

Alumni Update

Name: _____

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

Home Address: _____

E-mail Address: _____

Phone Number: _____ Fax Number: _____

Position: _____

Employer: _____

News to share: _____

Please return to: **Biological Systems Engineering Alumni Newsletter**
460 Henry Mall, Madison, WI 53706
or e-mail information to:
BSE@facstaff.wisc.edu

BIOLOGICAL SYSTEMS ENGINEERING UPDATE

460 Henry Mall
Madison, WI 53706

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UPDATE

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

Vol. 4

No. 1

The Chair's Chips

As we move rapidly through the spring semester, students and faculty are busy with many activities. Students are preparing for Engineering Expo and the ASAE Quarter Scale Tractor Competition. Faculty and staff are busy teaching, preparing end of the year reports and writing grant proposals. The students are planning three exhibits for Engineering Expo scheduled for April 18-20. Reflecting on 2000, numerous accomplishments by faculty, staff and students were realized.

In the last newsletter, we reported the approaching ABET (Accrediting Board for Engineering and Technology) evaluation which took place in November. Dr. David Thompson, former chair of Agricultural Engineering at Oklahoma State University, was our ABET visitor who recommended continued accreditation for six years. This is the maximum. He did list two concerns that we will address before the next visit in 2006. We will receive the official word shortly.

Plans continue for the finale celebration of reaching our BSE Campaign goals, *Creating Solutions for the 21st Century*, through your gifts, pledges and deferred gifts. This event will take place at the College of Agricultural and Life Sciences Dean's Breakfast scheduled for May 12 from 8:30 am to 10:30 am at the Edgewater Hotel in Madison. Each year the Dean has a breakfast to recognize alumni and friends for their support of CALS programs. All donors to BSE funds will be invited to attend. Tours of our building and laboratory will be available after the breakfast. This breakfast occurs during Alumni Weekend when many other campus activities take place.

In 2000, we were successful in adding two new faculty. KG Kathikeyan joined us last August as an assistant professor in the natural resources and environment. His research and teaching will focus on water quality. In December, Dr. Ferencz Denes started as an assistant professor in the food engineering area. His emphasis will be working on food safety.



Our building upgrade and remodeling, which started in October of 1999, is progressing. Most of the final work involves a new air handling system for the building at Henry Mall, which will provide a better environment. Hopefully the project will be complete by the Dean's Breakfast on May 12. Our building now meets the Americans with Disabilities Act with the addition of a ramp and an electrically operated door at the rear of the building. Numerous other changes have taken place making our building accessible.

In closing, we thank you for your support for our campaign and wish you the best in 2001. Please keep us informed of changes in position and/or location by completing the Alumni Update on the last page of this newsletter. Visit our website at <http://bse.wisc.edu> to get the latest information.

Sincerely,

Ronald T. Schuler

BSE Department Chair

THANK YOU

to our contributors
October 15, 2000 -
February 15, 2001

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David R. Bohnhoff

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Gary D. Bubbenzer

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Thomas G. Franti

Michael P. Frozena

Alan C. Geisthardt

Robert J. Goetz Jr.

Sundarum Gunasekaran

William J. Hacker

Holmes, Gunasekaran, and Converse Recognized

Brian Holmes received the Research Award from the Wisconsin Forage Council during their meeting in January. Brian's research focused on the silage density in bunker silos. Working with county agricultural extension agents, Brian collected data on silage density and packing practices on a large number of bunker silos on farms throughout Wisconsin.

In December, Sudarum Gunasekaran returned from Denmark where he was doing cheese research supported by a Fulbright Fellowship. Recently, Dr. Gunasekaran received a Samuel C. Johnson Distinguished Fellowship for 2001-2003. He will use the fellowship funds to support his work on "Smart Hydrogels."

Jim Converse received recognition for his dedicated work on the Conference Program Committee from the National Onsite Wastewater Recycling Association.

Denes – Joins BSE Faculty

Dr. Ferencz (Frank) Denes joined the BSE faculty on December 1 as an assistant professor working in the food safety. Dr. Denes received his degrees in Chemical Engineering from Gh. Asachi Polytechnical Institute in Romania. He has served on the faculty as a Principal Scientific Investigator, Poni Institute of Macromolecular Chemistry, Jassy, Romania. In 1992, he arrived at the University of Wisconsin-Madison as a scientist in the Center for Plasma Aided Manufacturing in the Engineering Research Center of the College of Engineering.



As a member of the Research Center Staff, Dr. Denes conducted research in plasma chemistry with a focus on surface modification. He was working with researchers in Forest Ecology and Management and Food Research Institute in the College of Agricultural and Life Sciences. In addition, he worked with faculty in Human Ecology on textile materials.

This position that Dr. Denes is filling was part of a chancellor's cluster hire in the area of food safety. This food safety cluster consisted of four new faculty being hired in four different departments working as a team to address food safety concerns.

Dr. Denes will use plasma chemistry to modify surfaces to improve food safety. Some of his food safety research will focus on the surface modification of food packaging material. We welcome Frank to BSE.

\$\$\$ New BSE Funds \$\$\$

Since our last newsletter in October, two more funds have been established at the UW Foundation. Robert Meier (BS, 1943) provided support to establish the Robert Meier/Professor Floyd W. Duffee Scholarship Fund as a tribute to Professor Duffee. From 1918 to 1962, Professor Duffee was a member of the department and served as chair from 1937 until his retirement in 1962. He was recognized for the development of the forage harvester with an ASAE Historical Plaque located at the entrance to our laboratory building.

Mr. Meier entered the U. S. Army after graduation and then began his engineering career with John Deere at the Harvester Works. For the remainder of his engineering career, he worked at John Deere Des Moines Works and John Deere Ottumwa Works. Retiring in 1983, Robert continues to be active in many civic and community organizations.

Through pledges from the five investor owned utilities in Wisconsin, the Rural Energy Fund will be established to provide extension/outreach and research useful to rural communities. We will work through the county

extension offices and investor owned rural community staff on rural energy issues. The five investor owned utilities are Alliant, Xcel (formerly Northern States Power), Madison Gas and Electric, Wisconsin Electric Power and Wisconsin Public Service. A special thanks to Chuck DeNardo of Wisconsin Electric Power for his leadership in organizing the support for this fund.

Following is a list of Funds established since the BSE Campaign was established. If you are interested in contributing to any of these funds, please feel free to complete and return the pledge form printed below.

- ◆ Biological Systems Engineering Campaign Fund
- ◆ White Clover Dairy Research Fund
- ◆ Hjalmer D. and Janet W. Bruhn Fellowship Fund
- ◆ Martin E. and Kathleen M. Burkhardt Fund
- ◆ Sixties Decade Student Computer Lab Fund
- ◆ Gail Edwin and Janice Faye Janssen Biological Systems Engineering Scholarship Fund
- ◆ Ham Bruhn Biological Systems Engineering Scholarship Fund
- ◆ Dick and Grace Stith Scholarship Fund
- ◆ Lynndon A. and Norma A. Brooks Scholarship Fund

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.



Alex Charvat (MS, 2000) is employed by the Wilderness

Company overseeing the design and engineering of full and half log homes. He is an engineering and design services manager in Plymouth, WI

Tim DeWitt (BS, 1985) is an Associate with Kimely-Horn and Associates in California. He is a registered Professional Engineer in California.

Aaron Faessler (BS, 2000) is a design engineer with McFarlane Manufacturing Co. in Sauk City,

WI. In June 2000, Aaron married Amanda Newby who works for Wisconsin DOT as a webmaster.

Mike Kelly (MS, 1996) is currently working for the city of Austin, TX as a water resources engineer. He is responsible for design and management of projects that minimize flooding, protect property from stream bank erosion and degraded stream systems to geomorphic equilibrium.

Thomas Clark (BS, 1985) returned to the U. S. from London, England where he worked for the management consulting firm, Booz Allen and Hamilton. He and his family returned to the Chicago area.

Mehmet Ak (PhD, 1993) works as a research and development coordinator for Aromsa, Ltd. in Istanbul Turkey.

Robert Smithyman (BS, 1948) is a retired farmer residing in Rubicon, WI. For news to share, Robert says, "milk is still too cheap and I remember working with Ham Bruhn on a old Case cross motor."

Vernon Paul Biel (BS, 1960) is retired. Living in Randolph, WI. Vernon reports that he has a new address after 36 years.

Do you have an update you wish to share? If so, let us know by completing the Alumni Update form on the last page of this newsletter. We love to hear from our Alumni!

Visiting Companies - A Key to Success



For the past four years, a representative of the foundation and the BSE department chair have spent one day a month visiting companies which could potentially provide employment for our graduates and may have interests in supporting the BSE department. Usually there are three companies visited each day. We have made visits with companies from Chicago, IL to Minneapolis and St. Paul, MN to Green Bay, WI.

We greatly appreciate the hospitality shown by these company representatives who often are BSE alumni. If you are interested in visiting with us regarding mutually beneficial opportunities, please feel free to contact Ron Schuler by phone at (608) 262-0613 or e-mail rschuler@facstaff.wisc.edu.



ASAE Summer Meeting

We will again host a reception for alumni and friends attending the 2001 International ASAE Meeting in Sacramento, CA from July 29 to August 1. Faculty and students will be there to share the news from the BSE department.

See the 2001 ASAE International Meeting Program of Events for the time and location of the reception.

THANK YOU

to our contributors
October 15, 2000 -
February 15, 2001
(continued...)

Harvest Tec Inc.

Jason A. Heindel

Myron L. Hillestad

Richard D. Holloway

Brian J. Holmes

International Paper Co.

Gale E. and Janice Janssen

John Deere Foundation

David W. Kammel

Hallie R. Kirschner

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Thomas J. Loehr

Ronald A. Martin

Marty J. Mathison

Robert H. Meier

Mark A. Mickelson

Scott A. Mueller

Gary W. Nyman

John W. O. Connor

Edward J. Odgers

Leslie L. Pagel Jr.

Student News

Our students are planning three projects for the Engineering Expo scheduled April 18-20 on the engineering campus. Machinery systems students will have a display of their quarter scale tractors and a full sized tractor. The food and bioprocess engineering students are planning a rice krispies



Brian Huenink (left), a 2000 Tractor Team Co-Leader, passes the helmet to Jon Frey, a 2001 Tractor Co-Leader.

bar manufacturing process line. The natural resource and environment students are developing a wetlands display. As usual, the Expo is open to the public. So if you are in the Madison area during this time, please stop by our displays.

The Quarter Scale Tractor Team is busy designing and constructing the 2001 UW-Madison tractor model. They will prepare a written report and an oral presentation. The team co-leaders are Jon Frey and Travis Nonn. The National Competition takes place at the Quad Cities Downs in East Moline, IL on June 1-3, 2001. Alumni in the area are encouraged to stop by and visit with students and faculty.



Brian Huenink, Machinery Systems Graduate Student

Brian Huenink, a December graduate and currently a Machinery Systems graduate student in the department, received the outstanding student activities award from WALSAA (Wisconsin Agricultural and Life Sciences Alumni Association). Brian served as the 1998-1999 president of the Student Pre-Professional Club, formerly the student branch, and 1999-2000 co-leader of the Quarter Scale Tractor Team. He was also active in Bacock House, an agriculture campus living unit. The award he earned included life membership in WALSAA and a plaque.

Biological Systems Engineering UPDATE

460 Henry Mall, Madison, WI 53706

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



BSE Receives Laboratory Modernization Funds



We were recently approved to receive funds for a laboratory modernization project of \$93,500 to improve our laboratory used for the *Engineering Properties of Food and Biological Materials* (BSE 365) course taught in Room 118 of the laboratory.

The funds will be used primarily to purchase laboratory equipment to be utilized by the undergraduates enrolled in this course. Examples of this equipment include a data acquisition system, computer vision system, a camera for the vision system, ultra filtration system, water transmission rate testing unit, near-infrared unit and drying oven. In the past, we have received laboratory modernization funds for the student computer room, machinery systems, building systems, and the measurement and instrumentation laboratories.

These funds provide the BSE department with an excellent opportunity to maintain our laboratories. Approximately every three to four years, we have been selected for this support.

THANK YOU

to our contributors
October 15, 2000 -
February 15, 2001
(continued...)

Daniel L. Pederson

James O. Peterson

Mark A. Purschwitz

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Rakesh K. Singh

Richard J. Straub

Leon J. Urben

Patrick W. Walsh

Wausau Insurance Companies

Laurence J. Wiest



Let's Celebrate!
Biological Systems Engineering
Campaign Finale
Edgewater Hotel
May 12, 2001



All contributors to the Biological Systems Engineering Campaign are invited to attend the Campaign Finale to be held in conjunction with the College of Agricultural and Life Sciences' Dean's Club Recognition Program. The event will feature several donors to the Biological Systems Engineering Campaign and also recognize all Campaign gifts. All donors will also receive a special gift to commemorate the finale and the tremendous success of the Campaign! **Thank you all for your help!**

If you have not yet participated in the Campaign, you may still do so by using the form included in this newsletter. We also welcome our alumni returning for the WAA Alumni Weekend to this event and will recognize special class anniversaries. If you are celebrating a special graduation anniversary, you should have also received a invitation from WALSA. Invitations to the Campaign Finale/Dean's Club Recognition will be mailed out in early April. If you have questions about the CALS Dean's Club, please contact Jodi Jacobson, UW Foundation, at (608) 263-2027 or jodi.jacobson@uwfoundation.wisc.edu.



FOCUS ON AN ALUMNUS - LARRY ROTH



*Larry Roth, BS Agriculture - 1949,
BS Mechanical Engineering - 1951*

Larry Roth completed his Bachelor of Science degrees in Agriculture (1949) and Mechanical Engineering (1951). While an undergraduate, Larry worked for Bob Yeck on his Bank Barn project, for Charlie Owens on his beekeeping project and with Professor Bruhn and Professor Wojta.

After completing his undergraduate degrees, Larry accepted a teaching position at Oklahoma A & M and started graduate school. Larry was hired by Professor Erv Schroeder, a Wisconsin graduate (BS Agriculture-1932, BS Engineering-1935). Larry had one week to make his decision about the teaching position. Making his decision on a Friday in September, he met his two classes the following Wednesday. One class which had 100 students enrolled consisted of two, 50-minute lectures and six, 2-hour laboratory sections. The other class had 25 students with one, 50-minute lecture and one, 2-hour lab. This was twenty-five percent time and it was Larry's first teaching experience and the start to his 35-year career in Oklahoma.

He completed his doctorate degree in 1965 in Agricultural Engineering at Oklahoma State University and remained on the Oklahoma faculty until his retirement in 1985. His principal area of research was pesticide application technology with a special focus on aerial application. While on the faculty he had sabbaticals at the John Deere Des Moines Works and Technion University in Haifa, Israel. He received numerous awards including an USDA Superior Service Award in 1985.

On two occasions, Larry calibrated aerial application equipment in Wisconsin at Wautoma and Baraboo. Additional world travel providing pesticide application equipment training included trips to Central and South America, Africa, Asia and the South Pacific. During his travel he had many experiences to share. In many cases, the experiences can be best described in short quotes from Larry. "The spray plane featured a sheet of armor under the cockpit area." "What we failed to do was notice that there was a mother elephant just out of sight." "They, the trainees, preferred to sit in the shade and watch us do the wok until the awning was taken down." "Get into your work clothes and get out where you can do some good."



Hanging-out with his grandson, Larry enjoys a life of leisure in his retirement at Larry's Paradise.

We thank Larry for sharing his experiences. He now enjoys retirement on his 40-acre tract known as "Larry's Paradise."