

# BSE Update

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

Volume 17, Issue 2

Winter 2010

## Inside this issue:

*Student Update* 2

*Student Scholarships* 4

*Faculty Update:* 6  
*Pat Walsh*

*Faculty Update:* 7  
*Cheryl Skjolaas*  
*Dr. Becky Larson*

*Faculty Update:* 8  
*Aicardo Roa-Espinosa*

*Faculty Update:* 9  
*Dr. Robert Anex*  
*Thank You Donors*

*Faculty Update:* 10  
*Roger Rowell*

*Funding Update* 11

## Remarks from the Chair

As I reflect over the challenges we have all faced over the last year, I can say with certainty that Biological Systems Engineering has been in a position of growth. We are certainly a stronger department today than we were at this time last year.

Our student numbers continue to grow, and we now have nearly doubled our undergraduate enrollment over the last several years. We have also seen an increase in graduate student numbers that reflects the grant funding success of our faculty. We currently have about 105 undergrads and more than 40 graduate students.

The quality of our students is reflected in the continued success that they and our ASABE pre-professional club have in ASABE competitions, where our students placed first in the AEM competition and placed well in several other competitions such as the Quarter Scale Tractor and the AGCS Student Design competitions.

We have added two new faculty this year. Rebecca Larson, a Michigan State alum, joins us as an assistant professor working in the area of bio-wastes. Her position is primarily extension/outreach and research, but she will also teach in the bio-waste area. Additionally, Robert Anex joins us as a new bio-energy/systems faculty. Rob previously was a professor at Iowa State University and joins us in a similar senior position. Rob's position was made possible as a hire through the Wisconsin Bioenergy Initiative. We welcome both Becky and Rob.



Professor and BSE Dept. Chair  
Richard Straub

Equally important to our success are our alumni who continue to excel in their own professional accomplishments and who have continued to provide support for our academic programs and institutions. One outstanding example of recognition of an alumnus occurred this fall when Aicardo Roa-Espinosa was recognized by the College of Engineering with a Distinguished Service Award. Aicardo was also honored by the Wisconsin Alumni Association for his accomplishments and support of the UW-Madison. We are so proud of these recognitions. The Department also wishes to thank all of our alumni for their support.

It indeed has been a good year for us!  
Best wishes for the New Year.

*Richard Straub*

# Student Update...

## Congratulations to the ASABE Officers for 2011:

### President

Tom Zwald

### Vice President

Alex Earhart

### Treasurer

Megan May

### Secretary

Kristi Freitag

### AEM (2)

Dave Bartling

Bryan Rowntree

### Public Relations

Bryan Rowntree

### Polygon (2)

Matt Krenicki

Brandon Nigon

### CALS

Meredith Remter

### Webmaster

Matt Krenicki

### Engineering Expo (3)

Jide Onyeneho

Brandon Welsh

Jake Zimmerman

### Lawnmower Clinic (3)

Craig Slattery

Joe Keene

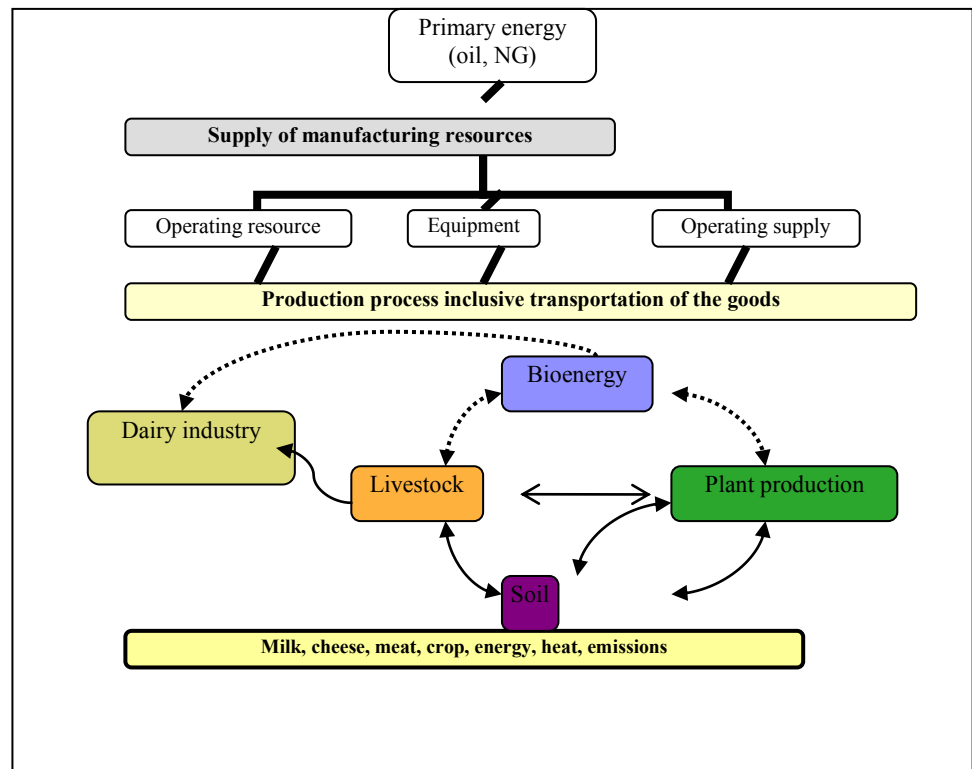
Jake Standal

## Visiting Scholar Simone Kraatz on "Green Cheese" Team

As a visiting scholar in BSE, Simone Kraatz is part of the "Green Cheese" team under the leadership of Professor D.J. Reinemann. The goal of the Green Cheese project is the development of a decision aid for dairy farmers, dairy processors and policy makers, to quantify the energy intensity and environmental impacts of integrating dairy and bio-fuels production systems as well as the implications of implementing selected new technologies and management practices on the energy and nutrient balance as well as global warming potential of individual farms and aggregated for the state of Wisconsin. Synergies are considered between dairy production systems and renewable energy development that lead to benefits for the dairy and bio-fuels industries in the state of Wisconsin.

"My work on this project allows me to continue and expand my research which I started in Germany," Kraatz said. "I did similar investigations for German conditions and started to develop sustainability indicators related to the environmental impacts of agricultural production procedures from a global point of view. Wisconsin became a point of interest for my investigations because the site conditions and the dairy farming procedures are comparable to those in Germany."

The system boundaries which Kraatz is considering in her investigations are shown in Fig. 1.



# Student Update...

## BSE Graduate Shin Yee Wong to do Postdoc at MIT

Shin Yee Wong is going to do a Postdoc at the Department of Chemical Engineering at MIT after she completes her Ph.D. in BSE in December. She will be joining Professor Allan Myerson's research group, and the focus of her research will be continuous crystallization for pharmaceutical products.

"I am very excited about the position and looking forward to my new adventure at MIT," she said.

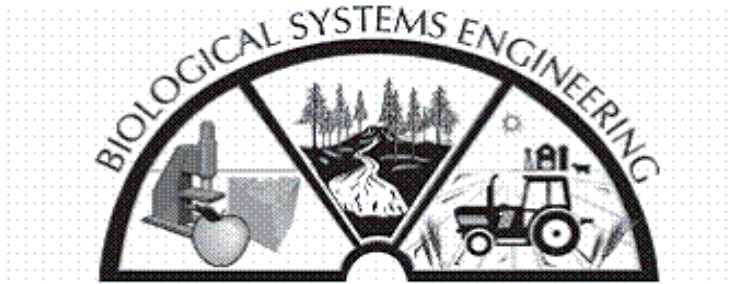
Wong began as one of Robin Connelly's first grad students in BSE. When Robin left, Rich Hartel (Food Science) took over her advising.



BSE Graduate Student Shin Yee Wong

## Serious Interest in BSE Senior Projects

As a graduate of the BSE Department, you likely completed a capstone project in your senior year as part of BSE 509. The scope and type of project you worked on was somewhat dependent on your BSE emphasis area. During the fall semester of 2007 a group of students in the Natural Resources and Environmental Engineering area completed the Arbor Hills Greenway Stormwater Infiltration System Design. The focus of this project was to reduce the volume of stormwater runoff entering the UW Arboretum from a developed residential area. The Greenway Project, which also won the ASABE 2008 G.B. Gunlogson Student Environmental Design Open Competition is now under consideration by the City of Madison and the UW Arboretum for future construction.



During the fall semester of 2008, BSE Natural Resources students were called upon again to correct a flooding problem at the Arlington Agricultural Research Station (AARS). The fields located directly east of the station headquarters is the northern portion of a certified organic production research area that was receiving runoff from non-certified organic areas. Failure to address this issue could result in the loss of organic certification and in-turn adversely impact organic farming research. The BSE 509 student project Soil and Water Management Plan for the Organic Fields at the Arlington Agricultural Research Station evaluated the hydraulic capacity of an existing diversion channel, designed two sets of terraces and diversion waterway. The new diversion waterway will divert runoff away from the southern portion of the organic research area. Construction is anticipated to begin next spring.

# Student Update...

## Scholarships Awarded to BSE Students

### BSE Scholarships:

#### Don S. Montgomery Scholarship

- Philip Thomas (Sr) Natural Resources & Environmental Engr. Hometown: Greendale, WI
- Margaret Debrauske (Jr) Food & Bioprocess Engineering Hometown: Madison, WI

#### Wisconsin Agricultural Engineer Scholarship

- Katherine Berres (Sr) Food & Bioprocess Engineering Hometown: Richland Center, WI
- Bryan Rowntree (Jr) Machinery Systems Engineering Hometown: Waterford, WI

#### Ham Bruhn Biological Systems Engineering Scholarship

- Leah Kammel (Sr) Natural Resources & Environmental Engr. Hometown: Madison, WI
- Chelsea Rowe (Sr) Natural Resources & Environmental Engr. Hometown: Waunakee, WI
- Breeyn Greer (Jr) Natural Resources & Environmental Engr. Hometown: Minnetrista, MN

#### Gail Edwin and Janice Faye Janssen Biological Systems Engineering Fund Scholarship

- Kristi Freitag (Sr) Natural Resources & Environmental Engr. Hometown: Birchwood, WI

#### Lynndon and Norma Brooks Scholarship

- Kevin Zwieg (Jr) Machinery Systems Engineering Hometown: Ixonia, WI

#### Orrin I. Berge Scholarship

- Christopher Hargot (Sr) Machinery Systems Engineering Hometown: Withee, WI

#### Robert H. & Willie Meier Scholarship Fund

- Timothy Burhop (Soph) Natural Resources & Environmental Engr. Hometown: Sheboygan Falls, WI
- Bryan Rowntree (Jr) Machinery Systems Engineering Hometown: Waterford, WI

#### Wisconsin BSE Scholarship

- Luke Syse (Sr) Food & Bioprocess Engineering Hometown: Blanchardville, WI

#### Dick J. and Grace B. Stith Scholarship Fund

- Margaret Debrauske (Jr) Food & Bioprocess Engineering Hometown: Madison, WI

#### Ervin W. Schroeder BSE Scholarship

- Brittany Noe (Sr) Food & Bioprocess Engineering Hometown: Green Bay, WI

### CALS Scholarships:

#### *Irving W. Gerhardt Scholarship & Vicky Lee*

#### *Hirsh Endowment for Conservation Scholarship*

- Joshua Accola (Sr.) Natural Resources & Environmental Engr. Hometown: Marshfield, WI

#### *Vicky Lee Hirsh Academic Merit Award*

- Timothy Burhop (Soph) Natural Resources & Environmental Engr. Hometown: Sheboygan Falls, WI

#### *Vicky Lee Hirsh Endowment for Conservation Scholarship*

- Anthony Hennes (Soph) Natural Resources & Environmental Engr. Hometown: Custer, WI

- Joseph Nied (Sr) Natural Resources Environmental Engr. Hometown: Mayville, WI

- Donald Radcliffe (Fr) Natural Resources & Environmental Engr. Hometown: Pardeeville, WI

- Chelsea Rowe (Sr) Natural Resources & Environmental Engr. Hometown: Waunakee, WI

- Philip Thomas (Sr) Natural Resources & Environmental Engr. Hometown: Greendale, WI

#### *Ferdinand Plaenert new Freshman Excellence Award*

- Megan Wolf (Fr) Hometown: Warrington, PA

#### *Phillip Lautenbach and Wilma Lautenbach Volendorf Academic Merit Award*

- Bryan Rowntree (Jr) Machinery Systems Engineering Hometown: Waterford, WI

#### *Walter H. Ebling Scholarship*

- Luke Syse (Sr) Food & Bioprocess Engineering Hometown: Blanchardville, WI

**Students and faculty in the Biological Systems Engineering Department greatly appreciate the support of these scholarships. The annual scholarships awarded to BSE students exceed \$10,000.**



# Student Update...

## BSE Grad Students Team-Up to Play Volleyball

The idea started when several BSE grad students in Room B23 wanted to get to know each other better as well as have some fun. The result was a UW Intramural volleyball team made up of grad students and post docs.

Initially, the team was comprised of Craig Slattery, Sonia Ares-Gomez, Horacio Agirre-Villegas, Stephanie Prellwitz, Jasmeet Lamba, Harsh Singh, Jack Buchanan, and Thais Fonseca. The team was named "Gala and the B23s", honoring Gala (Sonia's 1 year old daughter) and the grad student's room number. However, as the word spread around the department, several other BSE grad students and post docs joined the team. New teammates included Kari Jordan, Damodhara Mailapalli, Simone Kraatz and Sami Khanal.



"Since some of us had never played volleyball before and many of us had little experience, we had a couple of practice sessions before our first match," said Fonseca. "To be honest, we were very optimistic, but we had almost no chance of winning anything. The other teams seemed well prepared and synchronized, whereas we seemed (and were) not familiar with the game. To our surprise, we won the first match! It was amazing! We were so excited!"

Team BSE members include Horacio Agirre-Villegas, front left, Damodhara Mailapalli, Kari Jordan, left, Sonia Ares-Gomez, Thais Fonseca, Craig Slattery, Sami Khanal, Stephanie Prellwitz, and Jack Buchanan.

The team kept practicing and became closer friends as the season went on. "Even though we didn't win every match, we had so much fun playing," Fonseca said. "We were always very supportive of each other and of our efforts, no matter what."

The end of the volleyball season didn't mean the end of the BSE team. Actually it grew into an enlarged group forming a basketball team -- "Gala and the BSEs". New team members included Anurag Manalika, Yi-Cheng Wang, and Ryan Stenjem. The team even added some friends from other departments including Kweku (Development Studies), Victor (Development Studies), Patricia (Ag&Applied Economics), and Aaron (Biochemistry).

The team got together for the first practice and a new season of making new friends and having fun. "Oh my God, basketball is so hard to play," Fonseca said. "But I know we will have fun!"

# Faculty Update...

## Pat Walsh Receives UW-Extension/UW Colleges Chancellor's Career

Patrick Walsh, described by colleagues as "a tireless faculty member for Cooperative Extension serving the citizens of Wisconsin," was chosen to receive the UW-Extension/UW Colleges 2010 Chancellor's Career Award. Walsh, co-director and founder of the UW-Extension Solid and Hazardous Waste Education Center and professor of Biological Systems Engineering (BSE), was selected for the award for his work in creating leading-edge educational programs and partnerships that protect Wisconsin's environment.

"The annual Chancellor's Awards recognize outstanding contributions by UW Colleges' and UW-Extension's partners, supporters and employees to university outreach around the state," said interim Chancellor Marv Van Kekerix at the annual Chancellor's Award Banquet recently at the Lowell Center in Madison.

Walsh has been a member of the faculty in BSE since 1986. He credits the department's breadth and his close relationship with BSE extension and research faculty for keeping his extension programs on the cutting edge in energy and environmental outreach. According to Walsh, "Our faculty and staff expertise is extraordinary. I tapped this expertise in my programming and used it to try to make a difference for the people of Wisconsin."

Walsh founded the Solid & Hazardous Waste Education Center in 1990. Under his leadership, the program has become known as a national leader in integrated waste management solutions and technical assistance. Walsh's career with Extension began in 1983 when he used his combined background in law and engineering to assist the Wisconsin DNR in closing out-of-date waste facilities while providing expertise to create one of the most progressive landfill regulations in the U.S. He spoke to hundreds of local officials while training Extension staff in "Garbology 101."

Walsh has been extremely successful building partnerships around the state. He helped acquire funding for the Extension basin educator network with the DNR and established Extension's role in energy education through a partnership with the Wisconsin Focus on Energy program. Walsh is currently working to help communities determine if renewable energy and biofuels projects offer opportunities for positive economic growth.

"Pat's work in understanding the environmental and regulatory issues associated with community landfills has been invaluable to many Wisconsin communities," said Robin Shepard, Executive Director of the North Central Cooperative Extension Association. "He has always personified the Extension network of experts and the importance of mobilizing a university response that is timely and one that makes a difference."



Pat Walsh, left, receives the UW Chancellor's Award for Excellence



# Faculty Update...

## Cheryl Skjolaas is Part of Team that Wins Extension Chancellor's Award for Excellence

Creating more than a dozen intentional manure spills may not seem like a good way to protect Wisconsin's water resources. Yet this innovative approach to demonstrating the proper way to contain, clean up and restore a spill site is one of the many innovations piloted by UW-Extension's Custom Manure Applicator Subcommittee of the ANRE Nutrient Management Team.



UW-Extension's Custom Manure Applicator Subcommittee of the ANRE Nutrient Management Team includes: Jim Leverich, front left, Interim Chancellor Marv Van Kekerix, Kevin Erb, Cheryl Skjolaas, Jerry Clark, Nick Schneider, Matt Hanson, Ted Bay, and Joe Bollman.

As a result of these demonstrations and the Subcommittee's other work, the Subcommittee was chosen to receive the UW-Extension/UW Colleges 2010 Chancellor's Award for Excellence.

"I was invited to be a part of this team as a result of individuals being exposed to manure gases while cleaning out their tanker," explained Skjolaas. As a team member Skjolaas developed safety trainings and resources related to confined spaces entry, manure gas hazards and operating safely on roadways.

Manure is a big issue in Wisconsin. Our dairy industry produces the equivalent of 12 billion gallons of liquid waste annually—enough to cover a college football field (including end zones) to a depth of 5¼ miles. Manure is a valuable fertilizer but applied incorrectly, it can cause fish kills, drinking water contami-

nation and fertilize algae growth in lakes and streams. One third of this manure is applied by 116 for-hire application firms serving Wisconsin.

The annual Chancellor's Awards recognize outstanding contributions by UW Colleges and UW-Extension's partners, supporters and employees to undergraduate education and university outreach around the state, said

## BSE Faculty Addition: Dr. Becky Larson, Assistant Professor, Bio-waste

Dr. Becky Larson is a new BSE assistant professor with a focus on Bio-waste. Dr. Larson has recently completed her doctoral degree in Biosystems Engineering at Michigan State University (MSU) investigating agricultural filter strips.

Over the last 10 years at MSU, Dr. Larson has been a part of numerous research teams investigating a wide range of agriculture waste technologies. Research interests include all areas of biological waste including manure management, handling and treatment of agricultural and food processing waste, diffuse source pollution, agricultural sustainability, and waste-to-energy technologies including biogas production from anaerobic digestion.



Dr. Becky Larson

# Faculty Update...

## BSE Adjunct Professor Aicardo Roa-Espinosa Honored with Distinguished Achievement Award

BSE students, faculty and staff celebrated with BSE Adjunct Professor Aicardo Roa-Espinosa with a luncheon in the Ag Engineering building, and later in the day he was presented a Distinguished Achievement Award by the UW-Madison College of Engineering at the Engineers' Day dinner banquet at the Concourse Hotel.

"I want to thank all of you for all your support to present me and my true life story," Roa-Espinosa said. "It is hard to believe that once upon a time I was a dish washer. In many ways, all of you have helped me to be successful. My life represents the realization of the American Dream."

Roa-Espinosa is said to be a true American success story. Born in Palmira Valle, Columbia, he was homeschooled while his father moved frequently due to political fears. After attending college on scholarship from the City of Palmira, he received his bachelor's degree in agronomy engineering and worked in Columbia's sugar industry. In search of higher engineering education, he moved to the United States and received a master's in 1985 and PhD in 1989, both in Biological Systems Engineering with a specialty in soil and water engineering from UW-Madison.

Today, he is considered the leading authority in the use of polymers in erosion control and water clarification. His U.S. career began as an industrial stormwater project coordinator for the Wisconsin Department of Natural Resources (WDNR).

His extensive experience in soil conservation yielded award-winning dust control developments for landing helicopters in the 2003 Operation Iraqi Freedom campaign with the U.S. Marine Corps, marking him as one of the most knowledgeable people in the United States in polymer-based erosion control.

After this success, Roa-Espinosa formed his own company, Soil Net LLC, in 2004 to apply the technology. The company produces, supplies and develops separation technology for a number of different applications, including polymer-based vegetable-oil refining, biodiesel refining, erosion control, waste separation and transformation, and water clarification. As president of Soil Net, Roa-Espinosa discovered new ways to transform solids into fertilizers, animal feed, glue, erosion control products, and slow-release fertilizer.

Remembering his roots, Roa-Espinosa co-founded Centro Hispano of Dane County, created for Wisconsin-based Cuban refugees to acclimate to life here. Recognizing that education was a fundamental factor to his success, together with Ron Simmons, Peter Munoz, and the WDNR, he founded a Madison elementary school-tutoring program. He is also a board member of the Badger Chapter of the American Red Cross and board president for the Latin America and Caribbean consortium to support cassava research and development, the crop of the poor lands in many countries.

An active supporter of both the instruction and research programs at UW-Madison and an honorary fellow of the College of Agricultural and Life Sciences, Roa-Espinosa donates substantial funds to support student research in collaboration with his laboratory in Belleville, Wisconsin. There, he currently is working to create a practical, economical polymer to control soil loss and the associated components such as phosphorus, fertilizers and agrochemicals.

Roa-Espinosa enjoys traveling, botanical gardens, worldwide art museums and soccer. He has two children, Tomas and Samuel, and is married to Susan Byram.



Adjunct Professor Aicardo Roa-Espinosa



# Faculty Update...

## BSE Faculty Addition: Dr. Robert Anex, Professor, Biosystems Analysis & Assessment

Dr. Robert Anex joined the BSE faculty in the fall of 2010. He holds a BS and MS in mechanical engineering and a PhD in environmental engineering from the University of California-Davis. Dr. Anex was hired with support from the College of Agriculture and Life Sciences and the Wisconsin Bioenergy Initiative (WBI). Dr. Anex brings to BSE and WBI expertise in modeling and assessing bioenergy conversion technologies. More broadly, his research involves assessing the economic and environmental performance of coupled agricultural-industrial systems.

His recent research has focused on biorenewable fuels and chemicals. He is currently leading the techno-economic assessment area within the Engineering Research Center for Biorenewable Chemicals (CBIRC) and is the principal investigator of projects examining the impacts of biofuel production on the nutrient and hydrologic cycles. He is also part of several interdisciplinary teams searching for ways to produce biomass feedstocks more efficiently and sustainably by incorporating new crops and management practices.

He is a member of the editorial board of the *International Journal of Life Cycle Assessment* and is an associate editor for both the *Journal of Industrial Ecology* and *Biotechnology for Biofuels*. He also serves on the EPA Board of Scientific Counselors, Science and Technology for Sustainability Subcommittee. Prior to coming to UW-Madison, Dr. Anex was at Iowa State University, University of Oklahoma and University of California, Davis.



Dr. Robert Anex examines sorghum grown as part of a double-cropping experiment aimed at producing more biomass feedstock per acre in a sustainable manner.

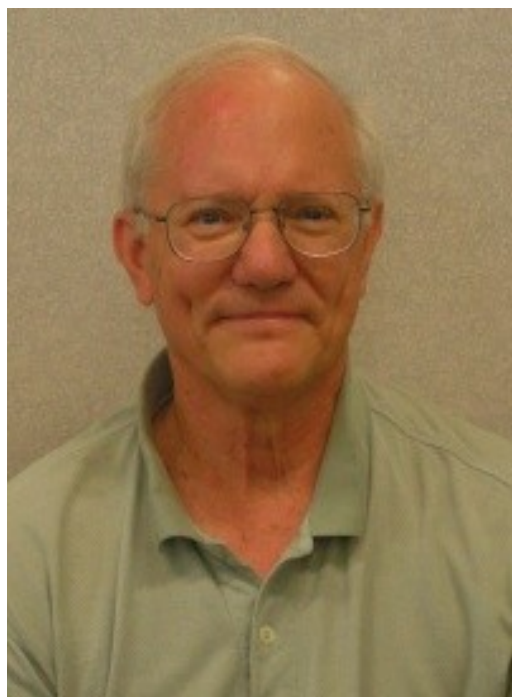
## Thank You

Contributors to our department from January 2010-November 2010:

Gregory B Weber  
Karl R Klingelhofer  
Thomas C Casey  
Kenneth M Russell  
Don L and Emily J Henderson  
John Deere Foundation (2 donations)  
Marshall F Finner  
John Deere Foundation  
-Brian M Huenink 2 matches  
Eliot D Bergeland  
Brian R Blanchard  
Wendell A Boyer  
Gary D and Sandra L Bubenzer  
Kevin F Connors  
Melissa L Copas  
Michel O Dreischmeier  
Jaime L Duarte  
David H Dupre  
Todd D England  
Alan C Geisthardt  
James C Guhl  
John Deere Foundation  
-Dale A Quam match  
Kari Jordan  
Timothy J Koch (2 donations)  
Jeffrey W Nelson  
James O and Carole J Peterson  
William A Pick  
James D Rauwerdink  
Brett J Renk  
Philip E Risser  
Walter M Schlessner  
Leo F and Lucille A Shirek  
Cheryl A Skjolaas  
Craig A Slattey  
Debra K Sumwalt  
Daniel B Thiemke  
Todd M Wehler  
Jeffery A Zimmermann  
Wisconsin Farm Technology Days Inc

# Faculty Update...

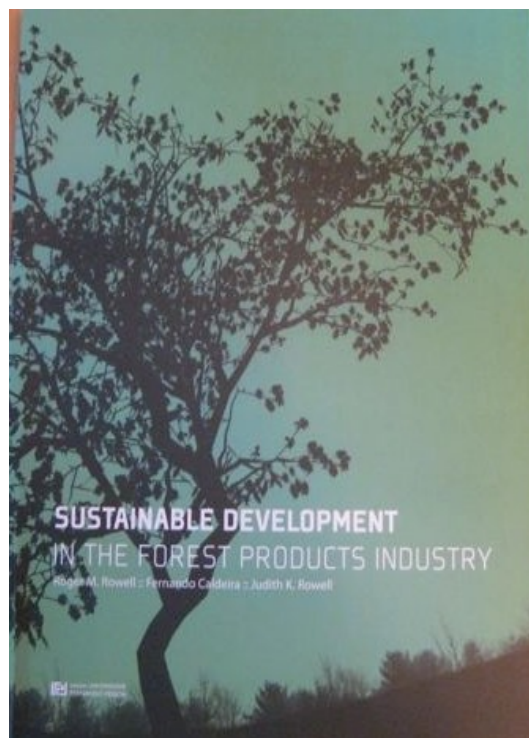
## Professor Emeritus Roger Rowell Publishes New Book and Travels Overseas



Professor Emeritus Roger Rowell

Professor emeritus Roger Rowell has just published a new book. He was both an author and the senior editor on *Sustainable Development in the Forest Products Industry*. The book explores the origins of sustainability as they apply to agriculture, forestry, and forest products. Global timber supply and demand are investigated in light of the current economic downturn. The biorefinery concept is presented as it applies to biomass fractionation and utilization. Energy demands and the role biomass can add to energy needs are reviewed. Recycling of wood, taking into account contaminants that are included are reviewed and the use of recycled wood for composites, wood-thermoplastic composites and value-added biomaterials are covered. To extend the life expectancy of wood-based materials, wood durability and stability without toxicity is introduced. The use of bio-resources as filter aids to remove contaminants from water are covered. Finally, there is a chapter on waste management.

The book provides knowledge, backed by tables, electron micrographs, and thorough references to light the path to sustainability that has been obscured by our infatuation with fossil fuels. The concept of Reduce, Recycle, Reuse, and Refuse, and, Respect is adhered to throughout the book. The book is full of ideas, tools, perspectives, and historical data. When we tug on a piece of nature, we find it is connected to everything else! If only for this essential concept this book would be a good college textbook for engineers, scientists, and environmentalists. With knowledge comes the responsibility to act. This book provides the former. The book was published by Fernando Pessoa University Press in Porto, Portugal and is the first book published by the University in English on this subject.



Professor Emeritus Roger Rowell's

*Sustainable Development in the Forest Products Industry*

# Funding Update...

Please give some consideration in contributing to one of the Biological Systems Engineering Department Funds listed below:

**Biological Systems Engineering Facilities Fund**  
**Biological Systems Engineering General Fund**  
**Biological Systems Engineering Student Activities Fund**

**Dick and Grace Stith Scholarship**  
**Farm Machinery Research Fund**  
**Ham Bruhn BSE Scholarship**  
**Ham and Janet Bruhn Distinguished Graduate Fellowship**

**Gail and Janice Janssen BSE Scholarship**  
**Lynndon and Norma Brooks Scholarship**

**Martin and Kathleen Burkhardt Fund (BSE Employment Assistance)**  
**Milking Research and Instruction Laboratory Fund**

**Orrin Berge Scholarship**  
**Rural Energy Issues Fund**  
**Robert and Willa Meier Scholarship**  
**Schuler Family Ag Safety and Health Fund**  
**Sixties Decade Computer Lab Equipment Fund**  
**White Clover Dairy Research Fund**  
**Wisconsin BSE Scholarship**

We sincerely wish to thank our alumni and friends who have generously supported the College of Agricultural and Life Sciences Department of Biological Systems Engineering. Your gifts today are more important than ever as the University faces challenging budget constraints. Gifts made to the Department of Biological Systems Engineering help us with scholarship, facilities improvement, endowed professorship and graduate fellowships, and carry on our tradition as leaders and innovators in the biological systems engineering field.

An annual household gift of \$500 or more qualifies you and your spouse for membership in the College of Agricultural and Life Sciences Dean's Club. As a member of the Dean's Club you will receive special invitations to the Dean's Football Brunch held in the Fall, the annual Dean's Club Recognition program in May, as well as periodic mailings about the College and a Dean's Club Pocket Calendar. An invitation to join the prestigious Bascom Hill Society is extended to those who provide support of \$25,000 or more to the department or to a specific project or program of their choice. You can pledge your commitment over a 10-year period, provide for a gift in your will, or give a gift of annuities or appreciated stock. If you have specific questions about giving, please contact Barbara McCarthy at the UW Foundation (Phone: 608-265-5891; e-mail: [barb.mccarthy@supportuw.org](mailto:barb.mccarthy@supportuw.org)).

## *Department of Biological Systems Engineering Funds*

I/we would like to join other alumni and friends in support of the Department of Biological Systems Engineering Fund.

I/we wish to pledge \$ \_\_\_\_\_ over \_\_\_\_\_ years. Please remind me of my pledge in \_\_\_\_\_ (month).

I/we contribute \$ \_\_\_\_\_. (Contribution is enclosed.) My company will match this gift; company form enclosed.

I/we wish to have my contribution support \_\_\_\_\_ fund.

Name: \_\_\_\_\_ E-Mail: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Please charge my gift of \$ \_\_\_\_\_ to my: MasterCard Visa American Express

Card number \_\_\_\_\_ Expiration date \_\_\_\_\_

Cardholder's name as it appears on credit card (please print): \_\_\_\_\_

Cardholder's Signature: \_\_\_\_\_ Date \_\_\_\_\_

Make checks payable to University of Wisconsin Foundation and return this form to:

University of Wisconsin Foundation  
 US Bank Lockbox  
 PO Box 78807  
 Milwaukee, WI 53278-0807



# Alumni Update

Name: \_\_\_\_\_

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

Home Address: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Position: \_\_\_\_\_

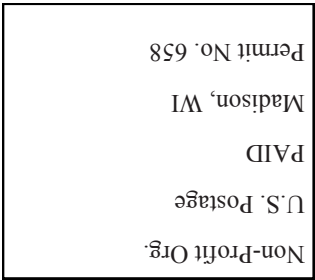
Employer: \_\_\_\_\_

News to share: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Please return to: BSE Update**  
**460 Henry Mall, Madison WI 53706**  
**or email information to:**  
**bse@wisc.edu**



**University of Wisconsin Madison**  
**Biological Systems Engineering—Update**  
**460 Henry Mall**  
**Madison, WI 53706**