GENERAL ENGINEERING NEWSLETTER

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

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New Faculty Members Create New Laboratories

The two newest members of the GE faculty, **Profs. David E. Goldberg** and **Yong Se Kim**, have lost no time in extending their specific expertise to students in the department.

Both have established specialized laboratories and are teaching classes compatible to their research interests.

Dr. Goldberg has created the Illinois Genetic Algorithms Laboratory to study the theory and application of genetic algorithms. He is receiving support from the GE Department, College of Engineering and the Research Board.

Under his direction, students are working on studies under auspices of an NSF-sponsored investigation of the foundations of genetic algorithms and an army-sponsored study of "messy genetic algorithms."

Computation in ILLIGAL is performed on four IBM RS/6000 workstations augmented by three IBM-Compatible PC's and a variety of peripheral devices. Customized simulation and analysis codes are developed in several languages and may be interfaced to existing simulation procedures on problem-solving codes.

Goldberg also has initiated a new course, GE 393-DEG, "Genetic Algorithms," which he previously taught for five years at University of Alabama. He is author of a textbook, *Genetic Algorithms in Search, Optimization and Machine Learning*.

Dr. Kim's research interest is in computer-aided design and manufacturing, solid modeling and geometric reasoning. He is especially interested in integrating geometry-based engineering applications.

He is developing the Solid Modeling Laboratory where an interdisciplinary team is conducting research on hierarchical product modeling based on form features, form feature recognition by volume decomposition, feature-based volume decomposition and their application in manufacturing planning and finite element mesh generation.

The computing equipment of SML includes two Sun SPARCstation 2's and an Apple Macintosh IIfx. A programming environment POLYFACET II for polyhedral solid is being developed at SML.

Kim teaches a new course, "Geometric Applications in Engineering," where POLYFACET II and a commercial solid modeling tool kit DESIGNBASE from Ricoh Corporation are used.

He also has begun a new graduate/upper undergraduate course, GE 393 YSK, "Geometric Application in Engineering." It introduces foundations for computer-integrated geometric applications in engineering activities of products, including design, analysis and manufacturing.

Additional information concerning the laboratories, courses and on-going research can be obtained by contacting **Profs. Goldberg** and/or **Kim** at the Department of General Engineering.

Faculty Holds Second Annual GE Retreat For Future Planning

Twenty-one members of the GE faculty met Saturday, Jan. 26 for the second annual Department of General Engineering Retreat at Allerton House near Monticello.

Department Head Prof. T. F. Conry opened the agenda by setting the stage for the day-long program and gave an overview of the department.

During the morning hours the focus was on the Graduate Program divided into three working groups.

Group one, chaired by **Prof. David E. Goldberg**, considered the need for a Ph.D. program versus alternatives;

Group two, chaired by **Prof. Wayne Davis**, discussed the mission of a Ph.D. program; and

Group three, chaired by **Prof. David C. O'Bryant**, dealt with stimulation of course development.

Each group was made up of seven faculty members.

Following lunch at a plenary session, chaired by **Prof. W. Brent Hall**, the total group heard reports from each group.

The rest of the afternoon, again found the conference divided equally into three working groups. This time discussing the Undergraduate Program.

Group one, **Prof. Scott Burns** as chair, modification of the curriculum outside the core sequence;

Group two, **Prof Osman Coskunoglu** as chair, modifications of the curriculum outside the core sequences; and

Group three, **Prof. Michael H. Pleck** as chair, assessment of the curriculum structure.

After dinner, a plenary session chaired by **Prof. Juraj V. Medanic**, received reports from the three groups.

Prof. Conry closed the session by conducting an open discussion on how to integrate the graduate and undergraduate program issues.

Results emanating from the retreat will be sent to the department curriculum committee for review. Any possible recommendations will be forwarded to the College of Engineering governance structure for consideration.

Knights of St. Pat Honor GE Students

Two students from the Department of General Engineering were named 1991 Knights of St. Patrick.

They are **Kelsey Milman**, senior, Pekin, IL and **Jason Struthers**, junior, Princeton, IL.

The students were honored at the annual St. Pat's Ball, March 2, in the Illini Rooms, Illini Union.

From the Department Head

The threefold mission of the faculty at the University of Illinois — teaching, research and service — is primarily devoted to teaching and research, with service to the department, the campus and national organizations occupying a small percentage of time. We have heard the epithet "Publish or Perish" so many times that many think of research versus teaching in the university. The ideal, of course, is research and teaching, considered as a continuum.

It has been said that a university has three functions: storage of knowledge (books in the library, professors' minds), transmission of knowledge (teaching, publications, textbooks), and generation of new knowledge (research and other creative endeavors). Central to these functions are the roles of research and teaching. As you look back at your education at Illinois you appreciate not only the educational foundation in the liberal arts and engineering that you received but also the training in the creative side of problem-solving — the ability to synthesize a result that is new and unique. Professors who are active in research bring a research or questioning attitude to the classroom that is fundamental to creative problem solving.

The Department of General Engineering offers a B.S. program that relies almost entirely on direct teaching and an M.S. program that is a research degree. Many of the faculty direct Ph.D. students in other departments until the Department offers its own doctoral program. Thus research (through the direction of graduate students and individual activity) is closely intertwined with classroom teaching as part of a faculty member's responsibilities. The interaction between research and classroom teaching is complementary, not antagonistic. To achieve the goals of a university, both are equally important.

Many ask why we publish and why it is so important that we publish. Publication of research in journals with procedures for rigorous review by peers in the field is the best way to scrutinize research results to determine if they are free from error and represent an original contribution to engineering of archival quality. This process provides a certain degree of assurance that the information being disseminated (in engineering and scientific areas) is technically correct. The publication of research results is also an effective method of technology-transfer to our colleagues in industry or government laboratories. A justifiable criticism is that university research projects never go so far as to be "reduced to practice", but in many cases that is due to constraints on time and financial resources. Our system of internal and external review of our research programs keeps us all focused on the important issues in research.

Prof. Wozniak's Research Attracts Wide Attention

Prof. Louis Wozniak continues to receive plaudits for his pioneering research in the application of digital control to hydrogenerators.

As announced in the Fall GE Newsletter, he received the 1988 Best Paper Award by the Energy Development and Power Generation Committee of the Institute of Electrical and Electronic Engineers. His research is sponsored by the Bureau of Reclamation of the U.S. Dept. of Interior.

During the 1990 Fall Semester, **Prof. Wozniak's** Digital Control of Dynamic Systems class was videotaped by the UI Office of Continuing Education and Public Service.

The presentation was innovative as the first engineering course with a full laboratory component offered by extension. A total of 15 students in Peoria and Rockford took the course.

In a letter from T.D. Creger, Senior Research Engineer, Caterpillar, Inc., Peoria, he calls the class "both a valuable and practical learning experience."

"**Prof. Wozniak** took extra measures with the class to better address our needs by combining pertinent theoretical material in the controls area with meaningful hands-on applications."

Creger expressed his gratitude for the GE department's willingness to help support continuing education in industry.

An important measure for research universities such as the University of Illinois is their ranking vis-a-vis their peers. Our College of Engineering has been fortunate to be ranked among the top three to four schools of engineering in the U.S.A. in recent years. These rankings are based on the rate of production of graduate and undergraduate degrees, the amount of external support for research that supports graduate students and provides resources for purchasing equipment, and finally, on the perceived quality of the faculty. Perceptions of faculty quality can be ephemeral, but they are important. This is our reputation among our peers — other senior engineering professors and deans of engineering — and the quality of our research publications and textbooks greatly influences the perception of our quality that is held by our peers. With an excellent reputation, we can continue to attract students of exceptional quality at both the graduate and undergraduate levels. Our good reputation also enhances the value of your degree as alumni(ae).

Students, faculty and alumni(ae) are inextricably bound together in our quest to maintain the high standards of quality of our institution and its component parts. The responsibility of our students is to learn and contribute to society to the limit of their gifts of intelligence and creativity. The responsibility of us as a faculty is to provide the environment for learning and personal growth for our students and to direct the search for new knowledge to the best of our abilities. And finally, your responsibility as alumni(ae) is to oversee the conduct of the institution, that it is indeed fulfilling its mission of teaching, research and service. A significant aspect of your oversight should be concerned with reputation and quality, and if you have concerns, please address them to the appropriate level: administration (department head, dean, chancellor, president), the Board of Trustees, or your state legislator. Alumni(ae) should take a special interest in their institution that was home to them during a significant period of their maturation. You should demand nothing less than the best reputation and the highest levels of quality in teaching, research and service from your Alma Mater.

Thomas F. Conry
Professor and Head

Student Design Projects Prepare Engineers for Professional Career

The ultimate goal of engineering education is to provide mastery of the process of design whereby scientific and technological information is used to innovate, devise or process that technology to the benefit of society.

At the University of Illinois at Urbana-Champaign, the General Engineering student is oriented toward engineering design throughout the entire curriculum.

After completing two years of basic study in the engineering sciences, the student begins a professional program of study in general engineering beginning the junior year.

The sequence begins with three courses in the first semester of the junior year, two courses in the second semester, followed by another course in the first semester of the senior year.

This comprehensive program of study in project design methodology makes use of problems that cut across traditional fields in mechanical design, structural design and control systems.

The highlight of the cross-disciplinary design sequence occurs in the final semester of the senior year through GE 242, a capstone senior Project Design.

Teams of two to four students work toward the engineering solutions to actual problems supplied by industry. A midterm and final report summarize the work of the semester for sponsor and faculty.

An important feature of the course for both faculty and students is the interaction with industrial sponsors. In the past, more than 200 companies, large and small, have supported the program. Firms include General Electric, General Motors, Eastman Kodak, Ford Motors, Chrysler Corp., Masonite, Microswitch, Sunstrand, US Army Construction Engineering Research Laboratory and many others.

Projects assigned to the students are current real design problems important to the company and are fully supported by company engineers and faculty.

The program reaches for high standards of excellence in project design. In the past 22 years, the student teams have placed 37 times—two firsts, seven seconds, one third, 13 fourth places and 14 merit awards, with six honorable mentions, in the prestigious national Lincoln Arc Welding Engineering Design Competition, open to all universities.

Objectives to be realized through the project design activity are: increased administrative skills, including the ability to work with others; budgeting of time and money; teamwork within the engineering project framework; development of open-end problem solving capability on real world engineering problems; close liaison with company management and possible employment to follow; facilitating the transition from the academic world to the business engineering environment; and technical and supportive engineering services to Illinois industry and ultimately to the people of Illinois.

Faculty Notes

Prof. Mark Strauss

Prof. Mark Strauss attended the American Society of Biomechanics meeting in November, 1990, in Miami.

Lincoln Arc Welding Cites GE Student Projects

Three merit awards in the 1990 Student Engineering Design Competition of the Lincoln Arc Welding Foundation have been awarded to senior project teams in General Engineering.

They are:

—"Redesign of Turbine Pump Testing Station"—Project Team: **Andrew W. Majernik**, Bridgeport; **John C. Marchelya**, Glen Ellyn; **Charles T. Riggs**, Oak Park; and **Carolyn S. Strittmatter**, Romeoville. Faculty Advisor was **Prof. Mark G. Strauss.**

—"Development of a Droplet Size Analysis Method Based on Volumetric Flux"—Project Team: **Raymond J. Heino**, Joliet; **Karen A. Shineflug**, Antioch; and **David W. Taraboletti**, Canton. Faculty advisor was **Prof. S. Daniel Thompson.**

—"Improved Design and Assembly Process of the Circular MIL-C-5015 Electrical Connector"—Project Team: **Donna M. Davis**, LaGrange; **Michael S. Dillon**, Champaign; **Craig S. Hicks**, Lockport; and **Evanthia Nafpliotis**, Skokie. Faculty Advisor was **Prof. Henrique L.M. dos Reis.**

In the past 20 years, GE students have received 27 awards from Lincoln Arc Welding.

Attention Class of '86

A large block of football tickets is being reserved for the Illini vs. Houston game on September 21, 1991. There will be a tailgate party before and after the game with plenty of food and drinks for all. The cost will be approximately $35.00 per person for game tickets and tailgate. Details will be sent to the May and December 1986 grads, but if you are interested and have not received anything by May 15, contact Janice Mueller Lilly at 205 W. Illinois St., Urbana, IL 61801, (217) 367-0114.

More Faculty Notes

Prof. Scott Burns

Prof. Scott Burns has received a $12,000 grant from the National Science Foundation for Research Experiences for Undergraduates.

A paper co-authored by **Scott Burns, A. Locascio, T. Carr, C. Lins, C. Agemura, T. Hanisch and J. Linderoth** was presented Jan. 10, at the NSF Design and Manufacturing Systems Grantee Conference in Austin, TX.

Prof. Scott Burns presented a paper April 29 at the ASCE 10th Conference on Electronic Computation in Indianapolis, IN.

Hardware and software grants totalling $37,000 from Motorola, Apple Computer, Microsoft, Navy Systems, Absoft and Spyglass have been awarded to Prof. Scott Burns as part of a cost-sharing program with the National Science Foundation Presidential Young Investigator Award.

Prof. Manssour H. Moeinzadeh

Prof. Manssour H. Moeinzadeh has been named chairman of the North American Organizing Committee and co-chair of "The First International Conference on Computer Application in Science, Technology and Medicine in Iran." The conference is scheduled to be held Dec. 26-28, 1991, in Isfahan, Iran and is sponsored by the University of Isfahan and Isfahan University of Medical Sciences. More than one thousand attendees are expected to participate in this International Conference and related workshops.

Gamma Epsilon Names Jerry H. Hogan 1991 Distinguished Alumnus

Jerry H. Hogan, '59, has been awarded the 18th annual Gamma Epsilon Distinguished Alumni Award.

A resident of Dallas, TX, he is Vice President of Engineering of MCI located in Richardson, TX.

The honor is bestowed each year on a General Engineering graduate for both outstanding accomplishment in one's profession and continuing contributions to the Department and/or the College of Engineering.

A plaque was presented to **Hogan** at the annual GE Honors Banquet April 18 by **Elizabeth Hausler**, Plano, IL, president of Gamma Epsilon.

Hogan was graduated from the U. of I. with a B.S. in GE in 1959 and received a M.S. (systems engineering) in 1966 from University of Arizona and a MBA (finance) in 1984 from George Washington University.

Following graduation from the U. of I., he entered the US Army where he spent 20 years in a distinguished career. Assignments included commander of a battalion in an Infantry Division in Europe; a member of the US Army Special Forces; a professor at the Naval War College; and as a System Analyst for the Secretary of Defense.

At the time of his retirement he held the rank of Lt. Colonel and was on the promotion list to Colonel.

Hogan entered the telecommunications field following his military retirement and held various assignments with Satellite Business Systems, a telecommunications company owned by IBM, Comsat and Aetna Life Insurance. He held positions as Director of Engineering and Vice President of Operations.

In 1986, **Hogan** moved to MCI, second largest telecommunication company in the U.S., as Vice President of Operations. He was named Vice President of Engineering in April 1990.

In addition to his army and professional career, he has taught both undergraduate and graduate courses in mathematics, statistics, quantitative methods of management and other technical subjects at George Washington U., Boston College, U. of Rhode Island, Providence College, Salve Regina College and the Naval War College.

While at Illinois, **Hogan** was president of the Illinois Society of General Engineers and was dubbed a Knight of St. Patrick's in the Spring of 1959.

He has been actively involved in the interviewing and recruiting of UIUC general engineering graduates. He presently has numerous alumni working for him at MCI.

Currently **Hogan** is a member of the Development Board of the University of Texas, Dallas.

Two Receive $500 NSF Excellence Scholarships

Two students in the University of Illinois Department of General Engineering have received "Incentives for Excellence Scholarship Prizes" from the National Science Foundation Minority Graduate Fellowship Program.

Recipients of the award are **Ms. Carolyn Eliana Brown**, Fairfield, Illinois, and **Ms. Nilda Lou Barrerio**, Wauconda, Illinois. Each received $500.

The awards were announced by **Professor Thomas F. Conry**, General Engineering Department head.

Selection was made on the basis of grade point average from a list of students identified as minority students.

Jerry H. Hogan

College Student Group Honors 3 on GE Faculty

Three faculty members from the Department of General Engineering have been designated Outstanding Advisors by the College Dean's Student Advisory Committee.

The honorees are: **Visiting Asst. Prof. James V. Carnahan**, and **Profs. Michael H. Pleck** and **Louis Wozniak**. It was the second straight year that **Carnahan** has been so honored and the second selection for **Wozniak**.

They were honored on March 11 at the Advisors Award Banquet at the University Inn.

Retirement Reception Honors Weichien Chow

General Engineering Lecturer **Weichien Chow** has announced his retirement effective May 20.

A retirement event in his honor was held Friday afternoon, April 26 in Levis Faculty Center.

Chow joined the GE faculty in 1978. He received his M.S. and Ph.D. degrees from University of Wisconsin. He is a registered professional engineer in Illinois and is a life member of ASME.

Before coming to Illinois, **Chow** had 30 years of experience in industry, where he was employed by Sparton Automotive; ITT-Kellogg; and Amphenol, a division of Bunker-Ramo Corp. (now Allied Signal Corp.) as a scientist, manufacturing engineer, manager and advanced product engineering design manager.

Chow says he has no definite plans for retirement but did not plan to leave the Champaign-Urbana community. Mrs. Chow recently retired from her position in the U. of I. Asian Library.

The couple has four sons—two living in California, one in Connecticut and one in Texas.

Department Honors Presented April 18 At Awards Banquet

Students, a faculty member and an alumnus were honored April 18 at the annual General Engineering Awards Banquet at the University Inn, Champaign.

The event was jointly sponsored by Gamma Epsilon and the Department.

Joseph G. Macro, Schaumberg, IL, was recipient of the Edward S. Fraser Award as the outstanding GE senior scholar. He received $200 cash and a plaque and his name will be added to a permanent wall plaque in the Transportation Building.

The Randolph P. Hoelscher Award for the outstanding junior was given to **Tiffany A. Hanisch**, Mendota, IL. The award consists of $100 grant and a certificate based on scholarship, leadership promise, activities and cultural development.

The 1991 Gamma Epsilon Distinguished Alumni Award recipient was **Jerry H. Hogan**, Dallas, TX (Details appear in a separate item.)

James V. Carnahan was presented the Excellence in Teaching Award. The recipient is determined by Gamma Epsilon and receives $500 and a plaque. Carnahan also won the award in 1986 and the College of Engineering Everitt Award for Teaching Excellence in 1989.

The Jerry S. Dobrovolny Leadership Scholarship went to **Kelsey L. Milman**, Pekin, IL. Criteria for the department award is demonstrated outstanding leadership qualities and academic scholarship. A certificate and $500 are awarded.

Margaret A. Schneller, Justice, IL, received the William A. Chittenden Award as the most outstanding Master of Science Graduate student in General Engineering. It includes a certificate and $1,000 in cash.

Other awards were:

—Herbert J. Sprengel Award: $100 to **John W. Lewis**, Urbana, for the best design project by a GE junior;

—Bernt O. Larson Project Design Award (Spring 1990): $150 each to **Andrew W. Majernik**, Sumner, IL; **John C. Marchelya**, Glen Ellyn, IL; **Charles T. Riggs**, River Forest, IL; and **Carolyn S. Strittmatter**, Bolingbrook, IL, for their design, "Redesign of Turbine Pump Testing Station." **Prof. M. W. Strauss** was faculty advisor.

Second place of $75 each to **Joseph M. Lohmar**, Mattoon, IL; **Sean P. Merlo**, Joliet, IL; **Edwin Sunga**, Waukegan, IL; and **Julie A. Upper**, Quincy, IL.

13 Inducted at GE Initiation Banquet

Thirteen GE students were inducted into Gamma Epsilon, General Engineering honorary, at the organization's Fall banquet.

They are:

Steven Robert Berger, St. Louis, MO; **Lisa Marie Chandler**, Lansing; **Julie Elizabeth Dier**, Buffalo Grove; **Michael Lloyd Grimm**, Normal;

Mark William Henning, Barrington; **Yuko Kabeshita**, Elk Grove; **David M. Langlois**, Hoffman Estate; **Jeffrey John Lee**, Arlington Heights;

John W. Lewis, Jr., Urbana; **Michael Walter Orlett**, Highland; **Bryan Dexter Smith**, Findley; **Edward L. Spellman II**, Lincoln; and **Tara Lynn Winslow**, Sugar Grove.

Attends International Session

Prof. Dan Metz has been continuing his work on vehicle dynamics and accident reconstruction. A lot of his current effort is centered on the rollover dynamics of high c.g./short wheelbase vehicles such as Suzuki Samurais and Jeeps. With both undergraduate and graduate students, he is pursuing this work intensely.

He still works for Jim Russell Racing Drivers School in off-hours and summers and, of course, is getting ready for the 1991 Indianapolis 500-mile race, at which he is a continuing consultant.

While presenting SAE Paper No. 910012 entitled "Emergency Braking Dynamics of Ground Effects Open-Wheeled Racing Cars" at the 5th Autotechnologies Conference, 23-25 January 1991 in Monte-Carlo, Prof. Metz attended a most interesting meeting of individuals, as shown in the photo. From left to right, those shown are:

Stu Grant, Race Tire Engineer, Goodyear Tire & Rubber Co., USA

Bernard Dudot, Technical Director, Renault Motorsports Formula One Team, France

Mauro Forghieri, Technical Director, Lamborghini Engineering, designer of the Ferrari flat-12 and Lamborghini V-12 Formula One racing engines, Italy

Geoff Goddard, Chief Racing Designer, Cosworth Engineering, designer of the Cosworth DFX Indycar engine, England

Paul Frere, internationally-known motorsports journalist and winner of Formula One, LeMans, and numerous other races, France

Prof. Metz, USA

Gordon Murray, Technical Director, McLaren Cars, Ltd., manager of the McLaren-Honda Formula One team, Australia and

Hans Mezger, Executive Manager, Special Products Development, Porsche AG, designer of the Porsche Indy V-8 engine, Germany.

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Alumni Notes

1955 **Raymond Dean Dowsett**, Aledo, IL, retired from Honeywell in December, 1988, after 30 years service. He also completed 30 years in the U.S. Navy and U.S. Naval Reserve.

John Edward Haug, Grosse Pointe Farms, MI, retired Jan. 1, 1990, from the Budd Company completing 32 years employment. His position at the time of retirement was Manager of Engineering Services.

1957 **Doyle Wilhite**, MBA '70, Washington University, is president of Asbestos Abatement Consultants, Inc., W. Groves, MO. He retired as a captain after 32 years of active and naval reserve. A recipient of the Joint Service Commendation Medal and two Navy Commendation medals for contributions in Disaster Preparedness and Maritime Defense, his last assignment was Deputy Sector Commander, Maritime Defense Zone, Sector two. At UIUC, Wilhite was an NROTC midshipman, a member of ISGE and an Engineering Council Representative.

1958 **Max L. Whitman**, MS (Public Administration), is Director of Public Works, Winnetka, IL, and is President-elect of The American Public Works Assoc. He resides in Glenview, IL.

1959 **Jerry Harold Hogan**, MS '66, Arizona, MBA '84 George Washington U., has been named Vice President of Engineering MCI, Richardson, TX. He is a resident of Dallas, TX.

1965 **Gerald A. Lasson**, MS '66 (Nuclear Engineering); MBA '75, Xavier U.; is owner of The Heritage Companies, an Ohio real estate and consumer finance firm. He lives in Bellefontaine, OH.

1966 **Carl E. Jaske**, MS '67 (T&AM); Ph.D. (Metallurgical Engr.) Ohio State, 1966, has been named senior group leader, Engineering and Research, CC Technologies, Columbus, OH. He is leading research projects on creep, fatigue, corrosion-fatigue, fracture, aging and remaining-life assessment of structure materials. Dr. Jaske also is publications chairman for the Pressure Vessels and Piping Division, ASME. His 16-year-old daughter is a member of the Ohio Division I State Cross-Country Championship Team. His wife and 12-year-old daughter also are avid long distance runners.

Steven G. Jonas, JD '70, Wayne State U., has accepted the position of Principal Engineer-vehicle regulations, Volkswagen of America, Troy, MI. With his wife and 12-year-old son, Jonas resides in Birmingham, MI.

1967 **Gary L. Marcucci**, MBA '69, has been appointed Director of Human Resources for Pioneer Flour Mills, San Antonio, TX.

Michael Yoshimura, MBA '71, U.So. Calif., is President-Consultant of MNO Corp., Nashville, TN.

1968 **Donald C. Bishop**, MBA '74, LSU, has been appointed as accountant, Department of Defense, DLA-TCFTO, Dallas, TX. He recently passed the Texas State CPA examination and received his license to practice as a CPA. He plans to continue as a government accountant in addition to his private practice.

1970 **Dennis Polhill**, MS (CE) and MPW '78, U. of Pittsburgh, has a new position as Vice President, American Pacific Financial Corp., Denver, CO. He sold a consulting engineering business to set up investor groups to speculate in Colorado Commercial real estate.

James S. Schlifke, JD '78, has accepted the position of Counsel, Hamman and Benn, Chicago. The firm specializes in patents, trademarks, copyrights and litigation. Schlifke's subspeciality is in commodities and securities. He resides in Northbrook, IL.

1972 **Michael Walter Rapps** is president of Rapps Engineering and Applied Science. He with his wife and two daughters lives in Springfield, IL.

Allen Paul Schwartzberg, MBA '77 James Madison, U., has been named staff engineer, Engineering Computing Programs, GE Aircraft Engineers, Cincinnati. He formerly was with G.E. in Daytona Beach.

1973 **Joseph Joachim Sarmiento**, MD '77, Northwestern U., is entering his fifth year as a Cardiac Electrophysiologist with Cardiovascular Medicine S.C., Peoria. He recently published an article, "Clinical Utility of Telemetered Intracardiac Electrograms in Diagnosing a Design Dependent Lead Malfunction," in The Journal of North America Society of Pacing and Electrophysiology. Dr. Sarmiento resides in Peoria with his wife and four children.

Karl Schaulin has been appointed Group Operations Manager with Proctor and Gamble, Mt. Dora, FL. He is responsible for Hawaiian Punch, Texsun Grapefruit and Spearfarm Apple Juice operation. He resides in Longwood, FL.

1974 **Mark A. Benton** has accepted a new position as Engineering Supervisor with DuPont, Valley Green Site, PA. In his new assignment he supervises an engineering group for design and development of connectors for electronic packaging markets.

John Bryan Reat, MBA '76, has been named District Manager, EDI Program Management, ATT, Chesterfield, MO. He is responsible for working with larger ATT customers designing Electronics Data Interchange. Reat with his wife and two children reside in Manchester, MO.

Steven J. Smiley, MBA '80, U. of Wis.-Milwaukee, is now Vice President of Operations, ASI Technologies, Milwaukee, WI. He is responsible for production, accounting, finance and engineering.

1976 **Brian M. Briggs**, ME '77, Rensselaer Polytechnic Institute, has left IBM to become an Information Technology Consultant with McKrissey & Co., Chicago. He lives with his wife and son in Glencoe, IL.

1977 **Daniel N. Donahoe**, MSME '79 UICC; MBA '83, Santa Clara U.; is Manager, Analytical Tools, Compao Computer, Houston, TX. He is a resident of Spring, TX.

Samuel A. Yee, MBA '83 DePaul U., has become Vice President for Personal Investments, The First National Bank of Chicago, formerly with DuPont Pension Fund. Yee with his wife and three children lives in Arlington Heights, IL.

1978 **George W. Flathers II**, MS (Industrial and Systems Engineering), Ohio State U., is a pilot of a Boeing 767 for Transworld Airlines Inc. out of JFK International Airport, N.Y. He also works part-time as a lead engineer at MITRE Corp., McLean, VA. He performs human factors research in flight simulators on automation, flight control and air/ground information transfer. Flathers resides in Sterling, VA.

Sharon M. Kelly, MS (Management) '83 Northwestern, has been named Research Analyst, Strategic Analysis Dept., Commonwealth Edison Co., Chicago. She is a resident of Arlington Heights, IL.

Bradford A. Kroll has resigned from Dresser Industries to start a new firm, Acoustical Ceiling Cleaning Co. in Charlotte, N.C. The company specializes in cleaning and replacing commercial acoustical ceilings.

1979 **David Rosenbaum**, MD '83 UIMC, has been appointed Staff Cardiologist, Mass. General Hospital, Boston. He also is a visiting scientist, Harvard U. and Massachusetts Institute of Technology Division of Health Sciences and Technology.

1980 **Richard Alan Carpenter** has a new appointment as project manager with GE Fanuc Automation responsible for use of G.E.Fanuc new simplicity cell control software used at two major automotive plants. The Carpenters on Nov. 2 became parents of triplet sons.

Gary Allen Gluck, MBA '85, Cal. State Northridge, has been named Branch Manager for Electric Supplies Distributing in Lancaster, CA. The Glucks who reside in Palmdale, CA are parents of their first child, a son born on Feb. 23.

Mark Daniel McFee has become Corporate Senior Mechanical Project Engineer with A. E. Staley, Decatur, IL.

Susan Elizabeth Kenney Meredith is living in Australia where she operates her own company, The Impact of Image Consultancy. She teaches seminars on image to corporations such as IBM and Apple, giving it an engineering flavour.

Dwight M. Woodbridge is Program Manager, Advanced Engineering Dept., Supension Systems, Buick, Oldsmobile, Cadillac, Flint, MI. He is working on advanced "smart" suspension systems for GM cars. Also he races Formula 2000 cars in USA and Canada, finishing 7th out of 65 teams in '89 Championship Export A Inc. series.

1981 **Tina F. Wolfe Holliday**, MS(CE) '87, San Jose State U., lives in Fremont, CA.

Thomas James Marseille, MS(ME) '87, Univ. of Calif., Berkeley, is a research engineer, Battelle Pacific NW Laboratory, Richland, WA. He resides in Kennewick, WA.

Susan Jane Polka McDermott, Rosemont, MN, has been employed as a civil engineer with the U.S. Fish and Wildlife Service at Fort Snelling, Twin Cities, MN.

Richard K. Sykes, MBA '90, U. of Chicago, is a management consultant with A. T. Kearney, Inc., Chicago. A resident of Palatine, IL he recently served as a consultant in Prudhoe Bay, AL.

LCDR Thomas F. Taylor, USN, is an F/A-18 pilot and is currently a flight instructor and training officer at the VFA-125 "Rough Raiders" based in Lemoore, CA. He also is owner of Circle T Investments, a real estate development company and the proud father of a new son.

1982 **Marc R. Bussan**, MBA '90, U. of Evansville, has accepted a position as manager, Product Engineering, Whirlpool Corp./Mexico, Benton Harbor, MI.

Bruce A. Heimerich has been appointed Director of Operations, Lab Thermics Technologies, Inc., Champaign, IL.

Edward Patrick Juraco, Denver, CO, is a senior test engineer with Martin Marietta, Denver.

Robert A. Mog, MA '85, MSE '89 and Ph.D. '90, all from U. of Ala., Huntsville, AL, has taken a position as Systems Survivability Engineer and Space Station Principle Investigator with Science Applications International Corp., Huntsville, AL.

1983 **David Changnon**, Ph.D. (Atmospheric Sc.) '90, Colorado State, has been named Regional Research Climatologist, Southeast Regional Climate Center, Columbia, S.C. He has recently moved from Ft. Collins, CO.

Cynthia Ann Kalina-Kaminsky, MS(GE) '87, McKinney, TX, is SMT Process/Product Engineer, Telecommunication Division, Rockwell Inter., Richardson, TX. She presented a paper, "Using SPC to Improve the SMT Process," at a SMTA Conference in Boston, MA. It was published in the July 1990 issue of The SMTA Journal of Surface Mount Technology.

Mark W. Kindig, Camp Hill, PA, has been promoted to Corporate Air Quality Manager at Gannett-Fleming, Inc. The firm is a multidisciplined, nation-wide consulting company headquartered in Harrisburg, PA.

1984 **Stassi Dene Henson Cramm**, Program Manager, USAF, has been transferred from Edwards AFB, CA to Las Vegas, NV.

Denise L. Flora, MS(ME) '86, U. of Ca. (Berkeley), has been promoted to Senior Engineering Project Manager and Assistant Director of the Industrial Electrotechnology Laboratory, North Carolina Alternative Energy Corp., Research Triangle Park, N.C. Flora, a resident of Cary, N.C., recently gave birth to her second child, a son.

Andrew M. Hartunian, MS(Ind. Engr.) '90 UIC, is a Project Industrial Engineer with Inland Steel, E. Chicago, IN.

D. Michael McFarland, MS '86, Ph.D. (AAE) '90, has accepted a position as Assistant Professor, Department of Mechanical Engineering, Univ. of Connecticutt. He is doing research in vibration and control of structures and is teaching a measurement and dynamics laboratory course.

Glen T. Mari, San Francisco, CA, has been named Application Engineer Manager for Marc Flow Products with Horika Instruments/Semiconductor Equipment Group, Sunnyvale, CA.

1985 **Jennifer L. Anderson**, Grayslake, IL, is a Senior Quality Engineer with Abbott Laboratories, Abbott, IL, in the

Diagnostics Division. She is responsible for validating equipment and utilities and documenting that they are capable of full range operation within specification.

Howard Lee Danzyger, MS(IE) '87, Georgia Tech, has been named Industrial Engineer, Fellowes Manufacturing, Itasca, IL.

Thomas K. Lynch is employed by Coldwell Banker Commercial, Houston, TX.

Laura A. Shaffer Smith is a Design Engineer, Therma-Care, Niles, IL. She with her husband and two sons reside in Rolling Meadows, IL.

Paul G. Stewart, Greencastle, IN, is employed as District Manager, Johnson Controls, Indianapolis, IN. He is the father of a new son born last November.

1986 **Larry M. Kaplan**, JD '89, has completed a clerkship with Judge S. Jay Plager, Court of Appeals for the Federal Circuit, Washington, D.C. He has resumed employment as Intellectual Property Attorney with William, Brinks, Olds, Hoter, Gibson and Lione, Chicago.

Anthony L. Schaff, Knightdale, NC, is a Process Engineer with Abbott Laboratories, Rocky Mount, NC.

Kenneth P. Geuskow is a Peace Corps Volunteer specializing in Urban Planning in Birathager, Nepal.

Stanley T. Gratt, Des Plaines, IL, is with Andersen Consulting, Chicago.

Laurie Taylor Lundborg is an Associate Quality Engineer, Furnas Electric Co., Batavia, IL. Lundborg who is active in American Society for Quality Control and Society of Women Engineers is studying for a MBA at Northern Illinois University.

Kent Allen Miller, MS'90, is employed as a Project Design Engineer, Ford Motor Co., Dearborn, MI. With his wife and new-born son, he lives in Belleville, WI.

Jennifer L. Waggoner Patselas, Kansas City, MO, has been employed as a Systems Programmer, The Federal Reserve Bank of Kansas City. She reports she was recently married.

1987 **Ruta Sidrys** is living in Malaysia where she heads a 7-month software implementation for a car-radio manufacturer. She served an IEASTA internship in Switzerland (1985) and work-study in Nanjing, China (1987). She writes that: "My international experiences combined with my GE project management skills have led to my position of responsibility. Keep up those invaluable international engineering programs." Her address is Penaug Parkroyal, 11100 Batu Ferringhi, Penang, Malaysia.

1988 **Jacquelyn Sue Beller**, MS '90, has accepted a position as the Technical and Support Manager of Aegis International, New York City. She resides in Manhattan.

1989 **Dean Andres Brusnighan**, MS '90, has taken a position as Rural Assisting Technology Specialist at Purdue University working with farmers who have disabilities. While at UIUC he held a part-time position with The Rehabilitation Center assisting students with disabilities gain access to computers.

Vladimir V. Kokotovic, Birmingham, MI, has taken a position with Test Systems and Simulation, Inc., Madison Heights, MI.

Shelia J. Manion, MS(CE) '91, has been employed as a Structural Engineer with John Frauenhoffer & Associates, Champaign.

Alisa L. Loomis Musler, Wheaton, IL, is an End User Computing Analyst at Pausophic Systems, Lisle, IL.

Diane Geralyn Ott, has been transferred by GE Plastics from Massachusetts to Georgia to complete her training program. After positions in marketing and engineering for 18 months, she is working as a Materials Engineer in Atlanta.

Neil Bennett Rosenblum is a Design Engineer with Delco Products Division of General Motors. He lives in Kettering, OH.

Rick S. Shanley has moved to Joliet, IL following a promotion to CEII Resident Engineer, Illinois Department of Transportation. After the birth of his first child, a son, he says, "Parenting makes the GE curriculum look like a cake-walk."

Douglas Alan Wilcoxon is a Process Engineer with Aparco Inc., Hillsboro, IL. He announces the birth of a daughter on Jan. 7, 1991.

Stephanie Ann Connolly, is enrolled in graduate classes in The Operations Research Center, MIT, Cambridge, MA.

Chris Alan Masin has accepted a position of Design Engineer with Trellex Morse, Keokuk, IA.

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