Our students and faculty benefit greatly through program enhancements that gifts from our alumni make possible. We truly appreciate your continued support.

For gifts to be used within Geological Engineering (#12233414):

1. My/our contribution is enclosed. $____________
2. I/we pledge $________ which will be paid in ________ annual installments of $ ______ beginning ______ (year). Please send me/us an annual pledge reminder in ______ (month).
3. My/our company will match this gift. (Company form enclosed).
4. Please charge my gift of $________ to my: __MasterCard __Visa __Discover __AmEx

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For more information or online giving options, visit Support GLE at www.gle.wisc.edu.

Message from the Chair

Welcome to the Summer 2012 issue of The Dig, the newsletter for Geological Engineering at the University of Wisconsin-Madison. I am glad to report that the University of Wisconsin-Madison and Geological Engineering remain strong. Enrollments in Geological Engineering are at an all-time high and our graduates have strong employment opportunities. We are the only undergraduate degree program in the College of Engineering with 100% placement of our undergraduates for more than two decades.

In this issue, we highlight two of our students, recent MS graduate Nikki Woodward and current undergraduate student Cole Christiansen, and Professor Jean Bahr, a hydrogeologist that has mentored countless students throughout her career at UW. We also highlight Kate Turner, a 1979 graduate of Geological Engineering’s predecessor, Mining Engineering, who has enjoyed a very interesting career in the oil and gas industry. Kate was one of just a few women to pursue engineering degrees in the 1970s, particularly in Geological Engineering. I am also glad to report that Bill Liska is joining Geological Engineering as a new Associate Professor this fall. We will have a highlight on Bill in next issue of The Dig.

We have a fantastic Geological Engineering reunion coming up this month that will reunite alumni from Geological Engineering, Mining Engineering, and the Geotechnical program in Civil & Environmental Engineering. The three-day reunion program will also include a banquet honoring four of our outstanding faculty who have retired in recent years, or are retiring soon: Mary Anderson, Tuncer Edil, Bezalel Haimson, and Dave Mickelson. The program in- cludes a guided tour of the Ice Age Trail by Dave Mickelson, who has published the new book Geology of the Ice Age National Scenic Trail with co-authors Louis Maher and Susan Simpson.

In addition to the reunion, we are connecting our past with our present through a series of regional luncheons with Geological Engineering and Mining Engineering alumni. We hosted an event this past July at Barr Engineering in Minneapolis that included more than a dozen alumni. The purpose of these events is to obtain feedback from our alumni on the strategic focus in Geological Engineering and to understand the needs of industry. Many of our alumni participating in these meetings have also joined our Lead- ership Annual Giving program of philanthropic support.

I am sure that all of you are aware of the financial pressures that public institutions of higher education are facing due to budget cutbacks at the state and federal levels. UW-Madison is no exception, and philanthropic support from industry, friends, and our alumni has become essential to ensuring that our students have effective learning experiences that will serve them throughout a lifetime. This fall, UW-Madison will be launching a focused annual philanthropic campaign, and likely will be reaching out to many of our alumni. If you participate in this program, I encourage you to specify that your gift be assigned to Geological Engineering. I also encourage you to consider making a pledge using our form on the backside of this newsletter or directly at http://www.engr.wisc.edu/interd/gep/support.html.

I will ensure that discretionary gifts made through the annual giving campaign are used to benefit students through activities such as hands-on learning in laboratories, experiential learning programs, and field opportunities. Through gifts from our friends and alumni, we provided scholarships to 25% of our undergraduates last year and began upgrading our laboratories to provide a more modern hands-on experience. Upgrading laboratories remains a high priority for Geological Engineering, and your discretionary gifts will help us provide these facilities for student use.

I look forward to seeing many of you at the reunion this month. I also welcome your feedback on The Dig, and welcome your comments and suggestions regarding Geological Engineering. And, if you are in Madison, please stop by for a visit.

Craig H. Benson, PhD, PE, NAE
Wisconsin Distinguished Professor and Chair
In 2010 Cole Christiansen graduated from UW-Madison's mining engineering program and began working for Golder Associates in Denver, Colorado. During his time at UW-Madison, Christiansen worked closely with Professor Craig Benson and Research Scientist Sabrina Bradshaw. Christiansen spent months working on a site investigation of a coal-fired power plant in which he and his supervisors studied the hydraulic conductivity of geo-synthetic clay liners (GCL) and performed tests on the hydraulic conductivity of clayey materials. The project obtained the AWSF fellowship on the chemistry and the environmental impact of clayey materials under different confining pressures.

In addition to research with Benson and Bradshaw, Christiansen received funding from the Shiel Undergraduate Research Fund in January of 2011 to pursue a research project on the identification and characterization of preferential flow paths in the Madison area. He also spent time pursuing extracurricular activities, such as playing in the UW-Madison marching band and attending NCAA basketball games. The Effectiveness of Blountite as an Ammonium Seal in Wells. Christiansen completed this research under the direction of Professor Craig Benson and Research Scientist Sabrina Bradshaw. Christiansen spent months working on a site investigation of a coal-fired power plant in which he and his supervisors studied the hydraulic conductivity of geo-synthetic clay liners (GCL) and performed tests on the hydraulic conductivity of clayey materials. The project obtained the AWSF fellowship on the chemistry and the environmental impact of clayey materials under different confining pressures.

Christiansen’s research, however, was temporarily put on hold for a chance to gain experience in the world of consulting engineering. He worked for Golder Associates as a geological engineering intern in Denver, Colorado.

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