



GENERAL ENGINEERING NEWSLETTER

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

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Spring 1984



Lester A. Boldebeck

DISTINGUISHED ALUM

Lester A. Boldebeck, Senior Vice President, Northern Illinois Gas, Naperville, received the Gamma Epsilon Distinguished Alumnus Award for 1984. Boldebeck, who lives in Hinsdale, is the 11th person to be honored by the student society.

He graduated in 1950 from the department of general engineering, and pursued postgraduate studies at the University of Chicago School of Business.

Boldebeck began his industrial career in 1950 with Public Service Company of Northern Illinois as an assistant engineer. When the company's natural gas and electrical holdings were separated in 1954, he joined the newly formed corporation, Northern Illinois Gas. Over 33 years of service, he has held positions of industrial gas engineer, division sales manager, division vice president, assistant vice president consumer relations, assistant vice president technical services and in 1976 was named vice president divisions.

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OUTSTANDING EDUCATOR

Professor Manssour H. Moeinzadeh has been nationally recognized as an outstanding educator of young engineers. The 1984 Ralph R. Teetor Educational Award for teaching excellence was presented to him at the Society of Automotive Engineer's International Congress and Exposition in late February.

For this award, his contributions to teaching, research and professional activities were evaluated against those of 128 highly qualified applicants. According to the awarding committee, "standards of excellence in education of this year's candidates were extremely high and brought forth the keenest competition to date."

The national recognition for excellence in education for 1984 follows a 1983 National Institutes of Health grant for research on hip and ankle joints. In 1983 the honor was conferred by the university's Biomedical Research Grant Board.

Moeinzadeh's primary area of research is biomechanics. Numerous publications and conferences have kept him at the forefront of biomedical

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Professor Manssour H. Moeinzadeh

Boldebeck (Continued from Page 1)

Today his responsibilities involve coordination of activities in NI-Gas' seven operating divisions and several centralized staff-support areas. These include aiding customers in reaching solutions to their energy needs, construction and maintenance of distribution facilities, quality control, measurement, transportation, communications, corporate social responsibility, coordination of credit, collection and cashiering functions, company and industrial public relations programs and the Customer Inquiry Center.

Mr. Boldebeck's professional affiliations include the American Gas Association, Midwest Gas Association, Southern Gas Association and the Newcomer Society in North America.

Moeinzadeh (Continued from Page 1)

engineering technology. He has developed mathematical models to simulate the dynamic behavior of major human articulating joints. His projects developed experimental apparatus and tested human subjects to measure their range of motion, and resistance forces, moments and torque. The Wright-Patterson Air Force Base has partially funded his studies to improve the performance of a computerized, multi-segmented, total-body model used and maintained by the U.S. Air Force.

In collaboration with colleagues from general engineering, physical education and veterinary bio-sciences, he currently develops mathematical models and utilizes computer graphics to optimize athletic movements. The aim of these studies is to improve the performance of world-class olympic cyclists, gymnasts and other athletes. Some of his techniques are now being used by his students to improve computer-assisted involvement of the handicapped.

He is also developing knee-joint-failure modes and criteria to predict the dynamic load level of impending failure. Once failure criteria are established, joint failure may be avoided through appropriate counter measures.

Moeinzadeh has taught courses in engineering design graphics, structural analysis and design, kinematics of mechanisms, and has directed general engineering senior project designs and independent studies. He is also supervising master's candidates in collaboration with the mathematics department and the general engineering master's program.

Professor Moeinzadeh joined the faculty in 1982 after receiving his Ph.D. degree in engineering mechanics from The Ohio State University. His B.S. and M.S. degrees are in mechanical engineering. He is a member of the American Academy of Mechanics, American Society of Biomechanics, American Society of Mechanical Engineers, National Society of Professional Engineers, American Society for Engineering Education, American Association of University Professors and is a member of honor societies Sigma Xi, Phi Kappa Phi, Tau Beta Pi and Sigma Tau.

Moeinzadeh is the third Teeter award winner from our department in a little over a decade. Professor L. Daniel Metz was chosen in 1972 and Professor Michael H. Pleck received the award in 1980.



Andre J. Quattrochi accepted a first place Lincoln Arc Welding award for his group's 242 project. With him are Dean Daniel C. Drucker, Department Head Jerry S. Dobrovolny and Professor Henrique L.M. dos Reis, project advisor.

STUDENT AWARDS

A Lincoln Arc Welding award of \$1,000 was granted to Andre J. Quattrochi of Berkely, Casey T. Schlacter of Des Plaines, and Michael J. Wolff of Chicago. Under the guidance of Professor Henrique L.M. dos Reis, the students won first place by presenting a theoretical control method and developing a working prototype of a closed-loop control system for a gas metal-arc process.

Lincoln Arc Welding merit awards were granted to Michael H. Lehmann of Oak Lawn, Samuel G. Papandreas of Lakewood, Ohio, Kelly W. Shoemaker of Naperville and John H. Waldron of Naperville. Professor Reis also directed this award-winning project which studies residual-stress-measurement methods in wood fiber hardboard.

Bronze Tablet awards for outstanding scholarship were earned by Bradley C. Crews of Mount Erie, Robert B. Goldman of Morton Grove and Kim M. Voss of Champaign.

The Edward S. Fraser Award to an outstanding graduating senior went to Denise L. Flora of Champaign.

The Randolph P. Hoelscher Award to an outstanding junior was presented to Kirsten F. Laurin of Galva.

The Bernt O. Larson Project Design Award to outstanding senior design teams has been chosen. First place was won by Christopher C. Landreth of Northbrook, Rob K. Phillips of Champaign, and Janina M. Skorus of Broadview. Professor Rodney D. Hugelman was advisor for the project, "User-Interactive Computer Hardware System to Conduct Automated Fracture Toughness Testing on Charpy Specimens."

Phillp S. Bierman of Glenview, Daniel J. Bitz of Steger, Anthony E. Smith of Harvey, and Charles T. Wetherington of Savoy won second place for "Optimization" of Ductwork Insulation." Professor David C. O'Bryant was project advisor.

The Herbert J. Sprengel Award for the best engineering design analysis was presented to Paul Estrada of Orland Park for his project with balsa wood.

The theme of the 33rd Engineering Open House at the U of I was "Develop Tomorrow - Today." The general engineering department featured:

The Distinguished Alumni placard — displaying the achievements of alumni in a range of fields

The G.E. 103 exhibit — giving a glimpse of outer space defense systems

The Robotics demonstration — offering hands-on experience with robot control

The Voice recognition performance — illustrating the capabilities of new machines

The Digital Controls Laboratory — demonstrating solution of dynamic problems with mini computers

CAD/CAM Laboratory — presenting the latest programming and aids to design analysis

A general engineering project which enabled a handicapped youth to play music on a minicomputer won second place in this year's contest. The project was entered by **Louis N. Caputo** of Chicago, **Gregory Dowler** of Wood Dale, **Marianne J. Stanke** of S. Holland and **Thomas J. Wdowik** of Bensenville. **Professor Moeinzadeh** was advisor to the group.

This year's student directors were GAMMA EP-SILON's **Keith F. Flaminio** of Springfield and ILLINOIS SOCIETY OF GENERAL ENGINEERS' **Kathryn I. Phillips** of Palatine.

Alumni-Industry Gifts

Contributors to the 1984 Annual College of Engineering Fund include: General Foods Fund, Inc.* (matching Gregory P. Konneker), Johnson Controls Foundation, PPG Industries Foundation* (matching Randall M. Smith), United Technologies Corporation**, William S. Bennett '76*, William A. Chittenden '50**, Col. and Mrs. Robert Dalrymple '38*, Andrew Ekblaw '59*, William R. Evans '64*, Stanley R. Felderman '57, Edward C. Gloppen '56, Kenneth M. Grachan '75, Frederick A. Hansen '28, James R. Hayes '79, Richard K. Keyzer '59*, Gregory P. Konneker '75, Erik S. Maseng '77, Charles R. Murdock '77, Todd R. Neely '78*, Paul Newhagen '73*, Dean and Mrs. David R. Opperman*, Roger A. and Deborah Reeves '69, Edward H. Shafer Jr. '49, Randall M. Smith '61*, Harrison Streeter**, Francis T. Toth*, Michael N. Yoshimura '67, Thomas S. Zych '77.



Analog Computer Donated

Our sincere thanks to the General Electric Company of Bloomington for recently donating an analog computer to the department. With it, senior **Steven J. Cook** and graduate student **Lucia O'Neill** are solving a G.E. 393 laboratory problem.

An Apple computer is employed to digitally control a simulated physical system which is programmed on the analog computer. Professor Louis Wozniak and Senior Research Engineer Dominic O. Skaperdas use the analog facility to teach elementary dynamics and to provide a hands-on experience in digital controls. We offered the course for the first time this spring. There are 27 students, almost half of them from electrical and mechanical engineering.

Chittendon '50 Receives Loyalty Award

William A. Chittenden '50 of Elmhurst was one of only sixteen alumni to receive the University of Illinois Alumni Association's Loyalty Award in 1983. The Loyalty Award is presented in recognition of "time, talents and services given so freely and unselfishly to the University of Illinois."

1984 Annual College of Engineering Fund

* Sponsoring Associates are recognized by each department for their contribution of \$100 or more.

** The Dean's Club honors those who contribute \$500 or more to a department or to the college.

Enclosed is

\$10 \$25 \$50 \$100
 \$250 \$500 Other _____

Please direct my gift to:

Department of General Engineering

Please check where appropriate:

My company will match this gift. Enclosed is the Matching Gift Form.

Make your tax deductible check payable to UIF/UIUC Engineering Annual Fund.

Send to University of Illinois Foundation,
 224 Illini Union,
 1401 W. Green St., Urbana, Ill. 61801.

FACULTY NEWS

Professor James V. Carnahan completed a paper, "Analysis of the Effect of a Car Size on Accident Injury Probability Using Automobile Insurance Data," which was accepted for publication in *Accident Analysis and Prevention*. In addition to his investigations of automobile crash test data, he reviews material for publication in the field's journal. Further work is also in progress on the analysis of a dynamic processing system.

Professor Osman Coskunoglu is currently working on three projects for the U.S. Army Construction Engineering Research Laboratory in Champaign. "Decision Support System for Energy Management," implements microcomputers for energy management in Army facilities. Graduate student **Andre J. Quattrochi** is involved with this project which will include: 1) a computerized data-management system, 2) an effective energy-monitoring tool for different management levels, and 3) energy analysis, budgeting and decision-making for different management levels.

A second project, "Artificial Intelligence in Decision-Making," strives to combine artificial intelligence techniques with optimization approaches of a manager. Specifically, a logic programming language, PROLOG, is being used to formulate dynamic programming for a resource allocation problem. The project is expected to provide: 1) inference-generated data requests, 2) probabilistic reasoning, and 3) and explanation of the logic used to obtain the optimal solution.

He is also developing an optimization model for army building maintenance and repair, and replacement policies over a planning horizon.

Professor Edward N. Kunznetsov has won the Gamma Epsilon student honor society award for excellence in teaching for 1983-84.

Professor Rodney D. Hugelmann is now a senior member of the American Institute of Aeronautics and Astronautics. Also, he attended eight days of workshops on robot management and industrial robot applications which were sponsored by the General Electric Robotics/Vision Center, Orlando.

Professor L. Daniel Metz recently completed work on several research papers. "Ground Effects Principles as Applied to Championship Racing Cars" is to appear in *International Journal of Vehicle Design*; "Transient Ride Height Disturbances in Ground Effects Racing Cars" is slated for the *AIAA Journal*; "Optimal Path and Aerodynamic Downforce Requirements at Indianapolis Motor Speedway" is also soon to appear.

With **Professor Moeinzadeh** and graduate student **Larry White**, he is working on experimental and theoretical studies of bicycle performance on recumbent and standard bicycles. The first fruits of this work will appear at the Olympic Scientific Conference in Eugene, OR.

Together with graduate students **Bernie Cyr** and **Marty Rizey**, Metz has completed a two-year study of human control performance. A second paper on this topic will appear in *IEEE Transactions on Systems, Man and Cybernetics*.

Professor Manssour H. Moeinzadeh is the author of "Response of a Two-Dimensional Dynamic Model of the Human Knee to the Externally Applied Forces and Moments," published recently in the *Journal of Biomedical Engineering*, an international journal. In October he attended the 7th annual American Society of Biomechanics conference held at Mayo Clinic, Rochester, Minnesota. In November he was an invited participant in Argonne National Laboratory's Micro-Computer-Interfacing workshop.

Professor Henrique L.M. dos Reis has been faculty advisor for five winners of the national Lincoln Arc Welding competition. So far, every one of his student groups has won an award. In 1980 they received a fourth place, in 1981 a merit award, in 1982 another merit award, and in 1983 a merit award and a first place award.

Professor Louis Wozniak's paper, "Variable Blade Pitch Turbines-A Dynamic Model," was accepted for presentation at the third Small Hydro-Power Fluid Machinery Symposium of the ASME for the 1984 winter annual meeting.

Computer Graphics & Design Laboratory

According to **Professor Michael H. Pleck**, three major IBM CAD/CAM software packages may soon be in use in the department. The first of these is CADAM (Computer -graphics Augmented Design and Manufacturing) by Lockheed. The CADAM system is designed to produce finished drawings with a library of standard or user-defined symbols; text at any size, angle, slant or spacing; and full dimensioning to ANSI or ISO standards. A user may construct 3-D splines, ruled bicubic and revolved surfaces. 3-D Mesh generation facilities may be used to develop finite element models for analysis in a wide range of applications. There is also extensive Numerical Control capability for multi-axis systems.

The second package is CATIA (Computer-graphics Aided Three-Dimensional Interactive Application) by Dassault. Some highlights of this system include: advanced solid modeling with Boolean logic techniques, a kinematics function for motion studies and interference checking, an NC parts program for three-axis and multi-axis machines, and the transfer of CATIA data to the CADAM system for detail design and drafting. A step-by-step animation of the linkage assembly allows the user to validate the correct mechanical operation of a complex system.

The third software package is CAEDS (Computer Aided Engineering Design System) by Structural Dynamics Research Corporation. The system assists engineers in solving problems related to heat transfer, stress, or dynamic situations. The Frame Analysis module consists of interactive programming routines that can be used for static, dynamic, limit, and buckling analysis of any structure that can be represented by interconnected beams. The Finite Element Analysis features include special preparatory processing, distortion checking, and thermal analysis plotting. A large library permits convenient modeling and structural analysis.

ALUMNI NEWS

1922 Donald E. Rutishauser gets around, from Edina, Minn. to Austin, Texas.

1931 Stanley T. Radenz left San Diego for Topeka.

1941 Dr. Hugo T. Delrosso is collecting vitamin C in Debarry, Fla.

Homer D. Huggins, Senior Vice President Technical Services for Modine Manufacturing Co. of Racine, retired in December after 38 years with his company.

1949 Richard B. Clark moved from Washington, Ill. to Alamogordo, NM.

1951 Gerald E. Melahn of Dundee is Vice President of Thermo Dynamics, Inc., Mt. Prospect.

1954 Robert A. Nieman, MBA '62, Harvard Business School, is a partner with the firm, Robert H. Schaffer & Associates. He moved into international management consulting after seven years in engineering. His wife is manager of clinical regulations for a Swedish pharmaceutical firm. His daughter is a student at Cornell, and his son is a student at Phillips Academy, Andover.

Cmdr. Daniel W. Urish is now with the Univ. of Santa Clara's civil engineering department.

1959 Richard K. Keyzer, MBA in Finance from UCLA, is First Vice President Corporate Finance for Underwood, Neuhaus & Co. of Houston.

1963 Thomas E. Dow will be relocating in the Akron, Ohio area with his new position as Director of Consumer Relations and Product Service for the Goodyear Tire & Rubber Co.

1967 Michael D. Dinitz, MBA '71 from Northwestern, is now general manager of Block & Co. of Wheeling.

Louis A. Friedrich, MBA in Finance '69 from Columbia, is Vice President Finance, for Sanford C. Bernstein & Co., Inc., N.Y.

1972 Samuel E. Eskridge, Supervisor, Component Engineering for Packard Electric Division of General Motors at Warren, Ohio, is responsible for the design of plastic and metal components for automotive wiring systems. He also directs computer-aided-design implementation and finite element analysis of component engineering. He and his wife, the former Sandra Williams, MS '72, Fort Valley State College, had a baby girl, Sonya Alexandria, in October.

Frank J. Fronczak, MS in TAM '73 from U of I, and DE '77 from Univ. of Kan., is Assistant Professor of ME at the Univ. of Wis. He and his wife, Linda, have two children, Jenny, 7, and Joey, 4.

Richard H. O'Connell, Project Manager at Sargent & Lundy, Chicago, is Chicago Section Program Chairman of the American Society of Mechanical Engineers. He recently presented a paper, "Spent Fuel Storage Alternatives" at the American Power Conference. He and his wife, Janet, live in Lombard with their two children.

1973 Gregory P. Boysen, Director of Public Works for the village of Buffalo Grove, was elected 1984 treasurer for the Chicago Suburban Branch of the American Public Works Association. He and his wife, Nancy, have twin daughters, Emily and Sheila.

Donald D. Burn is covering the coasts, from Santa Clara, Cal. to Westboro, Maine.

John F. Hoffman, a fire protection engineer for Bendix, moved from Independence to Blue Springs, Mo.

1974 Mark C. Benton is now Research Supervisor for the Machine Dynamics Group of E.I. DuPont at Wilmington, Del.

Mike M. Saville, Senior Project Engineer at 7 UP of St. Louis, has a son who celebrated his first birthday in November.

Andrew M. Stefanik MSME '76, and Mark W. Stefanik BSGE '77 now live in Wesley Chapel, Fla.

Stephen S. Wolff, Vice President Administration and in-house Counsel for the Blitz Corporation of Chicago is working toward an MBA from the Univ. of Chicago.

1975 Kenneth M. Grachan, MS '80 from IIT is Principal Engineer of Sperry Flight Systems at Phoenix, Ariz.

Richard A. Nebel, MS '76 and PhD '80 in Nuclear Engineering from U of I, is with the Los Alamos National Laboratory. In November he presented an invited paper at the American Physical Society Division of Plasma Physics. In July, he and his wife, Kathy, had a baby, Kenneth Edward.

Dr. David H. Smith, MD '81 from Univ. of Pittsburgh, is now a 3rd-year resident in internal medicine at Temple University Hospital. In July of this year he will begin a fellowship in hematology/oncology at the Univ. of Chicago.

Timothy J. Smith, MS Environmental Engineering '77, U of I, is an Air Pollution Engineer with U.S. Environmental Protection Agency in the San Francisco area. He and his wife, Eileen Regan of Philadelphia, live in Berkeley.

1976 William J. Kingsborough, Product Design Engineer with Parker Hannifin Corp., Des Plaines, married Cathy A. Waters in October. They plan to make their home in Berkeley.

Michael D. Brunetto, Project Engineer for Anheuser-Busch Companies, Inc. of St. Louis, expects to receive an MBA from Washington Univ. this fall.

1977 Lisa Dochtermann Chisholm, Product Manager for Illinois Tool Works Co. of Frankfort, received her first patent, issued in September '83.

Daniel N. Donahoe, MSME '79 from U of I and MBA at Santa Clara, has started taking classes in electrical engineering at Ariz. State Univ. He has an engineering position with Motorola in Scottsdale but on weekends he can be found 4-wheeling in the desert foothills.

1978 Thomas P. Fiock, MS in Accountancy from Southern Ill. Univ., is now assistant director of the Applied Research Center at SIU, Carbondale.

Todd R. Neely, MSISE and MBA '83, Univ. of Southern Calif., is now consultant on the manufacturing control system of Ernst & Whinney, Chicago.

Sharon M. Stefanik, Advertising Specialist for Commonwealth Edison, received a master's in management from Northwestern. She is also now engaged to Keven P. Kelly of Arlington Heights.

1979 Todd C. Green, Senior Engineer, surgical products division of ValleyLab, Inc. at Boulder, Colo. married Angeline Pietras, a graphic artist from Brookfield, Ill.

James R. Gunnison, Product Manager for IBM at Charlotte, N.C. now has three sons, Eric, 8, Shawn, 3, and Michael, 1.

Michael R. Huber, a recent visitor to campus, has about half his work completed toward a MSME from Iowa State. He is with Deere & Company, Waterloo.

Mark R. Johnson has gone south, from St. Charles to Johnson City, Tenn.

Ronald M. Monsen headed east, from Olney to Parkesburg, Va.

Philip J. Morettini is a Product Marketing Engineer with Hewlett Packard in San Diego. His division manufactures computer graphics equipment and instrumentation devices.

Bradley D. Mottier, MSGE '81, is now Marketing Manager for Slick Aircraft Products, Rockford. The engineering department is one of six reporting to the marketing manager.

David O. Reip, recently promoted to Captain, USAF, received a regular commission. He is currently a rated co-pilot in the UH-1N model "Huey" helicopter.

1980 Eric M. Austin, MS in TAM '81 from U of I, is now an engineer with CSA Engineering, an aerospace consulting firm in Palo Alto. He reports that GE alums, Carolyn Doyle Dressell, BSGE '80 and MSCE '81, Richard Rush, BSGE '80, and Joann Whitacre Williams, BSGE '80 are sharing the sunshine with him in Calif.

Bruce O. Gonsholt, Sales Engineer for Westinghouse Electric Corporation of Brookfield, Wis., is engaged to Cheryl Klamert of Milwaukee.

David S. Hermann is a Field Sales Engineer with Advanced Micro Devices of Sunnyvale, Calif.

Edward J. Jaselskis, MS in Construction Management from MIT, is with Exxon Research & Engineering Co. in New Jersey.

Gregory C. Kuenzig advanced from his first job at Gerber Systems, programming a CAD/CAM computer. Now a Junior Programmer Analyst at Sikorsky Aircraft, East Haven, Conn., he works with engineers in the use of design programs on the IBM CAD/CAM.

Jeff A. Miller, MSME, Univ. of Petroleum & Minerals, Dhahran, is the first American to receive a post-graduate degree from a Saudi university. After three years of life in Europe and the Middle East, he would like to hear from fellow classmates. He now lives in Springfield, Ill.

James R. Templin, a Sales Engineer for Westinghouse Electric Corporation of Chicago, married Mary Aerialis, Applied Life Sciences '80, U of I. They had a son, Jameson, in May, '83.

Ralph T. Wakerly, MBA '81 from U of I, married the former Betty Curtiss, a U of I master's in agriculture. They are now living in Carrollton, Texas with their new daughter, Marie Therese.

James R. Wilford and his wife, Sandy, had their first child in November, Katy Alicia.

1981 Gregory S. Gerard, MSGE '82, is now Programmer-Analyst for Union Carbide Corp., Engineering & Technology Services Division of W. Va. He and his wife, Mary, expected their first child in April.

Bradley S. Gregor graduates this May from St. Louis Univ. School of Law. He married Rosemary Dujka, a registered pharmacist at Barnes Hospital, in July of 1983.

Mark E. Kaltrider is an Industrial Engineer with Rochester Products Division of General Motors Corp., Grand Rapids. He is considering going after an MBA degree.

Brian J. MacGregor, Applications Engineer for Ingersoll-Rand of Dallas, married a U of I education graduate in 1980. He and his wife, Elizabeth, have a daughter, Kimberly.

Susan Polka Morris, a Civil Engineer with the Bureau of Reclamation, lives in Lakewood, Colo.

Roger H. Stein receives his law degree in May from the U of I. He has accepted a position with a patent law firm in Chicago.

Timothy E. Tucker, MSIE '84 from U of I, is now with Arthur Andersen Management, Information Consulting Division in Chicago.

Tina Voigt Holliday, a civil Engineer with the U.S. Army Corps of Engineers, spent the past 18 months working in the field on several construction projects at the Monterey Residente office. She is now in the Military Design Section of the Sacramento district office.

1982 Molly R. Bryden, a Computer System Engineer for Union Electric Company, married Fred N. Cory. They live in Fulton, Mo.

Richard T. Cartwright Jr. went south, from Wheaton to PacBay, Fla.

April Horne, Product Engineer for IBM in Rochester, Minn. was recently on campus recruiting for her company.

Katherine M. Hughes is attending Stanford's graduate school of engineering management.

Gary A. LaFine is Engineering Liaison, Engine Division, for Caterpillar of Mossville. He and his wife, Julia, have a new daughter, Jacquelyn.

Thomas Y. Peterson is reportedly a graduate student in ME at the Univ. of Minn.

1983 Susan J. Botts, a Civil Engineer I with Ill. Dept. of Transportation at Quincy, is also the owner of a top-ten, nationally rated horse. She and her half-Arabian gelding have already qualified to compete at the Arabian National Championships for 1984.

James R. Duft, an engineer with McDonnell Douglas Astronautics Co. of St. Louis, is working on the Electrophoresis Operations in Space Project. This research is striving to produce proteins in space that are limited by gravity on earth.

Carl Lewis Eichstaedt III, an engineering analyst with Sargent Lundy of Chicago, lives in that city.

Julie Chalden Evans is now a manufacturing engineer with Diablo Systems-Xerox Corp. of Fremont, Calif.

William J. Fox, Graduate Assistant at Bradley University, expects to receive his M B A in the spring of 1985.

Douglas B. Franz went east, from Aurora to Budd Lake, NJ.

Michael H. Gibson, a Software Engineer for Flinn & Drefflein Engineering Co. of Northbrook, reports a dynamic change in the amount of digital electronics used in control systems, as seen from his new position.

Michael W. Hartley, a manufacturing engineer with Illinois Tool Works of Des Plaines, has moved to Chicago.

Stassi Henson might now be Stassi Cramm, if our grapevine didn't get tangled on this one.

Christopher A. Irpino, Industrial Engineer with Eli Lilly in Indianapolis, is planning an October wedding.

Desiree Fornell Miller, a Production Engineer with Kores Nordic (USA) Corp. of Summerville, S.C., married Dave Miller, BSME '81.

Michael C. Okkema is operating his own business and working toward a master's in EE from U of I, Chicago.

Paul W. Shafer is now an Application Engineer with Honeywell, Chicago south branch.

Marc A. Spoor, a Quality Assurance Engineer for Singer Controls Division of Schiller Park, has been traveling to plants in the U.S. and Canada to implement statistical process control.

Doris G. Smith moved from Streamwood to La Mesa, Calif.

Gary Schwerdtfeger went west from Hoffman Estates to Mountain View, Calif.

John H. Waldron, a merit award winner in the Lincoln Arc Welding Foundation Design contest, is now Assistant New Business Manager for Molex, Inc. of Lisle.

Employment Contacts

The Engineering Placement Office publishes a weekly bulletin which includes a section called "MAIL CONTACTS". These are employment opportunities that come to our attention and which we make known to our graduates. Companies and potential employees may obtain more information from Robert J. Mosborg.

Engineering College Placement Director
109 Engineering Hall
1308 W. Green
Urbana, Ill. 61801
217-333-1960

Networking for Job Placement

A pilot networking program for job placement of graduates was launched in February by the Career Development and Placement Center at Urbana. A questionnaire was mailed to approximately 6,800 alumni in classes 1976 through 1979.

From these class responses, David S. Bechtel, director of the center, hopes to create an alumni contact file. He plans to have a directory ready to be mailed by May.

Instant Research Bibliography

The Engineering Library provides a subject-based computerized review of articles in all engineering-related fields. These custom bibliographies can be used for literature review, post-project verification and research support. The average cost of a search is approximately \$35. Information is available at 217-333-3576.

Alumni Officers

General Engineering Constituent Alumni Association officers for 1984 represent a twenty-five-year span of department graduates. These officers were elected at the March 26th board meeting:

President Myron J. Bernard, '56, of Geco Engineering in St. Louis

Vice President David A. Burge, '66, of David A. Burge Co., L.P.A., Attorney at Law in Cleveland

Secretary Bradley D. Mottier, '79, '81, of Slick Aircraft Products in Rockford

Treasurer Thomas P. Fiock, '78, Assistant Director of the Applied Research Center Southern Illinois, Carbondale

Newsletter Correspondent Todd R. Neely, '78, of Ernst and Whinney in Chicago

Recording Secretary Robert W. Devine, '81, of S & R Engineering Inc. in Urbana

A Relations with Industry committee was formed with John B. Holz '76, '81 of IBM, MASS as chairman. Assisting John are Ronald H. Hausch '64, of Universal Oil Products in Des Plaines and Leroy E. Hendricks '78, of Clark Dietz in Champaign.

Student Officers

The Engineering Council recognized the outstanding contributions of the General Engineering honor society this spring. Professor **Harrison Streeter**, faculty advisor since 1962, received a "dedication and service" plaque just last year.

GAMMA EPSILON

President, Adrienne A. Gigler, Naperville

Vice President, Laura A. Shaffer, Crystal Lake

Secretary, Lori A. Gowin, Dawson

Treasurer, Jarlath J. Lyons, Flossmoor

Engineering Council Representative, John S. Romuk, Chicago

Engineering Open House Chair, Keith F. Flaminio, Springfield

Publicity, Cynthia M. Schur, Wilmette

ILLINOIS SOCIETY OF GENERAL ENGINEERS

President, Bradley C. Crews, Mount Erie

Vice President, Mark W. Myers, German Valley

Treasurer, Lawrence R. Slight, Lisle

Secretary, Marianne J. Stanke, South Holland

Engineering Open House Chairman, Kathryn I. Phillips, Palatine

Engineering Council Representative, David E. Reid, Huntley

Engineering Council Representative, James G. Pietrzak, Dolton

JETS

Professor **David C. O'Bryant** and **Jonathan Horner**, state director and state coordinator of the Junior Engineering Technical Society, report that Evanston and Naperville-North won 1st and 2nd place for large high schools in the Tests of Engineering Aptitude, Mathematics and Science. University High of Urbana and Red Bud won 1st and 2nd for small high schools.



Myron J. Bernard, '56, President of General Engineering Constituent Alumni Association with Professor Jerry S. Dobrovolny, head, U. of I. department of general engineering

Bernard '56 Alumni President

Myron J. Bernard '56, Senior Vice President of GEICO Engineering Corp. of St. Louis, is current president of the General Engineering Constituent Alumni Association. He worked for his company between his junior and senior college years as a time keeper and has held draftsman, assistant engineer, engineer, project engineer and management positions.

"The General Engineering degree gave me a broad view of all aspects of engineering and management which served me well as I moved into new areas." He is a candidate for the M.S. in Construction Management degree from Washington University.

He has just finished a term as President of the 115-year-old, 1800-member Engineers Club of St. Louis. His heavy commitment to civic responsibilities includes board membership and officer responsibilities for Covenant House — a housing project for senior citizens, the Jewish Community Center Association, and Rainbow Village for mentally retarded.

His son is a graduate of Washington Univ. and his daughter is now attending Indiana Univ.

PROFESSOR DAVID C. O'BRYANT IS WORKING WITH ALUMNI TO ORGANIZE A MEETING ON A FOOTBALL WEEKEND THIS FALL. IF YOU WOULD LIKE TO JOIN IN, PLEASE LET US KNOW RIGHT AWAY.

Alumni Board Meets

The General Engineering Constituent Alumni Association met with the faculty on March 26th to exchange ideas on the current curriculum and future direction of the department.

Professor **David C. O'Bryant** presented statistics on secondary fields among 1983 graduates. Marketing and administration predominate, but, a growing number of students are opting for engineering systems. Our graduates fare well financially when compared with other Illinois engineers at 5 and 10 years out.

Professor **Thomas F. Conry** reported on the growing 3-year-old graduate program. 15 graduates are already gaining recognition for the department.

Professor **Wayne J. Davis** and **Juraj V. Medanic** discussed long-term departmental goals in the areas of systems analysis, including dynamic system control and economic system analysis.

Professor **Michael H. Pleck** lead a tour of the CAD/CAM system. Professor **Thomas R. Woodley** demonstrated the minicomputer-microprocessor lab. Professor **Louis Wozniak** integrated analog and digital computers to control a dynamic system.

Department head **Jerry S. Dobrovolny** stressed the vital role of alumni cooperation in guiding the department toward a better understanding of industry needs. **ALUMNS ARE ASKED TO SEEK OUT RESEARCH AREAS REQUIRING ACADEMIC EXPERTISE, PROMOTE INDUSTRY SPONSORSHIP OF GRADUATE AND UNDERGRADUATE PROJECTS, AND HELP THE DEPARTMENT IDENTIFY WITH INDUSTRY.**



Professor Michael H. Pleck with Bradley D. Mottier, '79, '81, Secretary of General Engineering Constituent Alumni Association

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