

LEAD INDUSTRIES ASSOCIATION

60 EAST 42ND STREET

NEW YORK 17, N. Y.

June 1, 1958

SUBJECT: TWELFTH ANNUAL BATTERY
RESEARCH AND DEVELOPMENT CONFERENCE

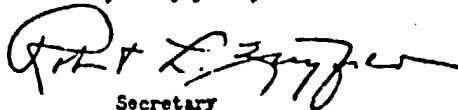
To Members of the Lead Industries Association:

The Twelfth Annual Battery Research and Development Conference sponsored by the Power Sources Division, U. S. Army Signal Research and Development Laboratory, Fort Monmouth, N. J., was concluded on May 22, 1958.

The two-day session, held at the Berkeley-Carteret Hotel, Asbury Park, dealt with new type batteries and was highlighted by a round table discussion on the power source needs of the military and industry for the next 10 to 20 years. A list of the scheduled papers, their authors and affiliations is attached. Several unannounced and informative papers were presented at the round table discussion and will be made part of the published proceedings.

The Signal Corps intends to make the proceedings available in the near future. Copies at the reduced price of \$5.00 can be obtained through the L.I.A. Single copies obtained directly are priced at \$10.00. It is suggested that members interested in obtaining the proceedings of the Conference write to the Lead Industries Association to that effect.

Very truly yours,


Secretary



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TWELFTH ANNUAL BATTERY
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P R O G R A M

Twelfth Annual Battery Research and Development Conference

SYMPOSIUM ON FUEL CELLS

Fuel Cells, Basic Considerations	Western Reserve University Dr. Ernest Yeager
An Experimental Hydrogen-Oxygen Fuel Cell System	National Carbon Company Research Laboratories Dr. George E. Evans
Hydrogen-Oxygen Fuel Cells	Patterson-Moos Division of Universal Winding Co., Inc. Mr. Kenneth I. Rapp
Investigation of the Hydrogen-Oxygen Fuel Cell	U. S. Army Signal Research and Development Laboratory Dr. Herbert Hunger
High Temperature Fuel Cells	Pittsburgh Consolidation Coal Co. Dr. H. L. Recht

SYMPOSIUM ON NICKEL-CADMIUM BATTERIES

The Charge-Discharge Process of the Nickel Oxide Electrode	U. S. Army Signal Research and Development Laboratory Dr. F. Kornfeil
Absorption Measurements on Nickel Oxide Electrodes	U. S. Army Signal Research and Development Laboratory Dr. B. C. Bradshaw
The Working Mechanism of Sealed Nickel-Cadmium Cells	U. S. Army Signal Research and Development Laboratory Dr. Ernst T. Baars
Sintered Plate Nickel-Cadmium Batteries	Sonotone Corp. Mr. L. Belove

SYMPOSIUM ON SPECIAL PURPOSE BATTERIES

New Battery Systems

Solid Depolarizer Materials for Thermal Cells	Catalyst Research Corp. Dr. Sidney M. Selis
Ammonia-Vapor Activated Batteries	Eastman Kodak Co. Mr. T. A. Hale

Automatically Activated Zinc-Silver Oxide Batteries

Introduction

Mr. W. T. Wilburn	U. S. Army Signal Research and Development Laboratory
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Discussion of Construction

Mr. E. Morse
Mr. Paul L. Howard
Dr. D. T. Ferrell
Mr. John Devitt

The Eagle-Picher Co.
Yardney Electric Corp.
American Machine & Foundry Co.
Frank R. Cook Co.

Reliability Program

Mr. R. McCutcheon

U. S. Army Signal Research and Development
Laboratory

PRIMARY BATTERY SYMPOSIUM

New Primary Battery Designs

Wax Batteries

National Bureau of Standards
Dr. Reuben E. Nood

Solid Electrolyte Batteries

Sprague Electric Co.
Dr. Donald M. Smyth

Solid Electrolyte Silver Halide
Batteries

General Electric Co.
Dr. J. L. Weininger

Organic Cathode Materials for Primary
Cells

Radio Corporation of America
Dr. C. K. Morehouse

Manganese Dioxide

Quality Control in the Manufacture
of Electrolytic Manganese
Dioxide

American Potash & Chemical Corp.
Mr. T. W. Clapper

Preparation of Chemical Manganese
Dioxide

American Potash & Chemical Corp.
Mr. J. T. Muench

Low Temperature Batteries

Battery Heating and Vest Batteries

Mallory Battery Co.
Dr. Herman Scheibler

Low Temperature Dry Batteries

Ray-O-Vac Co.
Mr. John W. Paulson

Water Activated Batteries

The Eagle-Picher Co.
Mr. Edward P. Broglio

Field Testing of Low Temperature
Batteries in Alaska

U. S. Army Signal Research and Development
Laboratory
Mr. E. J. Settembre

A -100°F Non-Aqueous Battery

Yardney Electric Corp.
Mr. Frank Solomon

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SYMPOSIUM ON POWER SOURCES OF THE FUTURE

Energy Sources for "Space-Age" Activities	U. S. Army Signal Research and Development Laboratory Dr. Hans K. Ziegler
Electrochemical and Photogalvanic Devices	U. S. Army Signal Research and Development Laboratory Mr. Charles H. Clark
Nuclear Energy Sources	Mound Laboratories Mr. B. C. Blanke
Nuclear Energy Sources	Radiation Research Corp. Mr. John Coleman
Solar Energy Converters	U. S. Army Signal Research and Development Laboratory Mr. George Hunrath
Thermal Energy Converters	U. S. Army Signal Research and Development Laboratory Dr. Emil Kittl
Energy Conversion in the Solid State	Massachusetts Institute of Technology Dr. Mahmoud Rias
Wind Generators	Automatic Power, Inc. Dr. Ulrich Hutter
Utilization of Atmospheric Energy	Loral Electronic Corp. Dr. A. M. Lucian
Telepower: Powering Transistor Devices With Radiated Energy	Diamond Ordnance Fuse Laboratories Mr. L. R. Crump
The Challenge of the Future	Electro-Optical Systems, Inc. Dr. A. M. Zarem