

LIA22398

LEAD INDUSTRIES ASSOCIATION

80 EAST 42ND STREET

NEW YORK 17, N.Y.

June 2, 1959

SUBJECT: THIRTEENTH ANNUAL POWER
SOURCES CONFERENCE

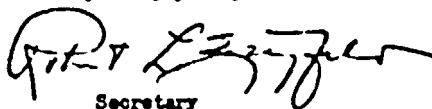
To Members of the Lead Industries Association:

The Thirteenth Annual Power Sources Conference sponsored by the Power Sources Division, U. S. Army Signal Research and Development Laboratory, Fort Monmouth, N. J., was concluded on April 30, 1959.

The three-day session, held at the Shelburne Hotel, Atlantic City, dealt in the main with new type battery systems. A list of the scheduled papers, their authors and affiliations is attached.

The Signal Corps intends to make the proceedings available at \$10.00 per copy with additional copies priced at \$5.00. It is suggested that members interested in obtaining the proceedings of the Conference write to the Power Sources Division, U. S. Army Signal Research and Development Laboratory, Fort Monmouth, New Jersey.

Very truly yours,



Secretary



**THIRTEENTH ANNUAL
POWER SOURCES CONFERENCE**

SPACE POWER

Advanced Research Projects Agency
H. W. Snyder

Nuclear Fuels for Electrical Power Sources

The Martin Co.
H. Crane

Design Considerations For Nuclear Power Sources

U. S. Army Signal Research and Development
Laboratory
X. Kittl

A Thermoelectric Generator

Minnesota Mining and Manufacturing Co.
A. D. Steele

Thermoelectricity

Westinghouse Electric Corp.
C. M. Zager

Thermionic Emission

General Electric Co.
V. C. Wilson

Comparison of Thermoelectric and Thermionic Conversion

Massachusetts Institute of Technology
G. Hatsopoulos

Dynamic Heat Engines

Tompson Products, Inc.
R. J. Dennington

Applications of Solar Energy Converters

U. S. Army Signal Research and Development
Laboratory
C. Hunrath

Recent Solar Converter Research

Radio Corp. of America
J. J. Loferaki

Large Area Solar Cells

U. S. Army Signal Research and Development
Laboratory
W. Cherry

Photogalvanic Batteries

Philco Corp.
W. E. Lasser

The Collection and Concentration of Solar Curtiss-Wright Corp.
Energy for Thermal Applications H. Telkes

W. Tolles

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SECONDARY BATTERIES

Calcium-Lead Grid Alloys	C & D Battery Co. E. A. Willihngans
Addition of Cobalt to Nickel-Cadmium Batteries	Gould-National Batteries, Inc. S. Januszkiewics
Sealed Nickel-Cadmium Batteries	T. A. Edison Laboratories A. Fleischer
Hermetically Sealed Nickel-Cadmium Batteries	Sonotone Corp. L. Belove
Cathodic Oxygen Reduction under Conditions Effective in Sealed Nickel-Cadmium Batteries	Accumulatoren Fabrik A. G. H. v. Dohren
Sealed Cells for Satellites	U. S. Army Signal Research and Development Laboratory A. Frink
Silver Oxide Secondary Batteries	Yardney Electric Corp. P. L. Howard F. Solomon
Alkaline Battery Tester	Vitro Laboratories A. W. Speyers

COMPARISON OF ENERGY CONVERSION SYSTEMS

A Parametric Study of Energy Transformation	Electro-Optical Systems, Inc. J. H. Fisher
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FUEL CELL BATTERIES

Introduction, Concepts and Survey	U. S. Army Signal Research and Development Laboratory H. F. Hunger
Low Temperature Type	National Carbon Co. Research Laboratories O. E. Evans
A Redox Type	General Electric Co. Max L. Feldman
A Second Redox Type	Lockheed Aircraft Corp. M. Eisenberg
Ion Exchange Membrane Fuel Cell	General Electric Co. L. W. Niedrach
Regenerative Type	MSA Research Corp. R. C. Werner

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PRIMARY BATTERIES

Structure and Morphology of MnO_2	U. S. Army Signal Research and Development Laboratory W. Nye
High Capacity-Long Life Dry Cells	U. S. Army Signal Research and Development Laboratory J. M. Hovendon
Low Temperature Dry Cells	Ray-O-Vac Co. J. Paulson
Organic Depolarizer Batteries	Radio Corp. of America R. Glicksman
Micro-Miniaturization	U. S. Army Signal Research and Development Laboratory V. J. Kublin

HIGH-RATE BATTERIES

Battery Voltage Regulators	Gulton Industries C. Bowland
Ammonia Systems and the AVA Battery	Eastman Kodak Co. K. R. Scribner
The Zinc-Silver Oxide Battery	
Concluding Results of the Relia- bility Program for Battery BA-472/U	U. S. Army Signal Research and Development Laboratory K. T. Wilburn
Automatic Activating Devices	U. S. Army Signal Research and Development Laboratory M. Klein
New Constructional Features	Willard Storage Battery Division C. Gerhan
Chemically Heated Batteries	American Machine & Foundry Co. D. T. Ferrell