CHEMICAL ENGINEERING

Thirtieth
Annual Report to the Alumni
1978

THE OHIO STATE UNIVERSITY

Second Row:  R.E. Lynn, R. Arnold, D. Faust, A. Tinkovicz, C. Tan

Third Row:  D. McDowell, T. Jones, D. Wells, M. Lenz, S. Egnaczyk, M. Durilla, E. Warren

Fourth Row:  T. George, D. Imbrogno, S. Howe, J. Petrarca, L. Sheppard, R.S. Brodkey, R. Wright, A. Syverson, W.B. Kay


Class of 1977
Dear Alumni:

This has been another eventful year for our department; I am pleased now to greet you and tell you some of the highlights.

This year ACE Day will be held on Friday, May 19. I hope that many of you will be able to come back at that time. We especially look forward to greeting the members of the anniversary classes of 1918, 1923, 1928, 1933, 1938, 1943, 1948, 1953, 1958, 1963, 1968, and 1973. A registration form for the ACE Day luncheon is enclosed in this report.

Being chairman after Joe Koffolt and Sy is truly a tough act to follow. Meetings with alumni and industrial representatives have made me keenly aware of the great job they did, the esteem in which Ohio State University chemical engineers are held, and the attachment the graduates have for the department. Ed Haering's work as Acting Chairman was in the same tradition. I will certainly try to carry on in this tradition. Our goals are to maintain the fine undergraduate training experience our students have always had, and to increase the research effectiveness and visibility of the department. This will be no easy task in a time of rapidly increasing student enrollments and slowly increasing budgets. I believe, however, that with the faculty we have (plus the additional staff we are actively seeking) and with the support of our alumni, we will be able to meet this challenge.

There is, of course, an intimate tie-in between increased enrollments and the need for additional faculty. Our undergraduate enrollments continue to rise. We have 55 seniors, 75 juniors, and 90 sophomores this year. Graduate enrollment has not yet increased proportionally. Industry is readily absorbing all of our graduates, and clamoring for more. This year's average salary offer to B.S. graduates will be between $18,000 and $19,000 per year.

As many of you may have heard, Sy and Karlis Svanks retired last year. Fortunately, both are often around the building doing research and providing help when called upon. A report on the faculty retirement party for them is on Page 4.

I have had the opportunity to meet a number of you personally and I look forward to meeting many more of you. The faculty (and other staff members) join me in sending best wishes to each of you. We greatly value your continued interest and support. We hope to see many of you at this year's ACE Day events. Please keep us posted on your activities.

Sincerely,

Jack Zakin
Dr. Jacques L. Zakin is the new chairman of the department of chemical engineering at Ohio State University. A native of Far Rockaway, New York, he received the bachelor of chemical engineering degree from Cornell University, Ithaca, New York, in 1949. Also in chemical engineering, he received from Columbia University in 1950 the master of science degree, followed by the doctorate degree in engineering science from New York University awarded in 1959.

Zakin is a specialist in fluid mechanics with active research interests centering on drag reducing flows, turbulent transport of crude oil-water emulsions, and the structure of turbulence. Since 1962 he taught at the University of Missouri, Rolla, and also headed programs for minorities in engineering and women in engineering.

For a year he served as a visiting scientist at the Naval Research Laboratory in Washington, D.C., and in 1968 was a visiting professor of chemical engineering at the Israel Institute of Technology, Haifa.

Veteran of a decade of research and development assignments with Socony Mobil Oil Company in Brooklyn and Flintkote Research Labs in Whippany, New Jersey, Zakin is author or co-author of nearly 60 technical publications. He also holds five patents which relate to lubricating grease and drag reduction in turbulent flows.

He is a member of the American Institute of Chemical Engineers, the Society of Rheology, the American Chemical Society, and the American Society for Engineering Education. He is also a member of the honorary groups Sigma Xi, Tau Beta Pi, Phi Lambda Upsilon and Omega Chi Epsilon.

Excerpted from News in Engineering, November, 1977
Thank You, Sy and Karl

This past year was marked with the retirement of Aldrich Syverson and Karlis Svanks. We know that each of you joins with us in expressing our sincere appreciation for the years of dedicated and devoted service that Sy and Karl have given to the department, the University and our profession. We are delighted that both plan to maintain an office in the department so that we will continue to be able to enjoy their friendship as well as their counsel and advice. All of us wish them many years of continued happiness and success as they start another phase in their rich and rewarding lives.

Aldrich Syverson joined the faculty in 1950 by way of Syracuse University and served as Chairman of the department from 1968 to 1976. Before entering academe, he was employed by the B.F. Goodrich Chemical Company where he was responsible for organizing the Avon Lake Experiment Station and served as its first Manager. Sy has provided inspiration and dedicated leadership to all aspects of academic life. Students, alumni, faculty colleagues, professional and industrial counterparts all hold him in the highest regard. Sy has the rare talent of being able to effectively bridge the gap between theory and practice in a most meaningful way. This not only makes him a most inspiring teacher and researcher but actively sought after as an industrial consultant. His professional and personal standards continuously provide targets for all of us to follow.

Karlis Svanks came to Ohio State as a Research Associate in the Engineering Experiment Station in 1950 and he was assigned to the station on a full-time basis. He received his B.ChE. and M.S. degrees in chemical engineering from the University of Latvia. He had a number of years of industrial experience in Latvia before immigrating to the United States. He received his PhD from our department in 1966 and was promoted to Associate Professor in 1972.

Karl is an outstanding experimentalist and has worked on many projects through the station. These have been primarily in the areas of water pollution and coal research. He has served as the thesis advisor to some 17 M.S. students. Karl unselfishly gives of his time and talents to all who seek his advice and counsel.

In December, the faculty, staff and their spouses proudly recognized at a retirement dinner in their honor the many contributions and accomplishments of Sy and Karl. A few pictures of the evening’s activities follow.
THE CHE FACULTY AROUND "YE OLDE WATERING HOLE"

SY AND HIS FAMILY, DOUG, ELEANOR, BETH AND BILL

KARL AND HIS WIFE TEKLA

SY AND KARL OFFERING THEIR VALEDICTORIAN ADDRESSES
Greetings:

While preparing this annual note to you, I have reviewed the Alumni reports of the past which now covers almost three decades of activities of the Department. The review brings back many cherished memories of associations with many of you during your student days as well as later after graduation. These are significant rewards to one in education.

We were saddened by the death of Joe Koffolt last May. Few in our profession have contributed as much as he did through his professional competence and his untiring devotion to personal human relations. I am sure you share with me a feeling of gratitude for his leadership, concern and compassion.

We were pleased to welcome Dr. Jacques L. Zakin who was appointed Chairman of the Department last summer. Jack came to us with outstanding credentials. He is doing an excellent job as chairman and is a most valuable addition to the faculty. Last year while a search for a new chairman was being made, Ed Haering served as Acting Chairman; we are grateful to him for serving so well during the interim period.

On a personal note, following retirement from the University at the end of the Summer quarter, I had open-heart surgery. My recovery has been very good and I am now completing some research and writing. I am grateful to have the opportunity to do so in a university environment.

As I look back over the twenty-seven years that I have been associated with Ohio State, I am impressed with the important role that alumni have played. I would like to take this opportunity to offer my sincere thanks for your help and interest.

Best wishes.

Sincerely,
Dear Alumni:

Writing these couple of lines, I wonder: Is it really more than twenty-seven years since I joined The Ohio State University, first at the Engineering Experiment Station and later at the Department of Chemical Engineering? Why does it appear to me as so short a period of time? The answer is there and has been for a long time - it is the very friendly academic environment that I was given the opportunity to enjoy. Thank you, faculty and staff.

My sincere thanks to: the Late Dr. Joseph Koffolt, chairman, for encouraging me to work towards a Ph.D.; Dr. Aldrich Syverson, chairman and adviser of research for my Ph.D; and Dr. Edwin Smith (since April 1, 1950) for advice and help to a new-comer to the U.S.A. and O.S.U.

People frequently ask me what makes me run and feel so young? Does not one feel young again working with students, advising them in their research for M.Sc. degrees, observing their enthusiasm and hopes for the future, and hearing that they succeed in their lives? Indeed one feels young again. At least I do.

Recently I have been working on the Lake Erie Nutrient Control Program and, therefore, still have the opportunity to enjoy the friendly academic atmosphere of the Chemical Engineering Department, thanks to the chairman, Dr. Zakin, who has already contributed so much to the high academic standing of the Chemical Engineering Department.

Sincerely,

Karlis Svanks
1978 Annual Conference for Engineers and Architects Friday, May 19, 1978

8:30 Registration — Mershon Auditorium Lobby

9:30 Morning Session — Mershon Auditorium

Keynote Address
"Options for Coal as Energy," Dr. Robert E. Esswein, Envin. G. Bailey Professor of Energy Conversion, The Ohio State University

11:00 Reception — for awardees, friends, faculty, parents, class reunion groups
Mershon Auditorium Lobby

12:00 Awards Luncheon
Ohio Union Ballrooms

Presenting
The Reunion Classes of 25, 30, 35, 40, 45, 50, 55, 60 years
1978 Engineering Honor Students
Faculty Awards for Distinguished Teaching
Tezukuri Outstanding Alumnus Award
Distinguished Alumnus Awards
Meritorious Service Citation
Benjamin G. Lamme Medal

2:00 Departmental Sessions

• Aeronautical-Astronautical and Aviation
  Meet at 2:30 at the Aeronautical & Astronautical Research Laboratory, at OSU airport.
  Transportation may be arranged by calling 622-3027.
  Reports of the OSU General Aviation Research on aeronautical design and analysis, propulsion studies, state-of-the-art flight test data systems, aircraft wind tunnel developments, and flight test programs will be presented by the staff.

• Agricultural Engineering
  Room 115 E. Weede
  Faculty plans for capital improvements, and growth and development of faculty, research, resident instruction and extension.
  Reception and refreshments

• Architecture
  Room 121 Hitchcock Hall
  Address by David Lewis, ARIBA, AIA, and founder and partner of Urban Design Associates, Pittsburgh. Mr. Lewis is a fellow of The Royal Society of Arts in England, Andrew Mellon Professor of Architecture and Urban Design at Carnegie-Mellon University, and author of many books and articles including "Community Design: By the People." The exhibit will be open at the university.

• Bio-Medical Engineering
  Room 569 E. Weede Lab
  Program Review — H. R. Weede, Director
  Tour of Bio-Medical Engineering Projects in Research and Clinical Health Care
  Each tour will take about one hour. Selection of two from the following will be arranged to fit individual interests.

  • Catheterization Lab Data Transmission and Terminal: Optical Link, Hybrid Computer — Division of Cardiology
  • Biomedical Computer Lab: Weed School
  • Long Term Uterine Effects Resulting from Human or Animal Pregnancy Radiation — Division of Radiology
  • Hearing and Speech Handicap — Tactile: Visual, Hearing Aid
  • Biofeedback for Seizure: Electrical Engineering
  • Virtual Sensitivity to Contrast Stimulation — Division of Vision Research
  • Biomechanics Laboratory
  • Biological Fluid Flow: Norman Hamlin

• Ceramic Engineering
  Room 184 Wett Hall
  "Departments Growth Patterns and Research Development:" Dr. William B. Shook, Chairman
  Reunions and Tours

• Chemical Engineering
  Room 207 Joseph H. Kohlberg Laboratories
  Welcome to alumni and guests
  Student Awards
  Dr. Jacques L. Zakos: "Chemical Additives to Reduce Fluid Drag"
  Open House and Social Hour

• City and Regional Planning
  Ohio Union, A.D., Ohio Union
  "New Opportunities for Professional Planners," Constance Lieder, President of the American Institute of Planners.
  Mr. Lewis is the first woman president of AIP. A Phi Beta Kappa from Wellesley, she received the MCP from Harvard and is currently a PhD candidate at Princeton. She is also Executive Director of the Mayor's Task Force on Population Laws for Baltimore and a Professor of Planning at Morgan State College. She will also meet informally with students and guests from 9:30 to 11:30 in Room 270 of Brown Hall.

• Civil Engineering
  Room 456 Hitchcock Hall
  Update on C. E. Education and Research
  Construction: Dr. G. E. Mason
  Transportation: Dr. Z. A. Neumeth
  Structural: Prof. C. E. Smith
  Geotechnical: Dr. T. H. Wu
  Water Resources: Dr. T. V. Ricks
  Remote Sensing and Surveying: Prof. O. W. Minster
  Reunions — ACSE Student Band

• Computer and Information Science
  Room 330 Civil and Aeronautical Engineering Building
  Computer-Generated Animation
  Demonstration of state-of-the-art research
  The featured speaker will be Professor Joseph Weizenbaum of MIT who will talk on Artificial Intelligence and on Social Issues in Computing followed by a social hour and dinner.
  CIS also will host a special alumni event on Thursday, May 25.

• Electrical Engineering
  Room 115 E. Weede Laboratories
  Welcome: Dr. H. C. Ko, Chairman
  Open House and tours of the following research and educational facilities:
  • Microelectronics Laboratory — Room 201L
  • High Voltage Laboratory — Room 557-DL
  • High Voltage Laboratory — Room 113 Communications Lab
  • Vehicle for Automated Highway System — South of Drey Laboratory
  • Energized Model of Power Substation — basements, Caldwell Hall
  • Three Channel Sound System — Room 113 DL
  • Electric Power Laboratory — 1130 Kiene Road
  Reunions and Social Hour — Room 113 DL

• Engineering Mechanics — 4 p.m.
  Room 205 East Hall
  "Theoretical and Practical Aspects of Hybrid Finite Elements Methods" J. F. Lee

• Industrial and Systems Engineering
  Room 210 Baker Systems Engineering Bldg.
  CSE Leadership of Service Roles in National Productivity
  In: Industrial Manufactures, J. T. Black and R. A. Miller
  Town of Department Facilities, Reunions

• Landscape Architecture
  Student Lounge, Brown Hall
  Review of Student Work
  Department film: "Legacy for Living"

• Mechanical Engineering
  Room 209 Robinson Laboratories
  Comments by Dr. James A. Jobe, Chairman, on the leadership role and service programs of the department.
  Demonstrations: Energy Conversion, Machine Design, and Nuclear Engineering
  Departmental reunion: Refreshments

• Metallurgical Engineering
  Room 143 Meir E. Hall
  Department Open House, Town, Class Reunions

• Physics
  Room 1036 Alphonse Smith Laboratories
  Open House and tours of selected research facilities

• Welding Engineering
  Room 132 Welding Engineering Bldg.
  "Submerged Arc Welding of High Strength Quenched and Tempered Steels"
  Prof. Daniel G. Howes, Greg Kwast, James Dickinson
  Reunions

Evening — Informal Class Reunions

Motel Accommodations — Morels near the campus are: Scofield's University Inn, 3025 Olentangy River Rd., OSU Holiday Inn, 240 W. Lane Ave., Hilton Inn, 5110 Olentangy River Rd.

Parking — At Mershon Auditorium Parking Lot, 17th Ave. at High St.
CHEMICAL ENGINEERING DEPARTMENTAL PROGRAM

Room 207

The Joseph H. Koffolt Laboratories

Friday, May 19, 1978

2:00 WELCOME TO ALUMNI AND GUESTS

Introduction of Anniversary Classes
1918, 1923, 1928, 1933, 1938, 1943,

STUDENT AWARDS

2:30 Dr. Jacques L. Zakin: "Chemical Additives
to Reduce Fluid Drag"

3:00 OPEN HOUSE AND SOCIAL HOUR

1978 Annual Conference for Engineers and Architects

Name ____________________________________________

OSU Class _____ Dept. ___________________________

Mailing Address __________________________________

Business Affiliation ______________________________

Position or Title _________________________________

☐ Yes, sign me up for May 19, 1978. The
conference fee of $8.00 per person includes
registration, reception, and luncheon.

☐ Sorry, can't make it. Please update my records
as indicated.

Other Guests Name(s) ____________________________

Enclosed is a check for $________

Please make check payable to ACE Day and mail to:
The Ohio State University, College of Engineering, 2070 Neil Avenue, Columbus, Ohio 43210
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<thead>
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<td>C.A. Buehler</td>
<td>P.O. Holm</td>
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<td>C.D. Arrick</td>
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<td>L.T. Capell</td>
<td>D.S. Hubbell</td>
<td>P.F. Cunningham</td>
<td>M.W. Bacaintan</td>
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<td>R.A. Fisher</td>
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<td>D.D. Davis</td>
<td>J.A. Bailey</td>
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<td>C. Ma</td>
<td>D.W. Duncan</td>
<td>R.L. Baldner</td>
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<td>H.D. Evans, Jr.</td>
<td>L.C. Beale</td>
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<td>C.W. Gaylord</td>
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<td>R.D. Reed</td>
<td>L.F. Guentert</td>
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<td>D.C. Butts</td>
<td>E.W. Walke</td>
<td>V.J. Harris</td>
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<td>H.G. Carrell</td>
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<td>L.K. Herndon</td>
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<td>G.E. Fromm</td>
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<td>R.H. Ferguson</td>
<td>E.A. Faine</td>
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**Deceased Since Last Alumni Report**

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<td>Robert H. Foster</td>
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<td>Harvey G. Greer</td>
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<td>Joseph H. Koffolt</td>
<td>1931</td>
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**In Memorium**
The Ohio State University
Chemical Engineering

1977-78 List of Staff Members, Fellows, Scholars, Research Associates and Teaching Associates

Professors
Robert S. Brodkey
Christie J. Geankoplis
Webster B. Kay (Emeritus)
Waldron D. Sheets (Emeritus)
H. C. Slider
Edwin E. Smith
Thomas L. Sweeney
Aldrich Syverson (Emeritus)
Jacques L. Zakin (Chairman)

Teaching Associates
Steve Amerine
Steve M. Benner
Paul D'Ambra
Bahman Ghorashi

Research Associate
Sin-Hoi Yam

Administrative Associate
Thomas A. Trufant

Secretary
Betty Frazier

Typists
Loretta Woody

Design Engineer
Michael B. Kukla

Laboratory Machinist
Earl Duckum

Alcoa Professorship
R. Emerson Lynn, Jr.

Associate Professors
Edwin R. Haering
John T. Heibel
Harry C. Hershey
Karlis Svanks (Emeritus)
Fellowships
Diamond Shamrock
I. Mueller
E. Warren

E.I. duPont de Nemours Fellow
Ruth Ivory

Eastman Kodak Fellow
Michael Peters

Exxon Company Fellow
Arthur Hensler

Arno C. Fieldner Fellow
Donald McDowell
Thomas Winkler

Raymond D. Hammond Fellow
Ken Bulen

Joseph H. Koffolt Fellows
Leslie S. Fishler
Dan Lindley
Johnny Wright

Procter & Gamble Fellow
Elizabeth Williams

Louis A & Lucille Roberts Fellow
C. Lin

Rohm & Haas
Frank Mitchell

Shell Companies Fellow
Donald W. Buchanan

Sohio Fellow
Christine Brown

Scholarships (cont.)
Chemineer
Douglas T. Brown

Dow Chemical Scholars
Wm. R. Dempwolf
Fred D. Ehrman

Dow Corning Scholar
Paul T. Dubetz

Goodyear Tire & Rubber Co. Fdn. Schlrl.
Edward J. Levine

Gulf Oil
Christopher T. Cunningham

Raymond D. Hammond
Debra L. Beran
Marc P. Papai
Debbie Simpson
Keith D. Wisecarver
Janet M. Worley

The Lubrizol Company Scholars
Neil P. Stuber
Paul W. Vance

Monsanto Company Scholars
Brian W. Baird
Donald T. Hooker
Timothy M. Kellogg
David M. Schilling

Rohm & Haas Scholars
Keith A. Zimmerman
Charles H. Wolf

Sun Oil Company Scholar
Gary R. Prok

Union Oil Co. of Calif. Scholars
Christopher T. Cunningham
Ronald J. Morin

Dr. J. R. Withrow Memorial Scholar
Beverley D. Housley

Scholarships
Ashland Chemical Co. Foundation Schlrs.
Dan M. Coombs
Bruce R. DeBruin
PLACEMENT OF CHEMICAL ENGINEERING GRADUATES

MARCH, 1977 – DECEMBER, 1977

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

JUNE, 1977

Jack Dale Alvis
Robert Claude Armstrong
Keith Edison Bowers
Robert Lee Collins
Ann Marsden Dolay
Michael Durilla
Timothy Alan Falken
David Michael Faust
Thomas Richard George, Jr.
Dale Coleman Gyure
Douglas Joseph Hallenburg
Thomas Michael Jones
Mary Etta Lenz
Brian Robert Levers
Winston Ray Nickerson
James Pappas
Mark Carter Reasoner
Choon Kok Tan
David Lewis Thaman
Annette Tinkovicz
Richard Joseph Torchia, Jr.
Davis Harrison Wells, Jr.
Robert Creston Wright
Thomas Eugene Wylie
Kenneth Allen Yunker
Goodyear Atomic, Piketon, Ohio
Michigan University
PPG Industries, Barberton, Ohio
Borden's, Columbus, Ohio
Shell, Ventura, California
Purdue University
Information not available
ASARCO, Columbus, Ohio
B.F. Goodrich, Brecksville, Ohio
Dupont, Wilson, N.C.
Goodrich Chemical Co., Cleveland, Ohio
Union Carbide, S. Charleston, W. Va.
Fiber Industries Inc., Greenville, S.C.
Olin, Buffalo, N.Y.
Nestle Inc., Marysville, Ohio
SCM Corp., Cleveland, Ohio
Information not available
PPG, Circleville
Eli Lilly, Indianapolis, Ind.
Monsanto, Alvin, Texas
Univ. of California, Santa Barbara, Cal.
Sohio, Cleveland, Ohio
Inland Division, Dayton, Ohio
Westreco, Marysville, Ohio.

AUGUST, 1977

Robert James Arnold
Richard Lloyd Duwelius
Steven John Egnaczyk
Thomas C. Houk
Steven Clark Howe
Philip Merrill Rose
Linnea Alice Sheppard
Texaco, New Orleans, La.
Duriron, Dayton, Ohio
Harbison-Walker, Pittsburgh, Pa.
Goodyear Atomic, Piketon, Ohio
Ashland Chemical, Marietta, Ohio
Fibre Industries Inc., Greenville, N.C.
Celanese, Pampas, Texas

DECEMBER, 1977

William P. Lesko
COE Mfg., Painesville, Ohio
MASTER OF SCIENCE IN CHEMICAL ENGINEERING

MARCH, 1977

Raymond Thomas Collins  
Steven Peter Lankton  
David Martin Muller  
Jakiniumar T. Shah  

Shell, Houston, Texas  
UOP, Des Plaines, Illinois  
Dow Chemical, Midland, Michigan  
Hudson Engineering Co., Houston, Tx.

JUNE, 1977

John Samuel Evans  
Patrick A. Reynard  

B. F. Goodrich, Brecksville, Ohio  
Sohio, Cleveland, Ohio

DOCTOR OF PHILOSOPHY IN CHEMICAL ENGINEERING

MARCH, 1977

Gary Benjamin Tatterson  

University of S. Carolina

JUNE, 1977

William Michael Fugel  
Thomas Burkley Hackett  
Herbert R. Lander, Jr.  
William Richard Ramakka  

Owens Corning Fiberglass, Granville, O.  
Union Carbide, S. Charleston, W. Va.  
Wright Patterson AFB  
Information not available
Daniel W. Duncan is Executive Vice President and Director of Virginia Chemicals, Incorporated. He received the Bachelor of Science degree in Chemical Engineering from Auburn University in 1937, followed in 1938 by the Master of Science degree in Chemical Engineering from Ohio State University. Also from Ohio State in Chemical Engineering he received in 1941 the Doctorate degree.

After graduation, Dr. Duncan joined Procter and Gamble Company as a chemical engineer until 1947, when he was named supervising chemical engineer for the Virginia Smelting Company. In 1954 he was named Plant Manager and in 1958 was promoted to Vice President of Manufacturing. In 1963 he was named to his present post, where he is also President of VirChem of Canada, Vice President of Virginia Chemicals Europe, and a Director of VirChem Leasing Corporation.

Dr. Duncan is known as a leader in technological developments and has been responsible for major engineering projects in the areas of chemical engineering, operations process improvement, engineering, plant location, and construction of new facilities. Company sales have increased some sixteen times to reach approximately $100 million. Plant manufacturing facilities have likewise grown from one to seven locations. His combination of technical and administrative skills is credited with being a decisive factor in effecting these noteworthy gains.

Active in civic and community leadership positions, he is a director for Portsmouth General Hospital, Blue Shield of Virginia, and a past president of the Portsmouth Rotary Club. He is a council member for the Tidewater Boy Scout group, a member of the Virginia State Chamber of Commerce, and a member of the honorary organizations Sigma Xi, Tau Beta Pi, Phi Lambda Upsilon, and Phi Kappa Phi.

He is also a member of the American Institute of Chemical Engineers, the Manufacturing Chemists Association, and the Virginia Manufacturers Association as well as the Canadian Chemical Producers Association.
Donald E. Garrett is President of both Saline Processors and Garrett Energy Research and Engineering. He received the bachelor of science degree in chemistry from the University of California, Berkeley, in 1947. In 1948 and in 1950 he received the master of science and doctorate degrees in chemical engineering from Ohio State University. An Army engineer from 1943 to 1946, he joined Dow Chemical Company after graduating from Ohio State. In 1952 he was an engineer for Union Oil and in 1955 was named manager of research for American Potash and Chemical. Appointed president of Associated Chemicals Company in 1964, he also became president of Garrett Research and Development Company. From 1965 he is principal owner and a director of the Liquid Chemical Company and from 1967 to 1975 was executive vice president, research and development, for Occidental Petroleum Corporation.

Dr. Garrett, a technical expert in such areas as crystallization, evaporation, and solvent extraction, has pioneered novel processes for mineral recovery, synthetic fuels, oil shale, and coal conversion. He is author of more than 100 technical papers and reports and holds nearly as many patents and applications. A skillful administrator as well as successful technical manager and entrepreneur, he is credited for negotiations between Occidental and Russia which resulted in ventures valued at about $20 billion. He has received several high honors, among them the Chemical Engineering Personal Achievement Award and, on two occasions, for teams working under his direction, the Kirkpatrick Award for Chemical Engineering Achievement. His current research centers on pyrolysis, shale oil recovery, and fuel from solid wastes.

A member of the honoraries Tau Beta Pi and Sigma Xi, he belongs to the American Institute of Chemical Engineers and the American Chemical Society. A member of the fossil fuel division of the general technical advisory committee to ERDA, he was in 1970 named a Distinguished Alumnus of Ohio State University's College of Engineering.
Raymond D. Hammond is eastern states General Sales Manager, Industrial Chemical Division, PPG Industries. He received the bachelor of chemical engineering degree from Ohio State University in 1949 and that year began his career with PPG as a sales representative in the cities of Cincinnati, Cleveland, and New York. In 1962 he was promoted to the position of assistant sales manager in New York, and the next year moved to Pittsburgh and was named regional sales manager. Promoted in 1970 to Eastern Area Sales Manager, since 1973 he has been General Sales Manager for eastern states of PPG’s Industrial Chemical Division. He is responsible for sales leadership and customer relations in the eastern portion of the country and travels frequently, coordinating activities of regional sales offices for PPG in Atlanta, Boston, Charlotte, New York, and Philadelphia.

A Colonel in the U.S. Air Force Reserve, he is a member of the Reserve Officers Association and holds both the Distinguished Flying Cross and the Air Medal with Clusters. A member of Tau Beta Pi, he also belongs to the West Pennsylvania Academy of Science, as well as the Sales Club of New York City. Mr. Hammond is a Life Member of the Ohio State University Alumni Association and also a member of the Ohio State Presidents Club. He has maintained a long, interested, and active association with the department of chemical engineering and with the university.

In cooperation with his firm, for example, he established the Raymond D. Hammond Fund for Chemical Engineering, which has resulted in the awarding of several scholarships each year to outstanding students of chemical engineering at Ohio State. A leader in fund-raising events, during one critical alumni fund drive he headed activities in the entire New York area. Known as a modest man with a sincere interest in students, he has not only made substantial material contributions, but also given freely of spirit, enthusiasm, and loyalty to the department and the university.
1977 ACE Day Activities

PROFESSOR ALDRICH SYVERSON
BRUCE MARTIN

DEAN DONALD GLOWER
JOE KOFFOLT'S SON TOM
PROFESSOR ED HAERING

PORTRAIT OF JOE KOFFOLT
Student Awards

PROFESSOR BRODKEY PRESENTING THE AMERICAN INSTITUTE OF CHEMICAL ENGINEERS' PROFESSIONAL AWARD TO MARY LENZ

BOB ROUNSLEY PRESENTING CENTRAL OHIO SECTION OF AMERICAN INSTITUTE OF CHEMICAL ENGINEERS' JUNIOR AWARD TO DOUG BROWN

BOB ROUNSLEY PRESENTING CENTRAL OHIO SECTION OF AMERICAN INSTITUTE OF CHEMICAL ENGINEERS' SENIOR AWARD TO DALE GYURE

PROFESSOR LYNN PRESENTING AMERICAN INSTITUTE OF CHEMICAL ENGINEERS' SOPHOMORE AWARD TO ED LEVINE
Anniversary Classes

1972 - DON WEAVER, GARY HOAM
1967 - JOHN YACHER, BRUCE POLING
1962 - MARTY COHEN

1957 - JOHN HELMS, WALTER FLACK, DAVE MACARUS

1952 - JIM FRONING, S. ORFANIDES, FRANK RUMMEL, BOB ALDRICH, CHUCK SCHMITZ, DAVE STEPHAN, BILL GLANCY, PAUL SCHRADER, PAUL MUELLER

1947 - ED SMITH, LOU HULLINGER, LEE STREET, BRUCE MARTIN, BOB BABICH, BILL LARCAMP

1942 - PAUL STUBER, FRED HANSEN, ED DUPLAGA

1937 - GEORGE SHEETS, BILL TOUCHMAN, BILL SIMERAL, HARVEY CRICE

1927 - ED BIDLER, SAM ARONOFF, MILT LINDSLEY
### The Ohio State University
Chemical Engineering Department

#### Salary Offers for 1976-77

**Bachelor of Science**

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**Master of Science**

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3          | 1480, 1440, 1380                           |
2          | 1760, 1545                                 |
3          | 1675, 1750, 1800                          |

**Doctor of Philosophy**

1          | 1725                                        |
3          | 2000, 1825, 1900                           |
2          | 1800, 1667                                 |