To The Chemical Engineering Alumni
Twentieth Annual Report

The Ohio State University
April 18, 1968

TWENTIETH ANNUAL REPORT TO THE ALUMNI OF THE
CHEMICAL ENGINEERING DEPARTMENT AND PETROLEUM ENGINEERING

Dear Jewels:

This is my last letter to you as Chairman of the Department. Last May I requested that I be permitted to give up the Chairmanship effective June 30, 1968. This will make 20 years as Chairman out of my 40 years with the University. It was my thought that by giving up the Chairmanship now the transition would be smoother. In my remaining four years as Professor I hope to devote my time to many things which I have wanted to do but there was no time. For example, I would like to write a history of the Department and I hope I can get the cooperation from all of you on this. God be willing, I will retire as a Professor June, 1972. There are several jobs that I will continue. The most important of which is the placement of our Chemical Engineers.

I was very sorry that I missed ACE DAY last year but, as many of you know, I was in traction at Grant Hospital for my aching back. I am happy to report that with the aid of a polio corset brace, my back has caused me little trouble if any.

As I look back on my 20 years as Department Chairman, I have a wonderful feeling when I hear the progress all of you have made. This is especially true of those who have had an interim of tough sledding but have pulled out of it.

My relationships over these many years have been heart-warming, stimulating, and very interesting. All of you have been very kind to me. Especially, when we had the Alumni Drive a few years ago. This drive has meant much to our Department and, needless to say, resulted in very much boasting on my part of our many Jewels. Alumni meetings we have had over the many years from New York to California have made me feel much younger.

I am also very thankful to the many chemical companies for what they have done for Chemical Engineering at Ohio State. To enumerate these would make the postage bill prohibitive.

DR. ALDRICH SYVERSON - The New and Third Chairman of Chemical Engineering

Sy, who has been with us since 1950, was the unanimous choice of the entire staff, including me. He attended the University of Chicago for two years and then enrolled in the University of Minnesota where he received his B.Eng. Degree with Distinction in 1938. In 1942 he received his Ph.D. Degree. He also was a Teaching Assistant at the University of Minnesota. He went to B. F. Goodrich Company, Research Center as a Chemical Engineer in their research department in Akron in 1945. He was transferred to B. F. Goodrich Chemical Company, Avon Lake as Plant Manager of Avon Lake Experimental Station in September, 1948. He was Associate Professor at the University of Syracuse. We had an opening in our Department in 1950 and I wrote to the late Dr. Howard Fritz, Vice President of Research, B. F. Goodrich. Fritz said, "I will give you the name of one man and if you don't get him, don't bother me any more." So, he joined our staff in 1950 and has been with us ever since.
While with us, Dr. Syverson has done a Yeoman's Job for the Department, the College, and the University. He has been a member of all the important committees of the Department, the College of Engineering, the Graduate School and many President's Committees. His course work is recognized by many as being one of the most outstanding in the country. This is especially true of his work in the Chemical Engineering Department where computer optimization is emphasized. In many respects we are leaders in this field. We were fortunate to have a man such as he to take over the responsibility of Department Chairman.

COVER PAGE

The photo of the staff which is printed on the cover includes all the senior staff members but does not include the three Adjunct Professors (Dr. Bruce Martin, Dr. Robert Bates, Mr. John Eckert) and Visiting Professor Aleksander Kraglewski. The staff members are:

(Seated from left to right) (Standing from left to right)

Professors Harry C. Hershey
Robert S. Brodkey
Thomas L. Sweeney
Aldrich Syverson
Webster B. Kay
Joseph H. Koffolt
Ralph Emerson Lynn, Jr.

Professors Christie J. Geankoplis
Edwin R. Haering
Waldron D. Sheets
James B. Tanner (Admin. Assist)
Karlis Svanks
Edwin E. Smith
Hartzel C. Slider

Quite often I receive inquiries concerning the specialties of our staff members. They are given below:


2. Aldrich Syverson, Associate Chairman and Professor: Kinetics of Adsorption of Gases on Solid Catalysis, Chemical Engineering, Economy, Electro Chemical Engineering, Plant Design, Polymer Engineering. B.Ch.E.-1938, Ph.D.-1942 (Minnesota)


7. Webster B. Kay, Professor: Chemical Engineering Thermo Dynamics, Phase Behavior in Critical Region, Pressure-Temperature-Composition, Phase Relations that Form Azeotropes. B.Ch.E.-1922, Ph.D.-1926 (Ohio State and Chicago)


**ACE DAY - FRIDAY, MAY 24, 1968**

The Annual Conference for Engineers will be held Friday, May 24, 1968. The following day will be the University's Alumni Meeting honoring the classes of 1908, 1918, and 1943. The change in dates, which is very welcome, is done through the office of Dr. Dick Mall, Secretary of Ohio State University Association. This will make it possible for those from the classes of 1908, 1918, and 1943 to attend these functions without too much traveling, and I hope that our Chemical Engineers make a good showing. I recommend very highly that those who do not belong to the Alumni Association join, as Dr. Mall has given our Department of Chemical Engineering and others his full support.

Dr. Curt A. Levis, of the Electro Science Laboratory, will give a talk on "Research with Potential Industrial Pay-Off".

Dr. Thomas H. Rockwell of the Department of Industrial Engineers will speak on "OSU Research and Highway Safety." (Incidentally, Tom Rockwell is also a Chemical Engineer from Stanford.) Luncheon will be at The Ohio Union again. In connection with this, we appreciate and thank The Standard Oil Company of Ohio for the generous invitation to 100 of our students to be their guests for lunch.
Following the general program in Chemical Engineering, Dr. Aleksander Kreglewski will give a talk on "Estimation of Basic Engineering Data for Chemical Engineers." The staff members will be in their offices and laboratories holding informal research seminars on the topics listed in the program that follows.

PROGRAM

MORNING SESSION

8:30 a.m.
Registration and tours of the building Hitchcock Hall, 2070 Neil Avenue (at Woodruff Avenue)

9:30 a.m.
Hitchcock Hall Auditorium
Presiding: Dr. Harold A. Bolz, Dean, College of Engineering
Engineering Research at Ohio State: Its importance for industry and the public
Introduction: Robert S. Green, Associate Dean, College of Engineering and Executive Director, Engineering Experiment Station
Address: "Research with Potential Industrial Pay-Off" by Dr. Ronald K. Long, Associate Professor of Electrical Engineering and Associate Supervisor, Electro Science Laboratory
Presentation of Teknikol Outstanding Alumnus Award
Highway Safety Research: Dr. Thomas H. Rockwell, Professor of Industrial Engineering and Director, Driving Research Laboratory

LUNCHEON SESSION - Ohio Union Ballrooms

12:00 Noon
Presiding: Marion L. Smith, Associate Dean
Honors: Recognition of Distinguished Alumni
Recognition of Honor Students
Presentation of Distinguished Alumnus Awards
Address: "An Alumni Viewpoint: Review and Preview" by J. Parker Garwick, President, Garwick and Ross, Inc., and Chairman, Committee of 100 for Engineering

AFTERNOON SESSION - DEPARTMENT OF CHEMICAL ENGINEERING, Chemical Engineering Building, Room 207
Presiding: Joseph H. Koffolt, Chairman

2:00 p.m.
Presentation of student awards in Chemical Engineering: American Institute of Chemical Engineers—Annual Scholarship Award
Return Scholarship Award of 1965 to James Sebert
M. W. Kellogg Company, Division of Pullman, Inc., Design Award
Central Ohio Section, American Institute of Chemical Engineers - Student Contest Problem Award
American Institute of Chemists Professional Award
American Society for Testing and Materials
The ASTM Student Membership Award for meritorious work

Introducing the Golden Anniversary Class of 1918:

**LIVING**

Herbert Spencer Coith
Thomas Alvin Boyd
Leonard Thomas Capell
Louis Jacob Trostel

Spencer G. Weber
Calvin A. Buehler
Williard Franklin Tressel
Robert Anderson Fisher

**DECEASED**

James Howard Young
George A. Burrell
Aubrey Emerson Hess
Garland Nett Hufford
Halton Mitchell

A. H. Vilbrandt
Frederick Thomas Andrews
Paul McHehan Horton
Edwin Wade Mann
John M. Ort

Samuel Lantz Shenefield

2:45 p.m. Inspection of research work and facilities of the Department. Guides will be members of the Ohio State Student Chapter of the American Institute of Chemical Engineers.

or

Those who wish to socialize may do so in the Unit Operations Laboratory, Room 117, where refreshments will be available until 5:00 p.m.

or

The following paper will be given:

"Estimation of Basic Engineering Data for Chemical Engineers" by Dr. Aleksander Kreglewski, Visiting Associate Professor in Chemical Engineering - Room 207, Chemical Engineering Building

or

Informal Research Seminars

Room 436 Critical Properties of Liquids - Dr. Webster E. Kay

Room 423 Surface Transport and Transient Adsorption - Reaction Research - Dr. Aldrich Syverson

Room 306 Problems of Fluid Dynamics in Chemical Engineering - Mixing and Turbulence - Rheology - Two Phase Flow - Dr. Robert S. Brodkey

Room 310 Drag Reduction - Dr. Harry C. Hershey
2:45 p.m. (Cont) Room 103 Coal Research - Petroleum Refining Research - Reaction Mechanism - Dr. Edwin E. Smith

Room 407 Studies and Development of Analytical Methods - Dr. Karlis Svanks

Room 336 Kinetics and Catalysis - Dr. Edwin R. Haering

Room 421B Properties as a Function of Polymer Structure - Dr. R. Emerson Lynn, ALCOA Associate Professor of Chemical Engineering

Room 29 Nuclear Chemical Engineering Program - Kyral E. Wylie (Graduate Research Associate)

Water Water and Waste Water Treatment Process - Res. Ctr. 1791 Neil Professor Waldron D. Sheets

Room 435A Air Pollution - Heat Transfer - Dr. Thomas L. Sweeney

Room 405 Mass Transport Phenomena of Liquids and Gases in Heterogeneous Media - Dr. Christie J. Geankoplis

Room 425 Miscible Displacement in Petroleum Reservoirs - Professor Hartzel C. Slider

Room 306 Analog Computers and Simulation and Digital Computer Control System 117 Thomas W. Doub (Graduate Fellow, National Science Foundation)

4:00 p.m. Social Hour - Unit Operations Laboratory, Room 117

6:00 p.m. Dinner for anniversary classes and others will either be arranged previously or in the afternoon. For the past three years the dinner was held at The Ohio Stater Inn, East Woodruff and High.

SALARY OFFERS

The salary offers are given in this report. This is only a preliminary list as some of the men are still taking trips. A final list will be available after June 1. If anyone desires a copy, kindly let me know and I will be happy to send you one.

Speaking of salaries, the following is quoted from the WALL STREET JOURNAL:

"ENGINEERS' SALARIES rise faster than ever, a study shows.

A nationwide survey of 22,700 members of the National Society of Professional Engineers finds their median income in 1967 was $14,310. That's up 19% from a similar survey average in 1962; the annual rate of gain is about double that of the early 1960's. Pay of college engineering professors and administrators and
state-employed engineers shows the steepest rise; that of Federal engineers the least.

The best-paid specialty is chemical engineering, with an average of $16,350 a year. Aeronautical engineers rank second. Civil engineers, the largest group, are next to last in average pay—$13,670. A small group of agricultural engineers, averaging $12,390 brings up the rear.

Engineers in the New England and Mid-Atlantic states draw the highest salaries, with those in the Plains states ranking lowest."

NEW MEMBERS OF THE STAFF

RALPH EMERSON LYNN, JR.

Dr. R. Emerson Lynn, ALCOA Associate Professor, joined our staff last Fall to develop our program in high polymer engineering. Dr. Lynn was born in Elkhart, Indiana on March 16, 1920. He received his B.Ch.E. Degree from Purdue University in 1942, and his M.Sc. and Ph.D. from the University of Texas in 1949 and 1952, respectively. His industrial experience was with U. S. Rubber from 1942 to 1946 where he was technical supervisor of footwear and self-sealing fuel tanks. He was Manager of Program Planning and E.P. Rubber Division of B. F. Goodrich in Cleveland and Avon Lake, Ohio.

HARRY C. HERSHEY

Dr. Harry C. Hershey was appointed Assistant Professor of Chemical Engineering in January, 1967. He joined the staff from the University of Missouri at Rolla where he held a similar position. He also served as Research Associate in the Department of Chemical Engineering at Ohio State from June, 1966 to his appointment as Assistant Professor. Dr. Hershey has taken additional graduate courses in Statistics and Applied Mathematics. His research interests in addition to the above are Turbulent Flow of Non-Newtonian Fluids, Mathematical Modeling, and Optimization. He was born November 10, 1938 in Baton Rouge, Louisiana. He received his B.S. Degree in Chemical Engineering from the University of Missouri at Rolla in 1960. He then joined Union Carbide Corporation, Nuclear Division as an Associate in Chemical Engineering in 1960. In 1962 he returned to the University of Missouri at Rolla and earned his M.Sc. and Ph.D. Degrees in Chemical Engineering in 1963 and 1965, respectively.

ALEKSANDER KREGLEWSKI

Dr. Aleksander Kreglewski is a Visiting Professor in our Department this academic year. He is working with Dr. Kay in the field of Thermodynamics and Phase Relationships. He is one of a group of brilliant scientists at the Institute of Physical Chemistry of the Polish Academy of Science in Warsaw. He was one of the lecturers on the Boyd Lecture Series in 1967.
There is a cordial invitation extended to all of you to attend the Third Thomas Alvin Boyd Lecture in Chemical Engineering. The topic of this series is "Air Pollution." The first series in the Thomas Alvin Boyd Lectures was a Science Seminar on Chemical Engineering in 1965. In 1967, the Lectures were concerned with "Intermolecular Forces and Thermodynamic Properties of Mixtures.

DR. THOMAS ALVIN BOYD, B.Ch.E. '18, is an internationally known authority on combustion and fuel chemistry. He was an early co-worker with Dr. Charles F. Kettering in the original General Motors Research Laboratories in Dayton and is credited with being one of the early pioneers in the development of tetraethyl lead. As a life-time associate and close friend of Dr. Charles Kettering, he authored "Professional Amateur," a biography of Charles F. Kettering. Dr. Boyd has thoughtfully made available to the University the income from his book, "Professional Amateur," to be used in sponsoring lectures which will bring together persons with a variety of backgrounds but mutual interests.


April 25 - AIR POLLUTION CONTROL EQUIPMENT - Dr. Seymour Calvert, Dean, College of Engineering, University of California, Riverside.

May 1 - SIZE ANALYSIS, SEMANTICS, AND STATISTICS IN AIR POLLUTION - Dr. Brian H. Kaye, Fine Particles Section, ITT Research Institute, Chicago.

May 16 - SELECTED METEOROLOGICAL ASPECTS OF AIR POLLUTION - Marvin E. Miller, ESSA Weather Bureau, State Climatologist, Columbus, Ohio.

All lectures will be held at 4:00 p.m. in Room 207 of the Chemical Engineering Building. For further information, write Dr. Thomas L. Sweeney, Ohio State University, 140 W. 19th Avenue, Columbus, Ohio 43210, Phone: (614) 293-2727

THE OHIO STATE UNIVERSITY CHEMICAL ENGINEERING EQUIPMENT DEVELOPMENT FUND

Contributions for this worthy cause are still coming in. Many of our alumni are earmarking their contributions to the Development Fund for the Chemical Engineering Project #525659. The University Administration, including our Dean of Engineering, has done much in the past decade in the uplifting of our Department in the areas of salaries, building, research equipment, personnel, and travel. Their cooperation with us has been positive. However, it is impossible for the University to support all of our needs from the budget. The contributions from our alumni and the grants-in-aid from many chemical companies help us materially. These contributions have been very helpful to defray the expenses of getting this report out and for the postage required.
DECEASED, LOST, STRAYED, OR STOLEN ALUMNI

It is with a heavy heart that I read the ever-increasing list of our deceased alumni. If any one of you know of someone who is deceased and not on this list, I would appreciate hearing from you.

PROFESSOR CHARLES E. DRYDEN

We are very sorry to report that Professor Charles E. Dryden of our Department died on September 23, 1967. In my report to you last year, I stated that a miracle had happened and that Charlie was on his way to a recovery.

Resolution in Memorium - Charles E. Dryden

The Board of Trustees expresses its sorrow at the death on September 23, 1967 of Charles E. Dryden, Professor in the Department of Chemical Engineering.

Dr. Dryden was born in Hagerstown, Maryland on October 15, 1917. He received his B.Ch.E. Degree from Drexel Institute of Technology in 1939, his M.Sc. Degree from Princeton University in 1942 and his Ph.D. from The Ohio State University in 1951. He worked as a Chemical Engineer after he received his degree from Princeton at the Silmo Corporation, M. W. Kellogg Co., Nopco Chemical Corporation, General Electric Nuclear Division, E. I. DuPont de Nemours, and Battelle Memorial Institute.

He is survived by his wife, Rosalie, and his four children; namely, Donald, John, Mark, and Cynthia. He was an elder at the West Second Ave. United Presbyterian Church.

Dr. Dryden had a very colorful career as a Chemical Engineer in industry and as a teacher. He came to teach at The Ohio State University, Chemical Engineering Dept. in 1955 from Battelle Memorial Institute where he was Assistant Division Chief for seven years.

Dr. Dryden was a member of many societies as American Institute of Chemical Engineers, American Society of Engineering Education - Nuclear Division, and the American Chemical Society. He was an officer in many capacities with these societies. He served on many important National Committees of the American Institute of Chemical Engineers.

He was the recipient of many honors. He received the Distinguished Alumni Award from Drexel Institute at their 75th Anniversary. He was elected to all the honorary societies involving chemical engineering and chemistry. He was chosen to give the A.S. Mauliar Lectures at the University of Madras, India. In 1950 he received the highest grade for chemical engineering in the professional engineer's examination. This was in competition with over 100 engineers from the state of Ohio.

Dr. Dryden was chosen to head up chemical engineering at the Indian Institute of Technology, Kanpur, India. This was in connection with the Kanpur Indo-American program which is the group effort of a consortium of nine universities. The Ohio State University is one of these nine. He did
an admirable job in developing chemical engineering. It was a dedicated
effort. When he left India, many expressed that it would be difficult
to find another American professor to step into "his oversized boots."
During his stay in India he authored the book, Outline of Chemical
Technology in 1964. This was revised for a hard back cover and finally
published in book form. The book was adopted by many schools in India
and it is now in its second printing. The royalties from this book
were donated to the University for undergraduate scholarships and a
design award which is awarded to the two best design solutions for
students in the 5th year. The award is now known as the "Dr. Dryden
Design Award."

Dr. Dryden was one of the country's outstanding engineers and as
a teacher did a magnanimous job. He was very versatile and was used
to teach the most difficult courses and many programs to keep the
department in the forefront. He enjoyed a close personal relationship
with all of his students and left an imprint on all of them. He has
over 50 publications including four patents and four books.

CHEMICAL ENGINEERS DO THEIR CIVIC DUTIES TOO

Dr. John D. Rogers, Jr., Research Engineer, Los Alamos Scientific
Laboratories, Los Alamos, New Mexico has been County Commissioner for
Los Alamos County for the past few years. He enjoys this work very much.

I received a clipping from the Waco News Tribune, Waco, Texas. I read
with much interest that H. Malcolm Louden, B.Ch.E. '33 and Plant Manager
for Owens-Illinois was elected Mayor of Waco, Texas. I am instructing
all of you who know Mac to address him as His Honor.
It was my thought that many of you would enjoy reading the article below. It was written by Marc Drogin of the Chicago Daily News Service, and published in the Columbus Dispatch, Thursday, April 13, 1967.

THEY WORRY ABOUT 'THAT CREATURE'

Yes, Mothers Always Care

You know, just because you get married, it doesn't mean your mother doesn't feel a responsibility any more about your welfare. Right? Mothers don't have on-off instinct buttons. They care forever.

My mother cares. Every Friday night when the rates go down, she cares. She sits there in her apartment 1000 miles away, and a warm vision of her loving son grows in her mind. She pictures me secure in the loving tenderness of my own family—and within 15 minutes she can't stand it any more, so she calls to find out about me.

"HE'S DYING!"
"He's not dying," says my wife. My wife looks forward to these calls like a salmon wants to be a lox. Instead of saying anything that might be misunderstood, my wife gets me. "Don't pretend you didn't hear the phone—old strum and crang is on the long-distnace."

And the main bout of the evening's card begins

"HELLO, MA."
"Is it really you?"
"No, by comsat, you're chatting with David Ben-Gurion with a sinus condition."

"YOU'RE ALL right? Don't delude me with jokes already. She's feeding you good food? Kosher food?"
"Mama, I'm find. I'm always fine. Why do you worry?"
"What's not to worry? How can a mother not worry? All I ask is that you be happy. If you're happy I'm happy. Tell me you're happy."

"I'M HAPPY."
"You're not happy. A mother knows."
"Mama, to prove it, listen, I'll laugh."

"DON'T laugh for me, it shouldn't sap your strength. What you have to go through with that creature day in and day out..."
"What creature? You mean my wife?"
"Me, I wouldn't bring it up. A mother knows when she should butt out. But now since you're bringing it up yourself, you know what's-her-name is a big mistake. When I think of all the nice Jewish girls! You remember Sharon Liebowitz? A dream, a mother's sith for a son!"

"THE ONE with the pimples?"
"Who looks? And Rosalie Krabwitz of the rich Krabwitzes."
"Yeah, I know. Who looks if she's cowhocked. Listen, Mrs. Matchmaker with a heart of gold and a phone bill you won't believe, it's time you stopped looking."

"ROSALIE isn't married yet, you know."
"A crime against humanity. So I'll pray for her. Now stop. I got a wife, two children and a Great Dane."
"When I think of how..."

"DON'T THINK, Mama, relax. I'm eating three, maybe four meals a day. The doctor, if all his patients were like me, would be out of work. My business is fine, the sun shines, I'm happy, happy, happy."
"If it kills you, you'll try to keep me from the truth."
"Listen, don't believe me. I'll call a stranger in from the street, he'll give you an unbiased opinion."

"DON'T TRY to pull the wool over a mother's eyes."
"I'll send you a photograph?"
"An expert couldn't touch it up, you'd look like the boy I knew?"

"WHAT BOY? I'm 31 years old!"
"If you'd listened to me, you'd only be 27."
"If I'd listened to you I'd have the only cow-hocked wife in the neighborhood. Now go relax, work some more on Papa, do something to take it easy."

"BRAINS YOU haven't got. Jokes in your despair you're making. Well, a mother can tell. I'm calling you next week and you should only do one thing for me."
"Which is?"
"Stop changing your number."
FROM WHERE DO OUR GRADUATE STUDENTS COME

AMERICAN COLLEGES AND UNIVERSITIES

California (1); CCNY (1); Cincinnati (3); Cleveland State (1); Cooper Union (2); Cornell (2); Dayton (3); Detroit (4); Illinois (1); Iowa State (1*); Louisiana State (1*); Louisville (1); Michigan (2); Michigan State (2); M. I. T. (1); Mt. Union (1); Newark College Engineering (1); North Carolina State (3); Northwestern (1*); Notre Dame (1); Ohio State (18); Penn State (2*); Pratt (1); Purdue (2); Texas A & M (1); Texas (1*); Tulsa (1*); VPI (1*); Villanova (1*); West Virginia (2); Wilmington (1); Wisconsin (2); Wittenberg (2). Total 68.

FOREIGN COLLEGES AND UNIVERSITIES

Baghdad (1); Bandung (Indonesia) (1); Bombay (1); Indian Institute of Technology-Kanpur (1); Jadrapur (India) (1); Khartoum (Sudan) (1); National Taiwan (1*); National University - Greece (1); National University - Mexico (1); Osmania (India) (1*); Traven Core and Banaru Hindu (1*); Tunghui Taiwan (1); University National Inq. Peru (1). Total 13.

*Previous 1 or 2 degrees from other universities.

OHIO STATE UNIVERSITY CHEMICAL ENGINEERS IN TEACHING

Teaching Chemical Engineering or as otherwise indicated:

University of Arizona (2); San Diego State College, University of Southern California; University of Denver; University of Delaware; University of Kansas (Engr. Graphics); University of Idaho; Illinois Institute of Technology; University of Illinois; Westmar College (Chemistry); Indiana Institute of Technology (2); Louisiana State University (Chemistry); University of Southwestern Louisiana; Tulane University; University of Maine; The John Hopkins University; University of Maryland (Physics); Massachusetts Institute of Technology; Michigan State University (2); Michigan Technological University; Wayne State University; University of Mississippi; The University of Missouri at Rolla; North Carolina State (2); St. Bonaventure U. (Seminary); University of Dayton; Ohio State University (10); The University of Toledo (2); Bucknell University; University of Pennsylvania; The University of Tennessee (Chemistry); Rice University; West Virginia University; University of Puerto Rico; Rutgers University (Ceramic Eng.); Alfred University (Ceramic Eng.); West Point (Chem.) Total 51.

RETIRED

University of Detroit, Virginia Polytechnic Institute; Montclair Teachers College (Chemistry); South Dakota School of Mines and Technology; Michigan Technological Institute. Total 5.

DECEASED

Ohio State University (2); Ohio State University (Met. Eng.) (2); Newark College of Engineering; Virginia Polytechnic Institute; Iowa State; Rose Polytechnic Institute; S. Dakota School of Mines; Washington University; University of Florida; Louisiana State College. Total 12.

IN FOREIGN COUNTRIES

Soochow University; Allahabad India (deceased); University of Philippines; University of Malaysia; Mica College, Jamaica B.W.I.; Universidad Nacional, Lima, Peru; Universida Santa Maria, Chili; University of Kanpur; Chulalongkorn University; University of Baghdad (2). Total 11.
THE OHIO STATE UNIVERSITY  
DEPARTMENT OF CHEMICAL ENGINEERING

April 22, 1968

SALARY OFFERS FOR 1967-1968 (DATA INCOMPLETE - AN UP-TO-DATE LISTING WILL BE AVAILABLE JUNE 15, 1968)

Underlined salary offer accepted.

BACHELOR OF CHEMICAL ENGINEERING (5 years)

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<td>To Commerce College - M.B.A. 660, 625 (summer)</td>
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<td>7.</td>
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<td>To Law School - Patent Law</td>
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<td>8.</td>
<td>8</td>
<td>To Iran - possibly Ph.D.</td>
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COMBINED BACHELOR OF CHEMICAL ENGINEERING AND MASTER OF SCIENCE

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<td>950, 915, 940</td>
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MASTER OF SCIENCE

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SALARY OFFERS FOR 1967-1968 (continued)

**DOCTOR OF PHILOSOPHY**

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**SUMMER SALARY OFFERS FOR 1968**

**THIRD YEAR STUDENTS** (13 students not reporting)

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**FOURTH YEAR STUDENTS** (8 students not reporting)

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<td>615</td>
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<td>8.</td>
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<td>10.</td>
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**FIFTH YEAR STUDENTS**

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**GRADUATE STUDENTS - Ph.D. Degree**

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15
THE OHIO STATE UNIVERSITY
DEPARTMENT OF CHEMICAL ENGINEERING

1967-1968 LIST OF STAFF MEMBERS, FELLOWS, SCHOLARS, RESEARCH ASSISTANTS

PROFESSORS
Joseph H. Koffolt, Chr.
Aldrich Syverson, Assoc. Chr.
Robert S. Brodkey
Christie J. Geankoplis
Webster B. Kay

ASSOCIATE PROFESSORS
R. Emerson Lynn, Jr.
Waldron D. Sheets
Hartzel C. Slider
Edwin E. Smith
Thomas L. Sweeney

ADJUNCT ASSOCIATE PROFESSORS
Robert L. Bates
John S. Eckert
John B. Martin

ASSOCIATE VISITING PROFESSOR
Aleksander J. Kraglewski

ASSISTANT PROFESSORS
Edwin R. Haering
Harry C. Hershey
Karlis Svanks

TEACHING ASSISTANTS AND AIDS
Peter N. Bartram
Thomas W. Doub
Paul D. Jachimiak
Kin H. Lee
Gerald M. Lehmann
David L. Lull
Sung C. Pak
Dean H. Reber
John L. Shailer
Steven E. Russell
David J. Walters

ADMINISTRATIVE ASSISTANT
James B. Tanner

SECRETARY
Betty Frazier

STENOGRAPHERS
Sandy Bergfalk
Bonnie Bonzak
Kathy Neaman
Shirley Turner

TECHNICIAN
Michael B. Kukla

MECHANIC
Keldon Latham

FELLOWSHIPS
1. American Cyanamid - Richard F. Navilice
2. American Oil - Alternate with Chemistry
3. Camille and Henry Dreyfus Found. - Richard D. Stolk
4. Dow Chemical - John W. Connor, Robert A. Baxter
5. Esso Research and Engr. - R. Russell Huddleston
7. National Science Found. - Paul D. Jachimiak
   Thomas Doub
   David L. Lull
   Kenneth N. McKelvey
8. NASA - Michael L. McMillan
9. Procter and Gamble - Edward M. Halko
10. Shell Companies - Michael C. Rominger
11. Union Carbide Corp-Chem. E. Lawrence Jarrett,
    Ronald R. Ramick
12. AID - S. K. Bhalla
13. Louis and Lucille Roberts Memorial - S. G. Nychas

SCHOLARSHIPS
1. General Motors - J. M. Salladay
2. Goodyear Foundation - G. A. Lindsay
3. Monsanto Chemical - D. E. Smith
4. Rohm and Haas Co. - J. W. Sebert, J. L. Braun
5. Standard Oil of Calif. - J. E. Suhrte

SCHOLARSHIPS (contd.)
6. Union-Camp Corp. - J. H. Becher
7. Union Carbide - C. Klingensmith, D. K. Reese
8. Universal Oil Products - R. D. Haberkost, J. L. Taraba

RESEARCH ASSOCIATES
Thomas R. Coffey
Miss Mamata Dutta
Anandhi M. Rao
James E. Williamson
Kyral E. Wylie

RESEARCH ASSISTANTS
Neil K. Goldwein

RESEARCH AIDE
Richard T. Linak

RESEARCH ASSISTANTS - (i)
Exp. Station
James R. Bailey
William E. Ferguson
Emil Mednis
Arthur H. Morth
Paul Smith
Chun-jen Wang

PETROLEUM ENGINEERING OPTION SCHOLARSHIPS
Shell Honor - John J. Curr
Union Oil of California - Jay Kaplan, James Diet
Departmental Scholarship
Financed from funds
provided by Pan American
Gulf Oil, and Mobil Oil
- Thomas Duvali
Wayne Ballantyne
William Pontius
### College of Engineering Enrollment, Autumn Quarter, 1967

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### School of Architecture and Landscape Architecture

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**Included in above totals:** Lima = 1, Mansfield = 2, Newark = 3, Wright-Patterson Air Force Base = 58

**Grand Total:** 2918
DECEASED CHEMICAL ENGINEERING ALUMNI
(Number in Parenthesis Indicates Number of Graduates that Year.)

1902
1. Harvey Keating

1904
1. John Hoffhine

1906 (3)
1. Thomas Beer
2. Arno C. Fieldner
3. B. T. Brooks, Chemist

1907 (6)
1. Harry R. Drackett
2. Harry E. Surface
3. Dana J. Demorest
4. A. H. Flower

1908 (6)
1. Frank M. Dorsey
2. Charles F. Hoover
3. Paul McDorman
5. Harry M. Williams

1909 (6)
1. Erwin Sonn
2. O. R. Sweeney
3. Sydney H. Katz
4. H. H. Watt

1910 (7)
1. Ernest H. Grant
2. William D. Lareaux
3. W. A. Richey
4. Lear H. Van Buskirk
5. P. S. Beebe

1911 (11)
1. Harry V. Atkinson
2. Sumner B. Frank
3. Roscoe G. Jones
4. Clarence B. King
5. C. J. Birkley
6. Albert W. Davison
7. Howard Dock
8. Ralph E. Hall

1912 (11)
1. P. M. Giesey
2. E. S. Boerstler
3. P. J. Montgomery
4. C. E. Veit
5. Walter O. Augustine
6. W. A. Richey
7. E. S. Eberstler

1913 (12)
1. Henry N. Case
2. Charles R. Parkinson
3. Albert N. Erickson
4. Reuben L. Walter
5. Howard E. Fritz
6. A. C. Perrin
7. James Brown
8. W. M. Davis
9. Clare O. Ewing, Sr.

1914 (19)
1. Emil H. Balz
2. W. T. Burgoon
3. Paul Cottringer
4. A. A. Chambers
5. Roy D. Fritz
6. L. A. Gregg
7. Edward G. Hines
8. Elmer Stewart Hull
9. Lesley S. Jenkins
10. P. R. Morris
11. A. A. Kohr
12. R. W. Shafor
13. A. R. Willis
14. Claud R. McNeil

1915 (20)
1. C. R. Bennett
2. Walter M. Berger
3. Ralph Peter Heikes
4. H. L. Dick
5. Carl W. Simpson
6. J. W. Melick
7. J. O. Lord
8. G. D. Evans
9. A. R. Willis
10. Melvin Degroote
11. F. C. Dunn
12. Kenneth Kersey

1916 (21)
1. M. A. Muskopf
2. Hampton A. Thirey
3. K. W. Reed
4. F. C. Vilbrandt
5. W. E. Brown
6. L. E. Smith
7. J. W. Young
8. K. Kersey

1917 (20)
1. Carl E. Augst
2. Walter L. Krueger
3. William A. Wirth
4. D. F. Alexander
5. F. L. Lanks
6. H. H. Thompson
7. Fred N. Schaez
8. H. D. Rollor (Ph.D.)
9. W. I. Burt
10. Chase R. Bennett
11. E. J. Witzemann

1919 (8)
1. Howard F. Sanders
2. J. G. Rafton
3. H. W. Seyler
4. E. V. O'Rourke (Pet.Eng)
5. Harold R. Nicklaus

1920 (31)
1. Haney C. Howell
2. Louis J. Mathies, Jr.
3. Roy Paster
4. Victor J. Roehm
5. Harold T. Reiner-Ruff
6. Carroll L. Streit
7. Joseph M. Volzer
8. Russell F. Hamilton
9. R. R. Kennedy
10. Fred V. Doutt

1921 (29)
1. Walker F. Spear
2. W. K. Gilkey
3. William Green
4. C. M. Evans
5. John E. Wiss
6. Donald Brooks
7. R. B. Hollenback
8. Henry F. Palmer
9. Herman Bankston
10. Daniel I. Mayne
1922 (33)
1. Paul R. Hines
2. Walter L. Klaiber
3. Roland M. Kohr
4. R. E. Wolfe
5. R. E. Whinnery
6. Wallace Wing
7. Ben Blumenthal
8. Carl J. Beckert
9. C. A. Ritchie
10. Andrew Karsten
11. Marion Reed
12. H. G. Carrell

1923 (60)
1. R. T. Donham
2. Albert G. Corwin
3. James T. Goff
4. William J. Harrison
5. R. G. Lyon
6. J. L. Roberts
7. J. L. Ware
8. E. N. Prinz
9. Stanley Newbrander
10. C. R. Blanchard
11. Y. L. Pun
12. Howard E. Fritz

1924 (28)
1. Carroll M. Allen
2. Raymond E. Carter
3. C. Weis
4. George W. Ruhl
5. Virgil Hutton
6. H. T. Ruff (Ph.D.)
7. Frank J. Koehne

1925 (35)
1. Curtis Balding
2. Lorin E. Lutz
3. Frederick H. MacLaren
4. Adolph Valley
5. John Bowers
6. Chennan Shen
7. Henry F. Palmer
8. S. M. Sun
9. Arthur E. Juthe
10. Alfred M. Eyerman
11. J. E. Prior
12. George W. Kuhl
13. R. H. Bancroft

1926 (14)
1. J. Gavin Cullinan
2. J. L. Thoma
3. Mao Han Tuan

1927 (19)
1. Charles E. Hammell
2. Dwight S. Masters
3. Edwin F. Nusdorfer
4. Charles R. Owens
5. L. E. Mong
6. Dwight S. Masters
7. C. E. Fareuff

1928 (19)
1. Thomas C. Chadwick
2. E. E. Martin
3. Wilson F. Brown

1929 (24)
1. James Pace Alton
2. Ming Tung Hsieh
3. W. J. Michel
4. E. B. Carr

1930 (34)
1. G. B. Malvea
2. K. M. Sprinkel
3. J. L. Arns

1931 (43)
1. T. W. Eslager
2. Adolph Wasserteuber
3. C. J. Black
4. E. B. Carr

1932 (40)
1. Conrad F. Daum
2. David M. Goodfriend
3. Alfred F. Galloway
4. E. C. Plotter
5. William M. Davis

1933 (42)
1. Francis E. Pickering
2. Carl H. Albrecht
3. H. L. Sittler
4. Thomas C. Chadwick (Ph.D.)
5. E. W. Mann

1934 (39)
1. George K. Durnound
2. Lawrence Stout

1935 (66)
1. Harvey C. Gillogly
2. William Swisher
3. Lee Kleimmaier
4. William T. Walton
5. James F. Simpson

1936 (42)
1. Robert L. Scroggs

1937 (53)
1. Richard M. Abbott
2. Clare O. Ewing, Jr.
3. Leon W. Omwake
4. William C. Shank
5. E. H. Osborne
6. James Braden
7. J. P. Mitchelson
8. Frank A. Vinci

1938 (71)
1. D. J. Gaston
2. Howard J. Orlowski
3. Alexander Newhouse
4. Henry F. Palmer
5. Richard D. Schaefer
6. Albert L. Taylor

1939 (69)
1. Robert E. Scheiber
2. Ralph Edwin Hall
3. E. E. Kimmel, Jr.

1940 (73)
1. Carmen Adovasio
2. F. Wayne Beall
3. John R. Linn
4. Robert Mills
5. Dana J. Demorest

1941 (71)
1. John W. Russell
2. W. H. Williams

1942 (67)
1. Vaughn E. Kelly
2. Julian Adam Yocum

1943 (90)
1. M. F. Dick
2. Willis T. Harberson

1944 (28)
1. K. E. Kress

1945 (14)
1. Roland L. Allen
2. Charles J. Speitz, Jr.
3. Howard Wilkinson
4. J. B. Metchelson

1947 (103)
1. Sidney Miller
2. Marion G. Dick
1948 (147)
1. H. C. Claflin
2. Donald Dewey
3. David Farrar Pickard
4. D. L. Wiggins
5. Robert J. Wygal

1949 (132)
1. Thomas O. Feasel
2. John W. Shook, Jr.

1950 (87)
1. Robert C. Johnston
2. David Pickard

1951 (103)
1. Turney Fergusston
2. John R. Seferian
3. Donald C. Dewey
4. Karl W. Mezgar
5. Harry C. Clafin

1952
1. C. Schlea

1953 (44)
1. Al-Kazimi, Abd Ali M.

1954 (57)
1. Fred C. Ohnmeiss
2. Carl S. Schlegl
3. Glenn L. Moore

1960 (56)
1. Rolland E. Blosser

LOST, STRAYED OR STOLEN ALUMNI IN CHEMICAL ENGINEERING

IF YOU KNOW THE ADDRESS OF ANY OF THESE, WE WOULD APPRECIATE IT VERY MUCH IF YOU WOULD INFORM US. WE WERE ABLE TO FIND OVER 50 WITH YOUR HELP THIS PAST YEAR.

1910
1. E. W. Gorman
2. C. G. Wood

1912
1. W. N. Lorentz

1913
1. A. N. Erickson
2. F. C. Smith

1914
1. W. J. King

1915
1. K. Kersey
2. W. T. Kraner
3. H. Mitzen

1917
1. W. J. King
2. E. R. Schaefer
3. En-Ton-Lee Toma

1919
1. C. C. Keckler

1920
1. Yu Seng Tsen

1921
1. H. W. Hess
2. R. D. Kumajon
3. D. I. Mayne
4. Kao Shen

1922
1. K. A. Cover
2. V. R. Morris
3. C. U. Pang

1923
1. A. F. Acosta
2. H. M. Davies
3. W. H. Miller
4. H. L. Moon

1924
1. Tien I. Chen

1925
1. M. C. Reed
2. C. M. Sun

1926
1. F. C. Davis
2. J. A. Thompson
3. Mao Han Tuan
4. Cho Wu

1927
1. Cheung Ying Chu
2. D. L. Bishop
3. Wei Yang

1928
1. R. B. Goble
2. Chieh Ma
3. E. W. Walke

1929
1. M. S. Hurwitz

1930
1. M. S. Hurwitz

1931
1. Mrs. H. Hsieng

1932
1. H. Weinberg

1933
1. N. R. Price

1934
1. B. A. Powman

1935
1. L. A. Bedford
2. E. C. Painter

1936
1. C. E. Green

1937
1. R. V. Cobb
2. B. F. Coffman
3. C. B. Cross
4. R. T. Whitaker

1938
1. L. F. Guenter
2. L. W. Love
3. T. K. Wu

1939
1. K. Hoover
2. H. G. Rohrer

20
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<td>D. B. Barnes</td>
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<td>J. Moomaw</td>
<td>R. Morrow</td>
<td>E. J. Wilson</td>
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<td>V. L. DePaola</td>
<td>L. W. Perkins</td>
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# Placement of Chemical Engineering Graduates

## Bachelor of Chemical Engineering

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<th>Company and Location</th>
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<tr>
<td>1</td>
<td>Jephthah A. Abara</td>
<td>Gulf Research &amp; Development Company, Pittsburgh, Pa.</td>
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<tr>
<td>2</td>
<td>John T. Baker</td>
<td>Diamond Alkali Company, Painesville, Ohio</td>
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<tr>
<td>3</td>
<td>Arthur Dale Bare</td>
<td>Shell Chemical, Deer Park, Texas</td>
</tr>
<tr>
<td>4</td>
<td>John W. Bradshaw</td>
<td>Charles Pfizer &amp; Company, Groton Long Point, Connecticut</td>
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<tr>
<td>5</td>
<td>William P. Burgess</td>
<td>Princeton University, Princeton, New Jersey*</td>
</tr>
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<td>6</td>
<td>John S. Dorsey</td>
<td>Rohm and Haas Company, Philadelphia, Pennsylvania</td>
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<td>Charles D. Dunlap</td>
<td>American Oil Company, Whiting, Indiana</td>
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<td>Keith A. Dunnigan</td>
<td>Procter and Gamble Company, Cincinnati, Ohio</td>
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<td>9</td>
<td>John P. Fundersol</td>
<td>Allied Chemical Company, Ironton, Ohio</td>
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<td>Frank W. Hauschildt, Jr.</td>
<td>American Oil Company, Whiting, Indiana</td>
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<td>Dennis W. Hurley</td>
<td>Dow Corning Corporation, Midland, Michigan</td>
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<td>Graham F. Painter, Jr.</td>
<td>Union Carbide Corporation, South Charleston, West Virginia</td>
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<td>John H. Pitcher</td>
<td>Armco Steel Company, Middletown, Ohio</td>
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<td>14</td>
<td>Bruce E. Poling</td>
<td>University of Illinois, Champaign, Illinois*</td>
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<td>16</td>
<td>Keith A. Robinson</td>
<td>E. I. du Pont de Nemours &amp; Co., Inc., Deepwater, New Jersey</td>
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<td>17</td>
<td>Anthony Santavicca</td>
<td>Diamond Alkali Company, Willowick, Ohio</td>
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<td>Donald E. Saunders</td>
<td>Indiana University, Bloomington, Indiana*</td>
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<td>Bruce A. Van Boskirk</td>
<td>Dow Corning Corporation, Middletown, Michigan</td>
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<td>20</td>
<td>Peter H. Wendschuh</td>
<td>University of California, Berkeley, California*</td>
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<tr>
<td>21</td>
<td>John Martin Yacher</td>
<td>Chemical Engineering Department, Ohio State University*</td>
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## September, 1967

1. Wilma Ann Jancuk (Diskant)
   Goodyear Tire and Rubber, Akron, Ohio
2. John Leitwein Guy
3. Robert R. Richards
   Union Carbide Corporation, Plastics & Chemical Division, Marietta, Ohio
4. Lawrence C. Wagner
   General Tire, Akron, Ohio
5. John B. Wood
   Business Administration, Stanford University, Pal Alto, California*

## December, 1967

1. William R. Herzog
   Sun Oil Company, Toledo, Ohio
2. Parviz Jian-Ziball
   Will eventually return to Iran

## March, 1968

### June, 1967

- Battelle Memorial Institute*
  United States Public Health Service, Cincinnati, Ohio

- Charles Pfizer & Company, Groton Long Point, Connecticut
  University of Illinois, Champaign, Illinois*
  Chemical Engineering Department, Ohio State University*

---

*Working for Ph.D. degree
### MASTER OF SCIENCE (continued)

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<td>2.</td>
<td>Gerald A. Bullano</td>
<td>Navy Officer Candidate School, U. S. Naval Base, Newport R.I.</td>
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<td>Charles D. Dunlap</td>
<td>American Oil Company, Whiting, Indiana</td>
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<td>Donald E. Saunders</td>
<td>Indiana University, Bloomington, Indiana*</td>
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<td>5.</td>
<td>Peter H. Wenschuh</td>
<td>Chemistry Dept., University of California, Berkely, Calif.*</td>
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<td>6.</td>
<td>Alan E. Zengel</td>
<td>Air Force Aero Propulsion Lab, Dayton, Ohio</td>
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December, 1967

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<td>1.</td>
<td>Arthur D. Bare</td>
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<td>Hugh J. Zeller</td>
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March, 1968

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<td>Sushil K. Bhalla</td>
<td>At Ohio State University; will join staff in Kanpur, India</td>
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<td>Lloyd G. Jones</td>
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<td>Ronald M. Kovach</td>
<td>B. F. Goodrich Chemical, Avon Lake, Ohio</td>
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<td>William E. Lewis</td>
<td>Humble Oil, Baton Rouge, Louisiana</td>
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<td>Gerald A. Wilcox</td>
<td>Esso Research and Engineering Co., Bayton, Texas</td>
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December, 1967

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<td>Esso Research Laboratory, Humble Oil, Baton Rouge, Louisiana**</td>
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<td>Merrill L. Minges</td>
<td>U. S. Air Force Materials Laboratory, Wright-Patterson AFB, Ohio**</td>
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<td>E. I. du Pont de Nemours &amp; Co., Inc., Engineering Dept., Wilmington, Delaware**</td>
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*Working for Ph.D. degree.

### DOCTOR OF PHILOSOPHY

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June, 1968

**Work completed; will receive Ph.D. degree on June 7, 1968**
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FELLOWSHIPS, SCHOLARSHIPS, GRANTS-IN-AID AND OTHER CONTRIBUTIONS TO THE CHEMICAL ENGINEERING DEPARTMENT

Words cannot express my thanks for the generous contributions to Chemical Engineering education made by the many companies and agencies listed below. Without their help, it would be impossible to have a graduate program. Our research would be still in the Baumé hydrometer stage. The undergraduate scholarships have helped many worthy students, especially those on a combined program where they have a laboratory on the campus the first five weeks between the summer and autumn quarters and then an extra quarter to complete their research. These are indicated in the table below.

FELLOWSHIPS
1. American Oil Foundation
2. Dow Chemical Company
3. Diamond Alkali Company
4. Koppers Company Teaching Fellowship
5. Shell Companies Foundation
7. Lubrizol Corporation
8. Procter and Gamble Company
9. Ohio State University
10. National Science Foundation
11. Louis A. and Lucille Roberts Memorial Fellowship Fund
12. Arno C. Fieldner Research Fellowship in Chemical Engineering

SCHOLARSHIPS
1. Dow Chemical Company
2. Goodyear Foundation
4. Monsanto Company
5. Pittsburgh Plate Glass Foundation
6. Rohm and Haas Company
7. Standard Oil of California
8. Union Camp Corporation
9. Universal Oil Products Company
10. Dr. James R. Withrow Memorial Scholarship Fund

GRANTS-IN-AID AND OTHER CONTRIBUTIONS
1. American Cyanamid Company*
2. Diamond Alkali Company
3. Camille and Henry Dreyfus Foundation, Inc.*
4. Dow Chemical Company*
5. Dow Corning Corporation
7. Esso Education Foundation*
8. B. F. Goodrich Chemical Company
9. Harshaw Chemical Company, Division
   Kewanee Oil Company
10. Hercules Powder Company
11. Pittsburgh Plate Glass Foundation
12. Mead Corporation
13. Monsanto Company
15. Universal Oil Products Company
16. Mobil Foundation Incorporated

*Money may also be used for a pre-doctoral fellowship.

THE ALCOA PROFESSORSHIP

As I had stated last year, the Aluminum Company of America (ALCOA) made a contribution of $50,000 for an Alcoa Professorship in Chemical Engineering. This will cover a three-year period. We have been successful, after looking for a year, to find a man to head up our program in Polymer Engineering. We had over sixty applicants but finally found a man who we thought would best do this job in engineering; namely, Dr. Ralph Emerson Lynn.
Dr. Arno C. Fieldner (1881-1966) was the first one of two to graduate from Chemical Engineering in 1906. He met a tragic death in an automobile accident on July 16, 1966 as he was returning from a fishing trip in Canada.

He was the recipient of many honors from Ohio State for his many contributions to Chemical Engineering. He was awarded the Joseph Sullivant Medal (1940), the Lammy Medal for meritorious achievements in industrial arts (1931), and an honorary D. Sc. degree (1941). He was also honored by the Universities of Alabama and North Dakota with honorary D. Sc. degrees.

His interests in coal technology began at Ohio State. His success as a Chemical Engineer developed so rapidly that, when the U. S. Bureau of Mines was created in 1910 and the Coal Division established in Pittsburgh, he was made chemist in charge of the fuel chemical laboratory, where he served until 1917.

The Cosmos Club (Washington, D. C.) honors few of its members with a vignette in their Cosmos Club Bulletin and none before including a photograph. The greatness of Arno C. Fieldner is indicated by a eulogy of him in the Congressional record (H12422), September 25, 1967, where he was deemed the world-famous authority on fuel.

In his will, which was just probated recently, Dr. Fieldner willed $75,000 to the Chemical Engineering Department which will be used for a fellowship bearing his name. At a recent meeting of the Board of Trustees, the following was approved concerning this fellowship:

"Description of

THE ARNO C. FIELDNER RESEARCH FELLOWSHIP IN CHEMICAL ENGINEERING

Established February 8, 1968 by the Board of Trustees of The Ohio State University, with a bequest from the late Arno C. Fieldner, B.Sc. Ch.E. '06, Ch.E. '23, D.Sc. (Hon) '44, formerly of Washington, D. C., through The Ohio State University Development Fund.

This bequest is to be placed in the University's investment portfolio under the rules and regulations adopted by the Board of Trustees, with the right to invest and reinvest as occasion dictates.

The income therefrom is to be used to establish and maintain a research fellowship, with the appointment to the fellowship to be made by the Chairman of the Department of Chemical Engineering.

In case the need for the fellowship herein described should cease to exist or so diminish as to create unused income, then the Board of Trustees of said University may use said income in its discretion, preference to be given to items in the field of Chemical Engineering."
DR. JAMES R. WITHROW MEMORIAL SCHOLARSHIP FUND

Last May I received a letter from one of our alumni who graduated over fifty years ago. He retired several years ago after a very successful life as an executive of one of the larger companies in the U. S. He stated that even though his relationships with his alma mater and particularly the Chemical Engineering Department have always been in his thoughts,

"While a student at Ohio State, there were several men who particularly helped me make the grade. One of these was Dr. Withrow whose kindly insight into the personality and talents of his students made it possible for him to direct his graduates to the best business opportunity for each. NOW WE WISH TO DO A LITTLE IN MEMORY OF HIM."

Looking over the financial reports of university endowments and development fund, he noticed that there was no mention of any fund set up in memory of Dr. Withrow. He made a contribution of over $3,000 in stock to start this memorial fund, hoping that other admirers of Dr. Withrow would make a contribution if they felt the same as he. He wishes his name to be anonymous. At the February 8 meeting of the Board of Trustees, the Dr. James R. Withrow Memorial Scholarship Fund was inaugurated. The following is a statement of the resolution passed at this meeting of the Board of Trustees:

"Description of

DR. JAMES R. WITHROW MEMORIAL SCHOLARSHIP FUND

Established February 8, 1968 by the Board of Trustees of The Ohio State University, with a gift through the Development Fund from a grateful student whom Dr. Withrow helped to start on his career.

All gifts are to be invested in the University Investment Portfolio under the rules and regulations adopted by the Board of Trustees, with the right to invest and reinvest as occasion dictates.

Income plus $300.00 of the principal is to be used annually to provide one or more scholarships for needy and promising students in the Department of Chemical Engineering for 25 years. At the termination of the 25-year period, principal and income are to be made available to the Department of Chemical Engineering for needed equipment."

Those who wish to contribute to the Dr. James R. Withrow Memorial Scholarship should make out a check payable to the Ohio State University Development Fund. In the lower left hand corner write Acct. No. 2398, Dr. James R. Withrow Memorial Scholarship Fund. The check should be sent to the undersigned who will deliver it to the Development Fund Office. Our address is 140 West 19th Avenue, The Ohio State University, Columbus, Ohio 43210.
COLLEGE OF ENGINEERING ADOPTS A FOUR-YEAR PROGRAM

At a recent faculty meeting of the College of Engineering, it was moved that the present five-year curricula in the College of Engineering by dropped, and that the College adopt a four-year curricula for all departments. The motion passed by a three to one vote. I voted to retain the five-year program although there are many advantages in the four-year curricula for the college.

Ohio State's College of Engineering adopted the five-year curricula in 1946. It had many advantages over the five-year curricula in other schools in that a better man, by staying over an extra quarter, could receive both his Bachelors and Masters degrees. Ohio State is the last of the large Engineering schools to abandon the five-year curricula.

At the present time and just recently inaugurated, there are now eight state supported schools of Chemical Engineering; namely, Akron, Cincinnati, Cleveland State, Ohio State, Ohio University, Toledo, Youngstown State, and Dayton. The two non-state supported schools who offer curricula in Chemical Engineering are Case Western Reserve and Dayton. In addition to this, Case has a Polymer Science and Engineering Division of Chemical Engineering.

Information will be given concerning the new four-year curriculum in Chemical Engineering. We are still holding staff meetings on this and within the month it will be submitted to the Engineering Council on instruction.

With kindest and warmest personal regards to all of you and looking forward to seeing many of you come back on May 24.

Joseph H. Koffolt
Chairman
Chemical Engineering Dept.

JHK/sat/sab
James F. Widman, B. Ch. E. '35, who has been with Union Carbide Corporation, International Division since 1935 with the exception of a stint in the Navy as Lt. J. G., sent me this interesting article given below. Jim has spent many years in Argentina, England and Japan. He is now being transferred to South America. I thought the article would be very interesting to many of you.

HELPFUL HINTS TO VISITING AND NEW FIREMEN
By James F. Widman
Reprinted from THE JOURNAL of the American Chamber of Commerce in Japan
May 5, 1966 Vol. 3, No. 5

Practically, every tourist or business person who leaves his or her home shores realizes that local customs and habits vary from country to country, and those of Asia and more particularly Japan, vary considerably from the Western World. Therefore, it would seem basic that the foreign businessman who comes to or lives in Japan should realize that he, and through him his company, is being evaluated by his Japanese contacts, in comparison with other foreign representatives they know. This is common to all countries, but with respect to Japan, foreigners should remember that for most Japanese it is still an "experience" to deal with non-Japanese, in business especially. A nervousness is sometimes apparent on the Japanese side, not necessarily caused by a lack of business confidence, but more because of concern over how he should convey his ideas through an interpreter to the foreigner, not losing the true meaning, nor creating any misunderstandings. Of course, doing business with Japanese is equally trying on foreigners, so it is essential that both sides recognize initial fundamental difficulties. Every foreigner coming to Japan should realize especially that things are done differently here than back at home, or even in other countries. Even if he sees or hears something with which he does not agree, he should remember it is their country, and for them their social and economic systems work well. This is not to say that he should keep silent with respect to matters that negatively affect his business, but he should know what he says, to whom he says it, and how what he says in the context of the situation will effect those to whom he is speaking. He must also realize that this may vary with the echelon with whom he is in contact.
The foreigner will be accorded courtesies, some far beyond his expectations. It is advisable to reciprocate. True, the foreigner cannot usually put on the equal of a geisha party, because, in most cases, he has not the connections to make the necessary arrangements—assuming he has the money (A first-class geisha party costs about ¥20,000 per person). However, he can take his Japanese friends to one of the many first-class night clubs, or arrange for a business lunch or dinner party in a private room at a first-class hotel. He should not just leave with a bland promise to show his Japanese friends "an evening on the town," if they come to "Podunk, U.S.A."

With regard to accepting entertainment, visitors should be forewarned that Japanese who are good hosts are not per se, the proper type of representatives he should choose for his firm or product. Some use the visitor for "self-entertaining" and too often visitors may hear very little from Japanese by whom they have been entertained. In contrast some Japanese who are modest in entertaining but who are resolute and painstaking negotiators may prove the best friends of the foreign businessman in the long run. The foreigner should note that at social functions in the evening after drinks are served, the Japanese regard it as extremely bad manners to talk business. If the visitor does so he may lose much more than "face"; if the Japanese do so, the foreigner may be dealing with the wrong people.

Just as there are certain customs and manners to be observed between host and guests in the Western World, the same is true of Japanese. If your Japanese host asks you whether you prefer a western-style or Japanese-style dinner, he invariably hopes that you will suggest western-style because that will save him considerable expense. If he does not ask which style you prefer and you wind up sitting on a silk pillow for dinner, this is the way your host may want it. Whilst it is no longer good form, before the war, at top levels, it was impolite to eat any of the food at a Japanese tea-house dinner; the gentlemen would drink through all the courses and ultimately have a few bites of the rice. Just before they departed, the maids would bring each guest all of the food he had not eaten wrapped in a "furoshiki" (scarf) which he would take home ostensibly to give to his servants. As in the States, it was commonly suspected that the dog did not always get the bowser bag. So, unlike China, where one is expected to eat everything, it is not so in a Japanese restaurant or tea-house. If you do not want to eat the food, ask the maid or geisha to take it away because if you do not your host may have to wait a long time for the next course, as the maids might think that you still intend to eat what you have before you. In other words, expedite the serving of the courses whether you eat yours or not. The serving of rice is the signal that the dinner is coming to an end and, after that, there may be a little fruit, whereupon in all politeness the visitor should get on his knees, bow to the host, thank him for the nice meal, get up and leave.
The maids, the geisha and some of the young, lower echelons may want you to stay on but your host probably wants to terminate the dinner without running into any extra cost. If yours is important business, the host will probably be an astute executive who can spot a phony, so after a Japanese dinner in which you have skipped some raw-fish or too exotic courses, don't say, as one foreigner did, "This was the finest meal I ever had in my life."

There are other points that should be made with respect to evening progresses with Japanese being spoken all around him the foreigner may find himself according the young interpreter much more attention than he deserves. Save for his ability in English the interpreter may hold a very modest company position, whereas, the older senior executives and engineers who will decide the business may not have had time to become thoroughly bilingual. Japanese--male and female--do not like to be touched. The men dislike being patted or slapped on the back. At a night club, if your host disappears without saying goodnight do not be offended or surprised. He simply wants you to continue enjoying yourself with his subordinates. This is considered the polite way of avoiding the breaking up of a party.

After the initial courtesies, the foreigner tends to be friendly, to make his pitch in the "hard-sell style," to expect some questions and then a relatively prompt decision. His Japanese opposites are usually pleasant, good listeners, but even when they profess to speak English will rarely understand even half of what is said to them. When dealing with non-English speaking Japanese, interpreters usually get over only about half of what the foreigner says, and what to the foreigner is a critical point may be omitted by the interpreter because he fails to appreciate its significance. Since the Japanese understand so little, they almost invariably ask for time to think matters over. This is followed by more meetings, more questions asked and, if the foreigner is honest, patient, has a good proposition and exhibits courtesy, the Japanese will warm up to him and his proposal. Foreigners should not hesitate to present their views directly, for it has often been said that Japanese respect clarity, properly placed firmness, and thoroughness on the part of their potential foreign partners. They prefer to have a clear meeting of the minds beforehand, and thus avoid later quarrels. It takes time, however. If a foreigner expects to accomplish something in two days in Japan, as a rule it will actually take two weeks. A four day task will take four weeks, etc. There may well arise some misunderstanding due to different objectives, but even so, responsible Japanese businessmen usually seek no more advantages than the astute European, or American businessmen.

Then, there is the matter of the detailed contract or agreement, which is a foreign invention not used as a rule in Japanese circles where verbal agreements prevail not only in business, but between Government and business. The foreigner indoctrinated in committee responsibility and the written agreement feels it is difficult, if not impossible, in some cases,
to commit himself and money without a contract. The Japanese will struggle through such an agreement trying to understand the contents, which will involve lengthy discussions and full explanations of not only each and every word, but the particular meaning as it pertains to him. If not handled in a friendly manner, this sometimes causes bad feelings or builds up an aura of distrust. On the other hand, Japanese have been known to sign documents in good faith with which they were not in complete agreement—accepting verbal assurance from a person they trust.

A foreigner should never be without a calling card, as it is a Japanese business courtesy to present these at the time of introductions, even to lower echelon executives, including the interpreter. Often, somebody will walk in during a meeting and sit down as a participant. Foreigners should present cards to him, too, at the first opportunity.

In its blunt sense, the work "no" is difficult to express in the Japanese language. Often visitors, as well as local foreign residents, are confused when they find that "iie" ("no") means "yes," and "hai" ("yes") means "no." Use of a clear but soft negative phrase is recommended, when "no" must be said. It is desirable to put important questions three times, each in a different fashion, or to interpret an answer with, "You-mean..." just to assure yourself you've understood correctly. The Japanese may smile, or even laugh, at what may appear an odd time to a foreigner. This is their way of showing embarrassment. For example, they may not have understood what is said and, therefore, do not know how to answer, hence the giggle or big smile.

The Japanese will open up to diplomatic comments from foreigners, such as "we are happy to be working with such an outstanding organization..." Unless a Japanese specifically asks how something is done in the U.S., visitors will get started off on the wrong foot if to prove a point they say, "In the U.S., we do it this way..." The Japanese, although liking the American way, realizes that local circumstances require modifications in approach to the Japanese with whom they deal. The Japanese sometimes appreciate it if, when asked questions, the foreigner initiates his reply with "Frankly...," or "Honestly...," and then speaks frankly and honestly.

Meetings tend to be formal and to the fast-moving foreigner, rather slow in getting started. If he shows impatience, however, he may well regret it later. If a visitor wants to get on more friendly terms with his Japanese associates, it is best to do this by playing golf, having a drink, or a meal. By this we mean an extemporaneous occasion, not an evening of entertainment. Simple jokes are appreciated, providing there is no play on English words or phraseology. Few stories translate well into any other language.

During your visit never tell any of your hosts that you plan to
buy a camera, some pearls, etc., because they will feel obligated and present them to you. This innocent mistake actually is tantamount to inviting a present, even though the visitor does not intend it to be that way. There are foreigners who deliberately do so to the disgust and dislike of their local people and Japanese.

Visitors should never discuss affairs of the heart, particularly during business hours. It frequently happens that visitors are introduced to charming members of the fair sex and mistakenly believe that the host wants to be kept informed. This is anything but the truth.

Foreigners should never assume anything said will not be repeated because there seem to be no secrets in Japan.

These are but a few helpful suggestions. In the ultimate there is no substitute for family background and genuine good manners. From this base one can frequently deduce the proper course and in any event, the Japanese with enviable ability to sense what is in the sincere foreigners' heart gradually build up a warm feeling towards him. Where there is good will, a way inevitably ensues. Finally, if you have waded thus far, do not be needlessly concerned, use this as a guide and remember, in business the Japanese wears a Western business suit and like you, he puts on the pants one leg at a time.

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**Table of Excuses**

(Reference Unknown)

To save time for management and yourself, please give your excuses by number. The list covers most situations.

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1. That's the way we've always done it.
2. I didn't know you were in a hurry for it.
3. That's not in my department.
4. No one told me to go ahead.
5. I'm waiting for an O.K.
6. How did I know this was different.
7. That's his job, not mine.
8. Wait 'till the boss comes back and ask him.
9. I forgot.
10. I didn't think it was very important.
11. I'm so busy I just can't get around to it.
12. I wasn't hired to do that!
13. I thought I told you.
1937
A. Chute, H. Grice, D. Folkert
B. Gunyou, H. Penburr

Dean Hubbell '27, W. B. Kay '22

1942
Back Row: R. Darby, M. Lowman,
D. Henthorn, F. Hanson, N. Strouse
Front Row: A. Lieberman, C. Kerns,
D. Terry, G. Luckey, P. Stuber,
D. Arnold, D. Peterseim

1932- P. Blume, C. O. Throne

1957- A. Raymond, G. Ingersol, J. Helms


A.I.Ch.E. Scholarship Award
Presented by E.E.Slowter to
John Becker

Central Ohio Section
A.I.Ch.E. Student Contest
Problem Award Presented by
Dr. Syverson to C.D. Dunlap

Central Ohio Section A.I.Ch.E.
Student Contest Problem Award
Presented by E.E.Slowter to
Pat Burgess

M.W.Kellogg Design Award
Presented by Dr. C.E.Dryden
to W.Hauschildt
A.I.C. Award presented by Dr. Kay to John Bradshaw

ASTM Award presented to D. Reese and D.E. Smith by Dr. Svanks

Our Girls: Shirley, Sharon, and Marjean

Our Girls Again but not working Just Yacking