

Alumni Update

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Degree and Date(s): BS () MS () PhD ()

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**Please return to: Biological Systems Engineering Alumni Newsletter
460 Henry Mall, Madison, WI 53706
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**BIOLOGICAL SYSTEMS
ENGINEERING UPDATE**

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UPDATE

*A Newsletter of the University of Wisconsin-Madison
Biological Systems Engineering Department*

Spring 2003

Vol. 5, No. 4

The Chair's Chips



Spring on the UW-Madison campus is the time of the year when awards are presented to recognize accomplishments of the faculty, staff, and students, as well as a time when many graduate and undergraduate students are preparing to graduate. Numerous alumni were also recognized for their accomplishments this spring. The details on honorees can be found throughout this newsletter.

Before graduation, many seniors must complete their senior design projects culminating in a poster presentation open to the campus. Several graduate students will also be defending their research work before the end of the semester.

Currently, faculty are preparing for a department review of teaching, research and extension activities. A team organized by the USDA CSREES (Cooperative State Research, Education and Extension Service) will evaluate BSE and prepare recommendations for the college administration. These recommendations will be very useful as the department evolves with a greater focus on a biology-based engineering.

Due to severe state budget constraints, the planned addition to the Agricultural Engineering Laboratory has been moved from the 2003-05 biennium to the 2005-07 biennium. Several other UW-Madison projects such as Microbial Sciences and the Integrated Dairy Facilities, Phase Two are in the 2003-05 plans. The latter project involves USDA agencies, NRCS and ARS with new facilities at Marshfield. The Biochemistry addition continues on schedule for 2005-07, which will lead to a new structure immediately south of our building on Henry Mall. Life Sciences Communications will be relocated.

Thanks to the Sixty's Decade Alumni Computer Fund, we were able to purchase two new desktop computers for the undergraduate student design and computer laboratory. The students consistently make good use of this laboratory at all hours of the day. BSE students have access to these computers any time of the day because they are issued special keys to enter the building.

For those attending the International Meeting of ASAE in Las Vegas, Nevada, July 27-30, 2003 be sure stop at the UW-Madison BSE Alumni Reception from 8:00 p.m. to 10:00 p.m. on Monday, July 28 in the Capri 104 of the Riviera Hotel. You will have the opportunity to meet faculty and other alumni and to learn about activities in the department. Light refreshments will be served.

Since our last newsletter in November, 2002, friends and alumni of BSE have contributed nearly \$70,000. We greatly appreciate your support! Again, if you are traveling this summer or are ever in the Madison area, be sure to stop by the department to visit regarding the progress and changes occurring in BSE. In closing, be sure to share any news by completing the form on the back page.

Sincerely,

Ronald T. Schuler
BSE Department Chair

THANK YOU

to our contributors
November 16, 2002 -
April 22, 2002

Contributors to the departmental funds established in the UW-Foundation include:

- Carrie R. & Elton D. Aberle
- Marilyn Adams
- David L. Ahlgren
- Alliant Energy Corp.
- Kevin Andrasek
- Jerold W. & Ruth E. Apps
- Laurence & Arlis H. Arnold
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- Timothy H. & Patricia A. Fredman

BSE FACULTY AND STAFF TAKE CENTER STAGE

At the April 9, College of Agricultural and Life Sciences Awards Banquet several BSE faculty and staff received recognition for their accomplishments and strong support of BSE programs. James Converse received the CALS Advisor Award; Cheryl Skjolaas, the CALS Academic for Leadership and Service Award and Jeff Nelson, the J. S. Donald Short Course Teaching Award.



Jim Converse received the CALS Advising Award for his role in advising undergraduate students and the support he provides for our program. Converse joined the department in 1970 as an Assistant Professor when he started advising students. Currently, he advises twenty-six students.

Since 1996, he has chaired the BSE Undergraduate Instruction committee, which processes all BSE curricula and course changes. He also served as BSE Department Chair from 1988-1996. In addition, he annually updates our Undergraduate Student Handbook, which is impacted by BSE changes as well as changes in other departments.

Converse provided the leadership in assembling the documentation for our accreditation by the Accreditation Board for Engineering and Technology in 2000. As a result of his efforts, we received approval for six years, the maximum that is approved.

He also directs the exit evaluation completed by our graduating seniors near the end of their last semester. This evaluation is used to improve our undergraduate program. He works closely with CALS Academic Affairs Office to certify students for graduation. Additional work is required now that students must complete the Fundamentals of Engineering for graduation. ★

Cheryl Skjolaas, a Senior Outreach Specialist, received the CALS Academic Staff Excellence in Leadership and Service Award. Skjolaas joined BSE in 1991 as an outreach specialist on the Agricultural Promotion Systems project funded by the National Institute for Occupational Safety and Health. She has continued as specialist on other safety and health programs in BSE including AgrAbility of Wisconsin, Agricultural Safety and Health Center of Wisconsin, and the National AgrAbility Project.



She has been innovative and creative in developing materials for youth and adults on safety and health projects. Skjolaas has provided educational support of Agricultural Safety and Health programs for county agricultural agents, county youth development agents, and agricultural education teachers. The state

EMERITUS PROFESSOR BROOKS PASSES AWAY

Lynn Brooks, BS, Agr. Engr. '48, BS, CE, '48 and MS, Agr. Engr. '58, passed away on December 27, 2002. Lynn was a member of the Agricultural Engineering Department for 37 years serving as professor and extension specialist in Farmstead Electrification and retiring in 1987. Lynn was born in Kaukauna and lived most of his youth on a farm near Berlin. During World War II, he attended Western Michigan College and Notre Dame in the US Navy officer's training program. After receiving his undergraduate degrees, Lynn worked for the US Soil Conservation Service as a district engineer in southeast Wisconsin.

He joined the department in 1950 as an instructor becoming the project leader for the Electric Research Farm, which was used to demonstrate and promote the use of electricity on the farmstead. After receiving his MS degree in 1958, he was appointed extension rural electrification specialist. Lynn was promoted to Assistant Professor in 1964, Associate Professor in 1967, and Professor in 1975. The primary focus of his extension work was milking equipment, milk cooling, mechanical farmstead equipment, ventilation, corn drying, efficient use of electricity, and stray voltage. He coordinated the statewide 4-H electricity project and served as the superintendent of the Mechanical Science Department at the Wisconsin State Fair from 1967-1982.

Lynn was active in ASAE serving on numerous committees and as chair of the Electric Power and Processing Division in 1967-68. He was awarded the George W. Kable award by ASAE in 1985. He coordinated the establishment of the Wisconsin Farm Electric Council and served as its secretary/treasurer for 25 years. From 1977 through 1985, Lynn served as the general manager of Farm Progress Days and was active in the North American Farm Show Council serving as president in 1983.

Lynn and Norma, his wife of 52 years, were strong supporters of the UW-Madison attending many events from football games to alumni gatherings. They established the Lynndon and Norma Brooks Scholarship Fund, which provides an annual scholarship to be awarded to a BSE student. Anyone interested in contributing can complete the form below. ■

Biological Systems Engineering Campaign

I/we wish to join other students, alumni, industry and friends in enhancing the teaching, research and outreach programs in the Department of Biological Systems Engineering by contributing as indicated below to the Campaign.

_____ \$250 _____ \$500 _____ \$1,000 _____ \$5,000 _____ \$10,000 _____ Other

I/we wish to pledge \$_____ each year for _____ years beginning in _____ (year).
Please remind me of the annual amount I have pledged in _____ (month).

I/we wish to make a single gift at this time. Enclosed is my/our contribution of \$_____.

Please charge my gift of \$_____ to my: Master Card Visa American Express
Card Number _____ Expiration Date _____
Cardholder's name (please print) _____
Cardholder's Signature _____ Date _____

I/we wish to designate this gift: _____

Where the need is greatest in the Department, for facility enhancements, for faculty/research support, for student support, other _____

Name: _____

Address: _____

Please make your gift payable to **UW-Foundation-BSE Campaign**.
University of Wisconsin Foundation, 1848 University Avenue, P.O. Box 8860, Madison, WI 53708-8860



Alumni Update



Thank you for continuing to send your business cards and information updates. We appreciate hearing from you! If you haven't kept in touch, please send us your business card and/or complete the form at the end of this newsletter.

Aircardo Roa-Espinosa, MS, Agr. Engr., '85, PhD, Agr. Engr., '89, was recently in Iraq to assist the US Marines in creating a safer environment. As a graduate student in BSE being advised by Gary Bubenzer, Roa-Espinosa worked on the soil bonding theory of some polymers to reduce soil erosion. This theory was applied in Iraq to reduce the dust created by the helicopters during landing and take off.

The U. S. Marine Corp was extremely interested in this theory because of safety issues especially during landing. During helicopter landing, neither the pilot nor members of the crew could see through the cloud of dust. Reducing the dust in the air greatly improved visibility, reduced air cleaner

maintenance, and decreased the wear of engine and equipment parts. Roa-Espinosa spent one week in Iraq assisting the Marines in implementing this program.

Gary Hoerth, BS, Ag. Engr., '88, works as Senior Civil Engineer for STS Associates out of the Milwaukee office. He is currently completing an MBA program at Northern Illinois. His daughter Amanda is currently enrolled in our BSE program. Gary has an unusual e-mail address- waterwrestler@aol.com.

Jim Meier, BS, Ag. Engr., '94, reports that he recently founded Great Lakes Engineering, LLC in Grayslake, Illinois. The company offers services in engineering, land surveying and

planning. Their primary concentrations are stormwater management and site development with a focus on conservation and best management practices. Jim is looking for a summer intern who would do Engineering/CAD and field surveying.

Bob Satori, BS, Ag. Engr., '94, has recently been promoted to the position of Engineering Manager of the Structural Design and Analysis Group of Manitowoc Cranes in Manitowoc, Wisconsin. His group is responsible for the design and finite element analysis of the major crane structures including Rotating Frame, Carbody, and Boom Sections, as well as release of the crane capacity charts. Before this promotion, Bob was a staff project engineer leading a new product development team. ■

A TRIBUTE TO SCHROEDER AND STAAB

Ervin Schroeder, BS, Agr. '32, BS, ME '35, passed away recently in Utah. He received his master's degree in Agricultural Engineering from Penn State. From 1933-1936, Mr. Schroeder helped design and build flood control dams with the Soil Conservation Service.

From 1936-1946, he was a professor at Penn State and headed the Farm Equipment Research for the Tennessee Valley Authority from 1946-1947. He then served as professor and head of the Agricultural Engineering Department at Oklahoma State University from 1947 until his retirement in 1974.

He was recognized by ASAE by being elected Fellow and awarded the Massey-Ferguson Medal, both in 1969. He was also a member of the American Society for Engineering Education. Other recognition included being listed in American Men in Science and being elected a member of Alpha Zeta, Sigma Xi, and Sigma Tau.

Mr. Schroeder was instrumental in hiring at least two UW-Madison alumni at Oklahoma State University: Larry Roth, BS, Agr. '50, BS, ME, '52 and Jerry Brusewitz, BS, Agr. '64; BS, ME, '65; MS, Agr. Engr., '67. Both are also retired. Last spring, Mr. Schroeder established an endowed scholarship fund. Before that, he contributed annually to the scholarship to award two, \$500 scholarships. Anyone interested in adding to his scholarship can complete the contribution form on the bottom of page 7.

Don Staab, BS ME '59, MS Agr. Engr. '60, passed away on June 22, 2002 at the Franciscan Woods in Brookfield, Wisconsin. He owned Special Equipment Services since 1967. ■

organizations for these groups have recognized Skjolaas by presenting her with their statewide awards.

The AgrAbility programs provide education and direct assistance to farmers with disabilities. The National project, where Skjolaas serves as the project manager, provides support and training for twenty-four state projects.

She has been active in the National Institute of Farm Safety (NIFS) where she served as chair of the finance committee, and now she holds the role of executive secretary for the organization. She was selected for this position because of her organizational and interpersonal skills. ★



The J. S. Donald Short Teaching Award recognizes outstanding support for the Farm and Industry Short Course Program. **Jeff Nelson**, a 2003 recipient of this award, became involved in teaching short course in 1996 and now has full responsibility for the Farm Power course (three weeks) and teaches all of the Farm Machinery course (six weeks) except for ten to twelve lectures.

Nelson has received high student ratings in the courses and has developed an interactive environment in the laboratory. The students enjoy the opportunity to complete hands-on projects. For the lectures, he has developed power point presentations, which provide detailed diagrams and explanations. These classes are intensive and challenging since they meet everyday with three hours of instruction each day. ★

SUMWALT RECEIVES FRONTLINE AWARD

Debra Sumwalt, a program assistant in BSE since 2000, received the Frontline Award from the UW-Madison Student Personnel Association, for her support of BSE in the front office. She enthusiastically greets BSE visitors and makes the department a welcome place for students especially the international students. She is very willing to answer all questions or finds the answers by doing the research or sending the student or visitor to the correct people whom can easily provide the answer.



Ron Schuler and Candy Pharo proudly nominated Debby for her dedication to BSE and the UW.

She is extremely knowledgeable regarding our faculty research and the UW-Madison campus. As the person who manages graduate student applications, she has developed a close working relationship with staff at the graduate school and many times makes faculty aware of opportunities of new and recurring programs for additional support. ★

- Bill & Helen George*
- Barbara A. Giese*
- Margaret A. & Thomas S. Gingras*
- Doris D. Graf*
- William E. Grogan & Judith A. Benade*
- Robert H. Grummer*
- Al & Suzie Haars*
- William J. Hacker*
- James L. & Norma K. Halderson*
- Rogene Halpop*
- Gregory J. Hanson*
- James D. & Gladys A. Hansen*
- Jerry Hardin*
- Helen R. Harvey*
- Keith M. & Ruth F. Hawks*
- Marcy Schultz Heim*
- Bobette F. Heller*
- Donald L. Henderson*
- Christopher James Herlache*
- Richard D. Holloway*
- Brian J. & Mary Holmes*
- Andrew & Linda Hopfensperger*
- Chrystie M. Jackson*
- Gail E. & Janice Janssen*
- Byron Jevine*
- John Deere Foundation*
- Karen F. Johnson*
- Larry R. Johnson*
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- Hallie R. Kirschner*
- Karl R. Klingelhofer*
- Richard L. LaCroix*
- Allen R. & Joan M. Liegel*
- Richard & Betty Lievens*
- James R. & Nancy R. Love*
- Russell L. & Edna L. Luchow*
- Dorothy Hodgskiss & Robert Luening*
- Madison Gas & Electric Co.*
- Vilas W. & Gladys V. Matthias*
- Karen McCarthy*
- Kenneth L. & Imogene G. McFate*
- Mark A. Mickelson*
- Paul A. & La Vay E. Morrison*
- Carleton S. & Bonnie L. Nehring*



Jill Grodecki, a senior in the Natural Resources and Environment area, received one of the UW-Madison Harvey Meyerhoff Undergraduate Excellence awards for her academic achievement, leadership and service. This award provides university-wide recognition for Jill's accomplishments who while maintaining excellent grades also actively participated in many campus activities outside the classroom. Jill was president of the pre-professional ASAE student group for 2001-2002. She currently is a national pre-professional officer serving as vice-president, and she developed the web design for UW-Madison Quarter Scale Tractor Team, which won first place at the ASAE competition in June, 2002. ★



Karen Mandl, a senior in Food and Bioprocess Engineering, received an outstanding senior award in the College of Agricultural and Life Sciences. Karen was recognized for her superior academic performance and involvement in extra-curricular activities both on and off campus. She served as vice-president of the Society of Women Engineers and was involved on numerous committees. She was a writing editor for the Wisconsin Engineer. The past two summers, Karen was employed at General Mills and plans to return this summer. In the fall, she plans to pursue a master's degree in Food Science. ★



Julie Graham, a senior in Food and Bioprocess Engineering, received the outstanding undergraduate student in Biological Systems Engineering from the Wisconsin Section of ASAE at their April 2 meeting. Julie has an excellent academic record and has served as the UW-Madison Student Pre-Professional Club secretary from 2001-2002 and vice-president from 2002-2003. She is also involved in numerous other campus clubs and activities. Last summer, she was employed at Nestles in Eau Claire where she worked on mixing baby formula. ★



Josh Bacon and **Ben Binversie** received outstanding graduate student awards from the Wisconsin Section of ASAE. Both were recognized for their research accomplishments and support of the student pre-professional club. They had key roles in the lawnmower/snowblower clinic last fall and provided support to the quarter-scale tractor team. Both completed their undergraduate degrees at the UW-River Falls and are conducting research in the machinery systems area. ★



Biological Systems Engineering UPDATE

460 Henry Mall, Madison, WI 53706

For more information, please call (608) 262-3310 or visit us on the web at <http://bse.wisc.edu>.

POFAHL AND BEHLING RECOGNIZED FOR SERVICE

Bob Pofahl, BS, Agr. Engr., '71, MS Agr. Engr., '73, received a College of Engineering Distinguished Service Award when the college celebrated its 55th Annual Engineer's Day on October 18. The college recognizes outstanding engineers who are nominated by various departments based on their contributions to the engineering profession.

After receiving his degrees, Bob began his career reviewing resources for the Minnesota Department of Natural Resources. After four years, he joined Harza Engineering and later Boyle Engineering in Fresno, California. At that time, he worked on solving environmental problems associated with water quality and irrigation.

In 1985, Bob returned to Wisconsin to focus on soil and groundwater remediation while employed as a senior engineer with the national consulting firm, RMT, located in Madison. After two years, Bob formed a new consulting firm, Resource Engineering Associates. His company focuses on environmental considerations of development including site selection, water resources, and waste management.

Bob is a member of ASAE currently serving as vice-chair of programs of the Wisconsin Section of ASAE, which will be followed by him chairing the section. He is active in the Middleton community serving as a member the Middleton Chamber of Commerce's Economic Development Committee and is a volunteer in school and recreational activities. Bob and his wife, Julie, have three children, a son who graduated from UW-Madison and two daughters who are currently students at the UW-Madison. ★

Keith Behling, BS Ag. '68, received the Wisconsin Section of ASAE Career Award for his 33 successful years of employment with the USDA National Resources and Conservation Service in numerous engineering positions. Scott Mueller writes, "Under Keith's leadership countless tons of soil were saved, countless miles of surface water quality were protected and countless square miles of ground water were protected." He was instrumental in developing rules, inventories, planning procedures, and implementation for Wisconsin Non-Point pollution abatement program NR-120. He was a mentor for at least a dozen NRCS engineers. Keith was very involved in community activities including service clubs, community projects and promotions for agricultural production.

Keith started his career as an engineer in Eau Claire from 1967-1970 and became an area engineer in Wausau from 1970-1975. Since that time, he has been an area engineer in Richland Center, retiring in 2000. He continues to be active in his community and most notably serving as the grounds committee chair for the 2002 Wisconsin Farm Progress Days.

For his outstanding performance while employed by NRCS, Keith received numerous Certificates of Merit (6), Spot Awards (2), and Certificates of Appreciation (3). He was active in ASAE serving on several committees. ★

Dorothy Nelson
Marlin Nelson
Gary Niesen
John W. O'Connor
Clarence C. Olson
William A. & Mary M. Peterson
William A. Pick
Ronald E. & Margaret R. Pierce
Wilfred J. & Ardith M. Pierick
Jeffrey A. & Noren Poirier
Norval E. & Marjorie L. Rather
James Rauwerdink
Charles W. & Lois J. Reid
Douglas J. & Mary Kay Reinemann
Phillip E. Risser
Dwayne A. & Wilma Janet Rohweder
David K. Schirer
Walter W. Schlessler
Ronald T. & Barbara L. Schuler
Rakesh K. Singh
Gerald M. & Shirley Smith
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