

GAANN Fellowships Promotes U.S. Technical Leadership

Since 1991, the School of Civil Engineering nearly doubled the number of U.S. students in Ph.D. studies in civil and environmental engineering at Purdue thanks to two successful proposals to the Graduate Assistance in Areas of National Need (GAANN) program. Sponsored by the U.S. Department of Education, GAANN's objective has been to help the United States retain a technological edge in the world by encouraging and preparing U.S. students for futures in academia and research.

The 21 GAANN fellowships awarded to the School of Civil Engineering are part of the effort to increase the number of doctoral students in areas of national needs such as the deteriorating national infrastructure and increasing environmental concerns. GAANN provides the opportunity for the university to attract U.S. citizens and permanent residents to careers in academia and by drawing from traditionally underrepresented groups in engineering such as women and minorities.

Professor Bob Whitford, who submitted the GAANN proposals in 1991 and 1995 and served as director of the School's program, reports "There is concern that the United States is losing some of its technological edge. The specific focus of the GAANN is to provide fellowships that include a focus on preparing students for a pro-

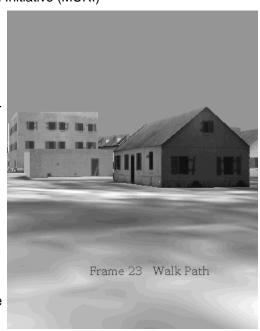
Civil Engineering Professor Leads MURI Research Project and Center

In September 1996, Purdue received an award for a project entitled "Rapid and Affordable Generation of Terrain and Detailed Urban Feature Data" from the Army Research Office (ARO). The award came under the Multidisciplinary University Research Initiative (MURI)

program and amounts to \$5 million over a period of five years. The project and the MURI Center are headed by Professor Edward Mikhail of Geomatic Engineering Area (formerly Surveying Engineering). Other direct participants in the project are: Professor Jim Bethel, also from the Geomatics Area: Professor Dave Landgrebe, from the School of Electrical and Computer Engi-

neering, Professor Ram Nevatia from the Institute for Robotics and Intelligent Systems at the University of Southern California, and Dr. Jim Pearson of GDE Systems, Inc. in San Diego, California.

As the title suggests, the goal of the project is to achieve new levels of automation and productivity in the process of extracting 3D terrain and feature data



from imagery. We typically begin with a hierarchical series of images of a given area such as: SPOT satellite data. medium and large scale digitized aerial photography, airborne multi-or hyper spectral scanner imagery, and terrestrial, handheld photography. The research team members then apply complementary image analysis tools to

(1) determine the geometric parameters of all imagery, (2) determine a prelimi-

Professor Milton Harr selected to National Academy of Engineering

Professor Milton Harr has been for inducted into the National Academy of Engineering. He began teaching at Purdue in 1955 and received his Ph.D. in civil engineering in 1958. Election to the National Academy of Engineering is among the highest professional distinction accorded an engineer. Professor Harr was inducted in October during the National Academy of Engineering annual meeting in Washington.

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Civil Engineering Advisory Council

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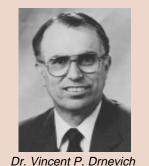
School Focuses on Future - Remembers Faculty Contributions

I am writing this as our faculty and students are well underway for the new school year. In August, I attended summer graduation, and it continued the tradition of excellence of these programs. I'll bet many of you remember your graduation ceremony. It is an important ceremony that affirms the student, provides a sense of pride in parents, family, and friends, and serves to cement a bond between the new alums and Purdue. As a faculty member in attendance, I enjoy a sense of accomplishment and muse about what these new graduates will achieve in their careers.

This past year, we lost three emeritus faculty members, Gerald A. (Jerry) Leonards, Joseph L. Waling, and John D. Wolszon, and an active faculty member, William L. Wood. Jerry was a giant in the geotechnical field who remained active in research and with graduate students until his sudden death. Joe Waling was a faculty member in the structure's area, headed the area for some time and then went on to upper administration. Jack Wolszon was a member of our environmental engineering faculty. Bill Wood, who was only 55, died suddenly from a rare heart disease.

In my last report to you, I told you of our faculty retreat of August 1996. It spawned much fruitful activity and improved communication over the past year. Much effort was spent on the undergraduate program, especially considering the changing needs of industry and the revised accreditation criteria, ABET 2000. These new criteria are much less prescriptive than the previous. However, they require that the objectives for each program be published and that procedures be put in place for assessing how the objectives are being met. Some changes were made in the graduate program to make it more attractive and responsive. More changes are likely to come. At our August 1997 faculty retreat, we focused on refining the strategic plan for the undergraduate program, the graduate program and research.

One of the most significant accomplishments of this past year was the hiring of seven new faculty persons. Stories on these people are included in this issue. An ongoing search for a person in the



Dr. Vincent P. Drnevich Professor and Head School of Civil Engineering

structure's area was successfully completed with Dr. Robert Frosch joining us in January. A separate, school-wide search for four persons began last fall. With the unanticipated retirements of Professors Robert Lee and Edward Ting in December, and the untimely death of Professor William Wood in February, the search number was increased from four to six. Over four hundred applications were received, twenty of the top applicants were interviewed, and six people were chosen as our top choices. Thanks to the excellent work of our search committee and faculty, we were successful in hiring all six of our top choices. Stories on Graham Archer, Katherine Banks, Antonio Bobet, Darcy Bullock, Rao S. Govindaraju, and Timothy Whalen are included in this issue.

Our Advisory Council took the initiative to meet one-on-one with faculty members at the spring meeting to gain insights into the issues facing civil engineering education and the program at Purdue. The Advisory Council with the aid a professional facilitator, Mr. Aldus Knight, then met to synthesize their findings. Afterwards, they presented four items to the faculty as working statements. The facilitator then formed mixed groups of faculty and Advisory Council members to further refine these items. The items include: 1) hire the best and brightest, 2) partner with industry to enhance teaching and research, 3) improve the mentoring process for assistant professors, 4) achieve appropriate balance between teaching and research, and 5) review the issue of specialist versus generalist in the undergraduate program. We are making significant progress in all of these areas.

Our fall council meeting focused on "connecting with students," as students shared their ideas and views about what it means to be a Purdue civil engineering student today. Harold Force, from Columbus, IN, was elected chair of the council, Wally Miller, from LaGrange, IN, was elected vice chair. I thank Chris Burke, the council's past chair, for his dynamic leadership and depth of insight. The Advisory Council provides great value to our School.

This past year presented a special challenge to me with my election in May 1996 as the Chairman of the Department Heads Council (DHC) of ASCE. The DHC consists of twelve department heads/ chairs, with two elected from each of six regions of the country. The DHC represents the civil engineering education community in ASCE. It is heavily involved in all aspects of civil engineering education, especially helping ASCE and civil engineering department heads prepare for the 21st century. One particularly interesting effort is my participation in a special task force that generated a white paper on: The Scholarship Landscape In Civil Engineering: A Bridge Between Rhetoric and Reality," as a means of educational institutional priorities and faculty rewards. You may review and submit comments on this draft using the World-Wide Web at http: ce.ecn.purdue.edu/~drnevich FacWork.html. My workload in the DHC will not let up. I was re-elected this past June for another year.

Three faculty members were promoted this past year with their promotions effective in August: Mark Bowman to professor, Elisa Sotelino and Boudewijn van Gelder to associate professor with tenure. We are proud of their accomplishments and are looking forward to their continued excellence.

We are excited about our new and returning students we have enrolled. The level of energy here is unbelievable. It is a wonderful place to be; it is wonderful to participate in preparing civil engineers for the future.

Vincent P. Drnevich

_ 🕌 Faculty Features .

New Faculty & Staff



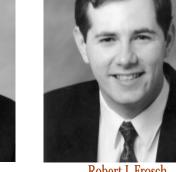
Graham Archer



Kathy Banks



Antonio Bobet



Robert J. Frosch

Graham Archer joined the School of Civil Engineering as an assistant professor in structural engineering in August 1997. He received his B.A.Sc. in 1985 and M.A. Sc. in 1986 from the University of Waterloo, Canada. He received his Ph.D. from the University of California at Berkeley in 1996. Archer's dissertation "Object-Oriented Finite Element Analysis," involved taking a fresh look at the design of finite element programs. In particular, he focused on the philosophy of object-oriented design and programming applied to the finite element method. The resulting program is extremely flexible and serves as a platform for advanced research in nonlinear dynamic analysis.

Prior to his returning to school for a Ph.D., he worked as a consulting structural engineer in both the U.S. and Canada. In that time he designed several buildings and bridge structures of reinforced concrete, prestressed concrete, and steel.

Kathy Banks joined the School of Civil Engineering in August 1997 as an associate professor in environmental and hydraulic engineering. She received a B.S. from the University of Florida in 1982, an M.S. from the University of North Carolina in 1985, and a Ph.D. from Duke University in 1989, all in environmental engineering. From 1989 to 1996, Banks was an associate/assistant professor of civil engineering at Kansas State University. She is a registered professional engineer in Kansas. Banks' research interests include phytoremediation, bioremediation, wastewater treatment, and environmental microbiology.

Banks is currently working on several phytoremediation projects. The use of plants to remediate petroleum contaminated soil is being assessed in laboratory and greenhouse studies, and at field sites in California, Kansas, and Virginia. Results indicate that plants enhance dissipation of recalcitrant petroleum compounds.

Evaluation of the most recently established field site, located at Port Hueneme, CA, will continue through the fall of 2000.

Antonio Bobet joined the School of Civil Engineering as an assistant professor in geotechnical engineering in August 1997. He received his B.S. and M.S. in civil engineering in 1983 from the Universidad Politecnica of Madrid, Spain, where he received the "Guerray Rubio Prize" for outstanding academic achievements. Bobet received his doctorate at the Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, in May 1997. His dissertation, titled "Fracture Coalescence in Rock Materials: Experimental Observations and Numerical Predictions," was the result of both experimental and analytical work on fracture initiation, propagation and coalescence in pre-cracked rock materials in multi-axial compression.

Bobet has nine years experience in industry as a construction manager and as a project engineer. He worked as resident engineer for Ferrovial, a Spanish construction company, where he directed the construction of the N-II Bypass Road in Girona (Spain), the Seu d'Urgell-Andorra (Spain), and the L'Obac road in Andorra. He also worked in the geotechnical division of Euroestudios, an engineering consulting firm, as a project engineer.

Bobet's field of interest is in rock mechanics, specifically in the area of fracture characterization and behavior in fractured rock masses.

Robert J. Frosch joined the School in January 1997, as an assistant professor in the structural engineering area. He received his B.S.E. in 1991 from Tulane University, his M.S.E. in 1992 from the University of Texas at Austin, and his Ph.D. in 1996 also from the University of Texas at Austin. Dr. Frosch is a licensed professional engineer in Louisiana. Prior to joining the faculty, he was a structural engineer with Modjeski and Masters Consulting engineers where he worked on the seismic retrofit projects. His interests include the design and behavior of structural concrete, earthquake engineering, repair and strengthening of structures, and autoadaptive structures.

Frosch's doctoral research at the University of Texas at Austin consisted of developing a precast infill wall system for strengthening nonductile reinforced concrete frames in seismic areas. Many existing structures located in seismic zones lack strength and ductility. The goals of the research project were to provide an effective and economic system that can be used for the rehabilitation of these



Rao S. Govindaraju



Timothy M. Whalen

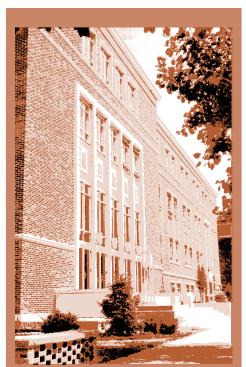
structures. Multiple phases of experimental testing were conducted with the research culminating with the testing of a large scale model specimen. The test specimen, a two-story nonductile frame infilled with the proposed precast infill system, was used to establish the overall behavior of the rehabilitation technique.

Rao S. Govindaraju joined the School as an assistant professor in the area of environmental and hydraulic engineering in August 1997. Govindaraju received his B.S. from the Indian Institute of Technology in 1984, M.S. from the University of Kentucky at Lexington in 1985, and Ph.D. from the University of California at Davis in 1989. He served as a research associate at Davis until 1992, after which time he joined Kansas State University as an assistant professor of civil engineering.

Govindaraju's research interests are primarily in the areas of surface and subsurface flow and contaminant transport. He has additional interest in surface erosion. His current work is centered around using stochastic approaches to address the problems of uncertainty and spatial variability as applied to problems of watershed hydrology.

Timothy M. Whalen joined the School in July 1997 as an assistant professor in the structural engineering area. He received his B.S. in engineering mechanics in 1987 and his M.S. in theoretical and applied mechanics in 1988 from the University of Illinois Urbana - Champaign. In 1993, he obtained his Ph.D. in theoretical and applied mechanics from Cornell University. Among his research interests are linear and nonlinear dynamics of systems and structures, structural control and damping systems, wind engineering, dynamic and structural response of wind-loaded buildings, stochastic dynamics, and continuum mechanics.

Whalen's thesis research was concerned with the dynamic response of symmetric systems and structures. By exploiting the symmetry via group-theoretic techniques, he obtained significant reductions in the computation time of numerical and/or analytical solutions to the linear vibration problem. In addition, he demonstrated the existence of nontrivial solutions to the corresponding nonlinear vibration problem. After graduating, he spent two years at the University of Illinois Aeronautical and Astronautical Engineering Department teaching structural mechanics and researching the nonlinear dynamics of symmetric structures. In 1995, he obtained a National Research Council Postdoctoral Research Associateship at the National Institute of Standards and Technology. His work there centered on the nonlinear dynamics of randomly forced systems, analysis of building code provisions pertaining to wind-induced structural response, and computer-based systems for wind loading standing provisions.



School of Civil Engineering

> Head Vincent P. Drnevich Assistant Head V. James Meyers

Area Heads: Construction Engineering Daniel W. Halpin

Environmental & Hydraulic Engineering Chad T. Jafvert

> Geotechnical Engineering Adolph Altschaeffl

Materials Engineering (Civil) Charles Scholer

Structural Engineering Wai-Fah Chen

Geomatics Engineering Edward M. Mikhail

Transportation and Infrastructure Systems Engineering Kumares C. Sinha

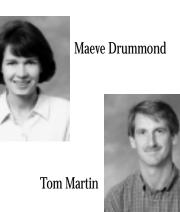


- Faculty Features

Maeve Drummond joined the staff this summer as undergraduate administrator for the School of Civil Engineering. She has a B.A. in Biology from Indiana University and an M.S. in Higher Education Administration from Purdue with an emphasis on counseling. Before coming to civil engineering, she counseled students during Day on Campus for the School of Science. Professor Gil Satterly, who is going into partial retirement, will continue to have primary responsibility for advising undergraduate students. Drummond will assist with advising and will take over the duties of scheduling deputy and registration deputy. In addition she will be responsible for the continued development of a database for undergraduate records within the School and computerizing the plan of study and registration processes.

A long-term resident of West Lafayette, she worked as a lab manager and researcher in the Department of Biological Sciences at Purdue. She also completed an internship in the Office of International Programs in Agriculture. She and her husband, Jim, a free-lance editor, have a son, Joe, and two daughters, Clare and Ellen. Drummond spends most of her free time with her family. She enjoys swimming, running, tennis and gardening.

Tom Martin is a Research Engineer in HERPICC. He started working as a County Engineer for Parke County, Indiana, in 1988, where he served as both highway engineer and supervisor. In 1995, he became the highway engineer for Putnam County, a position he enjoyed until joining the HERPICC staff in March. Martin is a Purdue graduate, receiving his BSCE from Purdue in 1981 and his MSCE in 1982. His areas of interest are road and bridge construction, pavement and bridge management, bridge inspection, and highway administration and planning. He is working on developing a workshop for preparing county highway budgets, improving and expanding the traffic counter program, and updating HERPICC's Sample Equipment Specifications.





Mark Bowman



Elisa D. Sotelino



Miroslaw Skibniewski



Boudwijn H.W. van Gelder



Jeff Wright

FACULTY PROMOTIONS

These faculty members received promotions in August 1997.

Mark D. Bowman was promoted to full professor. He joined Purdue in 1980. He received his BSCE from Purdue in 1974, his MSCE in 1975, and his Ph.D. from the University of Illinois in 1981. Bowman is a registered professional engineer in Indiana. Bowman's interests include structural steel design, structural analysis and design, structural fatigue, structural models and experimental methods and codes and standards.

Elisa D. Sotelino was promoted to associate professor with tenure. She joined Purdue in 1990 as an assistant professor. She received a Sc.B., PUC/RJ (Brazil), 1978, Sc.M., PUC/RJ (Brazil), 1980, Sc.M., Brown University, 1986 and Ph.D., Brown University, 1990. Sotelino's areas of interest are computational mechanics, high performance computing, and structural dynamics.

Boudwijn H. W. van Gelder was promoted to associate professor with tenure. Van Gelder joined Purdue in 1992 as an assistant professor. He received is M.S.G.E. (ir.) from Delft University of Technology (the Netherlands), in 1972, and his Ph.D. from Ohio State University in 1978. Van Gelder's areas of interest include geodesy/satellite geodesy, surveying /data adjustment, and deformation analysis.

Professor Miroslaw Skibniewski was appointed by the executive vice president for academic affairs to the position of assistant executive vice president for academic affairs.

Professor Jeff Wright was named assistant dean of engineering. In this half-time position, he will be working on enhancing information technologies in the Schools of Engineering.



Professor Doug Sutton received the James M. Robbins Chi Epsilon Excellence in Teaching Award for the Great Lakes District. He also received the Outstanding Faculty Member Award from the Purdue Chapter of Chi Epsilon. In addition, Sutton was honored by PCI - Precast/Prestressed Concrete Institute as the 1997 recipient of the Distinguished Educator Award and was among ten recipients to receive the 1997 PCI Fellow Award for outstanding service to PCI.

Professor Kumares C. Sinha is the chairman of the ASCE Highway Division and has also been reappointed to the ITS IDEA Advisory Panel of the National Research Council for a second 3-year term.

Professor Ernest Blatchley received the 1997 Harold Munson Award as the Best Civil Engineering Teacher.

Professor Gilbert Satterly received the Ross Judson Buck Best Counselor in Civil Engineering Award.

Professor A. R. Rao received the Marion B. Scott Award sponsored by Tau Beta Pi. This award is given to one pro-

Faculty News

fessor in engineering each spring for his/ her devotion to encouraging, inspiring, and advising the engineering student body in order that engineering students might grow both academically and professionally.

Professor Mete A. Sozen won the 1997 General Electric Senior Research Award for the American Society of Engineering Education. He was elevated to Purdue Chi Epsilon Chapter Honor Member. He was nominated for National Honor Member by the Purdue Chapter.

Professor Jeff Wright has published a new book entitled "Civil and Environmental Systems Engineering." The test is being used for his class on civil and environmental systems engineering.

Professor W. F. Chen was appointed a life member of the Structural Stability Research Council (SSRC). Life members are those who have given long service to the council and who have made significant contributions to the work of SSRC. He was also elected as an Honorary Member in the Society of Civil En-

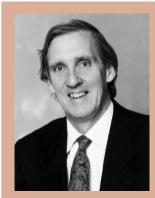
gineers. Professor Chen published a new book entitled ALRFD Steel Design Using Advanced Analysis.

Professor Jan Olek was elected chair of the TRB committee A2E01 Performance of Concrete.

Professor Skibniewski was invited to serve a two-year term as external examiner for the academic program in construction at the National University of Singapore.

Professor Bob Whitford is on a oneyear sabbatical in Alaska. He will be working for the Alaska Department of Transportation and Public Facilities with the Director of Statewide planning. He has been asked to help develop the twenty-year plan for transportation in the Yukon-Kuskokwin Rivers Delta. He will also teach a course in transportation systems planning and evaluation over the TV. The University of Alaska, Southeast will be providing an adjunct appointment.

Professor Emeritus John G. McEntyre was selected to receive the ASCE 1997 Surveying and Mapping Award.



Professor William L. Wood

Professor William L. Wood, Jr. died unexpectedly February 6, 1997, in West Lafayette. Bill was promoted to professor of civil engineering in 1992, teaching in the School's Environmental and Hydraulic Area. His research interests were in the areas of physical oceanography and coastal hydrodynamics. His latest research accomplishments include important advances in the management of beach erosion, harbor design, and transport of contaminated sediments.

Bill was a native of Detroit, born in 1941. He received his bachelor's degree from Michigan State University in 1963 and continued his education at the University of Chicago and Michigan State University, earning a Ph.D. in geophysics in 1971. He taught courses at Michigan State for a period before receiving an appointment as an associate professor of geosciences at Purdue from 1972 to 1984. From 1984 to 1985, he directed the engineering division of the Coastal Engineering Research Laboratory at the Army Corps of Engineers' Waterway Experiment Station in Vicksburg, Mississippi. He returned to Purdue in 1985 as an associate professor of civil engineering.

He was best known and honored for his innovative teaching techniques. He received the Harold Munson award as the best teacher in the School of Civil Engineering, as voted by the student body. During his academic career, he served as academic adviser to more than 400 undergraduate students in the schools of Science and Engineering at Purdue. He was also a residence hall faculty fellow at Wiley Hall, Duhme Hall, and Warren Hall.

Surviving are Terry L. Wood, his wife, his twin daughter and son, Christine L. Wood and Robert W. Wood; and his parents, Helen C. Wood and William L. Wood.

A memorial fund was established in his honor in the School of Civil Engineering. Contributions may be made to the School of Civil Engineering Development Office, 1284 Civil Engineering Building, Purdue University, West Lafayette, IN 47907-1284. Make checks payable to: Purdue Research Foundation and on the memo portion of your check write William L. Wood, Jr. Memorial Fund.



CE Alumni Honored

Nine civil engineering alumni were honored in 1997 by Purdue in recognition of the outstanding achievements of these individuals and the lasting contribution they have made to their professions.

Honorary Doctorate

Purdue's highest honor, Doctor of Engineering, honoris causa, is bestowed upon individuals of exceptional attainment and merit.

James L. Lammie

MSE 1957

Director and past president and chief executive officer, Parsons Brinckerhoff, Inc.

For his outstanding engineering career in both the military and private sectors, Purdue University is proud to recognize James L. Lammie with an honorary doctorate in engineering.

James L. Lammie's 44-year civil engineering career began with his B.S. in engineering from the U.S. Military Academy in 1949. His 21 years in the Army included a tour of duty in Vietnam with responsibility for 650 men engaged in combat construction operations for road, bridge, and airfield construction. He was staff officer at the Pentagon, served as district engineer for the U.S. Army Corps of Engineers in San Francisco, and earned three master's degrees, including an M.S. in civil engineering from Purdue University in 1957.

After retiring at the rank of colonel in 1975, Lammie joined Parsons Brinckerhoff and served as project manager for the general engineering consultant for design and construction of the Metropolitan Atlanta Rapid Transit Authority, which is regarded as one of the leading transit systems in the nation. In



1982, Lammie was named president and chief executive officer of Parsons Brinckerhoff, Quade & Douglas, Inc.

Lammie is a member of the prestigious National Academy of Engineering and the Industry Policy Advisory Committee to the U.S. Trade Representative. He received both the Civil Engineering Management Award and New York Civil Engineer of the Year Award from the American Society of Civil Engineers. He is also a fellow of both the American Society of Civil Engineers and the Society of American Military Engineers and has been previously honored by Purdue as a Distinguished Engineering Alumnus.

Distinguished Engineering Alumni

The Distinguished Engineering Alumnus Award is given by the Schools of Engineering to recognize outstanding and lasting contributions to engineering education, research, and practice.

Thomas A. Dames

BSCE 1968, MSCE 1968, PhD 1972



Rear Admiral Thomas A. Dames is the Commander. Pacific Division, Naval Facilities **Engineering Command** and Commander. Third Naval Construction Brigade in Pearl Harbor, Hawaii. He has command authority in the planning, design and construction for shore support facilities throughout the areas of the Pacific and Indian oceans and Southeast Asia. The Third Naval **Construction Brigade** directs Seabees operating in the Pacific the-

ater. Born in Argo, Illinois, Dames is a U.S. Naval Academy graduate. He later attended Purdue University, receiving a B.S. in civil engineering in 1968 and an M.S. in civil engineering the same year. He returned to Purdue in 1971 and was awarded a Ph.D. in urban planning and civil engineering in 1972.

R.M. (Dick) Teater

MSCE 1973



Corps as a commissioned officer from 1970 to 1977. Teater serves as a member of the ASME International Advisory Board and is a member of the Dean's Engineering Committee of the Purdue Schools of Engineering.

Dick Teater was born in Grinnell, Iowa, He graduated from the U.S. Naval Academy in 1970 and received his M.S. in civil engineering from Purdue University in 1973. Teater, who began working with Fluor Daniel, Inc. in 1980, most recently was group president of Power and Government,. Prior to joining Fluor Daniel, he worked for Holmes & Narver, Inc. and served in the U.S.



Civil Engineering Alumni Achievement Award Recipients

Bryan A. Erler

BSCE 1969, MSCE 1970 Senior Vice President and Owner, Sargent and Lundy, L.L.C.



Bryan A. Erler, senior vice president and owner of Sargent and Lundy, L.L.C., has been involved in the seismic dynamic analysis of nuclear stations, the design of post-

tensioned and reinforced concrete containments, and numerous structural design challenges of nuclear, coal, gas, and oil-fired power plants. Erler received his B.S. in 1969 and M.S. in 1970 in civil engineering and has been a leader in development of several national standards for power plants. He has participated in many peer review groups and research advisory panels at national laboratories and has published numerous technical papers in areas ranging from seismic analysis to containment shell analysis and design. He is an active member of a number of professional organizations and has served as a member of the Board of Directors, Structural Engineers Association of Illinois for more than ten years and president in 1992.

Steven R. Kraemer

BSCE 1975, MSCE 1976

Principal and Senior Vice President, Haley and Aldrich, Inc.



Wisconsin native Steven R. Kraemer graduated from Purdue University in 1975 with a B.S. in civil engineering with highest honors and earned his M.S.

in geotechnical engineering in 1976. In his 21 years with Haley and Aldrich, Kraemer has been in charge of over 300 projects, including the firm's largest - a \$13 million contract as the area geotechnical consultant for Boston's Central Artery/Tunnel project. This nation's biggest public works project included a new immersed tube tunnel under Boston Harbor that won the ASCE Outstanding Civil Engineering Achievement Award for 1996. Kraemer has authored numerous technical papers and his applied research for the Federal Highway Administration resulted in State of Practice volumes for design of bridge foundations, prefabricated vertical drains and drainage systems.

Edgar B. Olson

BSCE 1951

Chairman of the Board and Past President, Kettelhut Construction, Inc.



Edgar B. Olson started college in 1942 at Illinois Institute of Technology before piloting B-24 Bombers with the 15th Air Force, 98th Bomb Group headquartered in Italy. He completed his

studies at Purdue and graduated with a B.S. in civil engineering in 1951. During his 47 years with the Kettelhut firm, Olson worked as an engineer, superintendent, in-office estimator, project manager and finally president-owner in 1975 and chairman of the board in 1996. Under his leadership, the Lafayette, Indiana, company was selected to the Engineering News Record "Top 400 General Contractors" in the United States three times since the 70's. Olson served on the Indiana State Office Building Commission since 1978, being appointed by three different governors, and has been awarded the "Sagamore of the Wabash" by the governor of Indiana. Olson was a charter member of the Civil Engineering Advisory Council and chairperson of Purdue University's President's Council, where he also received the President's Council Distinguished Service Award.

The Civil engineeringAlumni Achievement Awards are based on the awardees' distinguished careers, which reflect credit on the value of a Purdue University civil engineering education. The awards are given by the School of Civil Engineering, based on approval of the faculty.

James S. Pierce

BSCE 1959, MSCE 1961

Leadership Team, Bureau of Reclamation Technical Service Center, Denver, CO



After completing his B.S. in civil engineering in 1959 and his M.S. in 1961, James S. Pierce began work with the Bureau of Reclamation in the Concrete and Structural Labora-

tory, one of the world's premier water resource management organizations. He lent his expertise to standards development activities with the American Society for Testing and Materials (ASTM) and the American Concrete Institute (ACI). He served on the ASTM Board of Directors and has been active in committees on Concrete and Concrete Aggregates, Cement, Precast Concrete, and Soil and Rock. Pierce travelled internationally for ACI making concrete technology presentations throughout the world. In 1994, he was presented the Henry C. Turner Medal for notable service to the concrete industry. Pierce is a fellow and past president of ACI.

Donald R. Schwegel

MSCE 1962

Chief Executive Officer, Baxter & Woodman, Inc.



Donald R. Schwegel earned an M.S. in civil engineering in 1962 from Purdue University before serving as a sanitary engineering officer in the U.S. Army Medical Ser-

vice Corps. In 1964, Schwegel joined Baxter & Woodman, Inc., where he designed and managed hundreds of environmental projects involving public and private water supply and wastewater. He was elected president in 1987 and chief executive officer in 1994. Schwegel is a leader in the development of pretreatment facilities for the food processing and metal finishing industries. He is a diplomate of the American Academy of Environmental Engineers and is active in numerous professional organizations such as WEF and AWWA. Schwegel's many honors include the Distinguished Service Award from the Consulting Engineers Council of Illinois.

Graham S. Toft

Ph.D. 1978

President, Indiana Economic Development Council, Inc.



Australian native Graham S. Toft graduated with honors in land surveying/development at the University of New South Wales. His master's research took him to

Papua New Guinea to design a land registration and survey system for a developing county. In 1978, Toft completed his Ph.D. in strategic planning. He served four years at Purdue's Center for Public Policy and Public Administration followed by two years with the Indiana Legislative Services Agency, Indiana General Assembly. Since 1970, Toft has been president of the Indiana Economic Development Council, a nonprofit public-private partnership that focuses on education and training, infrastructure financing, international trade, sustainable development and regulation and tax policy. Toft has been advisor to five state governments and more than 50 counties, cities, and towns on strategic planning, economic development, and governmental organization. He regularly conducts seminars for civic leaders on managing change, future trends, strategic thinking, and competitive advantage. In 1989, he received the Distinguished Professional Planner Award by the Indiana Planning Association.

_ **Student Highlights Scholarship** & Awards

Amoco Foundation Undergraduate Scholarship Kara L. Elliott - Frankfort, IN

Martin J. Gutzwiller Memorial Scholarship Brian S. Chen - West Lafayette, IN H. Scott Ivany - Bloomington, IL

Elmer F. Ballotti Memorial Fellowship William J. Leady - Chesterton, IN

John R. Blandford Memorial Award Lin-Shin Lin - Hualian, Taiwan John E. Thompson - West Lafayette, IN

Donald E. Bloodgood Memorial Award Ting P. Chan - New Haven, IN Brandon K. Ogilvie - Noblesville, IN Anthony M. Kunkler - Tell City, IN

Jacques W. Delleur Award Kuang-Ping Chiu - Taipei, Taiwan Khaled H. Hamed - Cairo, Egypt

Matthew Edward Kern Environmental Engineering Scholarship <u>David Hodson</u> - West Lafayette, IN Joan E. Gable - Carmel, IN

David E. Saksa Memorial Pass-The-Torch Award Monica S. Freel - Keystone, IN

Eldon J. Yoder Memorial Award Debasish Bhattacharjee - Calcutta, India

Myrtle Ford Tompt Award Anthony M. Kunkler - Tell City, IN <u>Kai Ki Mow</u> - Honolulu, HI Brandon K. Ogilvie - Noblesville, IN Nicole S. Speece - Muncie, IN

Gerrit H. Toebes Memorial Award Amy S. Mechling - Bluffton, IN Huey-Long Chen - Taiwan, R. O. C.

Estus H. and Vashti L. Magoon

Outstanding Teaching Assistant Award Mark K. Clough - Williston, VT **Richard A. Jones** - Crawfordsville, IN Rodolfo E. Kilian - Mexico Ayesha B. Shah - India <u>Sandra L. Man</u>silla - Humacao, Puerto Rico Chii Shang - Taipei, Taiwan



Kara L. Elliott



Brian S. Chen



Anthony M. Kunkler

Nellie Munson Outstanding Teaching Assistant Award Craig C. Akins - Braintree, MA Jon Å. Jonsson - Iceland

John G. McEntyre Endowment Scholarship Jason M. Copperwaite - Floyds Knobs, IN

Jud and Betty Rouch Land Surveying Scholarship Paul E. Klodzen - Valparaiso, IN

Central Indiana Chapter (ISPLS) Scholarship Ryan Carrel - Fort Wayne, IN

ISPLS Initial Point Blankenbecker Scholarship Andrew Hagedorn - Ferdinand, IN

LSE - Faculty Recognition Award Aaron W. Blank - West Lafayette, IN

Outstanding Senior Award - LSE Scott A. Lutz - DeKalb, IL

AGC Outstanding Student - CECON Jeremy R. Loftus - Georgetown, IN

Rosemary K. Burke - Outstanding Student Áward - Chi Epsilon Brandon Ogilvie - Noblesville, IN

Maple Point Foundation Grant Jody K. Tischmack - West Lafavette, IN



William J. Leady





David Hodson



Khaled H. Hamed

Kai Ki Mow



Amy S. Mechling



Richard A. Jones





John E. Thompson



Monica S. Freel



Debasish Bhattacharjee



Huey-Long Chen



Rodolfo E. Kilian



Scott A. Lutz



Sandra L. Mansilla



Jeremy R. Loftus



Brandon K. Ogilvie



Nicole S. Speece



Chii Shang



Craig C. Akins



Aaron W. Blank

Congratulations to **Jennifer A. Smith**, the recipient of an Eno Fellowship from the Eno Transportation Foundation Eno Fellowship from the Eno Transportation Foundation of Lansdowne, Virginia. The Eno Fellows program pro-vides up to ten student fellowships annually to help ensure retention of the best and brightest individuals in transpor-tation and encourages those with leadership abilities to recognize their strength and prepare for leadership roles. Jennifer attended the 1997 Leadership Development Con-ference, which was held in Washington, DC, in May Jenni-fer received her BSCE in 1995, and her MSCE in May of 97. She is currently employed as an engineer with Pflum, Klausmeier, & Gehrum in Indianapolis. Jennifer also re-cently married Alan Pyrz, a '97 CE graduate.

Darcie B. Johnson (right) was selected by the commit-tee on student services as the Zone II first place re-cipient of the 1997 Daniel W. Mead prize for students for the paper "What are the Ethical Responsibilities Towards Sustainable Develop-ment." This award was sponsored by the American Society of Civil Engineers.



Lan Qian is the recipient of the 1997 Helene Overly Graduate Scholarship. Ms. Qian is a graduate student in transportation from Wuhan, China. The Helene Overly Scholarship was established in 1981 by the Women's Trans-portation Seminar (WTS) to encourage women to pursue career paths in transportation. Ms. Qian attended the 1997 scholarship banquet in Chicago in July. She is a master's student of Professor Jon Fricker.



Jon A. Jonsson



Jason M. Copperwaite

Not pictured:

Ting P. Chan Joan E. Gable Ayesha B. Shah Ryan Carrel Andrew Hagedorn Paul E. Klodzen Jody K. Tischmack H. Scott Ivany



1923

Frederick Ashbaucher - Fred celebrated his 95th birthday on June 13, 1997, at his home in Indianapolis. He was surrounded by family and friends. Fred also attended the CE Breakfast in April. He visited with long-time friends and faculty members.

1929

George Morris Willard - Sun City, Arizona -Retired in 1973 after 44 years with American Telephone and Telegraph. He left St. Louis to live in Arizona in 1978. He has had several volunteer positions. George and wife Lisbeth enjoy their home, surrounded by 4 citrus and 3 peach trees. Their lifestyle includes many friends and activities, including attending the Purdue alumni luncheons to stay in touch. They have two daughters who both live in Denver, Colorado, and six grandchildren (grown) and a new grandsonin-law.

1933

George O. Ashman - Daytona Beach, Florida -Hall Construction Co., Inc.- Structural engineer and threshold building inspector. Dennis N. Hall, President of Hall Construction has had the privilege of working with George over the past seventeen years and reports that his past accomplishments are many. However, he is proudest of his work as assistant chief engineer for construction of the Spanish/American military bases in Spain from 1956 through 1962. Mr. Ashman's great knowledge and experience in both construction management and structural design have made him a very valuable consultant on many complicated commercial construction projects.

1948

Frederick W. Foley - Provo, Utah - Retired-Fred is a registered civil engineer in California and Utah. He developed a program to determine the engineering cost of trucking equipment. The results were used in many different engineering cost studies. In Utah, he successfully authored a bill that was passed and signed by the governor providing for natural gas safety and adequate cathodic corrison protection. He served two missions for his church, 18 months in Australia and 12 months in the USA. Donald R. Hanson - Charlottesville, VA -Donald retired from the United Nations in Nairobi Kenya, Africa, in 1988 after 29 years. His career included the following: Civic chairman, Albemarle County Housing Coalition (VA); chairman, Oahu Self Help Housing Organization (Hawaii); state chairman Hawaii "Year of the Homeless" (appointed by the Governor); president, Hawaii senior citizen organization. Professional honors — Star of Africa (Liberia); Donald Hanson Day - Feb 6, Bahu Hawaii; Jefferson Award; U.S. Presidential Award (1986). His career accomplishments include director, Indianapolis Housing Authority; housing advisor 21 Caribbean countries (US State Dept.); deputy commissioner planning & development, Chicago; housing advisor, United Nations (4 years Africa, 28 years adviser to 89 countries in Asia, Africa, South America, East Europe, Middle East, Caribbean). He wrote three publications for the United Nations - Self-Help Housing, Housing Model for Housing Policy.

1949

Elliot Fraser Bolick - Newark, Delaware - Retired, Chicago Bridge & Iron Company -Plainfield, Illinois - He retired in 1985 from the European division of CBI Co. He spent 30 of 37 years with CBI on overseas assignments mainly in the middle east. Managed projects from Mangla Dam in Pakiston (1963-64) to refining tank construction and municipal work in Iraq, Iran, India, Kuwait, Saudi Arabia, Trucial States, Oman, Pakistan, Somalia, Ethiopia, Kenya, RSA, and other middle east countries.

Thomas M. Major - Grove City Ohio - Retired

Jules T. Charles - Tulsa, Oklahoma - Retired from Mintco Inc. He was board chairman of the Franciscan Villa retirement homes and past member of the City Appeals Board.

1950

John T. Schira - Columbus, Ohio - Retired Ohio Water Development Authority, John and wife visited Purdue University and the School of Civil Engineering in July 1997 for the first time in 30 years. They have three sons who are Ohio State graduates.

1952

George M. Briggs - Greenwich, New York - Retired in 1983 from the New York State Department of Transportation. Following his retirement he served as executive director of the New York State Liquid Asphalt Distributors Association and then went on to be president of Briggs Engineering, retiring in 1992. Harold G. Poulin, Jr. - Salinas, CA - Senior vice president of Granite Rock Co. Harold is responsible for business development and a member of the board of directors. Granite Rock was a winner of the Malcolm Baldrige National Quality Award in 1992.

1953

Joseph C. Patrick - Bellemead, New Jersey -Retired director of facilities & development, construction official, Township of Montgomery.



Donald R. McCormack - Birmingham, MI -Retired in December 1996 as vice president and treasurer of Hubbell, Roth & Clark, Inc. after 37 years of service. He served as vice president for 31 years.

1956

Richard S. Kraus, PE, CSP - Annandale, VA -Professional safety and fire protection engineer for Petroleum Safety Consultants. He has been named senior editor for the safety half of the 4th edition of the United Nations International Labor Organizations "Encyclopedia of Occupational Health and Safety" published in 60 countries in over 45 languages. In addition to this, he is the author of the chapters covering the oil and gas industries and process safety. A new edition was published recently.

1957

James L. Lammie - MSE '57 - New York, New York - Director, Parsons Brinckerhoff Inc. James was named an honorary member of the American Society of Civil Engineers.

Gary F. Shearer - Bonita Springs, FL - President, Management Recruiters of Bonita Springs Inc. After a career in engineering and construction with CBI, Rust International and H.A. Simons Engineering, running corporate divisions in the USA, Brazil, and Singapore, he has settled down in Florida with his own executive recruitment business and loving it!

1958

Charles M Green - Long Boat Key, FL -Project manager, Bishop & Associates. He is a project designer for all civil/site improvements. He is now designing beach preservation structures on the Florida west coast. Moacyr Schwab De Souza Menezes - MSCE '58- Salvador Brazil, Bahia - Independent consulting engineer - Recipient of the Manoel Rocha Award (Brazilian Association of Soil Mechanics) 1992 - for the contribution to the development and teaching of soil mechanics in Brazil. He also received "Honor to the Merit" diploma from the Brazilian Paving Association in 1986 for relevant contribution to highway paving in Brazil.

Leslie Strull, P.E. - Morton Grove, IL - Senior consultant for Rolf Jensen and Associates, Inc., specializing in fire safety and code consulting. Treasurer for the Chicago Committee on High Rise Buildings and member of the safety committee of the National Fire Protection Association. He is also of member of the code revision committee for the city of Chicago and fellow ASCE.

1959

George "Bill" Bishop, P.E. - Dataw Island, South Carolina - Retired

1960

Hidayat N. Grouni - MSCE '60 - Scarborough, Ontario, Canada - Project Manager for 3E - Ebla Engineering Enterprises . Hid worked for 24 years in the Ministry of Transportation-Ontario (MTO) as a bridge and research engineer. In 1993, he took early retirement to pursue his interests and private practice as a consulting engineer. His most recent project is design of underpinning of a bridge across a subway tunnel, the effects of tunnel boring on the foundations of adjacent structures at street level, risk evaluation of a cut-and-cover tunnel failure and a survey of innovative rehabilitation techniques in America and Europe. He has also been involved in translating old technical manuscripts from Arabic to English for the UN and in preparing computer-aided graphics and slides for technical presentations in the US and Canada. Hidayat is a member of various engineering societies and a fellow at both ACE International and ASCE. He was awarded "Expert Status" by the Ministry in recognition of his contributions in the fields of bridge engineering and transit and guideway technologies. He has a number of papers and lectures to his credit presented in technical journals and forums. He also has many hobbies and volunteers in various functions.

1961

Delmar L. Kloeker - Seymour, IN - President and owner of Kloeker Engineering, P.C., which was organized in January 1995. He is a member of Seymour Rotary Club, elected as a Paul Harris Fellow in 1994. He has also been chairman of the traffic and transportation committee for the greater Seymour Chamber of Commerce for the past 7 years.

James O. Russell - Tampa, Florida - Vice president, director of operations for Tomasino & Associates Inc., in Temple Terrace, Florida.

C. Scott Snyder - West Lafayette, IN - is the city engineer for West Lafayette.

1963

William F. Howes, Jr. - Jacksonville, FL - Retired, but does some independent consulting in the railroad transportation field. He is also serving as president of the Railway & Locomotive Historical Society.

Thornton D. Schwenk - BSCE '63, MSCE '65 -Albuquerque, NM - Senior project engineer, Defense Technology Group for Science Applications International Corporation (SAIC). He was recently hired by SAIC to serve as a counter-terrorism consultant to the energetic materials research & testing center at New Mexico Tech, Socorro, to investigate structural response and to develop mitigation techniques against explosive attacks by terrorists on military and federal buildings. He and his wife, Ruth, have six children, including Purdue graduates: Stephen, EET '92, and Kimberly, SLA '95. He was past president and is currently a director of the Albuguergue post of the Society of American Military Engineers.

1964

J. R. Winchell, P.E. - Indianapolis - Criterium Winchell Engineers - J. R. Winchell received the Enterprise Award at the 10th Annual Conference of Criterium Engineers in San Antonio Texas. The prestigious award represents significant office growth. Mr. Winchell is a registered professional engineer at Criterium Winchell who specializes in building evaluation services. Criterium Winchell Engineers is an independent affiliate of CRITERIUM ENGINEERS, a national network of registered professional engineers specializing in building related services.

1966

Anthony P. Chrest - MSCE '66 - Received the 1997 Fellow Award from PCI - Precast/Prestressed Concrete Institute for his outstanding contributions to the precast/prestressed concrete industry and to PCI.

1967

John Davidson - MSCE '67, Ph.D '73 -Gainesville, Florida, John received special recognition from the College of Engineering and the University of Florida in being honored as University of Florida Teacher of the Year for 1996-97 and also named a College of Engineering Teacher of the Year for 1996-97.

1968

Robert E. Crawley, P.E. - Maryland Heights, MI - Vice president of Sverdrup Civil, Inc. works with Purdue faculty on a national proposal, CEHRMA (Consortium for Earthquake Hazard Reduction in Mid-America). Bob's specialties over the years have included port and marine facility projects, locks and dams, bridges and other basic infrastructure projects. He has led numerous study and design efforts for projects on the inland waterways, Great Lakes and coastal waters of the U.S. and overseas. He is a registered professional engineer in four states, a Rotarian, and a fellow in the Society of American Military Engineers. He is currently president of the St. Louis section of ASCE.



Pedro C. Repetto - MSCE - Aurora, Colorado - Vice president, Woodward-Clyde Consultants. He received the 1996 Geotechnical Engineer of the Year Award from the Philadelphia section of ASCE.

1971

Stephen F. Weintraut - Lafayette, IN - Has been named executive vice president of Butler, Fairman and Seufert in Indianapolis.



1972

John E. Goodson - Eugene, Oregon - Public works director for Lane County, is currently serving as chair of the prevailing wage advisory committee, Oregon Bureau of Labor and Industry. He was past president of the Oregon Association of County Engineers and Surveyors and was Oregon County Engineer of the year in 1988. He and wife, Mary, a fabric artist, have two sons attending Oregon State. Montgomery, a senior in electrical engineering, and Garett, a sophomore in industrial engineering.

1973

Robert G. Carlson - Lakewood, CO - President and chairman of the board of Muller Engineering Company, Inc. He joined American Consulting Engineers Council and became a certified consulting engineer.

L. Andre-Roy - Titusville, FL - Environmental scientist, General Research Corporation International Inc., Cape Canaveral, Florida.

1976

Robert E. Berger - BSCE '76 -MSCE '77 -Moneit, MO - Owner/president, Window Technology Inc. He started Wintech in 1991, manufacturing aluminum windows and insulated glass.

Jay J. Kent - Ballwin, MO - Recently promoted to senior technical staff member in AT&T's Global Network Solutions Division.

Paul K. Male - Saratoga Springs, NY - City Engineer, City of Saratoga Springs - President of Boys & Girls Club; active in APWA on state and local level; assists wife, Carolyn, operating Eartha's Court Street Grill in Saratoga Springs (3 1/2 out of 4 stars); maintains a small parttime engineering/surveying practice; finishing his 21 year as an adjunct instructor at Hudson Valley Community College; ABET program evaluator for ASCE (2 & 4 year technology colleges).

Jeffrey L. Stapleton - BSCE '76, MSCE '79 -Aurora, Colorado - Structural department manager for PTG/DeLeuw, Cather & Company. Jeff recently attended the national steel bridge symposium in Chicago. While there as a representative of his firm, he received a prize bridge award for the Aviation/Rosecrans Railroad Underpass. This 1996 prize bridge competition was sponsored by the American Institute of Steel Construction (AISC) and the National Steel Bridge Alliance (NSBA). He was the lead structural design engineer for this 300-foot-long steel truss bridge.

1977

Gary T. Boyer - Branchburg, NJ - MSCE - Senior engineer of Oxford Environmental, Inc. Focused on water supply projects during the past year and is now doing site remediation.

Roger Fine - Carmel, IN - Owner and president - John Fisher & Associates, Lafayette, IN.

C. Michael Gillam - Orlando, FL - Area manager for Parsons Brinckerhoff Quade & Douglas, Inc. Recently promoted and moved from Atlanta to Orlando.

Gary Nassau - St. Charles, MO - Staff project control engineer at Morrison Knudsen. Gary received his certification as a cost engineer (CCE) with AACE. He is responsible for a weldon spring site remedial action project (WSSRAP) in the engineering department.

1978

P. Thomas Gard, P.E., Esq.- MSCE '78 -Ashburn, VA - Manager, Contracts and Administration for Parsons Brinckerhoff Construction Services, Inc. in Herndon, VA.

1979

Walter Burke - Medford, NJ - Sr. project manager - Paulus, Sokolowski and Sartor, Inc. Walter was recently named as Associate.

Peter J. Matuszak - Loudon, TN - Facilities optimization team leader with Caltx Pacific Indonesia in Sumatra, Indonesia. Wife, Kathryn J. Shewski Matuszak, BSCFS '79, and daughter, Vicky, live as expats on loan from Texaco working on one of the largest water flood oil fields in the world.

Michael Paul Breach - Indianapolis, IN - Chief design engineer at USI Consultants, Inc. Daughter Michaela Rose Breach was born on October 17, 1996.

John A. Mundell - BSCE '79, MSCE '80, Carmel, IN - President/senior environmental consultant at Mundell & Associates, Inc. John founded an environmental consulting company in October 1995, specializing in contamination assessment and remediation; groundwater and contaminant modeling, risk assessment, and well head protection. Environmental liason for a group called "New Humanity," an international, multicultural group committed to the revival of society and elimination of barriers between peoples. The group coordinated an "environmental justice and brownfields redevelopment conference" in Indianapolis. **Thomas R. Walter** - Lafayette, IN - Thomas is now president of LINK LLC., a project management and development consulting firm in Lafayette.

1980

Karen Bailey Slikas-Barder - North Perth Goog, Western Australia, Australia. Karen is married and is mother to three daughters. In addition to working as a housewife, she is also in public relations at the Institution of Engineering in Australia and also lectures at Edith Cowan University part-time.

1981

John W. Lyons - Hanover, IN - President of BD Engineering, Inc., which he recently founded. BD offers engineering, land surveying, and construction management services.

Dennis G. Macklin - North Augusta, SC - Senior civil engineer, Bechtel Savannah River Inc. Dennis has two children, son Kyle and daughter Sicilee.

Jeffrey Myerson - Sugarland, TX - Division manager, Geographic Information Services in Houston. He was recently promoted to this position and also elected to a second term as secretary-treasurer of the Texas Society of Professional Surveyors.

1982

Milo Riverso - Ph.D. '84, MSCE '82, Scarsdale, NY - Vice president, Project Management and Operations for the New York City School Construction Authority.

Clyde L. Pritchard, P.E. - Sturgis, MS - Civil engineer of Springer Engineering, Inc., in Starkville, MS.

Paul G. Tourney, Acton, MA - International senior product manager for Grace Construction Products. Paul is also a registered professional engineer and received his MBA from Boston University. He is chairman of NACE.

1983

Karen Berg - MSCE '83 - Burton, SC - Senior project manager/contractor, The Childers Corporation in Parris Island, SC. Karen accepted a project manager position in March 1995 and was promoted to senior project manager in December 1995. She is responsible for JOC contract at Parris Island. **Zouheir I. Farah** - Parsons, Brinckerhoff, Quade & Douglas- Tampa, FL - Lead production engineer in charge of design for major highway projects. He was previously with PB in Reston, Virginia. He has 4 years overseas experience in highway design and construction in Lebanon.

Yose-Alberto Alves Nunes Do Valle - MSCE 1983, Coimbra - Portugal, Director De Servios Regionais De Estradas Do Centro - Head of the regional highway department (central region) of YAE (Portuguese National Highway Administration) since 1992, invited to serve as a teacher assistant of the civil engineering department, Boiubra University. Portuguese member of the C4 committee (highway and regional development) of PIARC/AIPCR, since 1992

1984

David E. Druzbicki - St. John, Indiana - David is a project engineer for Inland Steel in East Chicago.

Robert Kurtz - Roswell, New Mexico - Assistant technical support engineer, New Mexico Highway and Transportation Department. Robert obtained his master's degree in civil engineering from New Mexico State University in December, 1985. Married his wife, Joy in September, 1994.

Craig A. Peterson - Aspen, CO - Broker/VP real-estate development of Virtual Realty in Aspen. Craig states he enjoys the great ski seasons in America's winter playground.

1985

Donald W. Fisher - Carmel, IN - President- Insight Engineering, Inc. He formed Insight Engineering, Inc. on June 17, 1996, as a civil engineering/site design consulting company.

1986

Jeffrey Russell - Ph.D. '86 was chosen as one of the top 25 newsmakers for 1996. Dr. Russell is professor of engineering at the University of Wisconsin, Madison. He spearheaded development and implementation of the first electronic system to link asphalt pavers and rollers on a paving train. The system substitutes computer analysis for "seat-of-the-pants judgement" to expedite the rolling process, which is typically the bottleneck in paving. The new process has already demonstrated an ability to cut rolling time substantially while sharply increasing paving quality.

1988

David A. Clark - Indianapolis, IN - Project Engineer, Christopher B. Burke Engineering. David received the "1997 Outstanding Young Engineer of the Year Award" by the Indiana Society of Professional Engineers.

Dr. Ignatius O. Okonkwo - Hartford, CT -President & principal, Engineer Earth Design Associates, Inc. He is a member of the technical committee of ASCE on geosynthetic and soil improvements. He also founded a consulting civil and environmental engineering company with national and international setting and mission.

Paula M. Osborne - Louisville, KY - Transportation Engineering Manager, Jefferson County Public Works and Transportation.

Chang-Hsieh - Ph.D '88 - Arcadia, CA - Director of engineering, VTN West Inc.

1989

Heidi J. Passales - Fishers, IN - Property development manager, Amoco Corporation. Heidi manages the buying and selling of real estate for Amoco in the state of Indiana.

1991

Don D'Adam - Chicago, IL - Senior project engineer for Consoer Townsend Envirodyne Engineers. He was recently promoted to office manager for the Kansas City, Missouri operations of Consoer. He received his P.E. registration in 1996 and his MBA from Loyola University in 1996.

Kris Kirkendorfer Clemens - Ypsilanti, MI -Project controls engineer - Administrative Controls Management, Inc. Kris received her master's degree in structural engineering from the University of Michigan in 1993 and passed the Michigan EIT exam in 1994. She married James C. Clemens, MSCE '92. They met at Purdue.

Michelle (Shelley) M. Meyer - Atlantic Beach, NC - Job coordinator - Bailey & Jones Construction, Inc.

Antonio A. Gonza'lez-Quevedo - Ph.D '91 -Mayaguez, P.R. - Associate professor - Department of Civil Engineering, University of Puerto Rico. In 1996 he received two academic awards. Puerto Rico - EPSCOR granted him a Scholarly Productivity Award, recognizing his high productivity in research, and the University of Puerto Rico at Mayaguez awarded him an award in excellence for productivity in teaching, research and service.

1992

Jennifer Bechwith Wright - Milwaukee, WI-Transportation Engineer with CH2M Hill since 1993. Married Darius Wright Jr., BSCE '92, November 25, 1995.

Andrew Cigolle - BSCE '92, MSCE '93 - San Francisco, CA - Business services coordinator, United Airlines, engine maintenance. Welding, repair and flamespray business team.

T. Edward Kacena - Ed was ordained a priest in the Roman Catholic church in June 1997. He celebrated his first mass at St. Thomas Aquinas Center at Purdue on June 8, 1997. He is now a parish priest in Fishers, Indiana.

Darius A. Wright Jr. - Milwaukee, WI - Engineer associate at Edwards and Associate, Inc. Formerly with INDOT. Married Jennifer Beckwith, BSCE '92, November 25, 1995.

1993

Gui De Reamer - Indianapolis, IN - Civil engineer for Beam, Longest, & Neff. Married to Jennifer, BSCE '94.

Brian G. Gilpin - Bayside, WI - Attorney, Godfrey & Kahn, S. C. - Patent attorney, admitted in Illinois and before the United States Patent Office. Graduated cum laude from the John Marshall Law School, Chicago.

Todd Kufel - Lancaster, NY - Environmental engineer, Stearns and Wheler, LLC. He received his master's degree from the University at Buffalo in February 1996. Before joining Stearns and Wheler he worked as a research assistant for the New York State Center for Hazardous Waste Management.

C. Douglas Parmerlee - Lansing, MI - Structural engineer II, project engineer for Snell Environmental Group, Inc. Designer of numerous medium to long span highway bridges; involved in the design and anactses of breakwaters on the great lakes; designer of other miscellaneous structures constructed from a wide range of materials such as: aluminum, timber, steel, reinforced concrete and prestressed concrete.

Dawn Michelle Shoopman (Fugue) -

Greenville, SC - Environmental process engineer at Rust Environmental & Infrastructure. Dawn received her MSCE in environmental and water resources engineering from the University of Texas in August 1995. She married Phillip Shoopman, BSME '92, MSE '94, on April 6, 1996.

1994

Lucina O. Equihua - Mexico - Chief operator at MWWTP. She received an MSE in environmental engineering in 1994, and has had two years of experience in operation and management of municipal wasterwater facilities as a chief operator. Lucina was the first woman in Mexico in this kind of a position. She is single and thinking of going to the Netherlands for a short specialization on anaerobic treatment.

D. J. Hodson - Elmwood Park, New Jersey -Engineer, Langan Engineering and Environmental Services.

Jui-Lin Peng - Wufeng, Taichung County, Taiwan, ROC - Associate Professor of Construction Engineering at Chaoyang Institute of Technology.

Rick Radabaugh - Greencastle, IN - Civil Engineering Consultants. Married Catharine Dommer, BA '97, on June 29, 1996. His employer recently completed the construction documents for the Purdue North golf course under the supervision of Pete Dye and Tim Liddy.

Mikarand Hastak - Ph.D '94 - Brooklyn, NY -Assistant professor, Polytechnic University in construction management since September 1995. He is the proud father of a baby boy, Anand Sebastian born 6-16-96. **Brent A. Spencer** - LS'94 - Ft. Lauderdale, FL - Surveyor/engineer tech/computer administrator - Williams, Hatfield, & Stoner, Inc. Married Janet Zink (native Floridian) on December 7, 1996.

1995

Kimberly R. Godby - Houston, TX - Graduate environmental engineer at Law Engineering and Environmental Services, Inc.

Tony Hutchins – Portland, IN - Tony has just returned to Indiana from Texas. He and a friend are entering a new business adventure as "Heritage Builders" and are currently building homes.

Dale Kruse - Ft. Lauderdale, FL - Williams Hatfield & Stoner - civil, land surveying, and project engineer.

Kristen H. Peace (Peters) - Lake Jackson, TX - Environmental engineer - Phillips Petroleum Company. Married John E. Peace on June 1, 1996. Focusing on solid waste issues at work.

William H. Perry - Chicago, IL - EIT / Civil Engineering - Marchris Engineering Ltd.

Mindy K. Pozenel - Lancaster, OH - District engineer at Ohio EPA in Logan, Ohio.

Peter Nicholas Shepard - Ensign, US Navy -He married the former Julie L. Pfieffer on July 6, 1996. She is from Herndon, Virginia. He is currently on active duty in the Navy stationed at NAF ATSUGI in Japan (near Tokyo), where he serves as the squadron intelligence officer for VAW-115, an E-2C Hawkeye Squadron assigned to the USS Independence.

Gerald Swenson - Indianapolis, IN - Project manager; Drainage and Flood Control, City of Indianapolis D.C.A.M. Married Danette L. Shick on December 7, 1996.

1996

Susan Halsey - Environmental engineer/ management associate - US Steel, Gary Works.

James C. Kapustiak - Nile, IL - Survey coordinator/engineer at Spaceco, Inc. , Rosemont, IL.

Shawn C. Mason - Forest Park, OH - Project engineer/Engineer - Procter & Gamble in Cincinnati Ohio.

Scott Michael Mosher - Atlanta, GA - Cost Engineer, M.G. Patton Construction Co.

James K. Shinneman - Memphis, Tennessee

Samantha J. Walling -Bloomington, IN

School mourns loss of three emeritus professors.

Gerald A. Leonards died on February 1, 1997, while playing tennis. Professor Leonards was a renowned soil engineer and emeritus professor in the School of Civil Engineering. In honor of his work at Purdue, the Gerald and Beryl Leonards Graduate Fellowship in Geotechnical Engineering was established. Mrs. Beryl Leonards died in 1994.

A native of Montreal, Leonards came to Purdue after receiving his bachelor's degree from McGill University in 1943. He joined the staff in 1946 and began working on his master's degree, completing it in 1948 and receiving his doctorate in 1952. Although he retired from teaching in 1991, he continued to contribute significantly to the research program and the development of graduate students at Purdue.

As a soil engineering expert, he often was called on to solve soil foundation problems all over the world. He was named by the Italian government commission to investigate ways to stabilize the Leaning Tower of Pisa. He also was a consultant to NASA for the lunar space module, and consulted on the widening of the Corinth Canal in Greece. He was a life fellow of the American Society of Civil Engineers. In 1988, he was elected to the National Academy of Engineering. He is survived by his two children, son David and daughter H.H., and four grandchildren.

Memorial contributions may be made to the School of Civil Engineering Development Office, 1284 Civil Engineering Building, Purdue University, West Lafayette, IN 47907-1284. Make checks payable to: Purdue Research Foundation and on the memo portion of your check write Gerald and Beryl Leonards Fellowship Fund.

In Memoriam

Henry L. Roahrig, BSCE '31 Tucson, AZ Robert C. Ruhl, BSCE '32, MSCE '33 Tuscon, AZ Arthur R. Simpson, BSCE '35, MSCE '37 Ellison Bay, WI Matthew J. Timm, BSCE '35 New Carlisle, IN Joseph R. Waling, BSCE '38, MSCE '40 West Lafayette, IN *1940's*

Gordon R. Bloomquist, BSCE '42 Rockledge, FL Ira Cadwallader, BSCE '42 Englewood, FL Robert A. Esch, BSCE '48 Cleveland, OH Robert L. Eskew, BSCE '48 Vincennes, IN William H. Kashner. BSCE '41 Lafayette, IN Gerald R. Leonards, MSCE '48, Ph.D. '52 West Lafayette, IN Robert L. Lippman, BSCE '44 Munster. IN James R. Shepard, BSCE '49, MSCE '51 Huntington, WV Gordon A. Stewart, BSCE '41 Neenah, WI

Charles L. Thompson, BSCE '49 Scottsdale, AZ Clair K. Wolverton, BSCE '48, MSCE '49 Indianapolis, IN 1950's Jules T. Charles. BSCE '51 Tulsa, OK Nicholas M. Daskalakis, BSCE '56 Springfield, IL Joseph R. Kelly, BSCE '50 West Lafayette, IN John F. Langerud, BSCE '54 Krokkleiva, P. A., Norway Robert R. Reese, BSCE '50 Lima, OH Ricardo C. Vazquex, BSCE '52 Laredo, TX 1960's Wayne E. Ely, MSCE, 65 Glendora, CA 1970's William A. Egger, BSCE '73 Carmel, IN James T. Grenier. MSCE '79 North Attleboro. MA Robert B. Harr, BSCE'76, Ph.D.'90 Dallas, TX 1980's Eric John Schmednecht, BSCE '86 Valparaiso, IN

Joseph L. Waling died December 10, 1996 in West Lafayette. He taught in the School of Civil Engineering from 1938 and retired in 1983, with a stint in the Navy from 1941 to 1945. Waling received a Purdue BSCE in 1933 and MSCE in 1940, and a Ph.D. in structural engineering from the University of Illinois in 1952.

1920's

Fort Wayne, IN

McMinnville, OR

Watsonville, CA

Kerrville, TX

Pittsburgh, PA

Indianapolis, IN

Downers Grove. IL

Santa Barbara, CA

Jensen Beach, FL

Indianapolis, IN

Evansville, IN

John H. Leffel, BSCE '35

Charles F. Mashek, BSCE '33

George M. Neff, BSCE '32

Norman Olsen, BSCE '34

Vernon M. Ralston, BSCE '33

Carmel, IN

1930's

O. C. Warner, BSCE '24

Palm Beach Gardens, FL

Paul L. Brewer, BSCE '32

Joseph J. Consoli, BSCE '39

Richard H. Dickson, Jr., BSCE '31

John R. Fenstermaker. BSCE '35

Auburn, IN

Harry E. Curtis, BSCE '29

Ralph F. Kitterman, BSCE '29

George H. Percival, BSCE '26

Maurice H. Bradfield, BSCE '30

While a student at Purdue, Waling played three years of varsity baseball. Originally teaching applied mechanics, he moved to civil engineering in 1955 as the head of structural engineering until 1963. He later served as assistant to the director of the Purdue Research Foundation and as assistant dean of the graduate school. He was a factor in the great growth of research support for the university during the 20 years before his retirement.

Surviving are his wife, Mary Isabel Weishaar Waling, two sons, Stephen and Stanley, two daughters, Linda L. vonClausburg and I. Sue Waling, and a brother, Thomas.

Memorial contributions may be made to the School of Civil Engineering Development Office, 1284 Civil Engineering Building, Purdue University, West Lafayette, IN 47907-1284. Make checks payable to: Purdue Research Foundation and on the memo portion of your check write Joseph L. Waling Fund.

John D. "Jack" Wolszon,

professor emeritus died September 2, 1997, in West Lafayette. He was a professor in environmental engineering at Purdue from 1963 until 1985. Surviving are his wife, Cecile, two daughters, Elizabeth Wolszon and Mary Hays; four sons, William, Michael, Robert and James, and a brother, Norbert.

GAANN Fellowship... continued from cover

fession in academia. We want to give outstanding students an experience with GAANN and let them decide if academia is for them or not."

The stipulations of a GAANN fellowship are simple. You must meet the financial need requirement, which most graduate students certainly do, and you must be either a U.S. citizen or permanent resident. The fellowship funds must also be matched by the receiving institution. For every four fellowships funded by the U.S. Department of Education, the School of Civil Engineering must provide new monies to fund one fellowship.

The School of Civil Engineering uses GAANN in part to attract highly qualified MS graduates not necessarily planning to continue for their Ph.D. We also recruit bright undergraduate students and place them on the Ph.D. track immediately.

Purdue's School of Civil Engineering already consistently ranks in the top 10 of American universities in awarding Ph.D. degrees. With the excellent teaching programs and research in areas of national need already well-established, the potential for success with GAANN fellowships is certainly high.

For Jennifer Schramm, a Ph.D. candidate in environmental and hydraulic engineering, a master's degree was originally her goal. "With the GAANN fellowship," Jennifer states, "I now had the freedom to do the research project I chose — using ultrasound to degrade a pesticide in water — and the time to develop that research. Now I'm leaning toward staying in academia, and the GAANN teaching experience will help me decide."

Part of the GAANN initiative at the School of Civil Engineering is the unique opportunity for these potential future academicians to be involved in a structured, supervised, two-semester teaching program. While mentored by "master teachers" from the School's faculty, GAANN Ph.D. students receive training in teaching techniques and eventually teach their own class of 20-40 students.

Teaching in higher education was GAANN recipient Kris Matilla's long-time goal. "But without the GAANN, I would have returned to industry after my master's degree," recalls Matilla. "It's near impossible to get a Ph.D., have a family, be a teaching assistant, and complete your research, particularly when there isn't a lot of funding in your area of research. The GAANN fellowship allowed me to concentrate on my research for resource leveling of linear scheduling and also gave me a valuable experience with a classroom of my own."

"It's a great program for drawing students into teaching," says Matilla, who starts this fall as an assistant professor of civil and environmental engineering at Michigan Technological University. "Teaching was what I wanted to do, and I feel very fortunate."

by Sally Bond

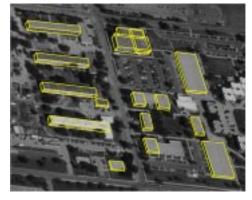


GAANN Fellows: (front left to right) Jennifer Schramm, Luisa Morales, Lisa Samples, (back left to right) John Thompson, Kris Mattila, Ernest Berney, Tim Lapara.

MURI Research Project...

nary object surface that initially includes terrain plus all occluding features, (3) locate, where possible, natural features such as vegetative cover and water bodies, (4) detect and locate man-made features such as buildings and roadways, and (5) integrate the above data into a coherent, attributed 3D site model for cartographic, visualization, or simulation applications.

The two accompanying figures show some of the preliminary building extrac-



tion results in one area and a perspective rendering of a completed 3D database in another area.

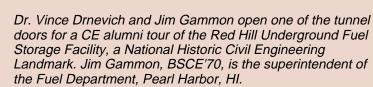
The research disciplines associated with each of the participating institutions are: Purdue CE (geometric image modeling and terrain extraction); Purdue ECE (multi- and hyperspectral remote sensing); USC IRIS (road and building extraction); and GDE (visualization).

We have acquired a number of digital data sets, and we are currently in the process of investigating the best sequences and feedback mechanisms between the groups in order to produce the highest quality result in the shortest time. Of course, complete automation of this process is a long way off, but we are definitely making progress toward this objective. Beneficiaries of this technology include the military, for training and simulation, and, potentially, many in the civil engineering community as well, for rapid mapping and visualization of project sites.



Professor Mark Bowman discusses solutions with his students.









Fred Ashbaucher, BSCE'23, visits Emeritus Professor Harold Micheal during a CE Breakfast.

New Naval attire? Commander Vince Hartman, MSCE'86 and Admiral Tom Dames, BSCE'68, MSCE'68, PhD'72,show their new CE T-shirts they received in Hawaii.





Engineering's DEA recipients and CE grads Patricia Galloway BSCE '78 and Mary Ann Zimmerman, BSCE '66, MSCE '68.

Maple Point Foundation Research Grant Recognizes Outstanding Graduate Woman

The Maple Point Foundation awarded its second annual Maple Point Foundation Graduate Research Award for outstanding women in civil engineering. Jodi K. Tischmack is the 1997 recipient of this highly competitive award. After a rigorous application and interview process, Tishmack, a doctoral student studying materials engineering — specifically the use of waste material for mine land reclamation — was chosen for best exemplifying the following attributes: academic excellence, an active and successful contribution to Purdue's academic community that has encouraged young women and girls to pursue science and engineering, quality research that can significantly add to the body of environmentally sensitive engineering knowledge, and faculty/staff recommendations.

In 1996, the first annual Maple Point Foundation Graduate Research Award for outstanding women in civil engineering went to Robin Mills Ridgeway, a doctoral student studying environmental engineering at Purdue University. Maple Point Foundation (MPF) of Lafayette, Indiana, will be honoring an outstanding woman every year with an award that will have a significant impact on their further academic and scholarly development or their engineering careers.

The School of Civil Engineering appreciates this grant made possible by Judith K. Hamman, Director, Maple Point Foundation and her parents Caryl (BS'41 Purdue) and Paul (BS '41 Public Service Engineering, Purdue).



Jodi Tischmach (center) receives the Maple Point Foundation certificate recognizing her selection for the 1997 Maple Point Foundation Research Grant. Representing the Maple Point Foundation are Steve Thompson and Peggy J. Orr.

Civil Engineering Phone-a-thon February 2 - 8, 1998

Students will call selected alumni during this period to raise funds for the School of Civil Engineering. Last year we raised more than \$80,000 through the phonea-thon for civil engineering, with the average pledge being \$75. These funds were given by 20% of the CE alumni contacted.

We want you to have an enjoyable conversation when you talk to the Purdue student who makes the call to you. Your contribution to the CE phone-a-thon is used to help improve our laboratories, purchase computer equipment, provide scholarships and fellowships, and allows us to continue our increased communication with all of our alumni.

Say Yes to the student caller when you hear, "Hello, I'm calling from Purdue University for the School of Civil Engineering."

Next Issue:

Retirements in Civil Engineering Professor Bob Lee, Professor Ed Ting, and Joe Fletcher

> Kumares C. Sinha named Olson Distinguished Professor

Civil Engineering Honor Roll - listing of donors to CE

There must be a smile on every Boilermaker's face around the world these days.

by Don Fry, Director of Alumni Relations and Developement

While walking across campus early in the semester, near Engineering Mall, sections of the Purdue All-American Marching Band were being put through their paces by upperclassmen. For me this was a sure sign that the new school year had started.

These days, the entire band marches and plays proudly as they pass by the Civil Engineering Building every Thursday. The Purdue football spirit is back! They marched by my window before, and I heard them — but this time it's different. It was always a joy to be part of Purdue University, but these days it's FANTASTIC.

As the band practiced, the football team must have been getting in step too. My best line for the football season is "Coach Tiller is my neighbor." Actually, the Tillers live a block away, but even our small neighborhood has been enthralled with the football team's new success and our new neighbors. The School of Civil Engineering is proud to have two players on this year's team — senior Lee Brush, #10, and Todd Stelma, #37.

One wonderful constant in the Purdue scene is that traditions abound on this campus. So if the football fans are reenergized by a successful season, I'd like to think Purdue's alumni want to connect to their academic school as well. The civil engineering team — faculty, staff, and students — works hard to be successful. I don't just see this on Thursdays or on Saturday afternoons. I see it everyday of the week! You should know that today's students are experiencing many of the memories you have about being a Purdue student. Some say it's not as hard, some say it's harder. What matters is that the school, through the faculty, adjusts to graduate the best civil engineers for today and the future of the profession. My opinion is that if there were a "bowl game" for academics, Purdue School of Civil Engineering would be bringing home "roses" every year.

If you have the "Old Gold and Black" back in your veins this year, be sure to remember the thousands of students, academic areas and laboratories that could

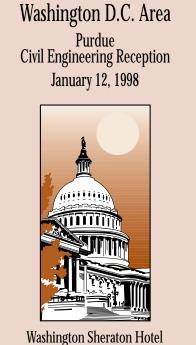
not exist without financial assistance through alumni and friend contributions to our program.

You will have the opportunity to respond to the school's request for donations soon, either by mail or by phone. We need everyone's support.

Hope to see you at a bowl game. Go Boilermakers!



Calendar of Events



5:30 - 7:30 p.m. TRB Visitors & Purdue CE Alumni Welcome January 12, 1998 - Washington D.C. - CE Alumni reception held in conjunction with the TRB National Meeting in Washington. Washington Sheraton Hotel, Americus Restaurant, 5:30 - 7:30 p.m.. For more information, call (765) 494-2166.

February 19, 1998 - Civil Engineering Alumni Achievements Award Dinner and Banquet. Purdue Memorial Union - Reservations required. For more information, call (765) 494-2166.

April 25, 1998 - CE Breakfast, 8 - 10 a.m., Civil Engineering Building. All CE alumni and friends and their families are invited.



http://ce.ecn.purdue.edu/CE

Transitions is published semiannually for alumni, faculty and staff, parents, and friends of the School of Civil Engineering at Purdue University. Send comments, news, and address changes to: *Transitions* Editor, School of Civil Engineering, Purdue University, 1284 Civil Engineering Building, West Lafayette, Indiana 47907-1284 or e-mail: cenews@ecn.purdue.edu



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