# AMERICAN INSTITUTE of ELECTRICAL ENGINEERS



# PETROLEUM INDUSTRY COMMITTEE

presents



# 9th Annual Conference

**SEPTEMBER 9-12, 1962** 

CLEVELAND, OHIO

Headquarters
PICK-CARTER HOTEL

## CHAIRMAN'S MESSAGE

The Ninth Electrical Conference of the Petroleum Industry this year is being held in Cleveland, Ohio, the cradle of the petroleum industry. This conference is sponsored by the Petroleum Industry Committee of the American Institute of Electrical Engineers.

We urge every electrical engineer associated with the petroleum and petrochemical industries to attend. We believe that both you and your company will benefit if you do attend.

The conference technical program is developed specifically to help you. It is comprised of papers and panel discussions. The subjects are timely and worthwhile. It is developed and presented by leaders and experts in the petroleum and petrochemical industries. The chances are that many will be of direct interest to you.

The conference is designed to give you the following:

- latest in technology
- cost reduction methods
- problem solving techniques
- valuable associations

The way to get the most out of this conference is to take an active part in the discussions. Ask questions. Give your own opinion. Ask the author to amplify or clarify some point. This makes the discussion lively and interesting and brings out the worthwhile points.

The program is rounded out by interesting inspection trips, a full schedule of activities for the ladies, and after-session social events.

Why not plan to attend? Let's make the Ninth the most successful of all of the conferences. We hope to see you there.

W. H. DICKINSON Chairman, AIEE Petroleum Industry Committee

#### MONDAY MORNING

10:00 - 11:30

#### **GENERAL SESSION** — Ballroom

PRESIDING - R. W. Mills, Chairman, Cleveland Conference

INVOCATION — Dr. L. Wilson Kilgore
Pastor, Lakewood Presbyterian Church

OPENING COMMENTS — W. H. Dickinson

Chairman, Petroleum Industry Committee

WELCOME — Curtis Lee Smith

President, Cleveland Chamber of Commerce

PAST PRESIDENT'S REMARKS — Warren H. Chase Vice President, Ohio Bell Telephone Co.

PRESIDENT'S REMARKS — Dr. B. R. Teare, Jr.

Dean of Engineering, Carnegie Institute of Technology

KEYNOTE ADDRESS — A. B. Clarke
Vice President, Manufacturing, Standard Oil Co. (Ohio)

#### 12:00 - 1:30

#### GENERAL LUNCHEON - Rainbow Room

PRESIDING — K. L. Wheeler

Vice Chairman, Cleveland Conference

ADDRESS — The Disciplines of Progress by R. M. Besse President, The Illuminating Co.

#### REGISTRATION - N. Mezzanine

Sunday — 4:00 P.M. - 7:00 P.M. Monday, Tuesday, Wednesday — 8:00 A.M. - 4:00 P.M.

#### FEES:

Registration — AIEE Members	\$ 8.00
Non-Members	\$10.00
Ladies and Students	No Charge
Monday — General Luncheon	\$ 4.00
Tuesday — Annual Banquet	\$10.00
Ladies' Activities	As Noted
Inspection Trips	As Noted

#### MONDAY AFTERNOON

2:00 - 5:00

#### GENERAL SESSION - Ballroom

# PANEL DISCUSSION Intrinsic Safety and Related Subjects

Presiding - W. E. Burpee

- S. P. Axe Panel Reporter Atlantic Refining Co.
- L. E. Cuckler
  Robertshaw-Fulton Controls
- W. F. Hickes
  Foxboro Co.
- E. C. Magison
  Minneapolis-Honeywell Regulator Co.
  - F. L. Maltby

    Drexelbrook Instrument Consulting Service
- R. McCarron Leeds & Northrup Co.
- J. F. Wilkens Royal Dutch Shell, The Hague, Holland

5:30 - 6:30

#### SUBCOMMITTEE MEETINGS

MANUFACTURING - Aviation Room

PRODUCTION - South Georgian Room

TRANSPORTATION - Harvest Room

# MONDAY EVENING

7:30

#### MUSICARNIVAL

Recommended to all conference attendees.

(For complete information see Ladies' Activities)

#### TUESDAY MORNING

9:00 - 12:00

#### **TECHNICAL SESSIONS**

#### MANUFACTURING - Ballroom

Presiding - John Moriaty

CPA-62-5014

An Analysis of Low Voltage Circuit Breakers as Applied on Petroleum Power Systems

F. X. Huttinger, Al Filipponi, ITE Circuit Breaker Co.

CPA-62-5015

Renovating Electrical Equipment Damaged by Hurricana Carla J. J. Jaquin, Jr., Dow. Chemical Co.

CPA-62-5016

Communications in Refineries
P. O. Klueber, Standard Oil Co. (Ohio)

#### PRODUCTION - Aviation Room

Presiding - R. K. Owen

CPA-62-5017

180 Well Computer Controlled Lease
W. E. Steman, Standard Oil Co. (California)

CP-62-1323

Production Flow Stations in Lake Maracaibo, Venezuela
P. S. Phillips, Venezuelan Sun Oil Co.

CP-62-1328

Reliability of Production Electrical Drilling Systems
Helmut Winter, General Electric Co.

CP-62-1332

Application of Liquid Level Switches to Oil Producing Operations M. A. Remke, Phillips Petroleum Co.

TP-62-1329

A 440/762 Volt Oilfield Combination Starter (by title only)
T. L. Scott, Phillips Petroleum Co.

# TRANSPORTATION - English Room

Presiding - J. J. Sonnier

CPA-62-5018

Pump Motor Protection Methods David B. Sleeman, T. F. Bellinger, Allis-Chalmers Mfg. Co.

CP-62-1326

Design and Operate for Lowest Electric Power Costs

John M. Stevenson, Dallas, Texas

CPA-62-5019

Remotely Controlled Gas Turbine Oil Pipeline Stations in Syria

Merritt A. Hyde, Westinghouse Electric

A. G. Coates, Iraq Petroleum Co.

CPA-62-5020

Electronic Protective Devices for Pipeline Stations
Haskell Ginns, The Indikon Co., Inc.

#### **TUESDAY AFTERNOON**

12:00

INSPECTION TRIPS — Buses depart from Prospect Avenue entrance.

#### EASTLAKE POWER PLANT

The Illuminating Company's Eastlake Power Plant is located 22 miles east of downtown Cleveland, and represents the newest of four power plants supplying the electric needs of Illuminating Company customers. Making up Eastlake's 631,000 kilowatt capability are four tandem-compound turbogenerators. A unique installation at the Eastlake plant is the 108 mile long coal pipeline extending from Georgetown, Ohio, to Eastlake, and designed to supply the greater proportion of coal consumed at the plant. Specific points of interest include the generating floor with four turbogenerators, the coal dryIng plant, boilerturbine control room, electrical control room and the large multi-story boilers used for steam production in running the four large turbogenerators. Fee, \$3.25, including box lunch.

#### NELA PARK - CLEVELAND, OHIO

Nela Park is the headquarters of the Lamp Division of the General Electric Company. In addition to the manufacture of light bulbs, extensive research of many kinds having to do with light sources and their uses is conducted at Nela Park. Nela Park has developed into the great teaching center of the lighting industry. Because of its beautiful grounds which resemble a college campus, Nela Park has become known as The University of Light.

In addition to a tour of the facilities and lighting demonstrations, lectures will be given by specialists in refinery lighting. Fee, \$1.50. Lunch not included. Cafeteria service is available at Nela Park.

#### REPUBLIC STEEL - WARREN, OHIO

Republic Steel Corporation's new hot strip mill at Warren, Ohio, was dedicated on September 21, 1961. It is a 56" semi-continuous unit designed to roll carbon, alloy, silicon and stainless steel sheets. In the tour of the facilities you will see the fascinating sight of red hot thick steel slabs being rolled to coils of steel as thin as .08 inches.

An added sidelight of the trip will be a one hour's bus ride along the beautiful Ohio Turnpike. Fee, \$3.25, including box lunch.

5:00 - 6:00

TECHNICAL PROGRAM SUBCOMMITTEE — Nautilus Room

5:00 - 6:30

GENERAL PROGRAM SUBCOMMITTEE — Harvest Room

5:00 - 6:30

WORKING GROUP No. 1 — South Georgian Room

# TUESDAY EVENING

#### ANNUAL BANQUET

6:30

## COCKTAIL HOUR - Embassy Room

Roving musician will entertain the guests during the social hour.

7:30

#### DINNER - Rainbow Room

The dinner will be held in the attractive Rainbow Room of the Pick-Carter Hotel where a menu fit for the heartiest of taste will be served.

#### MENU

California Zephir Fruit Cocktail

Celery Branches — Radishes Fleurette
Mixed Colossal Olives

Roast Souse Fall Prime Rib — English Style

Whole Northern Green Beans in Butter

Jacketed Baked Idaho Potato

Imperial Salad Vinaigrette

Rolls & Butter

Beverage

Blue Ridge Mountain Ice Cream

Dry Petit Four

#### ENTERTAINMENT

Background dinner music will be supplied by the entertaining Four Playboys.

After dinner, a delightful show will be presented for your evening's enjoyment. There will be a dance ensemble, magician, music, audience participation and more—intended to entertain the stags and couples.

# WEDNESDAY MORNING

9:00 -12:00

#### GENERAL SESSION - Rainbow Room

Presiding - Everett B. Turner

CPA-62-5021

Factors for Consideration in Planning Reliable Electric Power Supply and Control

Arthur Hauspurg, American Electric Power Service Corp.

CPA-62-5022

Electrical Hazards in the Petroleum Industry

John C. Howard, American Oil Co.

CP-62-1322

Improved Ball Bearing Arrangement for Electric Motors

J. R. Autenrieth, Phillips Petroleum Co.

CP-62-1331

Significant Characteristics of Insulated Conductors for Petroleum Plant Application

Roger S. Keith, Kaiser Aluminum Chemical Corp.

12:00 - 1:45

# JOINT PLANNING GROUP LUNCHEON — Spanish Room

# COPY OF PAPERS

Members may obtain preprints of numbered papers at the Conference for 50¢ each (\$1.00 each to nonmembers) or they may purchase them in advance of the conference by placing their order and remittance to the AIEE Order Department, 345 East 47th Street, New York 17, N. Y. Mail orders (particularly for out-of-town members) are advisable inasmuch as an adequate supply of each paper at the conference cannot be assured.

The conference supply of papers will be available at the registration desk.

#### WEDNESDAY AFTERNOON

2:00 - 5:00

#### TECHNICAL SESSION

#### MANUFACTURING - Rainbow Room

Presiding - T. R. Shaw

CP-62-1324

Designing for Economical Process Unit Lighting
E. G. Warren, Humble Oil & Refining Co.

CP-62-1327

Economics of Enclosure Selections for Motor Controls in Classified Areas W. E. Burpee, Badger Co.

CP-62-395

An Approach to the Economic Evaluation of Electrical Generation in Continuous Process Plants

T. D. Higgins, Union Carbide Chemicals Co.

## **PRODUCTION** — Aviation Room

Presiding - R. K. Owen

CP-62-1325

European Practices in Electrical Design and Construction for Petroleum Installations J. F. Wilkens, Royal Dutch Shell, The Hague, Holland

CPA-62-5023

Better Mousetraps

T. L. Scott, Phillips Petroleum Co. Stanley Bird, The California Co. W. E. Withers, Sun Oil Co.

CPA-62-5024

Thermoelectric Cathodic Protection
A. M. Bernard, Westinghouse Electric

# TRANSPORTATION - English Room

Presiding - F. P. Gertson

CP-62-1330

Remote Set Local Automatic Control and Telemetering Engine Driven Compressor Station Edward F. Poshadel, North Electric Co.

CP-62-1321

Economics of Outdoor Gas Pipeline Pumping Stations
J. P. Chudleigh, Brown & Root

CPA-62-5025

Pipeline Remote Control System Using Teletype Language:
1. Description and Operation

William H. Osborne, Shell Oil Co

2. System Design and Equipment Features
William J. Warren and H. E. Gavello
Shell Development Co.

5:00 - 6:30

# THURSDAY MORNING

9:00 - 12:00

#### **EXECUTIVE SUBCOMMITTEE - Suite 348**

1961 - 1962



# PETROLEUM INDUSTRY COMMITTEE

A.I.E.E. HEADQUARTERS REPRESENTATIVE —R. S. Gardner, Technical Activities, New York, N. Y.

CHAIRMAN — W. H. Dickinson, Esso Research & Engineering Co.

VICE CHAIRMAN - Everett B. Turner, General Electric Co.

SECRETARY - V. J. Sittel, Service Pipe Line Co.

SUBCOMMITTEE CHAIRMEN -

Manufacturing - T. R. Shaw, Phillips Petroleum Co.

Production — Roger K. Owen, Southwestern Public Service Co.

Transportation - J. J. Sonnier, Shell Pipe Line Corp.

#### CLEVELAND CONFERENCE COMMITTEE

Chairman - R. W. Mills, Standard Oil Co. (Ohio)

Vice Chairman - K. L. Wheeler, Illuminating Co.

Secretary - C. T. Fisk, Standard Oil Co. (Ohio)

Arrangements - P. G. Wagner, Wagner-Green Co.

Banquet - E. C. Pletz, Arthur G. McKee & Co.

Budget & Finance - W. M. Leighton, W. W. Clark Corp.

Inspection - R. H. Owen, Square D Co.

Printing & Programming — R. W. Cavanaugh, Allis-Chalmers Mfg. Co.

Publicity - C. A. Schroeder, General Electric Co.

Reception - W. J. Feahr, Crouse Hinds Co.

Registration - M. P. Shebek, Elliott Co.

Technical - E. E. Croushore, Westinghouse Electric Corp.

Ladies Activities - Mrs. Ralph Thompson

Student Activities —
Phillip Retzman, Fenn College
Bernard G. Huth, Case Institute of Technology

Cleveland Section Host-Chairman - John C. Ponstingl

#### LADIES' ACTIVITIES

Ladies' Activities will begin each day with a Coffee Hour in the Presidential Suite of the Pick-Carter Hotel, from 9-10:30 A.M.

# Monday, September 10, 1962

9-10:30 A.M. Coffee Hour

12:30 P. M. Luncheon at Higbee's 10th floor

Vista Room. Tickets \$2.00

Program — "Work Wonders with Wigs," by Antoine of Higbee's

8:30 P.M. Musicarnival's Production of "Do-Re-Mi". Tickets \$2.75.

Round Trip Bus \$1.00.

See "Do-Re-Mi" featuring Broadway Artists at Cleveland's Tent Theatre In-The-Round in Warrensville Heights. Buses will leave the Pick-Carter Hotel at 7:30 P.M. Curtain Time — 8:30 P.M.

# Tuesday, September 11, 1962

9-10:30 A.M. Coffee Hour

10:30 A.M. Museum of Art and Nela Park

A conducted tour of the world's most beautiful Museum of Art which is located in the Cultural and Educational center of Cleveland. Lunch will be available at the Museum Cafeteria. This will be followed by an especially prepared and conducted tour of the famous General Electric Lighting Institute at Nela Park, where we will see the latest innovations and trends in lighting. Round trip bus, \$1.00

6:30 P.M. Conference Banquet

# Wednesday, September 12, 1962

9-10:30 A.M. Coffee Hour

11-12:00 A.M. Electrama, "Live Better Electrically"

Lecture demonstration by the staff of The Illuminating Company in their auditorium at 55 Public Square.

## GENERAL INFORMATION

AUTHORS' BREAKFASTS will be held as follows:

Monday, 7:30 A.M. — Pan American Coffee Shop Tuesday, 7:30 A.M. — El Rancho Room Wednesday, 7:30 A.M. — El Rancho Room

Authors are invited to the breakfasts on the day of their talks.

BASEBALL: The Cleveland Indians American League team will be playing the Kansas City Athletics at the Municipal Stadium on Sunday, Sept. 9, at 2:00 P.M., and the New York Yankees on Wednesday evening, Sept. 12, at 8:00 P.M. Advance tickets may be obtained by mailing a note to the Bell captain with a check made out to the Pick-Carter Hotel.

HOSPITALITY ROOMS will be closed during all Technical Sessions, General Luncheon, and Annual Banquet.

CONFERENCE HEADQUARTERS will be in the Vice Presidential Suite.

The 10th Electrical Conference
of the Petroleum Industry
will be in
St. Louis, Missouri
CHASE-PARK PLAZA HOTEL
September 8-11, 1963