A MERICAN INSTITUTE OF CHEMICAL ENGINEER.

-THE NEWSLETTER-

AICHE One Day Symposium,

February 13, 1962

PLACE: The Sherman Hotel Randolph and Clark

Registration: Starting at N 11:30 a.m. Two concurrent sessions starting at 1:30 P.M.

1. A Look to the Future

2. Systems Engineering in the Chemical Process Industries

Cost: Registration for technical sessions \$4.00 (Students \$1.00)
Banquet \$6.00 (Students \$4.00)

Dinner Speaker: Thomas H. Coulter, Chief Executive Officer, Chicago Association of Commerce and Industry

Subject: Industrial Development and Chicago's Future"

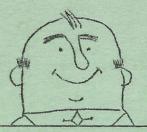
- ADDITIONAL DETAILS INSIDE -

MARK YOUR CALENDAR FOR THE MARCH MEETING.

Date: March 14, 1962

Place: Vogel's Restaurant, 1250 Indianapolis Boulevard, Whiting

Speaker: Dr. Hal Hart - American Oil Company
Subject: Computer Control of Processing Units.



The One-Day Symposium Committee wishes to thank the following companies for their contributions to help defray the cost of printing and mailing the program:

ABBOTT LABORATORIES: Abbott is a full line manufacturer of pharmaceuticals and fine chemicals, with annual sales in the range of 125 to 130 million dollars. It is an international company, having 21 plants around the world. The headquarters and main plant are in North Chicago. The company has 9,000 employees, 4,000 of which work at the North Chicago plant.

AMERICAN OIL COMPANY: The American Oil Company makes and markets a full line of petroleum products under the American or Amoco labels (Standard Oil in the Midwest). Headquarters are in Chicago; the main refinery and research facilities are in Whiting, Indiana. Together with associated members of the Standard Oil Company of Indiana family, (one of which Amoco Chemicals is also headquartered in Chicago) it accounts for about two billion dollars annual sales. The combined companies employ about 42,000 people.

THIS NEWSLETTER IS FOR YOU!

 appreciate the people is frustrated decisions matter unresults in design, actual continuity plants artion of 1

the amoun

be based

can do it

This exce despite t bonus con insurance by the co benefits comparabl the Unite

At the cu
Japan's a
the next
is a dras
ment fisc
tion of n
in order

JAPAN - LAND OF CONTRASTS

During my recent visit to Japan, I found a country that is fascinating and frustrating, sluggish and vital, efficient and inefficient. The tourists' world is fascinating because of the ancient lore and customs, the natural beauty of the country and the manner in which it is

appreciated and emphasized, and the all-out effort on the part of the people to please the visitor. The business world, I found, is frustrating because of the amount of time consumed in making decisions, regardless of the importance or trivial nature of the matter under consideration. This hesitation in decision-making results in a sluggish pace in the preliminary phases of plant design, but the vitality of the Japanese becomes apparent when actual construction is underway. The people are very efficient in their use of building materials, and by U.S. standards, the plants are almost underdesigned. Their utilization and conservation of land, by necessity, is the epitome of efficiency, but the amount of manpower used in most facets of the Japanese economy is wasteful. The philosophy of the employer appears to be based on the tenet that if one man can do the job, two or three can do it better.

This excessive use of manpower results in high production costs despite the APPARENT low wage rates. Fringe benefits include a bonus consisting of 2 to 4 months' pay, hospitalization and welfare insurance, a retirement fund, and in some cases, housing provided by the company employing the individual. The combination of fringe benefits and low productivity results in process equipment costs comparable to, or in excess of, the costs of similar equipment in the United States.

At the current rate of inflation in Japan, it is my opinion that Japan's advances into the world market will be slowing down during the next three years, barring devaluation of the YEN, unless there is a drastic improvement in productivity. Under present government fiscal policies, upgrading of existing processes and construction of new automated processes is being temporarily discouraged in order to restore the balance of foreign currencies.

narmaof 125 og 21 in

h work

tets a bels the

tered

The Japanese are apparently slow to adopt new ideas, but once adopted, they are very quick to adapt these ideas to their requirements. This ability of adaptation may well be their salvation in the problem of increasing productivity. The influx of technical advisers from England, France, Germany and the U.S. can easily serve as the source of new ideas.

To some extent, government policy may restrict the development of new ideas. The engineer in Japan does not enjoy the near-professional status of the engineer in the U.S. The Japanese engineer is under close government control and must be individually licensed in order to work in each of the areas of refrigeration, air compression, handling of dangerous materials (i.e., acids and caustic soda, petroleum products, etc.) and in some of our "unit operations." No general engineering license is available.

Another factor which retards the development of new ideas is the practice in Japan of hiring an individual for his lifetime. It is virtually unheard of for a man to resign and seek employment elsewhere, so that tightly knit, noncommunicative engineering organizations result.

The short stay that I had in Japan was very interesting and challenging. One unique problem in plant design, which I encountered, is the Japanese belief that all rotating and reciprocating equipment has inherently low reliability. This belief is felt so strongly that their standard practice is to have stand-by equipment in the process so that production may continue while the malfunctioning equipment is being repaired. As a result, fixe investment can become excessively high because of the many duplications of equipment. The excessive down time experienced by the Japanese in the past appears to be due to the failure of the Japanese to stress the importance of durability and ease of repair in equipment design.

Safety practices, as compared to the U.S., are poor. Unguarded V-belt drives, poorly designed stairways, weak handrails, and sandblasting and spraying operations, wherein the operator is only protected by a thin gauze face mask, are typical and widespread.

low va is now of rec has la

War II
the 1,
has be
of the
fields
lined
look t

Japan

NOTICE

Paragr

that o

At lea appoin good s member meetin good s sugges

Paragra
All such the clo
Committed
ing Common or more

Paragra All nom Nominat requirelon in lical

ent of coengineer icensed compresic erations."

It lent g

chaltered, quip-

uipe xe. upliy the

repair

ded d s despread. Despite the foregoing comments about overstaffing and the apparent low value of the employee as indicated by safety practices, Japan is now in the throes of a labor shortage. Activities in the area of recruiting labor has become so competitive, that the government has laid down ground rules for recruiting at the Secondary school and university levels.

Japan has made tremendous progress since the conclusion of World War II, as evidenced by the skyline of Tokyo which is dominated by the 1,092-foot Tokyo Tower. A tremendous amount of construction has been completed, and much more is in progress. We are all aware of the proficiency of the Japanese in the optical and electronic fields. All of this, despite the deficiencies that have been outlined above. In our future planning, we cannot, we must not, overlook the potential productive capacity of the 95,000,000 people that occupy the land of contrasts -- Japan.

-- Bob Opila

NOTICE: As passed at the October and November meeting, nominating procedures have now been amended to read as follows: Paragraph 2. Section 3. Article V

At least two weeks before the January meeting, the Chairman shall appoint a Nominating Committee of three members of the Section in good standing. The chairman shall announce his appointment to the membership at the January meeting. With the call for the March meeting, the Secretary shall send to each member of the Section in good standing a nominating ballot on which the member may show his suggestion for one nominee for each office and for director-at-large.

All such nominating ballots which are returned to the Secretary at the close of the March meeting shall be delivered to the Nominating Committee immediately. With these ballots as a guide, the Nominating Committee shall draw up a list of nominees of not less than one or more than three for each office and for the director-at-large.

Paragraph 4, Section 3, Article V
All nominees for officers and directors-at-large proposed by the Nominating Committee must be members of the organization in good

standing for at least two successive fiscal years including the year in which they are nominated. The list of nominees, along with appropriate background information, shall be presented to the members as part of the written notice of the annual meeting.

Speake Cont.

Dinner

COST:

PERS

NE

WHAT:

One-Day Symposium Sponsored by the Chicago Section,

American Institute of Chemical Engineers

WHERE:

Sherman Hotel, Randolph and Clark Street,

Chicago, Illinois

WHEN:

February 13, 1962

Two concurrent sessions starting at 1:30 p.m.

Registration starting at 11:30 a.m.

Cocktails at 5:45 p.m. Banquet at 6:30 p.m.

WHO:

SESSION 1

Subject- A Look to the Future Systems Engineering in the Chemical Process

Industries

SESSION 2

Chairman-

Dr. J. C. Forman Abbott Laboratories Norman E. Rawson Pure Oil Company

Speakers-

Dr. Clarence R. Jung, Jr. Standard Oil Company
"The Future: An Economist's Viewpoint"

Prof. L. G. Mitten Northwestern University "Operations Research"

Peter J. Marschall Abbott Laboratories "Manufacturing Facilities Overseas"

Charles Laspe
T.R.W. Computers Company
"Process Simulation With
Digital Computers"

Continued.....

AMERICA

R. J. He the authorecently

At a me

D. S. Gr Icing", Eltinge

0

tion,

g in

SS

rsity ch"

ompany n With Speakers-Prof. Albert H. Rubenstein Northwestern University "The Organization of Research and Development in the Chemical Industry"

> Dean W. R. Marshall, Jr. University of Wisconsin "Current Trends in Engineering Education"

Paul E. Parisot Monsanto Chemical Co. "Process Simulation With Analog Computers"

William G. Hunter University of Wisconsin "Evolutionary Operations"

Dinner Speaker- Thomas H. Coulter, Chief Executive Officer, Chicago Association of Commerce and Industry "Industrial Development and Chicago's Future"

COST:

Cont.

Registration for technical sessions - \$4.00 Students- (\$1.00) Banquet - \$6.00 (Students - \$4.00)

PERSONAL NEWS

AUSTIN COMPANY - Reporter: C. F. Sloan

Roy Lockhart is in Ohio starting up a plant making Rubber for golf ball covers.

AMERICAN OIL COMPANY - Reporter: M. F. Oxenreiter

R. J. Hengestebeck, Research Associate at the Whiting Laboratory is the author of "Distillation: Principles and Design Procedures", recently published by Reinhold.

At a meeting of the Whiting Science Club, Professor C. Northcote Parkinson spoke on "Parkinson's Law".

D. S. Gray presented the paper "Gasolines, Cars, and Carburetor Icing", at the Detroit meeting of SAE. Co-Authors are Lamont Eltinge, S. R. Oblad, and R. E. Kay.

AMERICAN OIL COMPANY....continued

Seymour Meyerson spoke on "Organic Ions in the Gas Phase" before the staff of the National Research Council, of Canada in Ottawa.

In a Seminar on Absorption Spectroscopy, sponsored by the Chicago Section of the Society of Applied Spectroscopy, J. B. Peri spoke on "Infrared Studies of Heterogeneous Catalysis."

Two staff members spoke before university groups: W. L. Bulkley, at the College of Pharmacy, University of Illinois, on "Flammability, Explosions and Detonations," and R. E. Higgins at Ohio State, on "Better Technical Writing."

J. F. Wygant spoke before the St. Louis Section of the American Ceramic Society on "Refractories in the Petroleum Industry."

BLOCKSON CHEMICAL COMPANY - Reporter: E. P. Lynch

Mr. E. P. Lynch has been transferred to the Sun-Olin Chemical Corporation at Claymont, Delaware.

CORN PRODUCTS COMPANY (TECHNICAL DIVISION) - Reporter: D. Gaichas

Joe Battaglia has a little more help on his income tax return for 1962 than 1961. His wife, Kitty, gave birth to a daughter, Kimberly, on January 6, 1962.

Jerry Blickhahn made plans to leave the bachelor ranks. He presented Miss Estelle Ertman with an engagement ring over the holidays. An early summer wedding is planned.

Jack Donahue and Dick Thurston are working hard on the February Symposium Committee. They would be satisfied with the reward of a large turnout at the Symposium

Bob Opila, having returned from Japan, presided over the January meeting. His account of Japan was most interesting and revealing. Bob is almost back to his old weight by now, too.

EIMCO CO

Chuck Si

Undaunte ture fel

ILLINOIS

Members

the Nati 1961. D was a di Dr. Octa Free For sorption

Dr. Skel

NORTHWES:

S. G. Bar by the Di sity of I entitled Mehra, wh which will

J. S. Dra Los Angel Exchange

Stephen V of the Sy

Mail the For Multi

EIMCO CORPORATION - Reporter: Art Welch

Chuck Silverblatt left our balmy sub-zero weather last week for Mexico.

Undaunted Conniè Cornell finally left for Finland where the temperature fell to -40°.

ILLINOIS INSTITUTE OF TECHNOLOGY - Reporter: Dr. Octave Levenspiel

Members of the IIT Chemical Engineering Department participated in the National Meeting of the AIChE held in New York City, December 4-6, 1961. Dr. Ralph E. Peck, Professor and Director of the Department was a discussion leader on drying at a luncheon on December 6, 1961. Dr. Octave Levenspiel, Associate Professor, presented a paper at the Free Forum entitled "Inadequacies of Present Design Methods for Absorption with Simultaneous Chemical Reaction and a Proposed Solution."

Dr. Skelland's guppies just gave birth.

NORTHWESTERN UNIVERSITY - Reporter: Professor G. G. Lamb

S. G. Bankoff attended the Symposium on Multiphase Dynamics sponsored by the Division of Industrial and Engineering Chemistry at the University of Delaware in Neward, December 28-29, 1961, and gave a paper entitled "Quenching Theory for Transition Boiling" by Bankoff and Mehra, which will appear in the first issue of <u>Fundamentals Quarterly</u> which will appear in February.

J. S. Dranoff will attend the 46th National Meeting of the AIChE in Los Angeles, February 5-7, 1962 to deliver a paper entitled "Ion Exchange Equilibrium in a Terrary System."

Stephen Whitaker will attend the same meeting to preside as co-chairman of the Symposium on "Fluid Mechanics in Chemical Reactor Design."

MAKE YOUR RESERVATION NOW!!!

Mail the attached reservation card or call: Bob Logsdon, IN 8-9470 For Multiple Reservations...please indicate names of all parties.

before Ottawa.

Chicago spoke

Bulkley, lamnt Ohio

erican

cal

aichas

urn for



ruary ard of

anuary vealing. REMEMBER: National Engineers' Week February 18-24, 1962

HELP PROMOTE IT: Economic growth through Professional Engineering

Emphasize the broad contributions of the engineering profession to America's economic and technological strength.

PLAN TO ATTEND: Chicago's Highlight
Chicago Engineers' Week Banquet
WHERE.....McCormick Place,
Lakefront Banquet Hall

WHEN.....Wednesday, February 21, 1962, 6:00 to 10:00 pm

WHAT.....Top flight program, including Engineer of the Year and Profession-alism Awards.

Guest Speaker: Rear Admiral R. K. James,..."Atomic Propulsion" M.C. Dan Sorkin of TV and Radio Fame

COST.....\$8.75

Tickets on a First Come - First Served Basis
Last Years Banquet was oversubscribed
Each Society will be identified by a
sign on each wall.

PLEASE MAKE PAYMENT TO: Chicago Engineers Week Committee c/o Chicago Chapter ISPE 8 South Dearborn Street

(Return Envelopes were included in last month's newsletter)

you are operating of meeting, plants, Alfor Research Certainnois; table 15-459-160

We need Sec interested following c Registratio Plant Tours Hotel and M Publicity Institute B Get-Acquain Luncheons Printing, Preprint Sa Institute Host Commit

is is a g to serve yo and your pr

Please offe this can be of Institut

W. J. Alford General Arra Committee



er)

-- you are interested in serving on one of the operating committees for this institute meeting, please drop a card or call W. J. Alford. % Pure Oil Company, Research Center. Crystal Lake, Illinois; telephone: 815-459-1600.

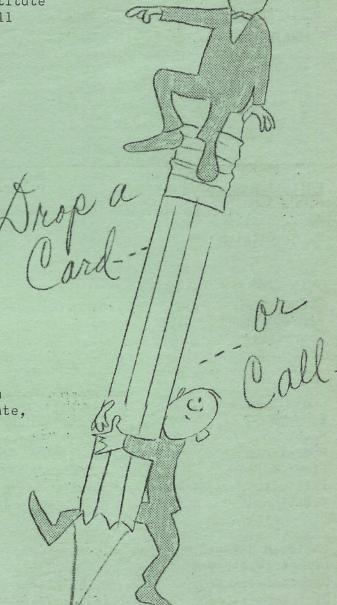
We need Section members who are interested in working on the following committees:
Registration
Plant Tours
Hotel and Meeting Rooms
Publicity
Institute Banquet
Get-Acquainted Party
Luncheons
Printing,
Preprint Sales and
Institute Membership

is is a good opportunity for you to serve your Section, the Institute, and your profession.

Please offer your services so this can be one of the best of Institute meetings.

W. J. Alford, Chairman General Arrangements Committee

Host Committee.



Mr. William T. Sullivan Abbott Laboratories 1400 Sheridan Road North Chicago, Illinois RETURN REQUESTED

Non Profit Org. U. S. Postage .014 Cts. PAID Chicago. Ill. Permit No. 2842

EDITORIAL BOARD

B. L. Johnson H. M. Betzig W. A. Watkins

BOARD OF DIRECTORS

Chairman Vice-Chairman Secretary Treasurer

Constitution Finance House Membership Program Publicity Vocational

Chairman 1960-61 Director-at-Large Director-at-Large Director-at-Large Council Liaison Symposium Chairman Section Officers, 1961-62

R. L. Opila H. M. Betzig G. H. Weyermuller

H. C. Thorne

COMMITTEE CHAIRMEN

G. J. McMahon E. F. Wagner R. E. Logsdon W. T. Sullivan L. O. Stine B. L. Johnson W. P. Egar, Jr.

OTHER DIRECTORS

T. F. Meinhold W. J. Alford W. C. Clarke W. A. Watkins D. A. Dahlstrom W. T. Brazelton

PERSONAL NEWS EDITOR Fred Becker

Visking Company 6733 West 65th St. Chicago 38, Illinois

Corn Products Austin Co. Chemical Processing American Oil

Dawes Laboratories Witco Chemical Co. Victor Chemical Works Abbott Laboratories Universal Oil Products Amoco Chemicals Corp. Metals & Thermit Co.

Chemical Processing Pure Oil Company Amoco Chemicals Corp. Duriron Company, Inc. Eimco Corporation Northwestern University