

# GENERAL ENGINEERING NEWSLETTER

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

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Deborah L. Thurston

#### MAJOR RESEARCH AWARDS GO TO TWO GE PROFESSORS

Two members of the General Engineering faculty have received prestigious academic awards.

-Scott A. Burns, associate professor, has been named an associate in the Center for Advanced Study for 1992-93 by the UI Board of Trustees.

- **Deborah L. Thurston**, assistant professor, has received the 1991-92 Junior Xerox Award.

In addition, **Professor Burns** was designated as a Beckman Associate which recognizes outstanding younger associate candidates who have made distinctive scholarly contributions in the sciences.

He was cited for his works on the classes of problems that are solved most effectively by the monomial method. Appointments as an associate provide release time from teaching duties for creative work on scholarly research.

Burns joined the GE faculty in 1985 after graduation from GE in 1980 and M.S. and Ph.D. degrees from UI Civil Engineering.

He has been regularly honored by his students for the Excellent Teaching Award.

Thurston was recipient of \$1,000 cash for the best research by an assistant professor during 1990-91.

A GE faculty member since 1987 after earning the M.S. and Ph.D. degrees in Civil Engineering from Massachusetts Institute of Technology, she was graduated from the University of Minnesota in 1978. She previously worked for the Minnesota Pollution Control Agency.

**Professor Thurston's** research shows that computer aids to design should assist engineers not only in making design decisions but also in considering the economic implications of those decisions for manufacturing.

Both Burns and Thurston were selected as 1989 Presidential Young Investigators by the National Science Foundation.

#### SCIENTIFIC GRANTS FUND NEW ALGORITHM LAB ESTABLISHED IN GE

A new research laboratory has been established in the Department of General Engineering—the Algorithm Visualization Laboratory. Located in 304 Transportation Building, the director is Prof. Scott Burns and it is staffed by five student research assistants. Presently the support staff consists of Tony Carr, Eric Chern, Randall Eike, Tiffany Hanisch, Jeffrey Linderoth and Mark Maslov.

Support for the AVL comes from a \$36,500 gift from Apple Computer, Inc., \$37,500 from the National Science Foundation as matching funds, and \$15,000 from the National Science Foundation as undergraduate research assistantships.

Recent scientific literature reveals a flurry of interest in the areas of chaos, dynamical systems, and fractals. Most of this work concerns the dynamics of complex physical phenomena, such as turbulent fluid flow, weather patterns, even dripping faucets. **Prof. Burns** says that computer graphics has assumed an important role in this endeavor, providing visual clues to the inner workings of chaotic systems in the form of fractal geometry.

The new AVL facility will apply the tools that have been developed to investigate these systems in a completely new way. Instead of investigating complex physical behavior, they will be applied to investigating complex algorithmic behavior observed in iterated numerical methods in engineering.

The original research project that motivated the creation of the AVL has been active since 1988. In that time, approximately 500 graphical constructions have been generated, representing various numerical methods applied to various engineering applications.

**Prof. Burns** states that different types of algorithmic behavior are easily observed using graphics. "In particular, two types of graphical constructions are especially useful: 'basins of attraction' and 'phase portrait' constructions."

The AVL will support research that seeks to understand behavioral aspects of numerical methods, specifically, behavioral aspects that defy conventional mathematical analysis.

Tangible results of the research are expected to be threefold: (1) guidance for the engineer in selecting the type of numerical method for a particular task; (2) basic understanding of the performance relationships between existing numerical methods; and (3) unexpected observations that suggest new directions for research in numerical methods.

Already research efforts have produced useful results. **Prof. Burns** states that a new technique for solving systems of algebraic equations using monomial approximations has been discovered recently that exhibits many unusual and desirable characteristics. **Prof. Burns** will be presenting his findings this summer at the World Congress of Nonlinear Analysts in Tampa, FL.

# From the Department Head Prof. Hugelman Announces



The mission of the Department of General Engineering is undergraduate and graduate education, the development of new knowledge through research involving our students, and providing service to the citizens of Illinois and the nation. A strong and active relationship with industry has been an important component of its effort to fulfill its mission.

The capstone course in project design has been at the forefront of undergraduate engineering education for over two decades. In the last five years, the Accreditation Board for Engineering and Technology (ABET) has required a capstone design course for all engineering curricula. But what makes the General Engineering capstone design course so special? The close interaction between industry and the department, with real-world projects, and most importantly, an industry advisor, conveys a sense of realism, importance, and urgency to the design problem that is hard to obtain with internally generated projects. The best projects both in terms of intellectual content and degree of difficulty and also in the level of excitement and quality of solution by the students are those that address substantive engineering problems and have the attention of the technical leaders in the company.

During this academic year the Department has had thirtynine industry projects with a diverse group of companies ranging in size from Fortune 50 to small business. Each company brings its unique problems to the course, which provides a wonderful learning and laboratory experience for all the students.

The partnership of industry in masters level research and design projects that stretch over three semesters is a logical extension of the Department's highly successful undergraduate program. Projects that have a deeper focus on a problem and a longer permissible time span for completion are ideal for a masters level student.

Why is industrial interaction so important at the graduate level? Collaboration with our Industrial partners is a mutually beneficial interaction. Industry benefits through its access to the resources of the University of Illinois. Students and faculty address problems and provide solutions that are important to business. The university and the engineering profession benefit through the development of new knowledge, the support of graduate students who will soon be hired by industry, and the definition of areas of research that are important to strengthening

# Retirement From Faculty

Rodney D. Hugelman, Adjunct Professor in the Department of General Engineering since 1976, will retire at the end of the current academic year.

He says he has no plans to leave the community and expects to remain active with his consulting and doing some research.

Hugelman received his B.S. and M.S. degrees in mechanical engineering from Oregon State University and his Ph.D. in aeronautical engineering from Oklahoma State University.

After a stint in private industry, he entered the Air Force and spent several years with Aerospace Research Laboratories in Dayton, Ohio. He left the Air Force in 1968.

Hugelman has served as an executive consultant for research and product development for industry. He holds a patent on a fluidic robot which he designed.

He is a registered professional engineer in Illinois and a member of ASEE, AIAA, ASME and Sigma Xi.

#### Faculty Members Honored As Outstanding Advisors

GE faculty members continue to receive numerous designations as Outstanding Advisors by the College Dean's Student Advisory Committee.

This year five were selected.

The honorees are: Profs. Thomas F. Conry, James V. Carnahan, David E. Goldberg, David C. O'Bryant and Louis Wozniak.

They were honored on March 30 at the Advisor's Award Banquet at the University Inn.

### 3 Staff Members to be **Honored for Long Service**

Three members of the General Engineering staff are being honored for long service to the University of Illinois.

Sydney P. Cromwell, Administrative Aide, and Peggy R. Hills, Transcribing Secretary IV, are completing 15 years service. Carolyn N. Reed, Transcribing Secretary III, has 10 years service.

The honorees will receive a certificate and lapel pin.

In addition, Marilyn Butler, Staff Stenographic Secretary, will complete 30 years service on Sept. 10, 1992. The new Transcribing Secretary III, Lynne Hoveln, has 7 1/2 years of service with the U of I.

the technological base of U.S. industry. By increasing the amount of Department/Industry collaboration at the graduate level, a greater number of highly qualified graduate students can be educated and then carry their high level of technical expertise with them to engineering jobs in industry. This is the fulfilment of the mission of the Department.

> Thomas F. Conry Professor and Head

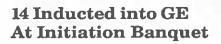
# Laura Antonacci Receives 100th GE Graduate Degree

Laura A. Antonacci, Hampshire, IL, has completed the requirements for a MS degree from the Department of General Engineering.

She becomes the 100th graduate from the GE Graduate Program since it began in 1979.

Ms. Antonacci is employed by Arthur Andersen Consulting, Chicago.

The first graduate degree from GE was awarded in 1981 to Bradley Mottier, now of Jacksonville, FL. He is now Vice President of Marketing for Unison Industries, Jacksonville, FL.



Fourteen General Engineering students were inducted into Gamma Epsilon, General Engineering honorary, at the organization's fall banquet.

They are: Bruce Atkins, New Berlin; Nilda Barreiro, Wauconda; Juliette Bunag, Des Plaines; Christopher Carson, Colchester; Donald Chamberlain, Palo; Clint Conrady, Urbana; Nancy Erler, Inverness; David Ferguson, Montgomery; Matthew Houchens, St. Joseph; Dawn McGhee, Schaumburg; Michael Smith, Clarndon Hills; Christina Tidd, Bloomington; Christine Timko, Joliet; and Eric Vallejo, Skokie.

# **Faculty Notes**

#### Prof. Manssour H. Moeinzadeh

— has been appointed as a member of the United States National Committee on Biomechanics representing the American Society of Biomechanics. This prestigious national committee sets the agenda and provides future research directions and funding opportunities for biomechanics activities in the Nation;

— presented one of the keynote lectures at the First International Conference on Computer Applications in Science, Technology and Medicine in Iran. The topic of his lecture was "Trends in the Use of Computer Aided Design (CAD) in the Evaluation of Vital Body Segment Parameters and Its Application to the Articulating Total Body (ATB) Models." He was also co-chair of the Organizing and Editorial Committees for this international conference which was held at the University of Isfahan from Dec. 27 to Jan. 3, 1992. More than 1200 scientists and scholars from 36 different countries attended this conference;

— as chairman of the Biomedical Engineering Division (BED) of the American Society for Engineering Education (ASEE), he has been working on the upcoming ASEE/BED Annual Conference to be held at the University of Toledo, OH, on June 21-26, 1992.

# Select Two GE Students for Engineering Council

Two students from the Department of General Engineering have been elected to positions on the 1992-93 Engineering Council.

Monica Heckert, Sterling, junior, will serve as Awards Vice President.

Eric Hiller, Manito, freshman, will chair the Engineering Information Bureau.

#### GE Team Places Second In EOH Design Contest

An exhibit by Jason Birch, Decatur, IL, and James Clark, Bourbonnais, IL, seniors in General Engineering, won second place in the W. J. "Jerry" Sauders Design Competition during Engineering Open House, February 28-29.

Name of the device they entered had the intriguing name, "Little Bunny Foo Foo."

Theme for this year's Open House was "Unleashing Tomorrow's Potential."

Mike Bishop, freshman, LeRoy, IL, and Louis Luangkesorn senior, Morton Grove, IL, represented General Engineering on the EOH Committee.

#### **More Faculty Notes**

#### **Prof. Dan Metz**

- Continues to teach and research in the area of vehicle dynamics and accident reconstruction. In February of 1992, Prof. Metz and four former undergraduate students, Michael Dover, John Fisher, Victoria McCleary and Errol Shavers published a refereed SAE paper entitled "Comparison of Linear Roll Dynamics Properties for Various Vehicle Configurations." Shavers, who now works for Proctor and Gamble, presented the paper at the 1992 SAE International Congress and Exposition in Detroit, MI. It also appeared in special SAE Publication SP-909, "Vehicle Dynamics and Rollover Propensity Research."

- Chaired the first SAE Technical Highlight Symposium ever given, entitled "Vehicle Dynamics Before and After the Accident." Professor Roland Ruhl, also of the Department of General Engineering, was a part of that program. Prof. Metz also delivered an invited three-day vehicle dynamics seminar for the SAE held in Dearborn, MI.

- Reports that consulting is going well and that he managed to win the first Golden Masters handball tournament he was eligible to enter (you have to be 50 years old!).

Send us your personal items. Keep your address current.

# Thomas E. Prickett Named 1992 Distinguished Alum By Gamma Epsilon Panel

The 19th Annual Gamma Epsilon Distinguished Alumni Award has been awarded to Thomas A. Prickett, president, Thomas A. Prickett and Associates, Inc., a water resources consulting firm, Urbana, IL.

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

A plaque was presented to Prickett at the Annual GE Honors Banquet April 16 by Elizabeth M. Fikes, Springfield, Gamma Epsilon president.

Prickett who is a native of Pekin, IL, was graduated from the U. I. with a B.S. in GE in 1960.

In July, 1960, he became a professional scientist in the Hydrology Section, Illinois State Water Survey, Urbana. He served in that position until August, 1977.

He then became Vice President and General Manager, Water Resources Division of Camp Dresser and McKee, Champaign. He was responsible for a staff of 12 groundwater hydrologists.

Prickett left CDM in 1981 and formed his own consulting firm working throughout the United States and in several foreign countries.

He has had an outstanding career for the past 32 years with world-wide experience in groundwater research, aquifer evaluation, well-field development and design, mining impact analysis, mass transport problem and process investigations, computer modeling, conducting modeling seminars, and litigation as an expert witness.

Prickett is a registered professional engineer in IL and holds membership in the National Water Well Association, American Institute of Hydrology, the Society of the Sigma Xi and formerly the American Society of Civil Engineers.

He has been recipient of several prestigious awards including Scientist of the Year by the National Water Well Assoc.; C. V. Theis Award of American Institute of Hydrology; and Life Membership Award in National Water Well Assoc.

Also he has been adjunct professor of Geology at Oklahoma State U. and lectured at 18 universities as the 1987-88 Henri Darcy Distinguished Lecturer.

Prickett has been prolific at writing engineering and scientific reports including 100 reports, book chapters, publications and other scientific articles.

While keeping busy with his consulting, research and teaching, he has transcribed a "Fighting Illini Song Book" piano sheet music with his desk top computer.

Prickett is married and is the father of two daughters. His hobbies include music, skiing and weekend farming.

#### GE Students Honored As Knights of St. Pat

Two students from the Department of General Engineering were named 1992 Knights of St. Patrick.

They are Elizabeth M. Fikes, senior, Springfield, IL and Tiffany A. Hanisch, senior, Mendota, IL.

The students were honored at the annual St. Pat's Ball, February 29, in the Illini Rooms, Illini Union.



Thomas E. Prickett

#### **More Faculty Notes**

#### Professor Mark W. Spong

- Will attend 1992 IEEE International Conference on Robotics and Automation May 10-15 in Nice, France. He will present two papers: "Remarks on Robot Dynamics: Canonical Transformations and Riemannian Geometry," and (with F. Ghorbel) "Adaptive Integral Manifold Control of Flexible Joint Robot Manipulators.";

- Will travel to Lund Institute of Technology, Lund, Sweden, to serve as a traditional "opponent" of Ola Dahl, a doctoral candidate in robot control theory;

- June 1 (with F. Ghorbel) will present, "Adaptive Integral Manifold Control of Flexible Joint Robots with Configuration Invariant Inertia," at the American Control Conference in Chicago;

- Will present two papers July 1 in San Francisco at the Japan-USA Symposium on Flexible Automation: (with S. Bortoff) "Pseudolinearization of the Acrobot using Spline Functions" and "On the Robust Control of Robot Manipulators."

- Was faculty advisor of the Acrobot exhibit which won the \$500 first prize in the Lockmiller competition at Engineering Open House. The two-link robotic device was built by Scott Bortoff, Ph.D. candidate in the Electrical Engineering Department and a research assistant in The Coordinated Science Lab. He was assisted by GE graduate students Alan Fitzmorris and Chang-Hsun Jon Huang.

## Summer and Fall Dates To Note

Summer Session Begins	June 15
Summer Session Exams	Aug. 7-8
Fall Classes Begin	Aug. 27
Homecoming Weekend	Oct. 23-24
Thanksgiving Vacation	Nov. 25-29
Fall Classes End	Dec. 11
Fall Exams	Dec. 14-19

#### Present GE Department Student Honors April 16 At Annual Awards Banquet

The annual General Engineering Awards Banquet where students, a faculty member and an alumnus are honored was held April 16 at University Inn, Champaign.

The event was jointly sponsored by Gamma Epsilon and

the Department.

Recipient of the prestigious Edward S. Fraser Award as the outstanding GE senior scholar was Tiffany A. Hanisch, Mendota, IL. She received \$200 cash and a plaque; also her name will be inscribed on a permanent wall plaque in the Transportation Building.

Donald L. Chamberlain, Polo, IL, received the Randolph P. Hoelscher Award as the outstanding junior. The honor consists of \$100 cash and a certificate based on scholarship, leadership promise, activities and cultural development.

The 1992 award to the Distinguished Alumni given by Gamma Epsilon went to Thomas A Prickett, Champaign, IL.

(Details appear in a separate item.)

**Prof. Scott A. Burns** was presented the Excellence in Teaching Award. The annual honoree is determined by Gamma Epsilon and receives \$500 cash and a plaque. Burns also won the award in 1989 and 1990.

Elizabeth M. Fikes, Springfield, IL, was recipient of the Jerry S. Dobrovolny Leadership Scholarship. Criteria for the department award is for demonstrated outstanding leadership qualities and academic scholarship. A certificate and \$500 cash were awarded.

Yun Qi Tian, Beijing, China, and Kris A. Warmann, Elmhurst, IL, received the William A. Chittenden Awards as the most outstanding Master of Science graduate students in General Engineering. The award consists of \$1,000 cash and a certificate to each.

Other awards included:

- Herbert J. Sprengel Award: \$100 to Jeffrey M. Cortez.

Wheaton, IL, for the best design project by a GE junior;

- Bernt O. Larson Project Design Award (Spring 1991): \$150 each to John L. Acree, Mt. Carmel, IL; Lisa E. Boreland, Barrington, IL, and Victor J. Gamez, Chicago, IL, for their design, "Slug and Mist Catcher for Pipeline Blowdown." Prof. W. Brent Hall was faculty advisor.

Second place of \$75 each to Sassan Attari, Barrington, IL, E. Matthew Gaertner, Urbana, IL and Christine J. Shields, Joliet, IL, for "Bottom Ash Locator for a Bottom Impounded Hopper." Prof. Henrique L. M. dos Reis was faculty advisor.

### **More Faculty Notes**

## **Prof. Dave Goldberg**

- Flew to Japan on March 8 as part of a ten-day tour to investigate genetic algorithm research in Japan by visiting universities in Tokyo, Osaka and Kyoto. Also he visited the laboratories of NEC, Mitsubishi, Kawasaki, and Fijitsu. His tour culminated in an invited keynote address to the Information Processing Society of Japan entitled "Genetic Algorithms Today and Tomorrow."

#### **Prof. Scott Burns**

 Received a \$16,800 grant from the National Science Foundation to support undergraduate research experiences in General Engineering;

- Presented a paper on the monomial method at the National Science Foundation Design and Manufacturing Systems Conference in Atlanta, in January.

#### Two GE Student Projects Receive Lincoln Arc Awards

Two student project teams from General Engineering have been cited by The Lincoln Arc Welding Foundation in the

1991 Student Engineering Design Competition.

A Silver Award (second place) granting \$750 each went to the project: "Heat Transfer Optimization of Refrigerator Condenser." The team consisted of Lawrence H. Chiang, Winfield, IL; Paul R. English, Hamilton, IL; Mark E. Simek, Glen Ellyn, IL; and Gregory H. Wuerfel, Naperville, IL. Faculty advisor was Juraj V. Medanic.

A Merit Award of \$250 each went to the project: "Analysis and Design of a Quench Test Device." The team was composed of James Emery, Wood River, IL; Dan Long, Dixon, IL; and Eric Vandergraaf, Glenview, IL. Faculty advisor was James V.

Carnahan.

In the past 21 years, GE projects have received 29 awards from Lincoln Arc Welding.

#### Professor Louis Wozniak

- was an invited participant at the North American Research and Development Forums: Repowering Hydro, February 24-26 at Kansas City. The meeting was an outstanding success in raising visibility of the hydroelectric industry and in goals to prepare for prioritizing 21st Century research.

- authored the following articles which appeared in IEEE

Transactions on Energy Conversion:

- (with G. Orelind, J. V. Medanic, T. A. Whittemore) "Optimal PID Gain Schedule for Hydrogenerators - Design and Application";

 "A Graphical Approach to Hydrogenerator Governor Tuning," (presented at IEEE Power Engineering Society Winter Meeting);

- (with F. Collier and J. Foster) "Digital Simulation of

an Impulse Turbine: The Bradley Lake Project";

- (with F. Collier) "Control Synthesis for an Impulse Turbine: The Bradley Lake Project";

- (with J. Herron) "A State-Space Pressure and Speed

Sensing Governor for Hydrogenerators";

- (with R. Erickson) "Maximum Slow-Rate Governor Control for Impulse Turbines";

- "Determining Hydro Generating System Stability and

Performance"

- (with **J. Lansberry** and **D. Goldberg**) "Optimal Hydrogenerator Governor Tuning with a Genetic Algorithm."

#### Prof. Mark G. Strauss

-Was invited to attend a short course on Rehabilitation Engineering and Adaptive Technologies at the University of Hawaii at Manoa. Co-sponsors Hawaii Department of Vocational Rehabilitation, Hawaii Department of Education and Hawaii Assistive Technology Project.

- Participated in a poster session, "Measurement of the Dynamic Forces During Normal Wheelchair Propulsion," for American Society of Biomechanics, November, Tempe, Arizona.

- Wrote article, "Empowering Rehabilitation Counselors with Technology for Journal of Rehabilitation Education.

- Made presentation, "Relative Performance of Aluminum and Galvanized Steel Evaporators," March 23 at the 14th Annual Conference of the International Institute of Ammonia Refrigeration in Miami, Florida.

- Served as advisor to a student project which won second place at Engineering Open House for undergraduate research. Entitled "A Feeding Device for the Disabled," it was presented by bioengineering students.

- Taught an extramural course, "Adoptive Technologies for Persons with Disabilities," this spring at College of DuPage.

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# **Alumni Notes**

- 1948 John L. Eberly recently retired as chairman of the Board of Protectoplas Co., Division of Ebco, Inc. which designs and markets plastic tanks, tank liners and processing equipment. He now resides at 210 Peppertree Drive South, Vero Beach, FL.
- 1949 Harry I. Weisman has changed his residence to 555 W. Cornelia #911, Chicago, IL.
- 1950 S. Dean Albrecht, Ohio, IL, is president and part owner (along with his two sons) of the Albrecht Well, Inc. The firm serves central and northern IL. Another family firm, The Farm Corp., owns and operates a grain-beef-dairy operation.
- 1960 Alan E. Gosnell, Warren, OH, has retired from his position with Pacher Electric. A member of the Fighting Illini basketball team 1958, 59 and 60 while at the UI, he was drafted into the Army Corps of Engineering. He joined Packer Electric upon his discharge.

Julius Edwin Monge, MSM '72, Lake Forest Graduate School of Management, AMP '79, Harvard U. Business School, is employed by Leat Management, Inc., Westminster, CO.

- 1963 Champ W. Davis, JD '66, is a partner in a newly established law firm, Davis, Mannix and McGrath, Chicago. He also is currently chairman of The Chicago Bar Association's Computer Law Committee.
- Robert D. Leonard, Winnetka, IL, BS (Communications) '65, has been named product manager, fiber optic cables, Andres Corp., Orland Park, IL. He served as coauthor and editor-in-chief Transmission Lines Chapter of National Association of broadcasters (NAB) Engineering Handbook, 8th edition.

1969 Gary Russell Allie, Chicago, MBA '71, has received a one-year AISI fellowship with the American Iron and Steel Institute in Washington, D.C. He will return to Inland Steel in Chicago. Allie is Vice President of the General Engineering Constituent Alumni Assoc.

Joel G. Herning, Downers Grove, IL, has been promoted to senior design engineer VOP, Des Plaines, IL.

- 1970 Earl "Sandy" Moldovan has been named President of Clark Engineers, a 50-person consulting firm in Peoria and Salem, IL. A son, Kristopher is a sophomore in GE and a daughter Jennifer, is a first-year medical student at UIC. Moldovan resides in Washington, IL.
- 1972 Terrence R. Phelan, MS '78, has been named an Associate with the firm, Ralph Hahn and Associates, Inc., Springfield, IL. He has moved to Springfield after spending 15 years in the Cincinnati, Ohio area.

1973 Bill Dean McKinney has assumed the position of Manager of Gas Operations and Storage Natural Gas Division, Illinois Power Co., Decatur, IL.

Terry N. Snyder, Sacramento, CA, is a water resource control engineer, State Water Resources Control Board. He became a Registered Environmental Assessor in 1991.

Ralph J. Wagner, MS (Env. Eng.) '73, MBA '77, SUNY, Buffalo, has been promoted to marketing manager, Corporate Marketing, NALCO Chemical Co., Naperville, IL. He has global responsibility for marketing training. He makes his home in Wheaton, IL.

JD '77, Suffolk Univ. School of Law, has been appointed General

	More than 115,000 alumni are—including approximately 90,000 who are life members. As a member you'll receive the Illinois Alumni News of U of I Chicagoan, as well as publications of your college or departmental constituent association. You'll qualify for our tour program, our insurance program and the annual family camp. And you'll continue your loyal involvement with something great—your University of Illinois			
Are you	To join, either as an annual member or as a life member, return this form with your check to: Alumni Association, 227 Illini Union, 1401 West Green Street, Urbana, IL 61801. (Make your check payable to the University of Illinois Alumni Association.)			
a member	One year single membership—\$25  Three year single membership—\$65  One year husband-wife—\$30  Three year husband-wife—\$80			
of the	SINGLE LIFE MEMBERSHIP—\$250. (INSTALLMENT PLAN: \$300—\$10 DOWN, FOUR YEARLY PAYMENTS OF \$72.50			
Alumni	HUSBAND-WIFE LIFE MEMBERSHIP—\$300. (INSTALLMENT PLAN: \$350—\$10 DOWN, FOUR YEARLY PAYMENTS OF \$85.00.)			
Association?	NameS.S.#  Spouse's name (if an alumnus)			
	If female, list maiden name. Does spouse have a U. of I. degree?			
	College & deptCollege yr			
If you're already a member, thanks for your support. If you graduated within the last two years, write for special life membership rates.  Please check: Urbana-Champaign Campus Chicago Campus. If you did not attend the University of Illinois, please check this box.				

Counsel and Chief Legal Counsel for The Illinois State Police.

Kathryn A. Davis, MS '75, has started a marketing consulting practice in New York City for professional service firms such as law, CPA, engineering and architecture to achieve their marketing goals. Ms. Davis was co-recipient of the GE Distinguished Alumni Award in 1990.

Edgar Reno Maurer, MS (Ind. Eng.) Purdue, has been named to a corporate resource group to support the implementation of activity based costing at Delco Electronics

Corp., Kokomo, IN.

Lynn (Richards) Junas Dwyer, MS '84, has been named senior analyst, Distribution Warehouse Center, Ames Department Stores, Rocky Hill, CT. She resides in Southbury,

Philip John Morettini, MBA '81, U. of Detroit, has assumed the position Division Manager, Software Products Division, Horizons Technology, Inc., San Diego, CA. The 15-year-old firm specializes in custom software development and systems engineering integration. Morettini was one of the founding members of SPD two years ago.

Eugene V. Dunn, Jr., MBA '84 Northwestern U.; MA (Japanese History) '89 U. of Chicago, is a Senior Product Engineer with Panasonic Factory Automation, Franklin Park, IL. He resides in Elgin, IL.

Edward J. Jaselskis, Ph.D. (Construction Eng.) '88, U. of Texas-Austin, is an assistant professor in the Civil Engineering and Construction Engineering Department at Iowa State Univer-

Jane Ellen Kienstra is a sales representative with the 3M Company of Newton, MA. She resides in Jamaica Plain, MA.

David B. Abel, Hermosa Beach, CA, JD '91, Loyola U., L.A., has accepted a position as associate attorney, Intellectual Property Section, Graham and James, Los Angeles.

Harry D. Daniels has been named plant manager, K&M

Control Valve, Des Moines, IA.

Mark R. Nachtrieb, MS '83, is Overseas Staff Development & Coordinator, Office of Training-Program Support, Peace Corps, Washington, D.C.

Gary James Vroman, MS (Engr. Management) Milwaukee School of Engineering, has been promoted to Sales Product Manager-Jet Engine Forgings, Ladish Co., Inc., Cudahy, WI. He resides in Racine, WI.

Joe L. Brittin, MA (Management Info Systems) '91, Sangamon State U., is a Nuclear Safety

Engineer, Ill. Department of Nuclear Safety.

Keith R. King, MS '83, as a senior engineer is a technical representative working for the U.S. Government in Scotland. He provides software maintenance for computer networks.

Randall D. Schwandner is M/S Manager with Jostens

Learning Corp., Springfield, IL.

Janina Marie Skorus-Neely, MBA '91, U. of Chicago, is Manager, Knowledge Based Systems Group, Anderson Consulting.

Toni Tegtmeier Baumann has been awarded MBA from Keller Graduate School of Management. She resides in Carpentersville, IL

Ervin Scott Eiler has accepted a position as Advanced

Systems Engineer, Electric Data Systems, Troy, MI.

Kevin W. Krak, McHenry, IL, has been named Architectural Project Manager, Toys-R-Us, Pazamus, NJ.

Kelly W. Shoemaker, MBA '85. U. of So. Miss., is a sales engineer with Allen Bradley Co., Miamisburg, OH and resides in Spring Valley, OH.

Annette G. Drilling Bouska of Riverwoods, IL, is a Senior Project Engineer, Diagnostics Division, Abbott Laboratories, No. Chciago, IL. Recently married, she is an MBA candidate at The Lake Forest Graduate School of Management.

Brian D. Fruchter, MSE (Ind. Eng.) '88, Arizona State U., is an associate engineer with ITT Research Institute, Chicago.

He resides in Deerfield, IL.

Jeff A. Gurosh, Oakbrook Terrace, IL, has been promoted to General Manager, Admiral Heating and Ventilating, Inc., Hillside, IL. The company is a commercial based HVAC Contractor specializing in tenant development, retrofits and various "Design Build" projects in the Chicago area.

Christine D. Condon has been named a member of The Technical Staff of AT&T Bell Laboratories, Columbus, OH. She resides in Reymoldsburg, OH.

Kurt Lyle Koenig, MS '89, has been promoted to senior engineer, Quality Engineering, General Dynamics, Ft. Worth,

TX. He resides in Richland Hills, TX.

Michael R. Murphy, MBA '91, U. of Chicago, has accepted a position as Corporate Finance Associate, JP Morgan, New York City.

Anthony L. Schaff, Highland Park, IL, is a Compliance

Engineer with Abbott Laboratories, No. Chicago, IL.

Mary Therese Sims Vouck, MBA '92, U. of Michigan, is Sales Engineer with York International, Troy, MI. She resides in Grand Rapids, MI.

Michael J. Chica, MS '90, has been named Design Engineer-medium wheel loader structures by Caterpillar, Inc. He makes his home in Glendale Heights, IL.

Andrew S. Hill, Escondido, CA, has been promoted to Design Engineer/Systems Administrator for Manitou Engineering Co., Escondido. He recently passed the California Registered Professional Civil Engineer examination.

Karin Ulstrup Mitola is an Executive Consultant at Peterson Consulting Limited Partnership, Chicago. The firm specializes in business dispute and litigation consulting on engi-

neering and accounting matters.

Kevin Russell Para, Aliso Viejo, CA, has become Senior Sales Engineer with West Coast Polymers, Long Beach, CA.

Therese M. Villegas has accepted a new position as Manufacturing Engineer/IE with Packard Electric, General Mo-

tors, Laredo, TX.

Brent S. Virgin, Lebanon, IL has left Andersen Consulting to become Senior Information Technologies Consultant with Ernst and Young, St. Louis, MQ.

1989 Kristin Leigh Callaway Chapman, Rockford, IL is a second-year law student at Northern Illinois U. Scott Everett Holwick, Sales Representative with Baxter Healthcare, McGaw Park, IL, has moved from Irvine, CA to Manhatten Beach, CA.

Liz A. Houtz, MBA '91, is an Associate Marketing

Engineer, S & C Electric Co., Chicago.

Lynn Longley, Dallas City, IL, was killed in a one-car accident near Lomas on May 3, 1991. He was a product design engineer with J. I. Case, Burlington, IA and was enrolled in graduate courses at St. Ambrose U., Davenport, IA

Diane G. Ott O'Connor, Duluth, GA, has been named Regional Materials Engineer, General Electric Plastics Division,

Norcross, GA.

Kendall K. Raczek, Grayslake, IL, has accepted a position as Senior Design Engineer with Signode/Illinois Tool Works.

Stephanie A. Connolly has moved to Cambridge, MA, where she will enroll in graduate studies (operations research) at MIT.

James Lee, Chicago, is a first-year student in the North-

western College of Medicine.

Paul W. Mochel, Coronado, CA, has been named Project Manager with Draheim Steel, Inc., San Diego, CA

Petra Polske, Downers Grove, IL, is a Quality Assurance

Engineer, Knowled Electronics, Franklin Park, IL

Jay Saltzman, Northbrook, IL, is a second-year student in the U. of Michigan College of Law. He will be a summer associate at the patent law firm of Fitch, Even, Tobin and Flannery, Chicago.

Karen M. Vallero Capuano, Elk Grove Village, IL, is a Loss Prevention Consultant-Engineering Division, Factory Mu-

tual Engineering, Hoffman Estates, IL

Daniel J. Burns, McHenry, IL, has accepted a position as Project Engineer with Laramore, Douglas and Popham, Chicago.

Mark Frank Buwen has been appointed Civil Engineer, Design/Plan Preparation, Illinois Department of Transpor-

tation, Schaumburg, IL.

Brian J. Gallichio has accepted a position as controls and automation products distributor and systems integrator at Fox Controls, Inc., Elgin, IL.

Mark Thomas Nelson, Geneva, IL, is a member of The

Technical Staff, AT&T Network Systems, Lisle, IL.

Brian Schmitz is a Product Specialist, US Electrical Motors Division, Emerson Electric Co., St. Louis, MO. He

resides at Maryland Heights, MO.

Gregory Wuerfel has been named Design Engineer with Landis and GDys Powers, Inc., Skokie, IL. He resides in Arlington Heights, IL.

### ATTENTION ALUMNI!

#### ATTENTION ALUMNI!

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