFRACTORIES" ADVISOR Dr. Tillotson
 ** (this \$6,000 for research work only)

* CONTINUE ON BACK OF CARD

1198

125-31 - serial 1016

✓ S. M. Phelps, SENIOR FELLOW (no deg.)
 ✓ John P. Maloney; F. Tech.
 ✓ George W. Calderwood (-) F. Tech.
 ✓ Eric W. Graebert (-) ~~lab. asst.~~; p-t. asst.
 ✓ Annabel Turner, B.S. (Car. I.T.) F. Secretary
 ✓ Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW
 ✓ Paul LeRoy Smith (-) ANALYST

FELLOWSHIP RECORDS — MELLON INSTITUTE

Form 71

125-32 - serial 2013

FELLOWS — ASSISTANTS — SECRETARIAL STAFF

DATE BEGAN — NAME — SOURCE — UNIVERSITY — DATE ENDED

✓ S. M. Phelps, SENIOR FELLOW (no deg.)
 ✓ John P. Maloney; F. Tech.
 ✓ George W. Calderwood (-) F. Tech.
 — Eric W. Graebert, B.S. (Pitt.) Asst. p-t... 2-25-1949
 Annabel Turner, B.S. (Car. I.T.) F. Secretary
 ✓ Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW
 ✓ Paul LeRoy Smith (-) ANALYST
 1-25-49... John Longwell, laboratorian

FELLOWSHIP RECORDS — MELLON INSTITUTE

Form 71

125-33 - serial 2080

FELLOWS — ASSISTANTS — SECRETARIAL STAFF

DATE BEGAN — NAME — SOURCE — UNIVERSITY — DATE ENDED

✓ S. M. Phelps, SENIOR FELLOW (no deg.)
 ✓ John P. Maloney; F. Tech.
 — George W. Calderwood (-) F. Tech.
 ○ Annabel Turner, B.S. (C. I. T.) F. Secretary
 ✓ Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW
 ✓ Paul LeRoy Smith (-) ANALYST
 — John Longwell, laboratorian
 6-1-49... Leon H. Baumer, B.S. (Alfred U.) R. Asst.
 (transfer from 242)

FELLOWSHIP RECORDS — MELLON INSTITUTE

Form 71

1199

American Refractories Institute I. F. 125-35
 Fellowship Agreement 1950-1951
 U. S. Seal, Chmn. M.I. Soc. 1208 Park Bldg. Pgh. Pa.
 Officers
 Date began May 1, 1950 Date ended
 Sum \$15,000 year + balance monthly prts & bills
 Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES;
 * Fellow *S. M. Phelps, SENIOR FELLOW
 Published name "REFRACTORIES" Adviser Dr. Tillotson
 note: this balance was about \$11,000 in research fund.

* THE REFRACTORIES INSTITUTE I. F. 125-35
 Fellowship 3134
 Address **as of July 1, 1951; was formerly called American Refractories Institute I. F. 125-35
 J. L. Crawford, President (c/o Walsh Refractories Corp. 101 Ferry Street, St. Louis 7, Mo.)
 Officers HEADQUARTERS: 1801 1st Nat. Bank Bldg. Pgh. 22, Pa.
 Secretary: Avery C. Newton
 Date began May 1, 1951; Assignment 7-1-51 ended RENEWED 4-1-1952
 Sum \$15,000 year + \$15,000 res. & monthly invoices
 Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES;
 * Fellow *S. M. Phelps, Senior Fellow
 Published name "REFRACTORIES" Adviser Dr. Tillotson
 note: this Agreement began on May 1, 1951, in name of Amer. Refractories Inst.; on July 1, 1951, assigned to The Refractories Institute
 * Continued on back of card OVER

Fellowship The Refractories Institute I. F. 125-36
 Address headquarters: 1801 1st Nat. Bank Bldg. Pgh. Pa. 3202
 Secretary: Mr. Avery C. Newton
 Officers J. L. Crawford, President, in St. Louis, Mo. (c/o Walsh Refractories Corp. 101 Ferry Street)
 Date began April 1, 1952 Date ended
 Sum \$15,000 year + \$15,000 res. & monthly invoices
 Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES;
 * Fellow *S. M. Phelps, Senior Fellow
 Published name "REFRACTORIES" Adviser Dr. Tillotson
 note: this formerly was a May 1st date but beginning in 1952 date was changed to April 1 to coincide with
 * Continued on back of card Donor's fiscal year. OVER

1200

FELLOWS - ASSISTANTS - SECRETARIAL STAFF				
DATE BEGAN	NAME	DEGREE	UNIVERSITY	DATE ENDED
	S. M. Phelps, SENIOR FELLOW (no deg.)			
	John P. Maloney, F. Tech.			
	George W. Calderwood - F. Tech.			
	Annabel Turner, B.S. (C.I.T.) F. Secretary			
	Robert W. Limes, B.C. r. (Ohio St. U.) FELLOW			
	Paul LeRoy Smith - ANALYST			
	John Longwell, laboratorian			4-30-50
	Leon N. Bauner, B.S. (Alfred U.) R. Assi			
15-51	Helen L. Sanner, temp. F. Secretary			3-21-1951
3-23-51	Amy Carolyn Roden, temp. Secretary			3-28-51
	(L. O. R. R. in S. C. in June 1951)			

Personnel: Fellowship 125-35 - serial 3134

Fellows - Assistants - Secretarial Staff				
Date began	Name	Degree	University	Date ended
	S. M. Phelps, SENIOR FELLOW			
	Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW			
	Leon N. Bauner, B.S. (Alfred U.) JUNIOR FELLOW			
	John P. Maloney, F. Technician			
	George W. Calderwood - F. Technician			
	Paul LeRoy Smith, ANALYST			
	Annabel Turner, B.S. (C.I.T.) F. SECRETARY			

Fellowship Record - Mellon Institute

Form 71

Personnel: Fellowship 125-36 - serial 3202

Fellows - Assistants - Secretarial Staff				
Date began	Name	Degree	University	Date ended
	S. M. Phelps, SENIOR FELLOW			
	Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW			
	Leon N. Bauner, B.S. (Alfred U.) JUN. FELLOW			
	John P. Maloney, F. Technician			
	George W. Calderwood - F. Technician			
	Paul LeRoy Smith, ANALYST			
	Annabel Turner, B.S. (C.I.T.) SECRETARY..			
1-26-53	Constance Sullivan Morgan, Mrs.			
	temporary part-time secretary			2-28-53

Fellowship Record - Mellon Institute

Form 71

1201

Secretary: Mr. Avery C. Newton
J. L. Crawford, President, in St. Louis, Mo.
(c/o Walsh Refractories Corp. 101 Ferry Street)

Date begun April 1, 1953 Date ended
Sum \$15,000 + \$15,000 research fund; monthly invoices
Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL
CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE RE-
FRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASSHOUSE PURPOSES;
* Fellow *S. M. Phelps, Senior Fellow
Published name "REFRACTORIES" Adviser Dr. Tillotson

* Continued on back of card

Fellowship The Refractories Institute I. F. 125-38
Address headquarters: First National Bank Bldg. Rm. 3332
Secretary: Mr. Avery C. Newton, Ex. Sec. above add.
Officers President: F. H. Atwood, Pittsburgh hqtrs. above

Date begun April 1, 1954 Date ended
Sum \$15,000 (no addnl. res. fund); monthly invoices
Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL
CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE RE-
FRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASSHOUSE PURPOSES;
* Fellow *S. M. Phelps, Senior Fellow
Published name "REFRACTORIES" Adviser Dr. Tillotson

* Continued on back of card

Fellowship The Refractories Institute I. F. 125-39 3398
Address headquarters: First National Bank Bldg. Rm. 3332
Secretary: Mr. Avery C. Newton, Ex. Sec. above add.
Officers President: F. H. Atwood, Pittsburgh hqtrs. above

Date begun April 1, 1955 Date ended
Sum \$15,000 (no addnl. res. fund); monthly invoices
Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL
CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE RE-
FRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASSHOUSE PURPOSES;
* Fellow *S. M. Phelps, Senior Fellow
Published name "REFRACTORIES" Adviser Dr. Tillotson
'56 = Dr. Anthony

* Continued on back of card

1202

Personnel: Fellowships 125-37—serial 3273

Fellows - Assistants - Secretarial Staff

Date began	Name	Degree	University	Date ended
	S. M. Phelps, SENIOR FELLOW			
	Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW			
	Leon N. Baumer, B.S. (Alfred U.) JUN. FELLOW			
	John P. Maloney, F. Technician			
	George W. Calderwood, B.S. in Met. E. (Pitt) Res. Asst.			
	Paul LeRoy Smith, ANALYST			
	Annabel Turner, B.S. (C.I.T.) SECRETARY			

Fellowship Record - Mellon Institute

Form 71

Fellowship 125-38—3332

Fellows - Assistants - Secretarial Staff

Date began	Name	Degree	University	Date ended
	S. M. Phelps, SENIOR FELLOW			
	Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW			
	Leon N. Baumer, B.S. (Alfred U.) JUN. F.			
	George W. Calderwood, B.S. in Met. E. (Pitt) 12-31-1954			
	Research Assistant			
	John P. Maloney, F. Technician			
	Paul LeRoy Smith, ANALYST			
	Annabel Turner, B.S. (C.I.T.) SECRETARY			
9-1-1954	Frank H. McRitchie, B.E. (U. Saskatchewan) FELLOW			
12-20-54	Shreve C. Sweeney, Laboratorian			

Fellowships Record - Mellon Institute

Form 71

Fellowship 125-39—serial 3398

S. M. Phelps, SENIOR FELLOW

Date began	Name	Degree	University	Date ended
	Robert W. Limes, B. Cer. (Ohio St. U.) FELLOW			
	Frank H. McRitchie, B.E. (U. Saskatchewan) FELLOW			
	Leon N. Baumer, B.S. (Alfred U.) FELLOW			
	John P. Maloney, F. Technician			
	Shreve C. Sweeney, Laboratorian			
	Paul LeRoy Smith, ANALYST			
	Miss Annabel Turner, B.S. (C.I.T.) SECRETARY			

Fellowship Record - Mellon Institute

Form 71

1203

Fellowship The Refractories Institute, F. 125-40 & #40A h050
Address headquarters:First Nat'l Bank Bldg. Meritor No.
Pittsburgh 22, Pa.
Office Halverson C. Newton, Exec. Secretary (above address)
1111 N. 12th St., Philadelphia 17, Pa.
St. Louis, Missouri
Date from April 1, 1956 Date ended
Sum \$15,000.00 Payable monthly invoices
Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL
CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE REFRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK FOR GLASSHOUSE PURPOSES:
*Fellow S. M. Phelps, SENIOR FELLOW
Published name "REFRACTORIES" Advisor Dr. Anthony
* Letter from Mr. Newton, dated 5-25-56, established 125-40A Account for \$1800.00 a month but this is not
* Continued on back of card included in the contract sum for 125-

Fellows - Associates - Secretarial Staff				
Date begun	Name	Degree	University	Date ended
	R.M. Phelps,	SENIOR FELLOW		
	Robert W. Limen, R. Cer.	(Ohio St. U)	FELLOW	9-30-56
	Frank H. McRitchie, B.E.	(U. Saskatchewan)	FELLOW	
	Leon N. Baumer, B.S.	(Alfred U.)	FELLOW	
	John P. Maloney, F.	Technician		
	Shreve C. Sweeney,	Laboratorian		
	Paul LeRoy Smith,	ANALYST		
	Miss Annabel Turner, B.S.	(CIT)	SECRETARY	

Form 71

1204

The Refractories Institute, F. No. 125
 1111 National Bank Bldg., Pittsburgh, Pa.

Mr. Avery C. Newton, Exec. Secretary (above address)
 Mr. U. S. Lowe, Pres. of Refractories (address: Pres. of
 A. P. Green Firebrick Co., Mexico, Missouri)
 SEE ADDRESS CARD

Date began April 1, 1957 Date ended
 Sum \$15,000.00 a year Payable monthly
 Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL
 CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE RE-
 FACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK
 FOR GLASSHOUSE PURPOSES;
 *Fellow S. M. Phelps, SENIOR FELLOW

Published name "REFRACTORIES" Address Dr. Anthony
 Note: Letter from Mr. Newton, 5-25-56, for "A" Acct. for \$1800.
 \$100, continued as no termination date was stated; this is
 not included in contract sum.
 * Continued on back of contract sum.

Fellows - Assistants - Secretarial Staff

Date begun	Name	Degree	University	Date ended
	✓ S. M. Phelps, SENIOR FELLOW			
	✓ Frank H. McRitchie, B.E. (U. Saskatchewan) FELLOW			
	✓ Leon W. Baumer, B.S. (Alfred U) FELLOW			
	✓ John P. Maloney, F. Technician			
	✓ Shreve C. Sweeney, Laboratorian			
	✓ Paul LeRoy Smith, ANALYST			
	Miss Annabel Turner, B.S. (CIT) SECRETARY			

Fellowship Record - Mellon Institute

Form 71

Fellow Refractories Institute, F. No. 125

9-57

Mr. Avery C. Newton, Exec. Secretary
 The Refractories Institute
 First National Bank Building
 Pittsburgh 22, Pa.

Mr. J. E. Brinckerhoff, President
 c/o Babcock & Wilcox Company
 161 East 42nd Street
 New York 17, New York.

1205

Officers See Attached Address Card

Date begun April 1, 1956 Date ended
Sum CIT. 1956-57 Year
Title THE INVESTIGATION OF PROBLEMS RELATED TO THE
CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE RE-
- FRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASSHOUSE PURPOSES:

* Fellow S. M. Phelps, SENIOR FELLOW

Published name "REFRACTORIES"

Adviser Dr. Anthony

Note: Letter from Mr. Newton, 5-25-56, for "A" Acct. for
\$1800. a mo. continued as no termination date was stated;
this is not included in Contract Sum.

* Continued on back of card

Fellows - Assistants - Secretarial Staff

Date begun - Name - Degree - University - Date ended

✓ S.M. Phelps, SENIOR FELLOW

✓ Frank H. McRitchie, B.E. (U. Saskatchewan) FELLOW

✓ Leon N. Baumer, B.S. (Alfred U) FELLOW

✓ John P. Maloney (-) M. Technician

✓ Shreve C. Sweeney, (-) Technician

✓ Paul LeRoy Smith, (-) Analyst

Miss Annabel Turner, B.S. (CIT) SECRETARY

Fellowship Record - Mellon Institute

Form 71

The Refractories Institute, F.No. 125

ADDRESS CARD

1958

Mr. Avery C. Newton, Exec. Secretary

The Refractories Institute

First National Bank Building

Pittsburgh 22, Pa.

Mr. J. E. Brinckerhoff, President

c/o Babcock & Wilcox Company

161 East 42nd Street

New York 17, N. Y.

1206

Fellowship Refractories Institute, The. F.No. 125-43
Address 1st National Bank Bldg., Pitts., Pa.

Date begun April 1, 1959 Date ended
Sum \$15,000.00 a year Payable monthly
Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL
CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE RE-
FRATORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASSHOUSE PURPOSES;

*Fellow S. M. Phelps, SENIOR FELLOW

Published name "REFRACTORIES"

Adviser Dr. Anthony

Note: Letter from Mr. Newton, 5-25-56, for "A" Acct. for
\$1800 a mo. continued as no termination date was

stated; this is not included in the Contract Sum.

*Continued on back of card

Fellows - Assistants - Secretarial Staff

Date begun	Name	Degree	University	Date ended
	S.M. Phelps, SENIOR FELLOW			
1258	Frank E. McRitchie, B.E. (U. Saskatchewan)	FELLOW		
	Leon N. Baumer, B.S. (Alfred U)	FELLOW		
	John P. Maloney (-)	Technician		
	Shreve C. Sweeney (-)	Technician		
121C	Paul LeRoy Smith (-)	Analyst		
	Miss Annabel Turner, B.S. (CIT)	SECRETARY		

Fellowship Record - Mellon Institute

Form 71

The Refractories Institute, F. No. 125-43

ADDRESS
CARD

Mr. Avery C. Newton, Exec. Secretary
The Refractories Institute
First National Bank Building
Pittsburgh 22, Pa.

Mr. J. E. Brinckerhoff, President
c/o Babcock & Wilcox Company
161 East 42nd Street
New York 17, New York.

1207

Fellowship Refractories Institute, The., F. No. 125-44
Address 1st National Bank Bldg., Pgh. 22, Pa.

Date begun April 1, 1960 Date ended
Sum \$15,000.00 Payable monthly
Object THE INVESTIGATION OF PROBLEMS RELATED TO ALL
CLASSES OF REFRACTORIES, EXCEPT GLASSHOUSE RE-
FRACTORIES ON POTS AND BLOCKS AND BAUXITE BRICK
FOR GLASSHOUSE PURPOSES;
*Fellow S. M. Phelps, SENIOR FELLOW
Published name "REFRACTORIES" Address Dr. Anthony
Note: letter from Mr. Newton, 5-25-56, for "A" Acct. for \$18,000.00 a mo. continued as no termination date was
stated; this not included in Foundation Sum.
*Continued on back of card

Fellows - Assistants - Secretarial Staff

Date begun	Name	Degree	University	Date ended
	S. M. Phelps, SENIOR FELLOW			
	Frank H. McRitchie, B.E. (U. Saskatchewan) FELLOW			
	Leon N. Baumer, B.S. (Alfred) FELLOW			
	John P. Maloney (-) Technician			
	Shreve C. Sweeney, (-) Technician			
	Paul LeRoy Smith (-) Analyst			
	Annabel Turner, B.S. (CIT) SECRETARY			

Fellowship Record - Mellon Institute

Form 71

The Refractories Institute, F. No. 125-44

ADDRESS
CARD

Mr. Avery C. Newton, Exec. Secretary
The Refractories Institute
First National Bank Building
Pittsburgh 22, Pa.

Mr. J. E. Brinckerhoff, President
c/o Babcock & Wilcox Company
161 East 42nd Street
New York 17, New York.

1208