



The Newsletter of the Wisconsin Section of
the American Society of Agricultural and
Biological Engineers

WI ASABE SECTION

www.wiasabe.org



The Society
for
engineering
in
agricultural,
food, and
biological
systems

TUESDAY - MAY 21, 2013

Section Meeting

Sturtevant, Wisconsin

Schedule of Events

Tour: POCLAIN HYDRAULICS INC

2:30 pm

MEETING {at POCLAIN HYDRAULICS INC}

5:30 – 6:00 pm: Social *Half* Hour

6:00 pm: Dinner

Followed by short business meeting

Dinner includes:

- Sicilian Chicken Breast
- Tender Sliced Roast Beef in brown sauce
- Baked Cod Supreme served with creamy white sauce
- Roasted Red Potatoes
- Tossed Garden Salad
- Relish Tray
- Green Beans Almondine

To Attend the Tour and/or the Dinner Meeting

Please REGISTER

by May 15th (Wednesday)

**Registration by this date allows for an accurate
dinner reservation!**

INSIDE THIS ISSUE

- May Meeting Schedule of Events
- Secretary/Treasurer's Report
- Award Results
- Directions
- Registration (register online and save a stamp!)
- Officer Contact Information

May 21st Meeting Details

Tour, Presentations, and Meeting: Poclain Hydraulics Inc.

1300 Grandview Parkway, Sturtevant, WI 53177

2:30pm Plant tour, demonstration, presentations

5:30pm -6:00pm Social ½ Hour

6:00 pm Dinner with Business Meeting to follow

Sicilian Chicken Breast topped with onion, peppers and mushrooms, Tender Sliced Roast Beef in brown sauce, Baked Cod Supreme served with creamy white sauce, Roasted Red Potatoes, Tossed Garden Salad, Relish Tray and Green Beans Almondine

---- Dinner is \$25 per person {students free} -----



MAPS AND REGISTRATION PAGE AT THE END OF THIS NEWSLETTER.

REGISTER ONLINE AND SAVE A STAMP!!!!!!

Secretary's Report

05 April 2013

The March 27th ASABE Wisconsin Section Meeting and Annual Awards Banquet was held in conjunction with the WPS Farm Show in Oshkosh with the meeting and banquet at La Sure's Banquet Hall following the show. During the day members and guests toured the Kimberly Clark X-Mill in Neenah. The mill is used by Family Care (Tissue & Toweling) to create prototypes tissue products.

Prior to a buffet style dinner guest speaker Cheryl Skjolass, Program Manager; National Agribility, gave an overview of what lies ahead for implements of husbandry. Her presentation titled *"Implements of Husbandry and Wisconsin Highways--What's Happened and What's Ahead"*, provided insight into the work being done to provide recommendations for future laws/regulations for farm equipment (implements of husbandry).

Following dinner a short business meeting was held. Officer reports and old business were quickly reviewed. New business portion of the meeting included the approval of the \$1500 support request from the UW-Madison Student chapter to assist with the expenses for the AETC farm show and International Meeting. It was also approved to make the Webmaster officer position a balloted position for future years. Nate Dudenhoeffer was elected 2013-2014 webmaster during the meeting. New business focused on the honoring 2013 Section Award winners and the 2013-14 officer team was introduced. Below is a summary of all awards and new officers. Please visit the Wisconsin section website (www.wiasabe.org) for pictures and details.

For a list of the Wisconsin ASABE members who were recognized for their contributions to engineering and their communities please see the award summaries. For a list of the new
Meeting adjourned at 7:45pm

Respectfully Submitted,
Garritt Boettcher
ASABE Wisconsin Section Treasurer 2013-2014

Treasurer's Report

05 April 2013

Opening Balance \$9805.60

Revenue:

<u>Date</u>	<u>From</u>	<u>Memo</u>	<u>Amount</u>
04/03/2013	Meeting Income	Spring Meeting	\$1100.00

Total: \$1100.00**Expenses:**

<u>Date</u>	<u>To</u>	<u>Memo</u>	<u>Check #</u>	<u>Amount</u>
01/25/2013	Jeff Marggi	Spring Award Rmbrs	0628	\$176.16
01/25/2013	Jeff Marggi	JB's Grill Rmbrs (officer Mtg)	0629	\$91.12
03/05/2013	Ben Borgardt	Ag. Tech Award	0632	\$150.00
03/05/2013	Jiang Yang	BSE Grad Award	0631	\$150.00
03/05/2013	Bryan Rowntree	BSE Undergrad Award	0630	\$150.00
03/27/2013	La Sure's Hall	Meeting and Meal	0633	1284.57
03/27/2013	Richard Straub	Meeting Payment & Awards	0634	277.00

Total: \$2278.85

Closing Balance \$8626.75

Respectfully Submitted,

Garritt Boettcher
ASABE Wisconsin Section Treasurer 2013-2014

2013 WISCONSIN SECTION AWARD RESULTS

Prof. Richard J. Straub is the recipient of the 2013 Career Achievement Award. The purpose of this award is to honor a Wisconsin Section member who has made outstanding contributions to Agricultural and Biological Engineering through work in research, education, design, and/or extension. The selection is based on the candidate's lifetime accomplishments as an engineer.



Straub has been an active ASABE member for over 40 years serving in many leadership roles at the Section and National levels. In 1979, he joined the Agricultural Engineering faculty beginning a very productive career in which he has taught and/or advised thousands of students. Straub has taught over a dozen courses including design, power systems, agricultural machinery, construction equipment, pesticide application, feed processing and career management. He has co-authored a text on "Field Machinery" and has been active in curriculum development. He was active in Farm Progress Days field demonstrations for many years.

Straub's research covered a broad scope including forge harvesting and processing, fractionation and processing of biomaterials including alfalfa, alternative energy and agricultural energy management, and precision waste application. He authored or co-authored more than 90 publications and has 4 patents. However, his most significant achievement has been leadership at the Department and College levels. Straub became chair in 1996 at a time when the BSE department was demoralized, being forced to close two programs by a new Dean who questioned the department's necessity. Its engineering program enrollment was on the decline with about 50 undergraduates and faced difficulty in retaining and replacing faculty and in upgrading aging facilities. Straub quickly moved to turn this around through aggressive recruitment, stakeholder engagement and a major development campaign. By 1999, enrollment increased to over 90 students, faculty numbers stabilized, a major facilities renovation was initiated and the department was completing a \$2.5 million development campaign.

Straub was then asked by the College to serve as Director of its Agricultural Research Stations, later serving as interim Associate Dean and Director of Agricultural Programs for the College. In those roles he was responsible for major upgrading of college research station facilities, getting AAALAC accreditation and research program planning and strategic leadership. In 2007, he was asked to consider splitting time between Ag Administration and Chair of BSE, a dual role that he continues today. His departmental leadership resulted in major growth in undergraduates from about 55 to 145 today, faculty numbers have increased, research has increased substantially and the need for a new BSE building is back on the College priority list. His commitment and achievement related to departmental growth, vitality and excellence is evident.

Damion Babler is the recipient of the 2013 Young Engineer Award. The purpose of this award is to recognize young Wisconsin Section members for their outstanding contributions to the advancement of the Agricultural and Biological Systems Engineering profession.



Damion grew up on his family's dairy farm near New Glarus where he continues to help out even today. He gained much experience using and maintaining the equipment required by a dairy operation and has used that practical experience in his daily professional career, designing hay and forage implements and feed mixing machines, finding ways to improve a farmer's productivity and safety. At both the Gehl and Kuhn companies he has had leadership roles designing and testing disc mowers, mower conditioners, wheel rakes, round balers, windrow mergers, forage harvesters and horizontal auger feed mixers.

Damion has traveled extensively in North America conducting field evaluations on the product lines/models he was responsible for and has worked closely with end users, dealers, company product management and sales personnel, manufacturing plant departments and suppliers to insure his products meet the goals of all areas.

Kuhn North America is Kuhn Group's North American sales/marketing, engineering and manufacturing division with two large manufacturing sites. Kuhn Group is the world's largest farm equipment manufacturer that does not produce tractors or combines, with nine manufacturing plants, each with an engineering department for select equipment.

Damion has held numerous ASABE Wisconsin Section officer positions including Chair, and is a licensed professional engineer in the State of Wisconsin. He has been awarded a number of patents with others pending. He is a creative engineer with a high level of integrity who aims his designs at assisting farmers/ranchers in performing their work safely with a higher level of productivity and value.

Outside of work, Damon is very active in his community. He is an assistant coach for cross country and track, where he mentors high school students to give them the opportunity to excel based on their hard work and determination. He is also involved in the New Glarus Yodel Club and New Glarus Mannerchor, which are singing groups made up of local talent interested in continuing Swiss traditions.

Randall Clark has been selected as the recipient for the Wayne G. Russell Award. The purpose of this award is to recognize an individual demonstrating exceptional commitment to helping the Wisconsin agricultural industry adopt new electric technology, farmstead mechanization, and farm equipment.



Randy is a small business owner dedicated to improving farm technology. In 2004, Randy began RCI Engineering, a firm which provides technical solutions in the hay, forage and biomass industries. In this capacity, RCI has worked with several national agricultural equipment manufacturers, including companies based here in Wisconsin. In addition to working with original equipment manufacturers, RCI develops, manufactures and distributes its own equipment which is sold through a partnership with John Deere. In this way, Randy and RCI have a broad impact on the evolution of agricultural equipment design.

As a successful, Wisconsin-based agricultural equipment manufacturer startup, Randy provides technical jobs for Wisconsin residents. RCI employs ten people in the areas of mechanical design, testing, fabrication and assembly. Additionally, RCI offers internship opportunities to undergraduate engineering students. Randy, by creating a local, small business, gives Wisconsin's residents opportunity to stay local and serve the farming communities in which they were raised.

Randy shares his passion for the innovative, twenty-first century side of agricultural engineering by mentoring student interns. Each year RCI Engineering offers equipment development and engineering experience to local high school students. Randy sees the need to show FFA students a different side of the agricultural industry. He highlights that entering into an agricultural field of study can mean more than typical dairying and cropping. At RCI, these high school students get a chance to watch and work with Randy and other engineers, allowing them to see first-hand where a combination of interest in agriculture and engineering technology can take them.

In many ways, Randy personifies the evolution of the Wisconsin agriculturalist. Growing up on a family farm, Randy took his background of dairy farming and cropping, combined with a degree in mechanical engineering, to become a pioneer in the field of agricultural machinery technology. Randy and his wife Wendy, now the parents of three young boys, are together sharing the farming legacy with the next generation by expanding the definition of what it means to be involved in Wisconsin agriculture.

Jiang Yang, is the recipient of the Biological Systems Engineering Graduate Student of the Year Award. The purpose of this award is to recognize a graduate student enrolled in a Biological System Engineering program for singular achievement in developing and or advancing the technology of engineering for food and agriculture.



Jiang got involved in ASABE when he came to UW as a Ph.D. student in BSE. He has a broad research interests including nanomaterial and thin film synthesis and their applications as biosensors for food quality, environmental safety control and healthcares; Biomass processing for bioenergy and developments of value-added by-products for renewable energy devices; functional food and drug in clinical trials; microfluidic engineering. He has eight published 1st-authored peer-reviewed papers with more than 100 citations and has given more than twenty conference proceedings and presentations. He serves as reviewers for a number of well-known journals including Biosensors and Bioelectronics, Talanta, Carbon and RSC Advances. Jiang is also highly motivated to help grant applications with several of his ideas and grant proposals funded by different agencies.

One area of his research, published in Nanoscale, involved fabrication of a one-time-use inexpensive nano-biosensor for quick detection of a neurotransmitter, aka lean meat powder, in meat samples from local supermarkets. The lean meat powder which is banned in many countries including US is associated with important brain functions and the pathological process of neurodegenerative diseases such as Parkinson's disease. In another work published in Carbon, he utilized the reduced graphene oxide nanosheets as an inexpensive and environmentally-friendly material for use in high-performance energy storage systems. The as-fabricated supercapacitor can serve as power sources themselves and have many appealing properties such as rapid charging/discharging rate, excellent energy density, high power density and long lifetime.

During his research, he is also concerned in technology transfer from laboratory into industries and is currently holding two US patent pending applications. He is also a Burrill Partner and was involved in the G. Steven Burrill Business Plan Competition with a technology transfer idea. Jiang's ultimate goal is to utilize the value-added by-products from biomass processing in renewable clean energy to boost biorefinery industries and offset the high price of bioethanol and hydrocarbons.

Upon graduation, Jiang wishes to continue his research work in material synthesis and developments for clean energy, food and medical applications. Ideally he would like to work in an institute or a university as a research fellow or scientist where he can be further trained with his expertise knowledge extended until he is able to work as an independent faculty. Jiang hopes his research experience, technology innovation and transfer knowledge as well as his great enthusiasm can benefit the food and energy industries in the future.

Ben Borgardt of UW-River Falls is the recipient of the Engineering Technology Student of the Year Award. The purpose of this award is to recognize an undergraduate enrolled in an Agricultural Engineering Technology, Agricultural Mechanization, or Agricultural Mechanization and Management program for achievement in preparation for a career in the profession.



Ben grew up on a dairy farm in Oshkosh, WI where he learned the value of a hard work and developed a mechanical aptitude repairing machinery on our farm. He is involved in ASABE as a student member with involvement in the UWRP Quarter Scale Pulling team, where he is the Vice-President and “X” Team Captain. Ben was also previously president of the UWRP Ag Industry Club. He notes that his ASABE involvement has led to networking experiences, which in turn have led to a position at New Holland Agriculture where he is starting in May as a New Product Field Service intern.

Ben is involved in our Ag Engineering Technology department. He enjoys the practical aspects of his classes and the ability to experience many new agriculture products that are made available students. Upon graduation, Ben would like to pursue a career as a machinery test technician. With Ben’s accomplishments, so far we are sure he has a bright future ahead of him.

Bryan Rowntree of UW-Madison is the recipient of the Biological Systems Engineering Student of the Year Award. The purpose of this award is to recognize an undergraduate student in preparation for a career in the profession.



Bryan has been an active member of the UW Madison ASABE Branch serving as the PR director and Vice-President. He has taken responsibility for the annual lawnmower clinic, and has organized club trips and company tours.

Bryan has also served as the house steward for the Babcock House, which provides a low-cost home to students with an Agricultural background. He has also served as an ambassador for the College of Agricultural and Life Sciences, where he represents the college at high school visit days, senior calling nights, CALS campus tours and other events such as the FFA Hockey Extravaganza and the World Dairy Expo. Additionally, he has also been involved with Quarter Scale Tractor Team, where he has worked his way up to Co-Design Leader. Beyond all this leadership in clubs, Bryan finds time to volunteer in events

for other campus clubs such as World Dairy Expo, the Saddle and Sirloin Club's Badger Kick-Off Classic Cattle Show, Red Cross blood drives, and Haunted House

After graduation in the spring, Bryan will begin graduate school in BSE at UW-Madison, working with machinery for biomass harvest. Following his graduate studies Bryan would like to begin a career working for a leading agricultural equipment manufacturer, specifically in the design or test of high horsepower tractors or combines. He has also has a staying closely connected with production agriculture, no matter where he ends up working.

Milestone Membership Anniversaries

25 Years

Thomas Loehr
Bruce Lorenzen
Paul Gillis
Gregory Pellegrom

40 Years

Earl Williams
Darrel Svendsen

50 Years

Leonard Massie
Ronald Schuler

62 Years

Frederick Buelow



Ron Schuler

National Award Recognition

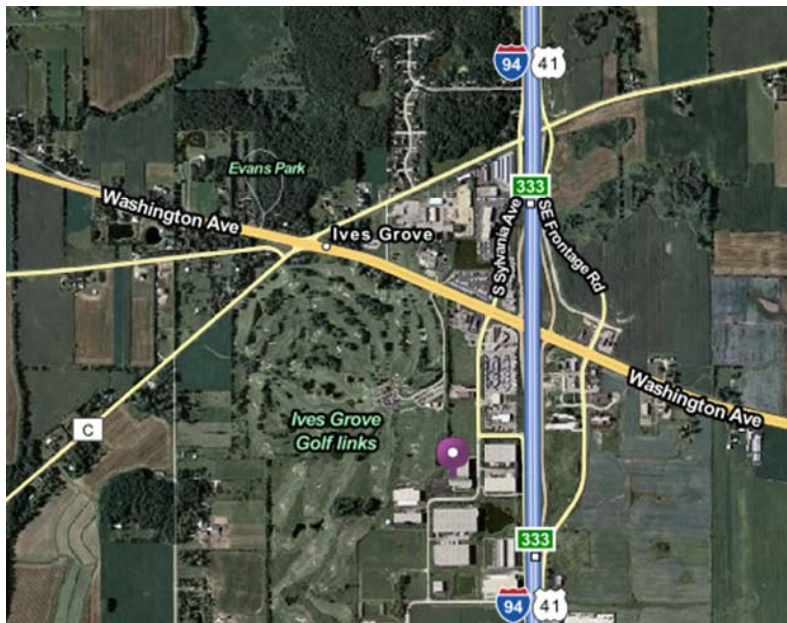
The following Wisconsin ASABE members received national recognition this year:

Professor Dave Bohnhoff was presented with the Evelyn E. Rosentreter Standards Award at a recent meeting of the American Society of Agricultural and Biological Engineers. The award recognizes distinguished research and standards development work in advancement of the design and construction of postframe building systems, and for his outstanding accomplishments in teaching and service to the profession. In presenting the award, ASABE noted that Bohnhoff has provided leadership in the development of engineering standards and their eventual adoption into the International Building Code. He has been a member of ASABE for 33 years.

The New Faces of Engineering program highlights the interesting and unique work of young engineers (age 30 or younger) and the resulting impact on society. Only 10 young engineers from across the nation are chosen for their outstanding, early, career achievements. Wisconsin has two members that were recognized this year – Shane Williams and Yi-Cheng Wang.

May 21st Meeting Location

POCLAIN HYDRAULICS INC
 1300 Grandview Parkway
 Sturtevant, WI 53177
 Phone: (262) 321.0676
<http://www.poclain-hydraulics.com>



From the North on Hwy 41/94

Take the WI-20 exit, EXIT 333, toward Racine/Waterford.
 Keep right at the fork to go on Washington Ave/WI-20 W.
 Turn left onto S Sylvania Ave.
 Stay straight to go onto Grandview Pky.

From the South on Hwy 41/94

Take the WI-20 exit, EXIT 333, toward Racine/Mt Pleasant.
 Turn left onto Washington Ave/WI-20 W.
 Turn left onto S Sylvania Ave.
 Stay straight to go onto Grandview Pky.

REGISTER ONLINE AT: www.wiasabe.org

**REGISTRATION
SECTION MEETING
Tuesday, May 21st 2013**

	Number Attending	Cost	Total
Tour at POCLAIN HYDRAULICS	_____	NO COST	-----
Dinner @ POCLAIN HYDRAULICS	_____	\$25/person students free	\$_____

Information:

Name(s): _____

Address: _____
 City/Town: _____ State/Zip _____
 Telephone: (____) _____ - _____ FAX: (____) _____ - _____
 e-mail: _____

Be sure to mail out a few days before **Wednesday May 15th, 2013** so that it arrives on time to:

Richard Straub
 ASABE Wisconsin Section Program Chair

 UW-Madison, Biological Systems Engineering Department
 460 Henry Mall
 Madison WI 53706

Wisconsin Section ASABE 2013-2014 Officer Team

Chair

Richard Straub
UW-Madison
(608) 262-3311

Past Chair

Dan Thiemke
John Deere Horicon Works
(920) 485-5074

Vice Chair Program (Chair-Elect)

Aaron Wittmer
Weasler Engineering
(262) 338-5432

Vice Chair Awards

Troy Runge
UW-Madison
608-890-3143

Vice Chair Membership

Shane Williams
Kuhn North America
(608) 897-2131

Vice Chair Public Relations

Amanda Crowe
USDA-NRCS
(608) 576-7651

Secretary and Treasurer

Garritt Boettcher
John Deere Horicon Works
(920) 485-5792

Webmaster

Nate Dudenhoeffer
Dudenhoeffer Agricultural Technology
(608) 432-5617

Career Development Committee

Chris Tamm
Landoll
(920) 756-6361

Tom Hoffman

Kuhn North America
608-897-2131

Chris Horton

Digi-Star
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Nomination Committee

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Rod Zimmerman

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