



Dates to Remember:

- Check Registration information for housing deadlines for NABEC 2013
- May 3: Deadline for NABEC Early Bird Conference Registration
- May 16, 2013—NABEC reduced rate room reservation deadline
- July 7-10, 2013: CSBE meeting, Saskatoon
- July 27-30, 2014: NABEC 2014, Kemptville Campus, University of Guelph .

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NABEC 2013

Where: Blair County Convention Center and Courtyard by Marriott, Altoona, PA

When: June 16-19, 2013

Welcome to NABEC 2013 in beautiful Altoona, Pennsylvania! McLanahan Corporation is hosting a jam-packed meeting. Special events include a keynote and industry panel focusing on “agricultural and biological engineering—increasing food production to match increasing global demand.” Graduate student competitions, undergraduate competitions, industry and academic technical shorts - there’s something for every interest! Be sure to stay for the Technical Tour on Wednesday and tour McLanahan Corporation, DelGrosso Foods, and Raystown Lake Dam.

Renew acquaintances and make new at the Welcome Reception and Monday Barbeque at the Altoona Railroad Museum. Bring your family – there’s plenty for them to enjoy in the picturesque area. They can visit the Flight 93 Memorial and Johnstown Flood Museum, Old Bedford Village, or DelGrosso’s Amusement Park. Conclude the meeting with friends and take in a baseball game with the Altoona Curve, a Double-A Affiliate of the Pittsburgh Pirates.

We’re looking forward to seeing you in “The Mountain City!”

Additional Information:

To register for the 2013 NABEC, go to the ASABE registration website: imis.asabe.org/source/events

Articles: All presenters at the conference are encouraged to prepare a written article to accompany their poster or oral presentation. Full articles must be formatted using the Article Template that will be available on the NABEC 2013 conference website.

Details and updated/final program are available at: nabec.asabe.org

Interested in past locations of NABEC and NAR conferences? hnabec.asabe.org/index_files/Past.htm



The “Tech Short” (how long your presentation can be)

NABEC uses the ten minute tech short presentation in order to allow the coverage of many different topics during our conference. The goal is to make listeners familiar with what you are doing but not to overwhelm them with details. A tech short time period places 10 minutes between the start of each presentation. The ten minutes includes time for changing speakers, a brief introduction (likely your title slide), eight (8) minutes for you to make your presentation, and one minute for questions.

Your 8 minutes for presentation should first tell the summary of your talk (what do you want the audience to go away with), then briefly cover the points of what you did and the brief results (fill in briefly what did you do and what did you learn), and then one final summary slide to finish. Ask for a question.

A time clock is usually used and the moderator will tell you what signals he/she will give you BUT you must have just an 8 minute talk to give. Write a short paper with charts, photos, and tables of data you want to share and place it on the paper distribution table. Use your presentation number as the paper number.

NABEC PE Certification Program

Earn your Continuing Education Credits (CEC) while attending the NABEC Conference with numerous hours of continuing education available. A CEC form will be included in the conference materials. A certification letter containing the NABEC letter head for documentation of the CEC will also be available if required. Come to NABEC 2013 and enjoy listening to the technical shorts and the student presentations, viewing the posters, and attending the technical tours while earning those required CEC.



NABEC Undergraduate Student Paper and Design Competition

For those of you teaching upper level courses that involve student projects, the annual NABEC undergraduate student paper and design competitions are an excellent opportunity to enhance the significance of the work for your students. Individuals or teams may enter either competition. Entries for the paper competition should focus on technical topics of interest to the agricultural and biological engineering community and can, for example, be based on substantial class term projects, independent studies, or undergraduate research projects. Projects entered in the design competition must involve engineering design of a system, component, or process for applications in agriculture, forestry, engineering or related fields. Design competition entries have frequently been but need not be limited to the product of senior design projects.

The deadline for the NABEC undergraduate student paper and design competitions is 5:00 PM, May 10, 2013. Electronic submittal of all entries, preferably in pdf format, is required. Cash prizes to first, second, and third place entries are awarded for both competitions and travel expenses for first place winners to the 2013 NABEC meeting are available. Entries must include summer addresses/contact information for the students. For full details, see the NABEC website: nabec.asabe.org/index_files/Awards.htm.

Please encourage your students to enter the competitions. Also, please, consider volunteering your services as a reviewer! You will not be asked to review more than a few entries, and the review process is uncomplicated. You'll be pleasantly surprised by the quality of the entries and your efforts will be greatly appreciated. Contact the Student Paper and Design Competition Committee Chair, Carmine Balascio, to volunteer (email: carmine@udel.edu; phone: 302-831-8872).

The deadline for undergraduate competition entries is 5:00 PM, May 10, 2013.

Graduate Student Competition Conference Registration Deadline

The competition among the graduate students is always one of the main attractions of NABEC. Due to an overwhelming response, all slots are currently full in the oral graduate student competition.

There were more students who wanted to give an oral presentation than spots available! Some contestants were asked to present a poster, instead. This ensures that everyone has the opportunity to compete, even if it is not in the preferred format.

Registering by the Early Bird Deadline will allow as many students as possible to compete, in their preferred format. Graduate students must register for NABEC 2013 by the Early Bird Deadline (**May 3, 2013**) to confirm their spot in the graduate student competitions. Those who do not register on time will automatically be deferred to a non-competition poster presentation. They may still present their paper as a poster at the meeting, but they will not participate in the competitions.

NABEC Young Engineer of the Year

Do you know a young engineer (industry, government or academic) that deserves recognition due to his/her contribution to the profession? Let us know!!!

Each year NABEC offers an award for Young Engineer of the Year. This award honors NABEC members for outstanding contributions to the advancement of the Agricultural/Biological Engineering Profession. Awards are made on the basis of nominations submitted by colleagues.

The award consists of an engraved plaque presented in person at the NABEC Annual Awards Banquet. Eligibility: Those eligible are NABEC members who have not passed their 40th birthday on July 1 of the year in which they are selected.

If you know a young engineer who deserves consideration for this honor you are urged to submit a nomination for him or her. Nominations will remain active for a period of three years. The nomination should be accompanied by the following documentation:

- a letter of nomination, including date of birth.
- an up-to-date resume for him or her, (not exceeding 2 pages in length).
- a 300 to 500 word narrative suitable for publication and use in the presentation of the award.
- 3 letters of support for the nomination.
- the nominee should be able to attend the conference to receive the award.

Further information is available on the NABEC web site (nabec.asabe.org).

Nominations and questions concerning the nomination may be directed to:

Anastasia E. M. Chirside
262 Townsend Hall, Univ. of Delaware
531 South College Ave
Newark, DE 19716-2140
aemc@udel.edu
Phone: (302) 831-8871
Fax: (302) 831-8889

Deadline for nominations is May 3, 2013

Past recipients of the Young Engineer Award:

1979 Norman Collins	1991 Richard Jennings	2003 Ali Demirci
1980 Fred Wheaton	1992 Ronald Pitt	2004 Hubert Montas
1981 William Ritter	1993 Gene Giacomelli	2005 Jennifer Becker
1982 No Award	1994 Chandra Madramootoo	2006 Valérie Orsat
1983 David Ross	1995 Paul Heinemann	2007 David Tilley
1984 Andrew Higgins	1996 Wayne Bogovich	2008 Jeffrey Catchmark
1985 Michael Walter	1997 Dennis Buckmaster	2009 Su-Ling Brooks
1986 Abdel Ghaly	1998 Timothy Royer	2010 Andrew Wedel
1987 Barry Frey	1999 Cristina Ratti	2011 Deron Davis
1988 Herschel A. Elliott	2000 Joseph Irudayaraj	2012 Mark Lefsrud
1989 James Garthe	2001 Terry Lynn Ruch	
1990 Unknown	2002 Michael Ngadi	

Distinguished Service to NABEC

And for those who gave great service to NABEC? They won't be forgotten!!!

A special award is presented annually to individuals who have contributed outstanding service to NABEC. The award shall consist of a plaque with appropriate inscription and will be presented at the NABEC Annual Awards Banquet. Nominations may be held over for two years. The criteria for the award are: contribute as an officer, local arrangements, program committee, tour arrangements or other significant effort to NABEC; support NABEC by encouraging colleague participation; professional activities in the Northeastern US / Eastern Canada area.

Nominations for the award should be:

- a one page (maximum) completed nomination form,
- a letter detailing the qualifications and specific activities and contributions.

Please use the nomination form which can be found on the NABEC web site,

nabec.asabe.org

Please send your nominations or related questions to:

Anastasia E. M. Chirnside
262 Townsend Hall, Univ. of Delaware
531 South College Ave
Newark, DE 19716-2140
aemc@udel.edu
Phone: (302) 831-8871
Fax: (302) 831-8889

Deadline for nominations is May 3, 2013

Past recipients of the Distinguished Service Award:

1996 Eric Norris	2002 Abdel Ghaly	2007 F. Spencer Givens III
1996 William Roberts	2002 Arthur Johnson	2008 Allen Zimmerman
1997 Mark Singley	2003 David Ross	2008 Kenneth Lomax
1998 none	2003 William Ritter	2009 Robert Kok
1999 Jacob (Jack) Pos	2004 Paul Heinemann	2009 Wayne Bogovich
2000 none	2005 Bill Bowers	2010 Stanley A. Weeks
2001 Richard Peterson	2006 Julie Cayley	2011 Cristina Ratti
2001 Robert Aldrich	2006 Vijaya Raghavan	2012 Glen Warner

Ag PE Exam - Valerie Orsat

The National Council of Examiners for Engineering and Surveying (NCEES) Examiners for Professional Engineers (EPE) and Examination Policy and Procedures (EPP) committees have approved the request by ASABE to change the name of the Ag PE exam to "Agricultural and Biological Engineering Exam" to be consistent with the name of our professional organization, "American Society of Agricultural and Biological Engineers," as well as to better reflect recent trends in academic curricula and the practice of the profession.

The Ag PE exam had 33 people sit for the October 2012 exam, which met and exceeded the 25 minimum. This is likely due to the two incentives that were offered for repeat takers of the exam (\$150) as well as those taking it for the first time (\$450). These incentives will be repeated for 2013. The pass rate for the exam was 83% for first-time takers. NCEES has approved the potential changes for the exam to move it from an October to an April administration.

Membership Development Council (MDC) Report — Michael Ngadi, MDC representative

The summary of the Dec 13th MDC conference call is presented below:

i) Ballots were approved namely:

Rules/bylaws of the Larry W. Turner Young Extension Professional Award
Creation of a Student Engineering Branch of ASABE at Washington State University
Massey-Ferguson Educational Gold Medal Award Rules as written. Seconded and passed.

ii) MDC was informed that the Board of Trustees (BOT) passed a balanced budget for 2013 and approved funds of up to \$100,000 in Initiative Funds for 2013. The deadline for proposal submission is February 15.

iii) There was discussion on the McKinley Membership Engagement Initiatives. Key points of the initiatives are:

- Define, articulate, and market ASABE's engagement in the realm of biological engineering.
- Produce and disseminate a compelling video that highlights the evolution and impacts of agricultural engineering, biological engineering, and ASABE.
- Facilitate student club programming and professional networking by providing academic departments with lists of local/regional ASABE members willing to speak to student groups.
- Initiate a student contest for creation of short videos illustrating various experiences of agricultural/biological engineering students.
- Increase student attendance at the AIM by ensuring high quality programming and providing financial subsidies/incentives to help offset the costs of travel, lodging, and/or registration.
- Develop and distribute a dynamic information piece targeted at employers of agricultural and biological engineering graduates.

Progress continues on each of these efforts.

iv) Brainstorming – Ways in Increase Membership continues. Gary, MDC Chair sorted the top five ideas provided by MDC members and ranked them by frequency and weight.

- Providing content of value to younger members via webinars, meetings and outreach opportunities.
- Make students automatic members, so they see the value of membership. Actively push information to them.
- Package annual member dues with AIM registration.
- Work more closely with Student Branch presidents to get them involved in Society activities.
- Improve functionality of ASABE website.
- ASABE needs stability concerning BE. How do we manage change to best attract BE members.
- Targeted marketing to schools and Sections within a relatively close driving distance to AIM locations. They will be more likely to attend the meeting.

It was decided that the entire list should be scrutinized to determine which items could be easily implemented at no cost. Mark Crossley will do so and will bring the list to the MDC for further action.

Meetings Council Report — David Ross, Meetings Council representative

The Meetings Council last met on November 13, 2012 by conference call. Highlights follow.

Summary of future meetings:

- 2013 Kansas City, MO July 21 – 24
- 2014 Montreal, Quebec July 12 – 17 with CSBE/SCGAB
- 2015 New Orleans, LA July 25 – 30
- 2016 TBD – several cities are submitting bids to be reviewed in the spring.

Timing of technical sessions/ committee meetings for 2013:

A motion was made to restructure the technical session schedule for Wednesday of the Annual International Meeting (AIM) with no change to the Monday and Tuesday schedules. A proposal from the Soil and Water Division asked for Wednesday sessions to be scheduled only in the morning and a decision was made to schedule them from 7:30 AM – 10:00 AM and 10:15 AM – 12:15 PM with the Wednesday Awards Luncheon beginning at 12:30 PM. Wednesday afternoon would be open for Committee Meetings. The reason is to have better attendance in the Wednesday technical sessions and then leave folks the option to leave after the Awards Luncheon, as many are doing currently. Committees would have the entire afternoon to hold final meetings before making their reports to councils.

The Meetings Council sent this information to Division committee chairs and vice chairs and to the Board of Trustees for comment at their meeting the following Saturday. The Meetings Council voted to adopt this schedule change if no major objections were received. Passed.

Sponsorships and Endowments for other conferences were acted upon. Minutes were approved.

NABEC 2014 Announcement!

Kemptville Campus - University of Guelph is proud to host NABEC 2014 from the 27th to 30th of July, 2014.

Kemptville Campus was established in 1917 and is one of the oldest agricultural colleges in Ontario. The campus has a mandate to deliver quality education in agriculture and related disciplines and to advance and transfer agricultural knowledge through research and innovation. The campus is host to a working farm that includes a robotic milking system as part of the Dairy Education and Innovation Centre.



The Kemptville Campus is a regional campus of the University of Guelph, and is situated 50 km (30 miles) south of Ottawa, Canada's capital city. The region has a strong dairy industry along with significant clean tech companies around the Ottawa region.

NABEC 2012-2013 Committees

Officers of the Planning Committee

<u>Chair</u> Heather Smeltz USDA NRCS 2120 Cornwall Road, Suite 4 Lebanon, PA 17042 (717) 274-2597, ext. 126 Heather.Smeltz@pa.usda.gov	<u>Chair-Elect (Honors/Awards)</u> Anastasia Chirside University of Delaware Townsend Hall, 531 S. College Ave. Newark, DE 19716-2140 (302) 831-8871 aemc@udel.edu	<u>1st Vice-Chair (Program)</u> Satyanarayan R.S. Dev Dept. of Bioresource Engi- neering McGill University (514) 576-0163 Satyana- rayan.dev@gmail.com	<u>2nd Vice-Chair (Newsletter)</u> John Arnold Ohio State University 1328 Dover Rd Wooster, OH 44691 (330) 287 1367 arnold.596@osu.edu
<u>Secretary</u> Valerie Orsat Department of Bioresource Eng. McGill University (514) 398-7680 valerie.orsat@mcgill.ca	<u>Secretary-Elect</u> Jude Liu Penn State 227 Ag. Engineering Bldg. University Park, PA 16802 (814) 863-6844 jliu@enr.psu.edu	<u>Treasurer</u> David Ross University of Maryland 10335 Champions Way Laurel, MD 20723-5746 (301) 498-2234 dsross@umd.edu	<u>Past Chair</u> Michael Ngadi Department of Bio- resource Eng McGill University (514) 398-7779 michael.ngadi@mcgill.ca

Other Members of the Planning Committee

<u>District I Representative</u> Joseph C. Walker 2131 Carol Lane Stevensville, MI 49127 (269) 449-1084 Exch-asabe@usa.net	<u>Meetings Council Rep.</u> David S. Ross University of Maryland 10335 Champions Way Laurel, MD 20723-5746 (301) 498-2234 dsross@umd.edu	<u>Publications Council Rep.</u> Ali Demirci 231 Ag. Eng. Bldg. University Park, PA 16802 (814) 863-1098 demirci@psu.edu	<u>MDC Rep.</u> Michael Ngadi Department of Bio- resource Eng McGill University (514) 398-7779 michael.ngadi@mcgill.ca
<u>Standards Council Rep.</u> Jude Liu Penn State 227 Ag. Engineering Bldg. University Park, PA 16802 (814) 863-6844 jliu@enr.psu.edu	<u>Undergrad Student Competi- tion & Program Committee</u> Carmine Balascio Bioresources Engineering University of Delaware Newark, DE 19717-1303 (302) 831-2468 carmine@udel.edu	<u>Webmaster</u> Satyanarayan R.S. Dev Dept. of Bioresource Engineer- ing McGill University (514) 576-0163 Satyanarayan.dev@gmail.com	<u>Newsletter editor</u> Paul Heinemann 250 Ag. Engineering Bldg. University Park, PA 16802 (814) 865-2633 hzh@psu.edu
<u>Parliamentarian</u> Robert Thompson USDA-NRCS 356 Mountain View Drive Colchester, VT 05446 (802) 951-6796 ext. 232 Bob.thompson@vt.usda.gov	<u>Local host NABEC 2013</u> Andrew W. Wedel McLanahan Corp, Holidaysburg, Pennsylvania (814) 695-9807 awedel@mclanahan.com	<u>Local host NABEC 2014</u> Timothy Rennie Kemptville Campus - University of Guelph 830 Prescott Street Kemptville, Ontario, K0G 1J0 Phone: 613-258-8336 ext 61286 tim.rennie@uoguelph.ca	<u>Historian</u> Bill Ritter University of Delaware Townsend Hall 531 S. College Ave. Newark, DE 19716-2140 (302) 831-2540 william.ritter@udel.edu
<u>Program Committee</u> Carmine Balascio Bioresources Engineering University of Delaware Newark, DE 19717-1303 (302) 831-2468 carmine@udel.edu	<u>Program Committee</u> Valerie Orsat Department of Bioresource Eng. McGill University (514) 398-7680 valerie.orsat@mcgill.ca	<u>Program Committee</u> Litha Sivanandan West Virginia University PO Box 6031 Morgantown, WV 26506 (304)293-7684 Litha.Sivanandan@mail.wvu.edu	<u>Program Committee</u> Robert Thompson USDA-NRCS 356 Mountain View Drive Colchester, VT 05446 (802) 951-6796 ext. 232 Bob.thompson@vt.usda.gov

Please register for the conference, or as an accompanying person, online at <http://imis.asabe.org/source/events/> by May 3, 2013 for Early Bird Prices. After June 9, 2013 please register at the meeting.

Conference Registration Fees

By May 3, 2013

Full Registration (a)	US \$
ASABE and/or NABEC Member	\$200
Non-ASABE Member	\$220
ASABE Retired Member	\$130
Student	\$100
One Day Registration (b)	
ASABE and/or NABEC Member	\$100
Non-ASABE Member	\$110
ASABE Retired Member	\$70
Student	\$60

After May 3, 2013

Late Registration	US \$
Add \$50 to Full Registration, Above	\$50
Add \$25 to One Day Registration, Above	\$25

(a) – Includes Sunday Evening Welcome Reception; Monday and Tuesday lunches and breaks.

(b) – Includes lunch and breaks for the corresponding day.

Event Registration Fees (See following pages for description of these activities)

Event	US \$	
Sunday Evening Welcome Reception (cost is included in Full Conference Registration fee of Members/Students) Additional Tickets (guests, accompanying persons, One Day Registrants)	\$30	
Monday's Barbeque – Altoona Railroaders' Museum	Adults	\$30
	Children 12 & Under	\$23
Tuesday's Awards Banquet	Adults – Chicken	\$30
	Adults – Pasta (Vegetarian)	\$25
Wednesday: Technical Tour (includes transportation and lunch)	\$45	
Accompanying Persons Tour Please indicate your interests and we will adjust as weather permits. Adults and children welcome at all activities.	Flood Museum and Flight 93 Memorial – June 17, 2013	\$45
	Old Bedford Village – June 18, 2013	\$60
	Bedford Springs Spa & Facilities	Pay on Site
	DelGrosso's Amusement Park	Pay on Site
	Altoona Curve Baseball Game (June 19, 2013, 7:00 PM); must register by May 15	\$7.50

Please contact Heather Smeltz at heather.smeltz@pa.usda.gov with any questions or special requests.

NABEC 2013—Lodging Information

Note: Deadline for room reservation at reduced rates is May 16!

A group of rooms has been reserved at the Courtyard Altoona in Altoona, Pa. Rooms are available on the evenings of June 16-19.

To make reservations, you may contact the hotel directly by calling +1 (814) 312 1800 and asking to make reservations under the event name listed below.

Guests may also make online reservations by clicking here: www.marriott.com

Rate: \$109.00 – Hotel rates are subject to applicable sales tax (9%) at the time of check-in.

Name of Event: McLanahan Corporation – NABEC

Online Group Code: MLCMLCA

Hotel Address: 2 Convention Center Drive
Altoona, PA 16602 USA

Hotel Information:

- Conveniently connected to the Blair County Convention Center
- Complimentary on-site parking
- Fitness Center
- Indoor Pool
- On-site restaurant is open for breakfast and dinner
- Smoke-free hotel
- Check-in: 3:00 PM
- Check-out: 12:00 PM

From Airports:

Altoona-Blair County Airport – 16.7 miles/26.9 kilometers

University Park Airport – 46 miles/74 kilometers

Pittsburgh International Airport – 133 miles/214 kilometers

** Directions from all listed airports available on hotel website.

The hotel and convention center are off Exit 31 of I-99/PA220 north of Route 22 in Altoona. Exit onto business 220/Plank Road south and left onto Convention Center Blvd.

Please see the hotel's website for more information about bus and train travel.

NABEC 2013—Conference Events

Welcome Reception:

The Sunday evening Welcome Reception will be held at the Blair County Convention Center's Grand Lobby (www.blairconventioncenter.com). Come enjoy this time to re-connect with old friends and make new ones before the official program starts. A pasta station and various appetizers displays will be available, as well as a cash bar.

Morning Breaks:

Each morning around 10 AM, light refreshments, including coffee, tea and a variety of snacks, will be provided. There will be no breakfast, but the Courtyard Altoona offers a variety of breakfast foods. All breaks are for registered conference guests only.

Monday/Tuesday Lunches:

Monday Lunch (Deli Buffet):

Assorted breads and rolls
Roast turkey
Smoked ham
Roast beef
Chicken & tuna salad
Assorted cheeses
Condiments
Choice of pasta or potato salad

Choice of soup

Assorted cookies

Tuesday Lunch (Italian Buffet):

Panzanella
Mixed Green Salad
Lasagna
Manicotti
Focaccia
Assorted cookies

Picnic (Monday Evening):

The Monday evening picnic will be held at the Altoona Railroad Museum (www.railroadcity.com, 1300 9th Ave., Altoona, PA 16602). The museum has been reserved entirely for the NABEC group's private event, so attendees may view the museum at their leisure. The picnic itself will be held outside on the museum's grounds and will be catered by Holland Brothers. The meal will include BBQ pulled pork, potato salad, fresh tossed salad w/ dressing, Holland Brothers' delicious baked beans, haluski, dessert and assorted beverages. Vegetarian burgers will also be available.

NABEC 2013—Conference Events

Awards Banquet (Tuesday Evening):

The Tuesday evening awards banquet will be held at the Blair County Convention Center. The banquet will feature the presentation of annual awards including Young Engineer of the Year, Distinguished Service and the winners of the graduate student oral and poster presentation competition. Meals will be a plated dinner and will include a choice of:

Option #1

Pollo Arrosto – lemon, roasted garlic and rosemary chicken w/ parmesan mashed potatoes

Option #2

Pasta Aglio Olio – gnocchi, garlic, olive oil, parmesan and broccoli

All entrees are served with house salad, chef's selected accompaniments, bakery basket, butter, hot beverage service and cheesecake for dessert.

Technical Tour (Wednesday):

Breakfast for the technical tour will be on your own. A bus will pick you up in front of the Courtyard Altoona in the morning for the tour. A box lunch will be provided during the tour, along with drinks and snacks during the day. You will be returned to the Courtyard following the last location. Tour stops include:

McLanahan Corporation (www.mclanahan.com)

McLanahan Corporation is a 6th generation, family-owned company that provides custom engineered processing solutions for a wide variety of industries including mineral, agricultural industries, and aggregate processing industries. It's location in Hollidaysburg, Pa. has served as the corporate base for 178 years and is home to engineering, manufacturing, sales and customer service personnel.

DelGrosso's (www.delgrossos.com)

A family-owned and operated company that makes a variety of sauces including pasta, salsa and sloppy joe sauces. They also produce meatballs and other Italian specialties. They use natural ingredients and are becoming widely recognized as one of the finer sauces available. As their business has grown they have expanded into producing lines of organic and specialty sauces.

Raystown Lake Dam – US Army Corp of Engineers (www.raystownlake.com)

Constructed between 1968 and 1978, Raystown Lake is the largest man-made lake in Pennsylvania. Built primarily for flood control purposes, the lake also provides recreation, fish and wildlife management, hydropower and low flow enhancement. Regulations were recently updated so that visitors with proof of U.S. citizenship are now allowed to walk out onto the dam.

Altoona Curve Baseball Game (Wednesday):

End the meeting with a night at the ballpark supporting the local baseball team, the Altoona Curve! (www.milb.com/index.jsp?sid=t452). The game starts at 7:00 PM against the New Hampshire Fisher Cats. Fireworks follow after the game. For this event, you must register by May 3, 2013.

NABEC 2013—Accompanying Persons Tours

One guided tour will be offered with transportation each day. There is an up-front cost to provide transportation, but all admission fees will be on your own. Those signed up will meet in the hotel lobby each morning for tours. There will be a stop for lunch on guided tours, but it will be on your own. Additionally, there are several on-your-own options that have been recommended by the host company for those interested in exploring central Pennsylvania individually.

Guided Tour - Monday, June 17:

Flight 93 Memorial – Stoystown, PA (www.nps.gov/flni)

On Tuesday morning, September 11, 2001, the U.S. came under attack when four commercial airliners were hijacked and used to strike targets on the ground. Nearly 3,000 people tragically lost their lives. Because of the actions of the 40 passengers and crew aboard one of the planes, Flight 93, the attack on the U.S. Capitol was thwarted.

Admission is free

Johnstown Flood Museum – Johnstown, PA (www.jaha.org/FloodMuseum)

On May 31, 1889, a neglected dam and a phenomenal storm led to a catastrophe in which 2,209 people died. It's a story of great tragedy, but also of triumphant recovery. The museum includes flood artifacts, information on the recovery, a multimedia map and the showing of the Academy-Award winning film, "The Johnstown Flood".

Admission is \$8 for adults, \$7 for seniors and \$6 for children under 18.

Johnstown Inclined Plane – Johnstown, PA (www.inclinedplane.org)

The Johnstown Inclined Plane is the steepest vehicular incline in the world, meaning that its 30' cars, which are large enough to hold 60 people, six motorcycles or a vehicle, travel at the steepest grade for cars their size.

Roundtrip Fares - \$3.25 Adults, \$1.75 Children for groups of 20 or more.

Guided Tour – Tuesday, June 18:

Old Bedford Village (www.oldbedfordvillage.com)

Old Bedford Village is a living history museum located in the Allegheny Mountains of PA. Bedford was a gateway to the west where many decided to make their home. Old Bedford Village has captured life from 1750-1900 by creating a unique collection of original homes and buildings from this time period.

Admission is \$10 for adults, \$9 for seniors, \$5 for students (6-College w/ valid ID), under 6 is free. Group discount with 20 or more people.

Historic Downtown Bedford (free time) (bedford.pennsylvania.com)

Be dropped off in Historic Downtown for lunch and some free time to browse the many shops, bakeries and antique stores that downtown Bedford offers.

NABEC 2013—Accompanying Persons Tours

On Your Own Tour Options:

Option 1: Mature Relaxation - Bedford Springs Spa & Facilities, Bedford, PA (www.omnihotels.com/FindAHotel/BedfordSprings/Spa.aspx)

Located less than 40 miles from the Courtyard by Marriott in Altoona, the Omni Bedford Springs Resort offers a full spa, one of the country's oldest golf courses, a variety of hiking trails and much, much more.

Option 2: Family Fun! - DelGrosso's Amusement Park, Tipton, PA (www.delgrossos.com)

A family amusement and water park located just over 15 miles from the Courtyard by Marriott of Altoona, DelGrosso's Amusement Park offers a full day for families with children of all ages.

Option 3: The Happiest Valley – Penn State University and State College, PA (www.psu.edu)

Visit the largest university in Pennsylvania and explore its unique college town. The campus includes a national arboretum, the Palmer Art Museum and the Penn State Creamery, home to a wide selection of unique ice cream flavors.

NABEC 2013 Paper Template is also available on the NABEC website. We encourage you to use this template for your paper to be presented at the 2013 conference. Please bring several copies of your paper for those interested.

Sunday, June 16		
14:00		Registration
16:00		NABEC Planning Meeting
18:30		Evening Welcome Reception
Monday, June 17		
08:00		Registration
08:00		General Session I
08:00		Welcome
08:15		Undergraduate Student Presentations
09:00		Technical Session IA – Graduate Student Oral Competition (concurrent session)
	13-035	Amending Soil with biochar - Current Knowledge and Research Gaps Ahmed Ahmed , McGill University
	13-036	A boosting ensemble technique for drought forecasting Anteneh Belayneh , McGill University
	13-037	Rice husk biomass briquettes: An alternative fuel for rural West Africa Audrey Yank , McGill University
		Woody Biomass Supply Chains in the Northeastern United States: An Economic Analysis Damon S. Hartley , West Virginia University
	13-039	Manure Pit Ventilation Modeling using SolidWorks Flow Simulation Daniel W. Hofstetter , The Pennsylvania State University
	13-040	Prediction of beef tenderness using hyperspectral imaging Technique Farzad Saadatian , McGill University
	13-041	Development and Testing of SWATDRAIN, A soil and water assessment tool Golmar Golmohammadi , McGill University
	13-042	Production of phytase by microbial submerged fermentation Hassan Coban , The Pennsylvania State University
	13-043	The effect of batter formulation and pre-drying time on inter-particle space fractions in fried batter Coatings Jamshid Rahimi , McGill University
	13-044	Sustainable Processing of Whey Waste Kristen Perano , Cornell University
09:00		Technical Session IB – Graduate Student Oral Competition (concurrent session)
	13-045	Processing Factor Affecting the Osmotic Dehydration of Broccoli Stalk Nora Salim , McGill University
	13-046	Evaluation of Palm Oil Quality Using FT-NIR Spectroscopy Ogan Mba , Clarkson University
	13-047	Effects of Composition on Waste Animal Fat Rheology and Crystallization Peter Adewale , McGill University
	13-048	Remediation Ability of Soil-Biochar Amendment in Reducing Environmental Pollution from Sex-Hormones in Animal Manure Sanaz Alizadeh , McGill University
	13-049	Application of Pulsed Ultraviolet light for Shelf Life Extension of Pre-formed Pizza Tina Mohammadbeygy , McGill University
	13-050	Evaluation of Electrolyzed Oxidizing Water for Cleaning-In-Place of On-Farm Milking Systems Xinmiao Wang , The Pennsylvania State University
	13-051	Forage Radish Cover Crops Increases Renewable Energy Production of Dairy Digesters Ashley Belle , University of Maryland

	13-052	Processing and characterization of Sugar from Aren Tree (<i>Arenga Pinnata</i> Merr) Inneke Victor , McGill University
	13-053	Weaning Infant Foods from Minor Millets Sara Hejazi , McGill University
	13-057	The effect of temperature on methane production: A simulation model Yongjiang Wong , University of Maryland
11:00		Keynote - Increasing Food Production to Match Increasing Global Demand; Bill Bickert, Ph.D., Professor Emeritus, Michigan State University
12:00		Lunch
13:00		Technical Session II – Poster Session (concurrent session)
	13-054	Impact of Feedstock Variables on Small Scale Biomass Pelletizer Performance Clay Swackhamer , The Pennsylvania State University
	13-055	Small-scale processing of locally produced edible oils Douglas H. Schaufler , The Pennsylvania State University
	13-056	Penn State Extension efforts to address engineering aspects of animal welfare on farms Eileen Wheeler , The Pennsylvania State University
	13-058	Studies on isoflavone deglycosylation and bioactivities in black soymilk fermented by <i>Rhizopus oligosporus</i> NTU-5 in a PCS bioreactor Kuan-Chen Cheng , National Technological University, Taiwan
	13-059	Immobilized Glucosidase for Isoflavone Deglycosylation in Black Soymilk Kuan-Chen Cheng , National Technological University, Taiwan
	13-060	Managing pasture mixtures to improve forage quality Tamie Veith , USDA-ARS, PA
	13-061	Short-term storage of freshly harvested lettuce under hyperbaric pressures Pansa Liplap , McGill University
	13-063	A comparative study of the lipase production by submerged fermentation using vegetable oil and waste frying oil Gulsad Uslu , The Pennsylvania State University
	13-080	Dehydration of Fruits Using Osmotic Dehydration, Vacuum Impregnation, and Pulsed Vacuum Osmotic Dehydration Alexandra Smith , West Virginia University
13:00		Technical Session IIB – Graduate Student Poster Competition (concurrent session)
	13-064	Synthesis and Characterization of Lignin-Peptide Crosslinks Brett G. Diehl , The Pennsylvania State University
	13-065	Manure Pit Ventilation Modeling using SolidWorks Flow Simulation Daniel W. Hofstetter , The Pennsylvania State University
	13-066	In vitro bioaccessibility of coenzyme Q10 in meats and enriched yoghurts Ponar Ecran , Ege University, Turkey
	13-067	Fed-Batch Fermentation for Human Lysozyme Production by <i>Kluyveromyces lactis</i> K7 in Biofilm Reactors Duygu Ercan , The Pennsylvania State University
	13-069	Simultaneous Saccharification and Fermentation for Ethanol Production from Potato Starch in Biofilm Reactors Gulten Izmirlioglu , The Pennsylvania State University
	13-070	Study on Chemical Changes in Microwave Assisted Retting of Flax Stems Gopu Nair , McGill University
	13-071	Conversion of phenyl alanine to phenyl pyruvic acid by microbial fermentation Hasan Coban , The Pennsylvania State University

	13-072	Canola protein isolate-based films: synthesis and characterization Weida Shi , Cornell University
	13-073	Effects of popping on the nutrient availability of little millet (<i>Panicum sumatrense</i>) Priyanka Kapoor , McGill University
	13-074	Response Surface Modeling to Optimize Acid Concentration, Time and Temperature during Hydrolysis of Hazelnut Shells Sibel Uzun , Middle East Technical University, Turkey
	13-075	Quantifying atmospheric nitrogen (N) losses in tall fescue irrigated with municipal secondary treated effluent. Stella Maris , The Pennsylvania State University
	13-076	Mechanisms of Deposit Removal from Milking System Materials during Cleaning with Electrolyzed Oxidizing Water Xinmiao Wang , The Pennsylvania State University
	13-077	Response surface modeling to optimize acid concentration, time, and temperature for hydrolysis of hazelnut shells Deniz Cekmecelioglu , Middle East Technical University, Turkey
14:30		Technical Session III
	13-001	Status of Safety in Biomass Production and Storage Aaron Yoder , The Pennsylvania State University
	13-002	A look at the environmental footprints of beef production Alan Rotz , USDA-ARS, PA
	13-003	Sand Lane Rehabilitation--Producing Clean Bedding Sand for Lactating Dairy Cows Andrew Wedel , McLanahan Corporation, PA
	13-004	Predictive relationships among mechanical properties of corn stover grind and quality of densified biomass pellets Apoorva Karamchandani , The Pennsylvania State University
	13-005	Jam Brook Fish Passage Project - Design and installation of a stream simulated arch culvert Daniel Baumert , USDA-NRCS, ME
	13-079	Rheological properties of rice-blackgram batter while replacing white rice with brown rice Satyanarayan Dev , A'Sharqiyah University, Oman
15:45		Technical Session IV
	13-006	Streambank Repair Work from Tropical Storm Irene Robert Thompson , USDA-NRCS, VT.
	13-007	Storm-Water Quality Performance for Paired Bioretention Basins Carmine Balascio , University of Delaware
	13-008	Natural Channel Design in Emergency Stream Restoration Deron Davis , USDA-NRCS, NY
	13-009	Implementation of Biorefinery strategy for the production of value added products from Newfoundland and Labrador's Seafood and Aquaculture Industry processing waste Deepika Dave , Memorial University of Newfoundland
	13-010	Performance of dairy manure gas emission reduction amendments Eileen Wheeler , The Pennsylvania State University
	13-011	Emerging contaminant from biosolids response to composting process. Gary Felton , University of Maryland
18:00		Barbeque at Altoona Railroad Museum

Tuesday, June 18

08:00		Registration
08:00		Welcome/Housekeeping
08:10		Technical Session V
	13-012	Implementing Best Management Practices Around Public Utilities - Selected Case Studies Heather Smeltz, USDA – NRCS, PA
	13-013	Engineering approaches to understand the molecular structures of the growing plant cell wall Hojae Yi, The Pennsylvania State University
	13-014	NRCS Response to September 2012 Manure Gas Incidence in Montour County, PA Hosea Latshaw, USDA-NRCS, PA
	13-015	Economic and Environmental Advantages of Coupling Anaerobic Digestion with Nutrient Recovery in Animal Agriculture James Wallace, McLanahan Corporation
	13-016	Supply System for Short Rotation Woody Biomass update John Posselius, CNH Global N.V.
	13-017	Watershed Diagnostics For Improved Adoption Of Management Practices: Integrating Biophysical And Social Factors in Urban and Agricultural Landscapes Paul Leisnham, University of Maryland
09:35		Technical Session VI
	13-018	A Case Study on Dairy Bedding Conversion Mark Sell, McLanahan Corporation
	13-019	Farm-system modeling to evaluate environmental losses, profitability, and Best Management Practice cost-effectiveness Tamie Veith, USDA-ARS, PA
	13-020	Inverting the classroom: Using web technologies to encourage conceptual learning at home, thus freeing classroom time for interactive experiences Nikki Brown, The Pennsylvania State University
	13-021	Performance Testing Of A Rotary Drum Liquid-Solid Separator With Dairy Manure Robert Plank, McLanahan Corporation
	13-022	A look at the environmental footprints of beef production Alan Rotz, USDA- ARS, PA
	13-023	The Use of Recycled Water for Irrigation of Turf and Landscape Plants: A Comparison of the Current State Regulations for Water Reuse Stacey Chirside, University of Delaware
11:00		Panel Discussion—Increasing Food Production to Match Increasing Global Demand – Industry Panel
12:00		Lunch
13:00		Technical Session VII
	13-025	Innovative Learning in Agriculture: Case Study of Student Managed Enterprise Tim Rennie, University of Guelph
	13-026	Hydraulic Systems - Practical Design Considerations Todd Huber, McLanahan Corporation
	13-027	Wells, Wells, Wells---the Dilemma and Consequences of Check Valves vs. Foot Valves for Rural Water Supply Stanley Weeks, Stanley Weeks, LLC
	13-028	Winter Harvest of Switchgrass for Bioenergy Zane R. Helsel, Rutgers University
	13-029	Reducing Advanced Nutrient Reduction Technology costs with Feed Management Peter J. Vanderstappen, USDA-NRCS, PA

	13-030	Development Of An Agricultural Air Pollution Course William Ritter , University of Delaware
14:35		Technical Session VIII
	13-031	Investigation of MRSP Biofilms Using Microfluidic Systems Sureah Neethirajan , University of Guelph
	13-032	Role of Agricultural Engineers in the Water Mission Area of the U.S. Geological Survey Gary Fisher , USGS, MD
	13-033	Methane Production Potential from Source Separated Human Wastewater in Haiti Stephanie Lansing , University of Maryland
	13-034	Temporal Variation of Infiltration Capacity: A Review Glenn Warner , University of Connecticut
	13-078	ASABE as the Biological Systems Engineering Society: What We Should Be Doing Arthur Johnson , SweetAire Farms
16:00		NABEC Business Meeting
18:00		Reception & Awards Banquet
Wednesday, July 26		
08:00		Technical Tours