



# GENERAL ENGINEERING NEWSLETTER

Department of General Engineering, University of Illinois at Urbana-Champaign

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Mary R. Jankousky

## WORK ABROAD

Last summer MARY R. JANKOUSKY, '77, of Benton, spent eight weeks in Turkey under the IAESTE program. She worked for Sumerbank, a government-owned textile factory, in Izmir which has a population of 1,000,000 and is the third largest city in Turkey. This particular factory not only produced cotton fabric for sale by the bolt, but also manufactured it into garments.

Mary worked as a trainee in the spinning, weaving, and chemical departments. Of the five other trainees, natives who came from Turkish colleges, two were women. When Mary left she was replaced by a male trainee from the Netherlands.

The technical work proved interesting and working in the factory was pleasant. However, salaries were low by U.S. standards until living costs were considered, then they became comparable to those in this country for similar work.

Mary found living and associating only with Turkish people enjoyable. They were friendly and eager to help her get along. Mary's fellow workers invited her into their homes, and to share their social life. There was little dating in Turkey as practiced here. Groups of girls met, or went with, groups of fellows but did not pair off. Mary had a

little difficulty with the language but, in spite of that, enjoyed bargaining for souvenirs with shopkeepers in the bazaars.

The salary was enough to cover Mary's living expenses while in Turkey but she had to furnish the cost of her transportation between Benton and Izmir. Even so, she feels the experience was very worthwhile, including her bus tour through Bulgaria, Czechoslovakia, Germany, France, and Italy, to Rome her point of departure for home.

## ADVICE TO SENIORS

James J. Schlembach, '75

Growth industries, glamour industries, and graduate schools; that's what most seniors are thinking about. An industry that is growing, not "spurting," and most likely to remain so will not depend on a volatile market. Glamour industries are funny. Glamour is pretty much subjective. There is no systematic way to define it, but almost everyone is affected by it. Graduate school, for most students, represents additional education before a career in industry, though, for some engineers, education is an end in itself.

The business I chose, the coal industry, has more than met my expectations. Trite words like challenge and responsibility describe what I've encountered in my work. And I'm writing to tell G.E.'s "what's out there."

Coal companies need engineers and the need is growing just as the coal industry is growing. Is this a "spurting" industry? I doubt it. The need for energy, especially for domestic sources of energy, and the vastness of U.S. coal resources argue against it.

Is it a glamour industry? Yes, definitely! Delegated responsibility reaches far down into the organization. The resource is crucial for future existence. Job assignments can be as varied as in any other industry; from field or underground work to financial work, with some computer simulation thrown in. By my definition that's glamorous.

The G.E. Department is unique because of the Secondary Field. An option in Mining is a strong point when interviewing coal companies, but not necessary. Interest and hard work are always the key.

When the time comes to choose companies to interview don't slight the coal industry. Under close scrutiny it will look good!



Stanley G. Hall

### STANLEY G. HALL

STANLEY G. HALL, M.S., '30, Professor Emeritus of General Engineering, died October 14, 1976, in Urbana.

Professor Hall was a native of Maine. He came to the university in 1925 and taught in the Department of General Engineering until his retirement in 1966. He was a registered professional engineer in Illinois and a life member of the American Society of Engineering Education and of the American Society of Mechanical Engineers.

In 1949 Professor Hall won an award for effective teaching. He coauthored several textbooks, including *Problems in Engineering Drawing and Geometry*.

Surviving Professor Hall are his widow, the former Catherine Harrington, and two daughters, Mrs. Elizabeth McCullough of Jacksonville and Mrs. Louise Thomas of Muncie, Indiana.

### G.E. ENROLLMENT

At last! Enrollment in the General Engineering curriculum last fall met the goal which Professor Dobrovolny secretly set when he became head of the department in September, 1959. The official figure, as of September 24, was 500 undergraduates enrolled in G.E., the fourth highest number in any curriculum in the College of Engineering, and for the fourth consecutive year. Of this number 209 were freshman, 125 sophomores, 89 juniors, and 77 seniors.

Since September, 1972, the number of undergraduates in this department has increased from 314 to the present figure, a gain of 59.2 percent. In that same period the number of students in the College of Engineering has grown from 3130 to 4243, or 35.5 percent.

The number of students enrolled in G.E. this spring has dropped to 415. However, this drop in enrollment for the second semester is typical, not only of the General Engineering Department but of the College of Engineering and

of the University as a whole. Even so, this is the largest number of students ever enrolled in the department in a spring semester.

### FACULTY NOTES

Professor L. DANIEL METZ is on sabbatical leave of absence during the Spring, 1977 semester. He is giving a series of lectures on his work and research at various universities throughout the United States, including the University of Colorado, University of Southern California, Stanford, Arizona State University, and Dartmouth College, among others. In addition, Professor Metz is continuing some of his current research in the area of modeling atmospheric pollutants, simulation of casting solidification and modeling of high order systems through second order systems. He mentions, however, that he does plan to play one or two games of handball, and invites his former students who may be in the area to reply to his traditional sports challenge!

Professor JAMES W. PHILLIPS was recently named Editor of *Mechanics*, published by the American Academy of Mechanics. The Academy has about 600 members scattered throughout North, Central, and South America.

The Champaign-Urbana Jaycees named Professor MICHAEL PLECK the Outstanding Young College Educator for 1976 at their annual Awards Banquet in January. This honor was given in recognition of Professor Pleck's contributions to education, his students, and various phases of society.

Professor HARRISON STREETER is now a Certified Safety Professional. To attain this status he had to have a Bachelor's degree in engineering, science, or other acceptable curriculum; five years or more of professional safety experience of which two years were in responsible charge; and a passing grade in a seven-hour written examination. Professor Streeter was motivated to seek this certification by the fact that he teaches a safety course in the Department of Industrial Engineering; by his desire to improve his credentials as an expert witness before the court in product liability cases; and by the impact of OSHA on design criteria, particularly as applied to the G.E. design courses.

### JETS Summer Programs

The College of Engineering and the Junior Engineering Technical Society (JETS) will again sponsor a two-week summer program for high-ability high school students who are between their junior and senior year in high school. The program has been conducted each summer since 1962 and has been extremely successful in introducing engineering to the past participants. The cost of the program is \$150.00 for the two-week session. This includes room, board, and materials. There is no tuition charge.

If you know of anyone who might be interested, please have them contact D.C. O'Bryant, Department of General Engineering, University of Illinois, Urbana, Illinois 61801.



### THREE GENERATIONS

From left, they are: Brad; Charles H. Mottier, Jr.; Mottier, Sr.; and Charles Mottier III.

Last October 23 three generations of one family, all of them Illinois engineers, gathered on campus for the Michigan State game. BRADLEY D. MOTTIER, '79, and CHARLES MOTTIER III, '78, students in General Engine-

ering from Springfield, entertained their father, CHARLES H. MOTTIER, Jr., '47, M.S. '48 in Civil Engineering, and their grandfather, CHARLES H. MOTTIER, Sr., '10, C.E. '23, of Des Plaines.



Sharon M. Stefanik

### KNIGHT OF ST. PAT

SHARON M. STEFANIK, '78, from Arlington Heights was named Knight of St. Pat in recognition and appreciation for her high scholarship and service to the College, the University, and the community. Besides winning several awards for exceptional scholarship Sharon has the highest academic average in the junior class of 90 G.E.'s. In addition, Sharon has found time to participate in the Society of Women Engineers and the Illinois Society of General Engineers; to serve on Engineering Council, the College of Engineering Awards Committee, the Engineers Speakers Bureau, and as secretary of Gamma Epsilon; to hold several offices in her social sorority; to sing in Newman Foundation

Church Choir; and to be an Illini Guide and member of the Block I.

### TEAMS TEST

A new kind of high school competition was held on February 24 at the University of Illinois at Urbana-Champaign. It is called TEAMS (Test of Engineering Aptitude Mathematics and Science).

Competing were teams from five east central Illinois high schools. The competition involved tests in six areas; Physics, Chemistry, Biology, Mathematics, Pocket Calculators, and Graphics. The competition was sponsored by the Champaign County Chapter of the Illinois Society of Professional Engineers and by the Junior Engineering Technical Society.

The winning team was from Centennial High School in Champaign and the members and coach of the team received pocket calculators, as well as a plaque for the school's trophy case. The second place team was the Urbana High School team and the members and coach of the team received slide rules for their efforts. There were individual first and second place winners in each of the six test areas with pocket calculators and slide rules being awarded.

It is hoped that this competition will spread state-wide next year with winners from various areas of the state having a run-off in Urbana to determine the state winners. The run-off would probably be held either during National Engineers' Week or during Engineering Open House.



## ENGINEERING OPEN HOUSE

ENGINEERING – INTEGRATING THE SCIENCES was the theme of the 1977 Engineering Open House which took place March 4 and 5 on the Urbana campus. Laboratories and classrooms were converted for this yearly exhibit of student activities.

The Department of General Engineering had a Hospitality Room, displays from design course projects, and a computer in action. Also shown were displays of material from engineering law and history and the activities of ISGE and JETS. These displays were located in the Transportation Building.

Professor and Mrs. Robert A. Jewett welcome news of you alumni through the *Newsletter*. They appreciate the greetings relayed from you to them by way of a third party. If you wish more direct communication with them their address is:

2928 Maplewood Avenue  
Lakeland, Florida 33803

Alumni, your responses to the questionnaire sent to members of the class of 1960 and later classes are very interesting. Your criticisms and suggestions for improvement of the General Engineering Curriculum are enlightening and helpful. Members of the department appreciate the time and effort you expended in filling out the forms objectively. Thank you.

### GENERAL ENGINEERING ALUMNI WITHOUT A GOOD ADDRESS

Do you know where they are? Please let us know.

Richard L. Anderson  
7033 N. Kedzie  
No. 1003  
Chicago, IL 60645

Arthur Lincoln Andrew  
General Delivery  
Yatch Savage St. Thomas  
Charlotte Amalie, VI 00801

Craig W. Arends  
10431 S. Ridgeland  
Chicago Ridge, IL 60415

Donald E. Ball  
Hotel Talasi  
Tallasse, AL 36078

Louis R. Black  
860 Fatham Rd  
W. North Palm Beach, FL 33408

Lt. Arthur George Blomberg  
22135 Napa St.  
Canoga Park, CA 91304

Ellis F. Botts  
25 E. 77th St  
New York, NY 10021

Paul A. Bower  
R.R. 1  
Barre, VT 05641

Charles Marion Cheffer  
138 Tiger Nas  
Lemoore, CA 93245

August Chicary  
1409 N. Walnut Grove  
Rosemead, CA 91770

Sandor H. Cole  
P.O. Box 9262  
San Diego, CA 92109

Thomas A. Collins  
1600 W. 135th St.  
Gardena, CA 90249

Richard Henry Czina  
390 Maple St.  
Burlington, VT 05401

Floyd Grosh Dougherty  
10801 Canterbury Dr.  
Sun City, AZ 85351

Jerry Michael Ettinger  
41 Whitney  
Woodstock, NY 12498

Robert Martin Fraas  
116 18th St.  
Manhattan Beach, CA 90266

John Russell Green Jr.  
2270 Winterparkway  
Cuyahoga Falls, OH 44224

## GAMMA EPSILON NEWS

The three students initiated into Gamma Epsilon last fall were BARBARA A. STAUDER, '77, from Nokomis; DAVID W. McCUNE, '78, of New Lenox; and JEFFREY E. RUBAK, '78, Palatine.

The field trip to the Anheuser Busch Brewery last semester was a big success! This spring the group went to the Museum of Science and Industry in Chicago on March 25.

On April 21 Gamma Epsilon will honor the General Engineering Achievement Award recipients and initiate new members at the spring banquet. Plans are also underway for a canoe trip, probably at Turkey Run State Park in Indiana, some weekend in April.

## I.S.G.E. ACTIVITIES

New officers elected by the Illinois Society of General Engineers for 1977 include president, SCOTT LANGLEE, '78, Crystal Lake; vice president, MARTIN LUNKES, '78, Niles; secretary, STEVEN SCHUDEL, '78, Elgin; treasurer, MARK MENARIK, '78; and council representatives, EDWARD LIEBENTHAL, '78, La Grange, and RANDALL GINGRICH, '80, Sheffield.

Plans for activities this semester include a meeting on April 6 at which a question-answer panel considers Mining and Environmental Engineering as secondary fields. Representatives from industry are expected to be present to participate in the discussion.

The annual ISGE picnic is scheduled for April 30.

The president appreciates the cooperation received in the past and hopes the society's activities will be as successful this semester as in previous ones.

# ALUMNI NEWS

'22 ROSS W. THOMAS was named "Grand Old Man of Petrochemical" by the International Petroleum Exposition & Congress in Tulsa last spring. He started with Chestnut & Smith at Drumright, Oklahoma, in 1916 in one of the early natural gasoline plants and went on to historical research and development.

'44 CHRIST D. KACALIEFF, President of Chris Kaye Plastics Manufacturing Company, writes that since purchasing the assets of General Molding Corporation, St. Louis, his company is the largest custom molder of plastic products in the St. Louis area.

'48 The President of Ever-Wear, Inc., HAROLD BRICKMAN, reports the swearing into the State of California Bar of his son, Howard Jay Brickman, also an Illini.

'48 On November 23, 1976, directors of Masonite Corporation elected ROBERT N. RASMUS President and Chief Operating Officer. Rasmus joined the firm in 1957 and has progressed through a number of key positions to this one.

'56 RICHARD D. JONSON is Vice President - Marketing of American Bosch Electrical Products Division, AMBAC Industries in Columbus, Mississippi.

'56 RONALD A. STEEN has recently been named Group Vice President by Koehring Company of Milwaukee. Steen received his M.B.A. from the University of Chicago, September, 1966.

'58 Eastman Kodak Company appointed RONALD S. KAREKEN Director of Kodak Trademark Legal Staff in September, 1976. In addition to his B.S. in General Engineering, Kareken holds a J.D. degree in law from George Washington University and an M.B.A. from the University of Rochester.

'60 LEO L. SULDA is a real estate salesman with HGM Corporation in North Ridgeville, Ohio.

'63 RICHARD S. MARSHO, his wife, Lynne, and their two sons, Scott, eight, and Steven, five, moved to Peoria in 1975. As Business Systems Manager for Central Illinois Light Company, Marsho is responsible for the computer systems analysts and records management.

'63 TODD S. PARKHURST received his LL.B. degree from the University of Pennsylvania in 1966. On August 15, 1976, he married Beverly A. Susler, A.B., '66, and J.D. degree in law, '69. While his

Are you  
a member  
of the  
Alumni  
Association  
?

## COME ON AND JOIN US. PAY ONCE, JOIN TWO.

Membership in the U. of I. Alumni Association automatically makes you a member of our General Engineering Alumni Association. A portion of your dues is paid to our group and helps sponsor the Newsletter, awards, and other projects. In addition, you'll receive the Alumni News, qualify for the tour program, the insurance program, and the annual family camp.

To join, either as an annual member, or as a life member, return this form with your check to: Alumni Association, 227 Illini Union, Urbana, IL 61801. (Make your check payable to the University of Illinois Alumni Association.)

- One year single membership—\$7       One year husband-wife—\$8  
 SINGLE LIFE MEMBERSHIP — \$125. [INSTALLMENT PLAN: \$10 DOWN, \$30 EACH YEAR FOR NEXT FOUR YEARS.]  
 HUSBAND-WIFE LIFE MEMBERSHIP—\$150. [INSTALLMENT PLAN: \$10 DOWN, YEARLY PAYMENTS OF \$35, \$35, \$35, & \$40.]

Name \_\_\_\_\_ Class year \_\_\_\_\_

Spouse's Name (If An Alumnus) \_\_\_\_\_ Class year \_\_\_\_\_

If female, list maiden name  
Address \_\_\_\_\_

College \_\_\_\_\_ Major \_\_\_\_\_

If you're already a member, thanks for your support. If you graduated within the last two years, write for special life membership rates.

# ALUMNI NEWS

wife serves as Assistant U.S. Attorney, Todd practices patent law with the firm of Olson, Trexler, Wolters, Bushnell & Fosse, Ltd., in Chicago.

'65 PAUL T. GIHRING is with the Medical Systems Division of General Electric in Wisconsin. Paul became a Wisconsin registered engineer by examination last year. He and his wife, Diane, have four children aged eight, five, and three years, and eight months.

'67 LOUIS A. FRIEDRICH received an M.B.A. in Finance from Columbia University, June, 1969. He is employed as a certified public accountant by Ernst & Ernst. They have loaned him to the City of New York but continue to pay his salary. Friedrich is serving on the staff of Deputy Mayor John C. Burton.

'68 DAVID N. PORTER has accepted a position on the corporate staff of American Telephone & Telegraph Company, New York City. He, his wife, the former Linda Jean Newton, '69, M.S.W., '73, and their son, Aaron, are living in Summit, New Jersey.

'69 After some seven years with Chicago Bridge & Iron Company in various jobs, including project manager for the Clinton Power Station, RUSSEL E. EWERS and his wife, Sharon, opted for the quieter, cleaner, and more permanent lifestyle of Lincoln, Nebraska. There Russ joined a fast-growing, moderate-sized electrical contractor, Commonwealth Electric Company, as Construction Administrator. At 5:29 A.M., October 11, 1976, Russ and Sharon welcomed their first child, Justin Yates.

'69 In July, 1976, ROGER A. REEVES transferred from Great Lakes Steel to Granite City Steel, both divisions of National Steel Corporation, to take the position of Data Base Administrator in the Management Services Department. He and his wife, Debbie, also '69, have two sons: Roger J., six, and Brian R., three years old.

'69 Upon graduation JACK P. SHALLOW joined Allen-Bradley Company as Sales Engineer in the New Orleans District Sales Office. In June, 1973, he married Sue Ann Horn. Jack left Allen-Bradley in July, 1974, and travelled with his wife in the United States, Europe, North Africa, Middle East, Far East, and Australia for fourteen months. Upon their return to this country he re-joined the Allen-Bradley Company as Sales Engineer and Branch Manager in Jackson, Mississippi.

'69 ROBERT C. SHOOK has earned an M.B.A. from Syracuse University since graduating from the University of Illinois.

'69 KARL J. THORNBRUGH received his M.B.A. degree in August, 1975, from the University of Pittsburgh and is now Sales Engineer with Westinghouse Electric Company.

'71 BRUCE A. HUBER received an M.B.A. from Harvard University in 1974. As Product Control Manager for Zenith Time, S.A., in Switzerland, he is coordinating both marketing and production efforts as the company switches from the manufacture of mechanical to electronic watches. This company is a subsidiary of Zenith Radio Corporation where Bruce was previously a product manager for television.

'71 TOBIN A. STANLEY passed the examination to become a registered professional engineer in Illinois in 1976. He is Sales Engineer for the Chicago office of The Trane Company.

'72 SAMUEL E. ESKRIDGE recently left active duty with the U.S. Army as a captain to return to the Production Engineering Department of Packard Electric Division of General Motors Corporation. Sam is responsible for engineering support in the Rubber Molding Department, including projects, cost reduction, process improvements, and production estimates.

'72 DENNIS D. LANE, his wife, and their two sons received a Ph.D. in Air Pollution from the University of Illinois in January, 1976. Dennis is an assistant professor of Environmental Health in the Civil Engineering Department at the University of Kansas, Lawrence.

'72 WILLIAM R. MATTHEWS earned the M.B.A. degree at the University of Illinois in 1973. He is Production Supervisor of Low Density Polyethylenes for E.I. DuPont in Victoria, Texas.

'73 JOHN M. MUNSON is Project Engineer for U.S. Gypsum Company in Shoals, Indiana.

'74 DAVID LOUIS HAGEN worked for the U.S. Environmental Protection Agency in Chicago until August, 1975. In July, 1976, he was married in Gloucestershire, England. Today he is a second-year medical student at the University of Illinois Medical Center in Chicago.

'74 LAWRENCE R. KEINZLER, Sales Engineer for A.H. Puffer of Rockford, wrote that he was "using some of the engineering, much of my education, and all of the polish and style that General Engineering provides in four years."

'74 THOMAS H. KUSEK has a new position with the U.S. Army Corps of Engineers in the Construction-Operations Division, Operations & Maintenance Branch, Navigation Section in Chicago.

'74 JOHN B. REAT received his M.B.A. from the University of Illinois in August, 1976, and is working for the Administrative Services Division of Arthur Anderson and Company in their St. Louis office.

'75 ALAN RAYMOND BELAIR is an engineer for Union Carbide Corporation-Linde Division in Tonawanda, New York.

'75 CLIFFORD CARL DRESCHER, a petroleum engineer with Texaco, Inc., of Midland, Texas, has moved to Big Spring, Texas.

'75 JAMES W. GAINES is assigned as a subsystems development engineer to the Space and Missile Systems Organization of the U.S. Air Force at Los Angeles Air Force Station. Jim is responsible for structural, thermal, and propulsion subsystems on the spin-stabilized communication satellites. In addition, he is working toward an M.B.A. at California State in Dominguez Hills.

'75 GREGORY KONNEKER has been promoted to Project Engineer with the Carton and Container Division of General Foods.

'75 JAMES J. SCHLEMBACH has been promoted to Planning Engineer by Monterey Coal Company. He is working on long-range finance and economic feasibility studies of new mines and major additions to existing facilities as well as doing some recruiting. The State of Illinois has certified Jim as a 1st Class Coal Miner.

'76 LYNN JUNAS RICHARDS (Mrs.) is Project Engineer with the Central Foundry Division of General Motors Corporation at Danville, Illinois.

'76 THOMAS J. TOBIN is Patent Engineer with Linde Division, Union Carbide Corporation in Tarrytown, New York, and attends law school at the Pace University School of Law at night.

'76 On June 12, 1976, BRUCE W. WINTER was married to Alicia Ann Zick, A.S. in child development from Parkland College. Bruce is Engineering Trainee with Firestone Tire & Rubber Company, working in the Private Brands Tire Engineering Department on the Montgomery Ward account.

'76 ROBERT J. WEIBEL and his wife have been in Taiwan since September, 1976, and are enjoying their stay. Bob is working on the installation by Westinghouse Electric Company of a 500 MW turbine-generator unit for the Taiwan Power Company's HSIEH-HO Power Station.

'76 MARIANNE ANDRASEK GOREN (Mrs.) left Westinghouse in September, 1976, to join Hewlett-Packard as a staff engineer. She is in the Electronics Instruments Group and hopes to be out in the field selling instruments in about a year.

'76 BRUCE R. BARTHOLOMEW is Project Engineer, Production Engineering Staff of Varco, Inc. He and Brenda Cahill plan to marry April 16, 1977.