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THE REFRACTORIES INSTITUTE

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THE REFRACTORIES INSTITUTE

Reports to the Membership

Twenty-Sixth Annual Spring Meeting

The Cloisters
Sea Island, Ga.
June 16-17, 1976

BOARD OF DIRECTORS

of

THE REFRACTORIES INSTITUTE

1976 – 1977

R. G. Ackerman	Corhart Refractories Co.
C. N. Bowler, Jr.	Interpace Corp.
A. M. Caito	Basic Refractories Division
Eric Charlton	Dolomite Brick Corporation of America
H. P. Day	Valley Mineral Products Corp.
D. R. DeVeaux	Harbison-Walker Refractories
Wm. A. France	J. H. France Refractories Co.
R. T. Hegeman	C-E Refractories
J. F. Knight	Kaiser Refractories
H. E. Konrad	Johns-Manville Corp.
F. H. Laube	Freeport Brick Co.
R. V. Lawrence	General Refractories Co.
B. F. Meyer	Norton Co.
W. F. Porter	Globe Refractories, Inc.
P. H. Reed	New Castle Refractories Co.
R. H. Rook	Martin Marietta Chemicals
R. W. Schaefer	Fibrico Co.
R. C. South	Lava Crucible-Refractories Co.
H. M. Stover	A. P. Green Refractories Co.
R. P. Stuntz	Babcock & Wilcox Co.
W. T. Tredennick	Resco Products, Inc.
F. W. Trost	Taylor Refractories Division
E. A. Williams, Jr.	North American Refractories Co.
Bonum S. Wilson	The Carborundum Co.
W. G. Young	Chicago Fire Brick Co.

OFFICERS

L. V. Lawrence	–	President
A. M. Caito	–	Vice President
W. F. Porter	–	Treasurer
B. S. Tucker	–	Executive Secretary

Mrs. Betty Lersch – Office Secretary

THE REFRACTORIES INSTITUTE – 1102 ONE OLIVER PLAZA
PITTSBURGH, PA. 15222

Minutes
of
Twenty Sixth Annual Spring Membership Meeting
of
The Refractories Institute
The Cloister
Sea Island, Georgia
June 16-17, 1976

The members attending the meeting that was called to order at 8:30 A. M. June 16, 1976 were welcomed by President Lawrence. A list of individuals, representing member companies, attending and the guest invited by the Board of Directors is attached.

MEMBERS AND GUESTS RECOGNIZED

President Lawrence introduced and welcomed the following individuals who were attending a Spring T. R. I. Membership Meeting for the first time: Mr. Bob Scott, Allied Mineral Products; Bonum S. Wilson, Jr., The Carborundum Co. and a new member of the Board of Directors; John Ekstrom, Corhart Refractories; John South, Lava Crucible-Refractories Co.; Dick McNamara, Norton Co.; Art Love and Jim Smith of Alcan; Brian Nalley, Chisholm, Boyd & White Co.; Sherman Thomas, Guyana Bauxite Co. Ltd.; Ted Keener, M. H. Detrick Co.; John Foggan, Philadelphia Quartz Co. and Mr. Robert Schroeder, Refractarios Mexicanos. Mr. W. S. (Bill) Lowe, an Honorary Member, was also recognized and welcomed.

The program and schedule of meeting events that were distributed from the registration desk were reviewed.

BOARD OF DIRECTORS AND OFFICERS ELECTED

President Lawrence referred to the election of the Board of Directors held May 21, 1976 and announced a listing of those elected was available at the meeting and would be attached to the minutes. He announced the newly elected Board met June 16, 1976 and according to the By-Laws elected the following Institute officers to serve until the Spring 1977 Board Meeting.

Mr. R. V. Lawrence	President
Mr. A. M. Caito	Vice President
Mr. William F. Porter	Treasurer
Mr. Bradford S. Tucker	Executive Secretary

EXECUTIVE COMMITTEE ELECTION AND COMMITTEE APPOINTMENTS

President Lawrence reminded the members that all standing committee members are appointed each year and that the Executive Committee stands for election each year, as provided in the By-Laws. The four (4) designated members of the Executive Committee for the year are:

R. V. Lawrence	President
R. T. Hegeman	Past President
A. M. Caito	Vice President
William F. Porter	Treasurer

Those elected by the Board of Directors are:

D. R. DeVeaux
B. F. Meyer
H. M. Stover
F. W. Trost
E. A. Williams, Jr.

Chairman Lawrence referred to the listings of the standing committees in the Directory of the Membership as being reappointed with the following additions and replacements:

Technical Advisory Committee:	Mr. Robert F. Grady, Martin Marietta Chemicals was appointed.
Packaging & Shipping Committee:	Harold S. Enslem, replacing Norman Kossman, both of A. P. Green Refs.
Factory Operators Committee:	Mr. Hugh Garvin, Taylor Refractories Division was appointed 1977 chairman.
Safety & Health Committee:	Mr. R. D. McCumber, A. P. Green Refractories Co., was appointed.
Energy Committee:	C. E. Lindsay, Kaiser Refractories and J. W. Dannemiller, General Refractories Co., were appointed.
	Mr. F. E. Morris was appointed to replace Frank Trost, both of Taylor Refractories Division.

MEMBERSHIP

The approval of Findlay Refractories Co., Washington, Pa. as an Active Member was announced. Mr. Louis H. Farmer, President, will be the Official Representative to The Institute. The company was welcomed to The Institute.

The resignation of G. & W. H. Corson, Inc. was announced.

TREASURERS REPORT

Mr. William F. Porter, Treasurer, presented the following report:

"I am pleased to report our dues collections continue to be excellent for which all of us are most appreciative. Our Audited Report for the same period by Main Lafrentz & Co. is available for your examination at The Institute office in Pittsburgh. It shows that we are in fine financial condition with our net worth now $377,942.09, about the same as last year."

"Under the guidance of Main Lafrentz, we have changed our accounting system from the cash in-cash out type to the more conventional double entry system for better control and better budgeting.

Our auditing and accounting fees are somewhat higher as a result. Also, because of increased committee activity, necessitating increased Counsel attendance to keep us clear of governmental statutes and regulations, we had substantially increased legal fees.

We have budgeted income at $272,100.00 and expenses at $263,046.80 for the 1976-1977 fiscal year, for an estimated surplus of $9,053.20.

You have been supplied with last year's financial statement along with the approved budget for the 1976-1977 fiscal year. (See report appended.)

Committee Reports

Mr. Lawrence commented that the standing committee activities are being coordinated by Messrs. Caito and Meyer. Each committee chairman has submitted a report of activities to the Co-ordinators. These reports have been reviewed and distributed at this meeting, and will be included in the minutes. (See appended reports.)

Mr. Caito reported his review of the Technical Advisory, Packaging and Shipping, Industrial Relations and Factory Operators Committees, and summarized each report. He commented that these committees were grouped as dealing with internal affairs. He complimented the chairman of each committee upon their work for the benefit of Institute members.

Refractories Research Center

Dr. Charles Semler, Director of RRC, presented a summary of his report (appended) and indicated the testing laboratory operation would be very nearly self supporting for the July 1975 - June 1976 period. He remarked the advice and assistance to RRC provided by a sub-committee of T. R. I.'s Technical Advisory Committee has been most helpful and welcome.

Foundation in Refractories Education

Mr. Ray Hegeman, Trustee Chairman and President of F.I.R.E., summarized the past year's grants for fellowships and scholarships. (See appended report and listing of grants and their status.)

Mr. Hegeman reported that the program that granted ten (10) $500.00 scholarships during the 1975-1976 academic year was received with enthusiasm by the universities. Comments from them emphasize their need to attract students and the availability of financial aid often is a determining factor. The ten recipients of scholarships successfully completed their year's work and all but one will continue in ceramic engineering or have obtained employment in ceramics. The student referred to above will continue in graduate school in the field of Nuclear Engineering.

The Trustees, Mr. Hegeman reported, have approved the recommendation of the Technical Advisory Committee that the 1976-77 educational assistance program be comprised of two (2) Fellowship Grants of $5,000.00 each and twenty two (22) Scholarship Grants of $500.00 each. (See listing in TAC report.)

Guest Speaker

President Lawrence called on Mr. Bob Rook to introduce the speaker. Mr. Rook commented that we were fortunate to have Mr. Walter Lowrie, Vice President, Viking Project Division of Martin Marietta, Denver, Colorado with us, who would describe the Viking Project, "Mission to Mars."

Mr. Lowrie described the project from its start to its present status. He noted that the probe was due to encounter and be placed in orbit around Mars just three days from the moment he was speaking. Mr. Lowrie fascinated the audience with his description of the landing vehicle and the tasks it is programmed to accomplish. He noted the extreme temperatures that were to be encountered and the related design problems that involved materials of interest to the refractories industry.

The audience gave Mr. Lowrie a standing ovation at the conclusion of his presentation and President Lawrence expressed The Institute's thanks to Mr. Lowrie for honoring the meeting with his presence, especially at this critical time in the project schedule.

The meeting recessed at approximately noon until 8:30 A. M., June 17th.

Second Session – 8:30 A. M. – June 17, 1976

The meeting was called to order by President Lawrence. He requested those who had not registered to do so. (See attached attendance list.)

Announcements were made regarding the planned activities of the day.

Committee Reports

President Lawrence explained Mr. Meyer's role as coordinator of the standing Institute committees whose areas of work are influenced by government regulations. Mr. Meyer gave a summary of the committee reports. (See reports appended, prepared by the chairmen covering Environmental Protection, Safety and Health, Metrication, and Energy.

Mr. Meyer called on Mr. Charlton, who reviewed the Energy situation in brief. He called attention to the distribution to the membership of the compilation of the Energy Survey conducted by The Institute which covers 1972 through 1975. He noted that this survey is the basis for voluntary reports on the quantity and types of energy used by our industry requested by the Department of Commerce and the Federal Energy Administration. Mr. Charlton urged all members to continue reporting as requested and recommended that each company maintain their efforts of conservation. He emphasized that FEA regulations regarding the possible requirement of mandatory energy reporting were being formulated in Washington and that the committee would keep in touch with FEA, and attempt to keep them informed of our voluntary efforts.

President Lawrence thanked Messrs. Meyer, Charlton, Caito, Hegeman and Semler for the preparation and presentation of the reports, and extended his congratulations to the committee chairmen and their co-workers for the work and accomplishments achieved.

President's Report

President Lawrence delivered the following report:

I would like to take a few minutes this morning and summarize the activities of your Institute during the last five years and also to review briefly what has happened in the last year.

We have made progress . . . We have been very active in the various areas of major concern to the membership. Unfortunately, new concerns and activities continue to be generated which require our attention.

For the three to five year period prior to 1970, there had been little change in the budget expense and activity of The Institute.

Around 1970-1971, the officers then in office, started taking a look and asking significant questions such as, "What is the purpose or objective of this Institute and what more can we do to serve the membership?" An Advisory Committee was appointed to take inventory and at the same time try to establish some meaningful direction. Many of you were involved and many discussions took place as you will recall.

As we were trying to establish our direction and objectives, a number of adverse events were simultaneously occurring that helped make up our minds.

Let me list a few to refresh your memory:

- An energy crisis
- An Environmental Protection Agency
- An Occupational Health and Safety Agency
- An Equal Employment and Opportunity Agency
- An Affirmative Action Program
- A continued consolidation and strengthening of unions
- A sudden awareness that few people in the regulatory agencies in the local, state and federal governments had any concept of refractories and their importance to the national defense and economic picture.

It became rather obvious what our objectives and purpose must be.

We went to work. . . Here are some results:

First, the energy study by Battelle Laboratories . . . probably the most significant study ever sponsored by your Institute. It has been used widely to inform government agencies, customers and utilities of our importance in the national economy. This report was updated in 1975 and has been distributed.

An Executive Committee was formed to manage the overall affairs of The Institute on a more timely basis. This committee has been active and has devoted both business and personal time to Institute affairs which we believe has enhanced the effectiveness of The Institute.

Subsequently, and in this time frame, the Energy Committee was formed to keep abreast of and guide us on energy matters. The members of this committee have been untiring in their efforts to serve the membership in matters of energy.

The Environmental Protection Committee was formed and has been most active. This committee has been instrumental in restructuring certain regulations which would have been more restrictive on many of our member companies.

The Safety and Health Committee is monitoring certain proposed regulations that will be most restrictive. Their work is just beginning.

The Industrial Relations Committee has been revived and is active in assembling and distributing information which should be most informative and helpful to your individual companies.

A Metrication Committee has recently been formed and their work is just beginning.

The other committees such as Technical Advisory, Government Relations, Factory Operators, Packaging and Shipping, etc. have all been meeting on a regular basis working on matters of importance to you. The highlights of these committee activities have been reviewed with you and full reports are available for you.

In addition to the Executive Committee and Board of Directors, several committees and individual committee members have been in Washington working with all areas of government in behalf of our industry and member companies of The Institute.

We have printed "Refractories - Uses and Industrial Importance" for the purpose of educating the layman on the importance of refractories. The first printing of 3,000 copies is exhausted with revised printing due very shortly. This publication was given wide distribution.

The Institute accounting system has been restructured with complete conventional double entry system and complete chart of accounts for better control and budgeting purposes.

We continue our support of the Refractories Research Center at The Ohio State University both in testing and research.

You have heard the report on the activities of the Foundation in their support of scholarships.

In Summary, let me give you a few statistics:

1. Our Active Membership remains constant at 58 members
2. Associate Membership is at 26 . . . a gain of one
3. In 1974 fiscal year, there were ten active committees and one sub-committee involving 19 member companies and 91 committee members
4. In 1975, just concluded, there were and still are 13 active committee and one sub-committee involving 22 member companies and 121 members
5. In 1974 there were 18 committee meeting, increasing to 31 in 1975.
   - A gain of 16% in participating companies
   - A gain of 33% in participating members
   - A gain of 72% in committee meetings

You should also know that membership participation in these committees is in excess of 90%. A clear indication of the interest, not only by the committee members but their companies, volunteering their time and expense to work on matters of importance to the total membership of The Institute.

All of these increases in activity have taken place without any additional personnel change on The Institute staff. It is obvious that we have reached the point in our Institute affairs where we must now go forward or regress. There are too many common problems facing us to stand still. The direction is clear . . . we must go forward.

During the last five year period, the expenses of The Institute have increased 18%. I do not need remind you what inflation has increased. The Wholesale Price Index for Industrial Commodities has increased a little over 50%.

I think you will agree that we cannot continue to carry on the activities I have mentioned previously with any degree of initiative unless we strengthen The Institute office staff.

Your Executive Committee has recommended, and the Board of Directors has approved, an increase in the operating budget which has been reflected in your dues. This budget provides for the employment of a full time President to manage the affairs of The Institute and to help us continue to move forward as we believe we must.

I wish to personally thank each member company, associate company and their participating committee members for the excellent cooperation during the last year and trust it will continue in the interest of The Institute and its membership.

With the activities of government at all levels, local, state and federal, which effect us, mostly adverse, it requires the attention of each of us to stay abreast of these activities. We must continue to develop a voice that can be heard on our industry's behalf.

. . . . . .

Proposed By-Laws Revision

The President brought to the member's attention the proposed By-Laws revision that had been distributed to all those in attendance along with explanation of revisions, changes and additions. He remarked that legal counsel, the Executive Committee and the Board of Directors had reviewed the proposals carefully and recommended their adoption by the membership according to the provisions of the present By-Laws.

Messrs. Lawrence and Clark reviewed the memorandums dated June 16 and June 17, 1976 as distributed to the members that noted and explained all revisions, changes and additions with the members and discussed questions that were raised. There was no dissent voiced by the members at the conclusion of the discussion period.

A motion was made that the proposed By-Laws dated May 14, 1976 as further revised by memo dated June 17, 1976 be adopted. The motion was seconded. The President called for discussion and no questions were raised or statements presented.

Counsel advised that a written ballot was necessary for the record. Ballots were distributed to all Active company members' official representative. The written signed ballots were verified and counted by T. R. I. Counsel and the Executive Secretary.

The results were announced by the President:

36 votes for and none against. This constituted a majority vote of all Active members.

The President declared the By-Laws adopted and instructed Counsel and the Executive Secretary to prepare true copies and distribute a copy to each member of The Institute.

Other Business

President Lawrence advised and explained to the members that the Board of Directors had taken the following actions at their meeting on June 15, 1976:

Approved a motion declaring the sterling silver Men's Golf Trophy and the Ladies' Golf Trophy become the permanent property of The Institute because of their intrinsic and historical value.

Approved a motion that called for the revision of the "Product Directory of the Refractories Industry in the United States" during 1977 at The Institute's expense. This directory was last revised in 1972. It is contemplated that it should be revised every five (5) years.

Approved the revision of the brochure, "Refractories - Uses and Industrial Importance."

Mr. Lawrence introduced the speaker as follows:

Gentlemen, we have covered a great deal concerning our present and future activities this morning. A subject that we have not explored or reported is the way in which we should maintain political contacts. Our speaker today will present us with some ideas to consider.

Dick Armstrong, Executive Director of Public Affairs Council, has become one of the leading proponents of increasing industry's awareness of the need to become involved in political activity. He is, also, a very dynamic and articulate individual.

He joined the Council almost twenty years ago as Field Director of PAC in 1959. Under Dick's administration, the Council has become a recognized professional organization in its field and has served over 500 corporations in assisting them either to create a P. A. program or to improve an existing one.

Dick's prior background includes a staff job with the University of Minnesota and a position with the Minneapolis Chamber of Commerce. He received his B. A. from the University of Minnesota and has done graduate work at the University of Birmingham, England.

Gentlemen - Mr. Armstrong.

Mr. Armstrong gave a most interesting and instructive presentation.

He advised that to be effective when making a presentation to legislators it is wise to establish five points:

1. Present a clear, factual story that he will be able to defend.
2. That you, and/or your company are located in his district and you look to him for representation,
3. Relate to your capability of helping him politically, with ideas and/or personally.
4. Develop a rapport with him on the basis of your integrity and complete dependability for truthful statements and information.
5. You have created support or have support for your position in his district.

The membership was very responsive to Mr. Armstrong's presentation and Mr. Lawrence thanked him on behalf of The Institute for his suggestions.

There being no further business brought before the membership, the meeting was declared adjourned at approximately 12:30 P. M.

SEE APPENDED REPORTS

TREASURER'S REPORT
STATEMENT OF INCOME, EXPENSE, AND NET WORTH
YEAR ENDED MARCH 31, 1976

	Total	Regular Account	Operating Reserve Fund (Special)	Foundation in Refractories Education (FIRE)
Income				
Members' dues	$211,925.00	$211,925.00		
Sale of publications	6,066.84	6,066.84		
Interest income	19,614.78	9,565.21	$10,049.57	
Factory Operators' Meeting registration	4,425.00	4,425.00		
Miscellaneous	128.42	.80		$ 127.62
	242,160.04	231,982.85	10,049.57	127.62
Expense				
Salaries	36,588.00	36,588.00		
Office expense	5,826.67	5,826.67		
Postage	3,444.55	3,444.55		
Auditing and accounting	18,890.00	6,725.00	12,165.00	
Legal fees	50,170.00	30,840.00	19,330.00	
Reimbursed expenses	7,384.11	4,578.18	2,805.93	
Travel and entertainment	3,811.37	3,811.37		
Meeting	25,952.81	25,952.81		
Printing and publishing	10,286.73	10,286.73		
Telephone	3,604.48	3,604.48		
Dues and subscriptions	1,791.51	1,791.51		
Rent	4,669.29	4,669.29		
Insurance	1,705.28	1,705.28		
Payroll taxes	1,546.84	1,546.84		
Pensions	2,570.58	2,570.58		
Census Bureau statistics	8,312.50	8,312.50		
Special surveys and reports				
Energy	10,962.97	10,962.97		
Other	5,049.75	5,049.75		
Business privilege tax	269.72	269.72		
Awards and grants	14,112.50	112.50		$14,000.00
	216,949.66	168,648.73	34,300.93	14,000.00
Excess of income over expense (expense over income)	25,210.38	63,334.12	(24,251.36)	(13,872.38)
Special budgeted items				
Ohio State University Testing and Research Programs	(25,957.28)	(25,957.28)		
Cash transfers from Regular Account		(55,250.00)	35,000.00	20,250.00
	(25,957.28)	(81,207.28)	35,000.00	20,250.00
	(746.90)	(17,873.16)	10,748.64	6,377.62
Net worth				
At beginning of year	378,688.99	190,595.03	187,953.88	140.08
At end of year	$377,942.09	$172,721.87	$198,702.52	$ 6,517.70

ANNUAL BUDGET
April 1, 1976 to March 31, 1977

INCOME	BUDGET
Members' Dues	$248,050.00
Interest Income	17,150.00
Sale of Publications	1,500.00
Factory Operators Meeting	5,400.00
Estimated Total	$272,100.00

EXPENSES – SUMMARY

Staff Payroll and Related Expenses	$ 45,898.00
Office	23,830.00
Institute Activities	25,420.00
Publications	24,285.00
Professional Services	69,475.00
Grants	74,138.80
Estimated Total	$263,046.80
Estimated Income over Expense	$ 9,053.20

Detail of expense groups listed above available for examination at The Institute office.

REPORT ON PENDING FELLOWSHIPS
FOUNDATION IN REFRACTORIES EDUCATION

School:	Clemson University - 1973-1974 Award
Student:	Thomas E. Landon
Faculty Advisor:	Dr. G. C. Robinson
TAC Advisor:	W. C. Bohling, Babcock & Wilcox Co.
Thesis:	"Improving Thermal Shock Resistance Through Mismatch Prestressing"
Remarks:	Awarded September 1973. Thesis distributed May 1976 - File closed
School:	University of Missouri - 1973-1974 Award
Student:	Leo Schifferli
Faculty Advisor:	Dr. Darrell Ownby
TAC Advisor:	Karl Sandmeyer, The Carborundum Co.
Thesis:	"Resistance of High Purity Cr_2O_3 Refractories to Chemical Attack as Theoretical Density is Approached"
Remarks:	Awarded August 1973. Student dropped out without completing thesis. Dr. Ownby submitted brief report. Work was inconclusive. File closed.
School:	Georgia Institute of Technology - 1974-1975 Award
Student:	James P. Bennett
Faculty Advisor:	Professor James F. Benzel
TAC Advisor:	W. C. Bohling, Babcock & Wilcox Co.
Thesis:	"An Anomalous Mechanical Behavior of Alumino-Silicate Refractories at Elevated Temperatures"
Remarks:	Awarded April 1974. Thesis distributed May 1976. File closed.

School:	University of Illinois - 1974-1975 Award
Student:	Stephen M. Kubiak
Faculty Advisor:	Professor James A. Nelson
TAC Advisor:	Wayne X. Fay, General Refractories Co.
Thesis:	"Hot Hardness of Refractory Materials II"
Remarks:	Awarded January 1974. Work started August 1974. Student's grades are not up to requirements as of January 1976. Work continues without F.I.R.E. support. Future report promised on work completed. As of May 1976, very little work has been completed.

School:	Georgia Institute of Technology - 1975-1976 Award
Student:	James M. Britt
Faculty Advisor:	Professor James F. Benzel
TAC Advisor:	W. C. Bohling, Babcock & Wilcox Co.
Thesis:	"An Anomalous Mechanical Behavior of Alumino-Silicate Refractories at Elevated Temperatures - Phase II"
Remarks:	Awarded August 1975. This is a continuation of work by James P. Bennett. Completion expected January 1977. $3000.00 was paid October 1975 and $3000.00 paid March 1976. Work is progressing successfully.

School:	Clemson University - 1975-1976 Award
Student:	Thomas Smith - replaces George Robinson
Faculty Advisor:	Dr. G. C. Robinson
TAC Advisor:	W. C. Bohling, Babcock & Wilcox Co.
Thesis:	"Quality Control of Calcium Aluminate Bonded Refractories"
Remarks:	$3000.00 paid October 1975. Report of progress received. $3000.00 paid May 1976. Work expected to be completed January 1977.

School:	University of Illinois - 1975-1976 Award
Student:	Lawrence E. Schulz
Faculty Advisor:	Professor James A. Nelson
Thesis:	"Reactions Between Refractories and Gases at Elevated Temperatures and Pressures"
Remarks:	Awarded March 1976 and $3000.00 paid. Experimental work starts Summer 1976. Work expected to be completed Spring 1977.

School:	Virginia Polytechnic Institute - 1976-1977 Award
Student:	Miss Rhonda F. Hayden
Faculty Advisor:	Professor J. J. Brown
Thesis:	"Study of Resistance of Refractories to Alkali Vapors"
Remarks:	Awarded April 1976 and $3000.00 paid. Project under way. Brick samples obtained. Progress report promised in September 1976.

School:	University of Missouri - 1976-1977 Award
Student:	William V. Ballard
Faculty Advisor:	Professor Delbert E. Day
Thesis:	"Refractory Properties in High Pressure/Temperature Gas Environments"
Remarks:	Awarded May 1976 and $3000.00 paid.

REPORT OF
1975-1976 T. R. I. – F. I. R. E. SCHOLARSHIPS

		Remarks
School:	Alfred University	Successful 1975-76. Will
Student:	John D. Fattey	continue in Ceramics. Wants
Faculty Advisor:	Dr. W. G. Lawrence	summer employment.
Amount Paid:	$500.00	
School:	Clemson University	Graduates August 1976.
Student:	Andrew Falatok	Expects to work with
Faculty Advisor:	Dr. G. C. Robinson	refractories company.
Amount Paid:	$500.00	
School:	Georgia Institute of Technology	Graduated June 1976.
Student:	James Gammans	Employed - Sanitary Ware -
Faculty Advisor:	Prof. J. F. Benzel	Production.
Amount Paid:	$500.00	
School:	University of Illinois	Successful 1975-76. Will
Student:	Heff E. Christensen	continue in Ceramics as
Faculty Advisor:	Prof. J. A. Nelson	Senior.
Amount Paid:	$500.00	
School:	Iowa State University	To Graduate School in
Student:	Jay D. Johnson	Nuclear Engineering.
Faculty Advisor:	Prof. Orville Hunter, Jr.	
Amount Paid:	$500.00	
School:	University of Missouri	Successful 1975-76. Will
Student:	Kurt Humphrey	receive 1976-77 scholarship
Faculty Advisor:	Dr. R. E. Moore	as a Junior in Ceramics.
Amount Paid:	$500.00	
School:	The Ohio State University	Successful 1975-76. Summer
Student:	Martin L. Hoss	employment - ceramic related.
Faculty Advisor:	Dr. Wm. B. Shook	Will continue.
Amount Paid:	$500.00	
School:	The Pennsylvania State University	Successful 1975-76. Summer
Student:	John S. Bowen	employment with J. E. Baker
Faculty Advisor:	Prof. Richard C. Bradt	Co. Will continue.
Amount Paid:	$500.00	
School:	Rutgers University	Graduates June 1976. Employed
Student:	Robert Damiano	with Owens-Illinois -
Faculty Advisor:	Dr. M. G. McLaren	Production.
Amount Paid:	$500.00	
School:	Virginia Polytechnic Institute	Graduates 1976. Will take
Student:	William L. Newell	graduate work in Ceramics.
Faculty Advisor:	Prof. L. H. Slack	
Amount Paid:	$500.00	

MEMBERSHIP MEETING
THE REFRACTORIES INSTITUTE
The Cloister
Sea Island, Georgia
June 16 and 17, 1976

ATTENDANCE

Active Members

Allied Mineral Products, Inc.
Mr. & Mrs. R. M. Scott (Bob & Dodie)

Alsey Refractories Co.
Mr. & Mrs. L. S. Goltermann, Jr. (Lou & Pam)

BMI, Inc.
Mr. & Mrs. E. W. Sharp (Everett & Callie)
Mr. L. B. Kelly, Jr. (Leo)
Mr. L. E. Williams (Larry)

Babcock & Wilcox Co.
Mr. & Mrs. R. P. Stuntz (Bob & Betty)

Basic Refractories
Mr. & Mrs. A. M. Caito (Tony & Garland)
Mr. A. R. Eakins (Alan)

C-E Refractories
Mr. & Mrs. R. T. Hegeman (Ray & Gloria)

The Carborundum Co.
Mr. & Mrs. B. S. Wilson (Bonum & Janet)
Mr. & Mrs. C. R. Landback, Jr. (Chuck & Millie)

Cedar Heights Clay Co.
Mr. M. E. Morgan (Red)
Mr. D. E. Morgan (Everett)

Chicago Fire Brick Co.
Mr. & Mrs. W. G. Young (George & Margaret)
Mr. & Mrs. H. R. Pedersen (Harvey & Arlene)

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Mr. & Mrs. H. W. Fulton, Jr., T. R. I. Counsel (Pete & Janie)
Mr. & Mrs. W. S. Lowe, Honorary Associate Member (Bill & Pearl)
Mr. W. O. Lowrie, Martin Marietta Aerospace, Guest Speaker
Dr. & Mrs. C. E. Semler, Director, Refractories Research Center (Charlie & Darlene)
Mr. J. J. Svec, Brick & Clay Record (Jerry)
Mr. & Mrs. B. S. Tucker, T. R. I. Executive Secretary (Brad & Betty)