BOARD OF DIRECTORS MEETING MINUTES

St.Louis, Mo. April 15, 1958

A meeting of the Board of Directors of the Lead Industries Association was held on Tuesday, April 15, 1958, at The Chase-Park Plaza Hotel, St. Louis, Mo.

PRESENT	REPRESENTING
J. D. Bradley	The Bunker Hill Co.
J. A. Costello	Ethyl Corp.
H. L. Day	Day Mines, Inc.
Andrew Fletcher	St. Joseph Lead Co.
Clarence Glass	International Smelting and Refining Co. (Anaconda Sales Co., Agents)
K. W. Green	Electric Storage Battery Co.
F. S. Mulock	United States Smelting Refining and Mining Co.
S. D. Strauss	American Smelting and Refining Co.
Reuben Viener	Hyman Viener & Sons
Jean Vuillequez	American Metal Climax, Inc.
W. J. Welch	National Lead Co.
William Wilke, III	Hammond Lead Products, Inc.

OTHERS

C. R. Ince St. Joseph Lead Co.

Robert L. Ziegfeld, Secretary-Treasurer

The meeting was called to order at 4:45 P.M., with Mr. Fletcher in the chair.

The minutes of the previous meeting of December 2, 1957, were approved.

REPORT OF THE NOMINATING COMMITTEE

The report of the Nominating Committee for officers was submitted as follows:

"The Nominating Committee, appointed by the President and approved by the Board of Directors at its meeting on December 2, 1957, in accordance with Article V, Section 4, of the revised By-Laws, recommends the election of the following to serve as officers of the Association until the 1959 annual meeting:

John D. Bradley	President and Chairman of the Board
F. S. Mulock	Vice President
Felix E. Wormser	Vice President
Kenneth W. Green	Vice President

Respectfully submitted,

NOMINATING COMMITTEE
J. A. Costello, Chairman
Jean Vuillequez
Miles M. Zoller

N 652

There being no further nominations, it was regularly moved, seconded and carried that nominations be closed and that the secretary be instructed to cast one ballot for the slate recommended by the Nominating Committee.

Mr. Bradley, as the new chairman, then assumed the chair.

ELECTION OF EXECUTIVE COMMITTEE

The secretary then was requested to read the names of the present members of the Executive Committee and it was regularly moved, seconded and carried that the Executive Committee be reelected and that Mr. Bradley be designated chairman of the committee. The Executive Committee is as follows:

J. D. Bradley, Chairman
K. C. Brownell
J. A. Costello
Andrew Fletcher
J. A. Martino
F. S. Mulock

REPORT OF THE TREASURER

Attention was called to the financial statements for the first quarter of 1958 which had been mailed to members of the Board on April 9, and they were ordered placed on file. Attached as Exhibit "A."

MEMBERSHIP

The resignations of W. P. Fuller & Company and Lucky Friday Silver-Lead Mines Company were tabled at the request of Messrs. Bradley and Day who wanted an opportunity to discuss these resignations with officials of the respective companies.

In view of the bankruptcy of Pennsylvania Smelting and Refining Company, the membership of that Company was ordered discontinued.

EXPANDED RESEARCH PROGRAM - AZI-LIA

The treasurer explained that the Expanded Research Program AZI-LIA now needed a second advance of $5,000 from the L.I.A. in view of the cost of the work now being done by the firm of Booz-Allen and Hamilton in obtaining a research director.

Inasmuch as the Board had approved at its December 2, 1957 meeting advances up to $25,000 per year for the next five years, no further authorization was deemed necessary.

RESEARCH BUDGET

The Board then proceeded to the consideration of the recommendations for additional research budget submitted by the Industry Development Committee after approval of that Committee and the Technical Steering Committee, as presented in the memorandum mailed to the Board with the agenda of the meeting on April 4. Attached as Exhibit "B."

Mr. Harold E. Lee, Chairman of the Technical Steering Committee, was invited into the meeting to explain the research recommendations.

It was brought out that some policy with respect to patents should be firmly established before entering into an extensive research program. Messrs. Strauss, Costello and Vuillequez were appointed as a committee to work out such a policy and to report their recommendations to the Executive Committee, being guided by the advice of their own patent attorneys.

The new budget for research was approved as presented in the amount of $103,000, distributed as follows:

Applied Research		
Reinforced Lead	$ 5,000	
Heat Emissive Properties	10,000	
		$15,000
Basic Research		
Lead Alloys		
Powder Metal lurgy		
Improvement of mechanical properties of lead with insoluble metals by suspension in the mush state	$50,000	
Lead Chelates		
Perfluorinated organolead compounds		
Lead oxide condensation products with organic materials		
Lead Hydrides	$25,000	
		$75,000
Contingency Fund		13,000
TOTAL		$103,000

Because it was felt that considerable time would be consumed in detailing these research projects, obtaining proposals from qualified research organizations, and allotting contracts, it was decided that no subscriptions should be requested until funds were actually needed.

DESIGN ENGINEERING SHOW

The secretary explained that the Industry Development Committee had approved an Association display at the Design Engineering Show for 1959 to the extent of $5,000 and that it would probably be necessary in order to obtain desirable space to contract for the space during 1958. He also explained that the cost of this exhibit would be paid from reserves in the Industry Development Fund which amounted to approximately $17,000 at the beginning of 1958.

The recommendation of the Industry Development Committee was approved.

GROUP LIFE INSURANCE

The Board agreed that a group life insurance plan for employees of the Lead Industries Association, similar to that already approved for the [illegible] Zinc

Institute was in order. It therefore referred to the Executive Committee the matter of setting up such a plan at an early date with the request that it conform as closely as possible with that of the American Zinc Institute.

1960 ANNUAL MEETING

The secretary reported that the American Zinc Institute Board of Directors had approved a two and one-half day joint meeting with the Lead Industries Association at The Chase-Park Plaza Hotels, St. Louis, in the week of May 2, 1960. The L.I.A. Board concurred in the action of the A.Z.I. Board.

1959 ANNUAL MEETING

It was also noted that the 1959 joint meeting had already been approved for April 22-24 at The Drake Hotel, Chicago, Ill.

1961 ANNUAL MEETING

The Board also expressed its desire to hold the joint meeting with the American Zinc Institute in 1961 at The Drake Hotel in Chicago on dates in April or early May which would not conflict with the annual meetings of member companies.

Meeting adjourned at 6:00 P.M.

Robert L. Ziegfeld
Secretary

FINANCIAL STATEMENT
RECAPITULATION OF ALL DIVISIONS (*)
January 1 to March 31, 1958

	SUBSCRIBED BY ALL MEMBERS			SUBSCRIBED BY PIG LEAD SELLERS O			
	ORDINARY	PENSION FUND	HEALTH AND SAFETY	METALLIC LEAD PRODUCTS	PIGMENTS AND CHEMICALS	CERAMIC	RADIATION SHIELDING
Balance, Jan. 1, 1958......	$50,194.50	$ 98,193.46	$25,552.32	$12,204.15	$4,324.72	$-1,020.61	$ 921.74
[illegible]s: ([illegible] Quarter)..	25,889.00		5,625.00				
[illegible]utstanding Subs..	887.00						
Net Subscriptions..	25,002.00		5,625.00				
Misc. Receipts.....	22.50			173.50			
Transfers To.......		8,140.50		16,750.00	10,700.00	15,750.00	1,250.00
TOTAL AVAILABLE....	75,219.00	106,333.96	31,177.32	29,127.65	15,024.72	14,729.39	2,171.74
Disbursements......	19,574.49		6,170.01	11,739.85	7,389.33	14,930.84	904.30
Advances & Deposits	(a)7,550.00			350.00	300.00		
Transfers From.....	8,140.50						
TOTAL DISBURSEMENTS	35,264.99		6,170.01	12,089.85	7,689.33	14,930.84	904.30
BALANCE, April 1, 1958	(b) $39,954.01	(c) $106,333.96	(d) $25,007.31	$17,037.80	$7,335.39	$ - 201.45	$1,267.44

(*) See individual fund financial statements for details.
(a) Includes $5,000 advance for Expanded Research Organization, AZI-LIA.
(b) Includes savings bank deposits of $23,880.55.
(c) All in savings bank deposits.
(d) Includes savings bank deposits of $15,313.30.

ORDINARY FUND

Financial Statement
January 1 to March 31, 1958

		Expenditures	
Rent and Light		$ 2,904.80	
Furniture, Fixtures and Equipment		824.47	
Salaries		12,709.21	
Social Security Taxes		331.16	
Travel Expense		982.31	
Printing		48.62	
Mailing		928.71	
Office Supplies		490.59	
Association Dues		55.50	
Entertainment and Luncheons		86.00	
Meetings	$281.02		
Registrations	845.00	-563.98	
Telephone and Telegraph		329.19	
Books and Subscriptions		- 7.80	
Illustrations		74.69	
Miscellaneous Expense		381.02	
Total Expenditures		$19,574.49	
Balance, January 1, 1958		50,194.50	
Less: Transfer to Pension Fund		8,140.50	$42,054.00
Receipts from:			
Subscriptions (First Quarter)		25,889.00*	
Less: Outstanding Subscriptions		887.00	25,002.00
"Lead in Modern Industry"			22.50
			67,078.50
Less: Expenditures		19,574.49	
Advances		2,550.00	22,124.49
Balance, April 1, 1957			44,954.01
Less: Advance for Expanded Research Organization AZI -LIA			5,000.00
			$39,954.01
Cash		16,073.46	
Savings Account		23,880.55	
		$39,954.01	

*Includes $2,661.25 in advance.

PENSION FUND

Balance, January 1, 1958	$98,193.46*
Transfer from Ordinary Fund	8,140.50
Balance, April 1, 1957	$106,333.96*

*All invested in savings accounts.

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HEALTH AND SAFETY DIVISION

Financial Statement

January 1 to March 31, 1958

	Expenditures	
Salaries	$4,314.96	
Social Security Taxes	121.33	
Travel Expense	557.48	
Entertainment and Luncheons	76.64	
Research and Research Material	209.80	
Office Supplies	161.99	
Mailing	87.38	
Telephone and Telegraph	52.67	
Books and Subscriptions	245.50	
Meetings	3.00	
Association Dues	130.00	
Illustrations	26.27	
Miscellaneous Expense	182.99	
Total Expenditures	$6,170.01	
Balance, January 1, 1958		$25,552.32
Subscriptions (First Quarter)		5,625.00
		$31,177.32
Less: Expenditures		6,170.01
Balance, April 1, 1958		$25,007.31
Cash	$ 9,694.01	
Savings Accounts	15,313.30	
	$25,007.31	

METALLIC LEAD PRODUCTS DIVISION

Financial Statement

January 1 to March 31, 1958

	Expenditures	
Salaries	$3,249.98	
Social Security Taxes	92.62	
Travel Expense	2,505.93	
Mailing	96.35	
Association Dues	53.75	
Entertainment and Luncheons	264.62	
Meetings	149.27	
Conventions and Exhibits	4,597.42	
Telephone and Telegraph	28.44	
Illustrations	110.37	
Office Supplies	46.30	
Publicity	390.95	
Building Construction Bulletins	-13.50	
Books and Subscriptions	54.89	
Miscellaneous Expense	112.46	
Total Expenditures	$11,739.85	
Balance, January 1, 1958		$12,204.15
Transfer from Industry Development Fund		16,750.00
"Lead Work for Modern Plumbing"		173.50
		$29,127.65
Less: Expenditures	$11,739.85	
Advance	350.00	12,089.85
Balance, April 1, 1958		$17,037.80

PIGMENTS AND CHEMICALS DIVISION

Financial Statement

January 1 to March 31, 1958

	Expenditures	
Consulting Fees	$ 405.00	
Salaries	2,450.00	
Social Security Taxes	59.03	
Travel Expense	1,348.73	
Telephone and Telegraph	8.61	
Meetings	18.31	
Entertainment and Luncheon	48.91	
Books and Subscriptions	26.31	
Mailing	28.94	
Office Supplies	90.63	
Publicity	350.16	
Advertising Production and Art	215.00	
Advertising Space	2,329.70	
Miscellaneous Expense	10.00	
Total Expenditures	$7,389.33	
Balance, January 1, 1958		$ 4,324.72
Transfer from Industry Development Fund		10,700.00
		$15,024.72
Less: Expenditures	$7,389.33	
Advance	300.00	7,689.33
Balance, April 1, 1958		$ 7,335.39

FINANCIAL STATEMENTS

January 1 to March 31, 1958

CERAMIC FUND

	Expenditures	
Salaries	$1,125.00	
Social Security Taxes	32.06	
Supplement to "Lead in the Ceramic Industries"	907.70	
Consulting Fee	300.00	
Travel	5.35	
School Exhibits	3,140.08	
Research Fellowship	6,000.00	
Telephone & Telegraph	15.13	
Office Supplies	46.30	
Publicity	345.48	
Mailing	45.23	
Advertising Production	825.27	
Advertising Space	2,143.24	
Total Expenditures	$14,930.84	
Balance, January 1, 1958		$-1,020.61
Transfer from Industry Development Fund		15,750.00
		14,729.39
Less: Expenditures		14,930.84
Balance, April 1, 1958		$- 201.45

RADIATION SHIELDING FUND

	Expenditures	
Salaries	$ 875.00	
Social Security Taxes	24.94	
Mail	4.36	
Total Expenditures	904.30	
Balance, January 1, 1958		$- 921.74
Transfer from Industry Development Fund		1,250.00
		2,171.74
Less: Expenditures		904.30
Balance, April 1, 1958		$ 1,267.44

INDUSTRY DEVELOPMENT FUND

Financial Statement
January 1 to March 31, 1958

		Expenditures	
Transfers to:			
Metallic Lead Products Fund	$16,750.00		
Pigments & Chemicals Fund	10,700.00		
Ceramic Fund	15,750.00		
Radiation Shielding Fund	1,250.00	$44,450.00	
Technical Service:			
Salaries	1,050.00		
Social Security Taxes	29.93	1,079.93	
Battelle Report		178.31	
Skidmore,Owings & Merrill Survey		5,439.68	
"Lead"		164.83	
Total Expenditures		$51,312.75	
Balance, January 1, 1958			$17,504.00
Subscriptions (First Quarter)		66,071.00	
Less: Outstanding Subscriptions		438.00	65,633.00
			$83,137.00
Less: Expenditures	51,312.75		
Advance	200.00		51,512.75
Balance, April 1, 1958			$31,624.25

*Includes $14,839.50 in advance.

Exhibit "B"
April 15, 1958

April 4, 1958

MEMORANDUM

To: Board of Directors, L.I.A.

From: Industry Development Committee, L.I.A.

SUBJECT: RECOMMENDED ADDITIONAL RESEARCH BUDGET FOR 1958

By mid 1956 a need was felt for the establishment of a well defined, long-range research program for usage as a reference structure in the evaluation and programming of recommended L.I.A. research expenditures. More specifically, it was felt that the existing practice of considering individual projects, per se, without relation to established long-range objectives, might readily lead to imbalance, not only with regard to function, but also with respect to type, applied vs basic and aggressive vs defensive.

After considered discussion the early formulation of a long-range research plan was deemed advisable. It was further felt expedient to expose our problems to a "new look" by seeking the assistance of a competent external consultant group of wide experience and contacts. As a result the Technical Steering Committee entertained proposals from Stanford Research Institute, Battelle Memorial Institute, and Arthur D. Little, Inc., for an evaluation of research needs and formulation of a research program for the Lead Industries Association. The committee recommended acceptance of the proposal submitted by Battelle and its recommendation was approved by the Industry Development Committee and the Board of Directors.

The Battelle report was received in December, 1957 and since has been the subject of two meetings of the Technical Steering Committee. That committee then made certain recommendations for a research program and budget, based both on the Battelle report and on other matters which had come to the attention of the Association, which were submitted to the Industry Development Committee at a meeting on April 3, 1958. The Industry Development Committee concurred in the recommendations of the Technical Steering Committee and is submitting them herewith to the Board of Directors for approval. In so doing the Industry Development Committee wishes to draw the attention of the Board to the fact that this recommendation for an appropriation for research totaling $103,000 for 1958 is in addition to the budgets approved by the Board at its meeting on December 2, 1957 but that it was recognized at that time that additional recommendations would be forthcoming when the Battelle report had been received and evaluated.

The Industry Development Committee also took into consideration the fact that an expanded joint research program with the American Zinc Institute is in process of formulation. It felt, however, that no time should be lost in getting the recommended research under way and that eventually when the joint research facilities have been established and are in operation, the research could be transferred to the new expanded program.

The Technical Steering Committee has also set up small subcommittees especially qualified to supervise, contract for, and plan each of the research projects. It also took into account a proper balance between applied and basic research, feeling that at the outset the greater emphasis should necessarily be on basic research which would subsequently feed ideas for applied research.

Following are the recommendations of the Technical Steering Committee, including research approved at the December 2nd meeting by the Board, in which the Industry Development Committee concurs and recommends to the Board of Directors for approval:

RESEARCH BUDGET, 1958

ALREADY APPROVED

1. Ceramics

a. Ceramic bodies Two fellowships at Rutgers	$6,000	
b. Porcelain enamels Two fellowships at Illinois	6,000	
c. Glazes One fellowship at Ohio State	3,000	
d. Phase diagrams One fellowship at Penn State	3,500	
e. Glass One fellowship at Alfred	3,000	
f. Glazed brick One fellowship at Clemson	2,500	
g. Ferroelectrics One fellowship at California	3,000	
Total Already Approved		$27,000

(The foregoing are under the supervision of the Ceramics Technical Committee.)

RECOMMENDED FOR APPROVAL

1. Applied Research

a. Reinforced lead and lead alloys
Owens-Corning Fiberglas Corp. has already spent some $10,000 to $20,000 in developing a method of reinforcing lead with glass fibers, the product indicating certain improved physical properties. Upon our offer of cooperation, they have suggested that tests be run in our member laboratories on samples supplied by them. The cost to determine whether additional research would be advisable should be moderate; therefore it is recommended

that this procedure be followed at a cost which will undoubtedly be only a fraction of the total mentioned in the Battelle report. This should not exceed the figure shown on the right to develop sufficient information to determine the future course of the work, if any $5,000

(The foregoing would be under the supervision of a subcommittee composed of A. J. Phillips, American Smelting & Refining Co., and Richard P. Hermsdorf, American Metal Climax, Inc.)

b. Heat emissive properties of lead compounds
This was not covered by the Battelle report but has been developed through other L.I.A. contacts. There is good evidence that lead compounds have properties that might be extremely useful in commercial heating and cooling applications, and these properties have been exploited only to a very limited extent. However, a program study is needed to determine its wider applicability. <u>$10,000</u>

(The foregoing would be under the supervision of the L.I.A. staff with the guidance of Roy Dahlstrom, National Lead Co.)

Total Recommended Applied Research $15,000

2. <u>Basic Research</u>

a. Lead alloys - general research

b. Powder metallurgy of lead and lead alloys

c. Improvement of mechanical properties of lead with insoluble metals by suspension in the mushy state.

All three of the foregoing, a, b, and c should start with a review of the literature and present knowledge and reference to similar work underway by others. $50,000

(The foregoing would be under the supervision of a subcommittee composed of A. D. Turnbull, The Consolidated Mining & Smelting Co. of Canada, Ltd., chairman, and I. L. Barker, Cerro de Pasco Corp.)

d. Lead chelates and their applications

e. Perfluorinated organolead compounds

f. Lead oxide condensation products with organic materials

g. Lead hydrides - properties and applications

These four projects, d, e, f, and g, would be pursued primarily through one or more graduate research fellowships in each category. $25,000

(The foregoing would be under the supervision of a subcommittee composed of Roy Dahlstrom, National Lead Company, chairman, and Y. E. Lebedeff, American Smelting & Refining Co.)

Total Recommended Basic Research	$75,000
Contingency Fund	13,000
Total Research, 1958	$130,000

RECAPITULATION OF RESEARCH BUDGET - 1958

Items Already Approved and Subscribed		$27,000
Items Recommended for Approval:		
Applied Research	$15,000	
Basic Research	75,000	
Contingencies	13,000	$103,000
Total Research, 1958		$130,000

Respectfully submitted,

INDUSTRY DEVELOPMENT COMMITTEE

By: Robert L. Ziegfeld

Secretary.

C O P Y

HOME LIFE INSURANCE COMPANY
62 Halsted St., East Orange, N. J.
Orange 3-0383

Roderick C. Bouchard, C.L.U.
Field Underwriter

October 15, 1957
"Our 98th Year"

Mr. Robert L. Ziegfeld
Lead Industries Association
60 East 42nd Street
New York 17, N.Y.

Dear Mr. Ziegfeld:

This letter outlines the Group Life Insurance plan which the Home Life Insurance Company of New York is proposing for the employees of the Lead Industries Association.

From the information supplied to us, we have created three classes of employees, with the individual amounts of Insurance determined by Salary level as follows:

	Annual Earnings	Amount of Ins.	No. of Employees	Total Ins. at risk
Class I	$4,000 and under	$3,000	5	$15,000
Class II	$4,001 to $8,000	$5,000	3	$15,000
Class III	over $8,000	$10,000	4	$40,000
			12	$70,000

Evidence of insurability (Statement of Health) is required for amounts in excess of $5000 - The Home Life reserves the right to limit the insurance to $5000 for those who do not qualify.

The proceeds of the employee's Life Insurance will be paid at his death to any beneficiary named by him, other than his employer, and may be paid in one sum or in installments as provided under Home Life's liberal settlement options.

This coverage also includes a disability benefit under which the employee's Life Insurance is continued without payment of premiums during his total disability if the disability occurs before his sixtieth birthday and continues until his death.

If the employee leaves the employ of the Association, his Life Insurance continues for 31 days, during which time he may convert it without a medical examination to any policy, except term insurance, then issued by Home Life.

Accidental Death and Dismemberment provides a benefit to the employee or his beneficiary in the event of non-occupational, accidental death or dismemberment. The benefits are shown in the following table, and the "maximum amount" is equal to the amount of the employee's Life Insurance under the plan. This benefit is in addition to the Life Insurance benefit.

IN THE EVENT OF LOSS OF	The benefit is
Life	maximum amount
one hand	one-half maximum amount
one foot	one-half maximum amount
one eye	one-half maximum amount
more than one [illegible] above as the result of the [illegible] accident	maximum amount

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(There are certain limitations found in all standard Accidental Death Benefit clauses).

Should any employee remain on the payroll beyond age 70, his Life Insurance automatically reduces to $2000.

Based on current ages of the employees, the monthly premium for the above coverage is $121.78, an average of $1.74 per month per $1000 of coverage. We would propose that the Lead Industries Association assume the entire cost for the first $3000. of coverage and that the individual employee contribute 60 cents per month per $1000 toward the cost of the excess Insurance to which he or she might be entitled.

On this proposed basis, the total cost to the Association would be $101.38 per month. The balance of the premium would be paid by the employees:

3 employees, with $2000 contributory Insurance @ $1.20 per month	$3.60
4 employees, with $7000 contributory Insurance @ $4.20 per month	$16.80
Total by employees	$20.40

Should the Home Life find it necessary to limit the Insurance to $5000, in the case of any one of those employees entitled by salary level to $10,000, the total cost to the Association would be reduced. For example, in the case of Mr. Bowditch, age 67, his total premium above is $45.20 per month. (37% of the total). If his Insurance were limited to $5000, the Association's monthly premium outlay would be $81.78, and the contributing employees would pay $17.40 for a total of $99.18.

Should the Association, for the sake of economy, feel obliged to keep its monthly expenditure to a lower figure, we feel certain this could be accomplished by adjustments in the amounts of coverage.

Installation and administration of the plan is relatively simple. The coverage becomes effective, subject to Home Life approval, on the date selected by the Association. No waiting period is necessary for those currently employed. Future new employees would become eligible after a waiting period of three months.

Very truly yours,

RODERICK C. BOUCHARD (SIGNED)

Roberick C. Bouchard, C.L.U.

RCB:lf