

INTERNATIONAL LEAD ZINC

RESEARCH ORGANIZATION, INC.

LEAD PROGRAM REVIEW COMMITTEE

1969 RESEARCH AUTHORIZATION

OCTOBER 28-29, 1968

INTERNATIONAL LEAD ZINC RESEARCH ORGANIZATION, INC.

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October 9, 1968

To: All Members of the Lead Program Review Committee

From: K. J. Altorfer

Subject: Fall PRC Meeting

The Lead Program Review Committee will meet on October 28 and 29, 1968 in New York City for the purpose of reviewing the Authorizations Recommended for 1969 R&D Projects. An agenda, a Summary of 1969 Zinc R&D Authorizations Recommended by the Technical Committees and a detailed list of projects recommended are included in this booklet. We suggest that you bring the booklet to the meeting with you.

You will note that the meeting on Monday, October 28, will include a number of guest speakers who will discuss various phases of our lead research effort.

Minutes of the various technical committees are attached.

K. J. Altorfer
Secretary

ISR000074

AGENDA

INTERNATIONAL LEAD ZINC RESEARCH ORGANIZATION, INC.

LEAD PROGRAM REVIEW COMMITTEE
BUDGET MEETING

Engineers' Club, 32 West 40th Street, New York, N. Y. 10018

October 28, 1968. 9:30 a.m.

- 9:30 Meeting Called to Order by Chairman
A Report on the "Zincatura" Project - Dr. S. F. Radtke
- 10:00 Introduction of Speakers - Dr. S. F. Radtke
- A. "Organolead Chemistry"
Prof. Dr. G. J. M. van der Kerk, Organisch Chemisch Instituut, T.N.O.
 - B. "Plastic Composites"
Mr. Harold Sarvetnick, Skeist Laboratories
 - C. New Shot Fabrication Techniques
Mr. J. R. Wellington, Cominco Ltd.
 - D. A Review of Lead in Air Pollution
Dr. D. R. Diggs, Du Pont Company
 - E. The Biological Basis for Lead Intoxication
Dr. Bert Vallee, Harvard Medical School
- 12:30 Lunch (The Engineers' Club)
- 2:00 Authorizations Recommended for 1969 R&D Projects
(See "1969 Zinc R&D Authorizations Recommended by the Technical Committees" attached)
- 5:00 Adjournment

N 3860.01

ISR000075

AGENDA

INTERNATIONAL LEAD ZINC RESEARCH ORGANIZATION, INC.

LEAD PROGRAM REVIEW COMMITTEE
BUDGET MEETING

Engineers' Club, 32 West 40th Street, New York, N. Y. 10018

October 29, 1968, 9:30 a.m.

- 9:30 Meeting Called to Order by Chairman
Authorizations Recommended for 1969 R&D Projects - continued
(See "1969 Lead R&D Authorizations Recommended by the Technical
Committees" attached)
- 12:00 Lunch (The Engineers' Club)
- 1:30 Authorizations Recommended for 1969 R&D Projects - continued
- 5:00 Adjournment

N 3860.02

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International Lead Zinc Research Organization, Inc.

October 28, 1968

1969 LEAD R&D AUTHORIZATIONS RECOMMENDED
BY THE TECHNICAL COMMITTEES

SUMMARY

I	Chemical Innovations	\$ 78,200
II	Architectural	108,194
III	Cable Sheathing	114,000
IV	Batteries	98,882
V	Paints & Pigments	48,000.
VI	Corrosion Protection	35,000
VII	Fellowships	32,030
VIII	Environmental Health	191,859
IX	Abstracting	10,000
X	Undesignated Research Authorization	<u>50,000</u>
		<u>\$ 766,165</u>

N 3860.03

ISR000077

October 28, 1968

1969 LEAD R&D AUTHORIZATIONS RECOMMENDED
BY THE TECHNICAL COMMITTEES

1969
AUTHORIZATION

I CHEMICAL INNOVATIONSA. ORGANOLEAD APPLICATIONS

✓ ULC	44	Organoleads For Tropical Disease Control	\$ 5,000	
✓ LC	49	Organolead Lubricant Additives	10,000	
✓ LC	132	Study of Surface Film On Steel Treated With Organolead Compounds	5,000	
✓ LC	89	Lead Compounds As Wood Impregnants Against Marine Borers	<u>6,000</u>	\$ 26,000

B. ORGANOLEAD SYNTHESIS

✓ LC	18	Organolead Chemistry	40,000	
✓ LC	28	Synthesis of Organolead Compounds	<u>12,200</u>	<u>52,200</u>

TOTAL CHEMICAL INNOVATIONS

78,200

II ARCHITECTURALA. PRODUCTS

✓ LM	77	Lightweight Lead Sheet Roofing System	28,694	
✓ LM	147	Lead Curtain Walls	20,000	
✓ LM	122	Lead-Plastic Composites for Packaging and Barrier Applications	<u>22,000</u>	70,694

B. METHODS & PROCEDURES

✓ LM	121	Reinforced Lead Applications	10,000	
3-✓ LM	149	Particulate Lead Sheet	<u>15,000</u>	25,000

C. FINISHES

✓ LE	100	Protective and Decorative Finishes for Lead	<u>12,500</u>	<u>12,500</u>
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TOTAL ARCHITECTURAL

108,194

III CABLE SHEATHING

LM 55	Lead Composite Cable Sheathing	\$ 24,000	
LM 142	Extrusion of High Strength Lead Cable Sheathing Alloys	70,000	
X ULM 42	Welded Lead Tubular Products	<u>20,000</u>	<u>114,000</u>
TOTAL CABLE SHEATHING			114,000

IV BATTERIES

A. S.L.I.

LE 84	Pastes and Grids for the Lead-Acid Battery	35,000	
LE 128	Support of Battery Research at NRL	<u>15,000</u>	50,000

B. STAND BY

X ULE 42	Effect of Composition and Structure on Corrosion of Lead-Calcium Alloys	<u>21,082</u>	21,082
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C. PROPULSION & PORTABLE

X LE 99	Recombination of Gases in Lead-Acid Batteries	<u>10,000</u>	
ULE 50	Lead-Air Battery	<u>3,000</u>	13,000

D. GENERAL

X ULE 53	New Electrochemical Uses for Lead	<u>10,000</u>	
X ULE 52	Lead Plating from Organic Electrolytes	<u>4,800</u>	14,800

TOTAL BATTERIES

98,882

V PAINTS & PIGMENTS

LC 81	Antifouling Paint Formulations	28,000	
LC 127	Lead Pigments in Paints	<u>20,000</u>	<u>48,000</u>

TOTAL PAINTS & PIGMENTS

48,000

VI CORROSION PROTECTION

ULM 46	Explosive Cladding of Lead to Steel	10,000	
X LM 125	Hot Dip Lead Alloy Coating of Steel	<u>10,000</u>	
X LM 148	Soldering Lead Coated Surfaces	<u>10,000</u>	
X ULE 54	Corrosion Mechanisms of Lead Alloys	<u>5,000</u>	<u>35,000</u>

TOTAL CORROSION PROTECTION

35,000

VII FELLOWSHIPS

LM	141	Industrial Applications of Lead (Art Center College Fellowship)	\$ 2,500	
ULM	41	Cryogenic Properties of Lead and Lead Alloys	2,500	
LC	134	Electrochemistry of Organolead Compounds	5,340	
LC	137	Opacification of Leaded Porcelain Enamels	5,800	
LC	139	Oriented High Lead Ferrites	7,500	
LC	150	Photochemical Reactions of Lead Oxide	5,200	
LC	108	Study On Lead Bearing Colored Aluminum Porcelain Enamels	<u>3,190</u>	<u>32,030</u>

TOTAL FELLOWSHIPS

32,030

VIII ENVIRONMENTAL HEALTH

A. AIR POLLUTION

LH	75	Human Exposure to Particulate Lead Compounds in the Air Under Experi- mental Conditions	58,000	
LH	151	Study of Atmospheric Concentrations in Animals and Man	<u>34,383</u>	92,383

B. OCCUPATIONAL HEALTH

LH	79	A&B Toxicity Testing for Organo-Lead Compounds	<u>10,000</u>	10,000
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C. PUBLIC HEALTH

LH	94	Biol. Basis for Lead Intoxication	51,976	
LH	106	Kettering Lead Abstracts	2,500	
LH	138	Lead Release from P.V.C. Piping	<u>10,000</u>	64,476

add LH 115, 114, 109, ULM 15 A 74, 582 pmid

D. UNDESIGNATED RESEARCH AUTHORIZATION 25,000

TOTAL ENVIRONMENTAL HEALTH

191,859

IX ABSTRACTING

LP	52	Lead Abstracting Service	<u>10,000</u>	<u>10,000</u>
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TOTAL ABSTRACTING

10,000

X UNDESIGNATED RESEARCH AUTHORIZATION

50,000

TOTAL LEAD AUTHORIZATION

\$ 766,165