Centennial Annual International Meeting Highlights
Conferences and International Meetings

To receive more information about ASABE conferences and meetings, contact ASABE at 800-371-2723 or mcknight@asabe.org.

2007

Sept. 15-19  International Symposium on Air Quality and Waste Management for Agriculture. Broomfield, Colorado, USA.


2008

June 29- July 2  ASABE Annual International Meeting. Providence, Rhode Island, USA.

ASABE Section and Community Events

2007

Sept. 13-15  Pacific Northwest Section, ASABE/CSBE Meeting. Moscow, Idaho, USA. Contact Barbara Williams, barbwill@uidaho.edu.


Oct. 12-13  2007 Red River Valley/CSBE, CSBE/ASABE North Central Intersectional Conference. North Dakota State University, Fargo, North Dakota, USA. Contact Dean Steele, Dean.Steele@ndsu.edu or Paul Aakre, PAakre@mail.crk.umn.edu.

Oct 27  Nebraska Section Meeting. Lied Lodge and Conference Center, Nebraska City, Nebraska, USA. Contact Stacy Modelski, stacy.modelski@ne.usda.gov.

Oct 30  Quad City Section Fall Meeting. Bettendorf Family Museum, Bettendorf, Iowa, USA. Contact Eric Windeknecht, WindeknechtEricD@JohnDeere.com.

2008

Jan 22  Quad City Section Winter Meeting. Contact Eric Windeknecht, WindeknechtEricD@JohnDeere.com.

March 25  Quad City Section Awards Meeting. Contact Eric Windeknecht, WindeknechtEricD@JohnDeere.com.

April 15  Quad City Section Tour. Contact Eric Windeknecht, WindeknechtEricD@JohnDeere.com.


ASABE Endorsed Events

2007

Sept. 30- Oct. 5  CID 58th International Executive Council Meeting and USCID Fourth International Conference on Irrigation and Drainage. U.S. Committee on Irrigation and Drainage. Contact Larry Stephens, stephens@uscid.org.


2007 Annual International Meeting

A sense of pride and excitement permeated this year’s Centennial Anniversary Meeting in Minneapolis. Honoring 100 years of service and achievement, this activity-packed meeting recognized the past, celebrated the present, and looked toward the future.

Invited dignitaries, four engaging speakers including a past U.S. president, a gala celebration dinner, special exhibits galore, and so much more awaited meeting attendees.

A special commemorative video told the story of the profession including significant events and figures, engineering landmarks, and the many ways in which agricultural and biological engineering has contributed to our quality of life.

Two new student competitions debuted at this year’s meeting. The robotics student design competition garnered much interest and excitement as students used robotics to develop solutions to agricultural problems. The 100th Anniversary High School Multimedia Competition stimulated interest among high school students.

Tractor Trendsetters of the Last 100 Years provided a special centennial exhibit in tractor history. The Top 15 Agricultural and Biological Engineering Achievements of the 20th century were also featured.

Other highlights showcasing the profession included awards and recognitions, presentations, competitions, committee meetings, professional development courses, tours, and networking.

Those members unable to attend the meeting will get a feeling of the pride, the excitement, and the enthusiasm this Centennial meeting generated among attendees of all ages and cultures as ASABE celebrated 100 years of achievements. For those who attended the meeting, Resource recaps the week’s highlights.

We hope this issue showcases the many meeting highlights and instills a sense of pride in the contributions you have made in the past 100 years!

Mark your calendars now!
ANNUAL MEETING HIGHLIGHTS

2 ASABE Celebrates Centennial in Style
3 Foundation Activities Earn $10,500
4 Photo Montage of Meeting Activities
6 ASABE Fellows Inducted at Centennial Meeting
7 Presidential and Leadership Citations
8 2007 ASABE Award Winners
10 Standards Developers Recognized
12 Board and Council Meeting Highlights
13 Outstanding Paper Reviewers for 2006
14 Paper Award Winners
15 2007 Centennial Meeting Overview
16 ASABE Fellows Inducted at Centennial Meeting
17 Young Professionals Community AIM Activities
19 Graduate Student Research Award
20 Meeting Activities Photo Spread
21 Preprofessionals Meeting Activities

INSIDE ASABE

15 A Word from the President
16 Gale A. Holloway Professional Development Award Established
16 Cooperative Standards Program
17 Member News
17 In Memoriam
17 Puerto Rico Section Holds Silver Jubilee
18 Following Study, Dues Review Committee Recommends Increasing Dues
18 Fellow Eligibility and Bylaws Changes

FEATURE

19 Eco-Engineering a Sustainable Society
Ann C. Wilkie
“We must learn to live on and with the planet rather than in spite of it, and agricultural and biological engineers will be front and center in these efforts.”

2006-2007 ASABE Annual Report
This report features an historical timeline and highlights from the past 100 years in addition to the accomplishments of the past year. See insert.

DEPARTMENTS

2nd cover
Events Calendar
21 Personnel Service
28 Professional Listings

LAST WORD

29 Methane to Markets
Robert J. Meyers

ON THE COVER
Freelance writer/photographer John Dietz of Arden, Manitoba Canada, captured and graciously shared Minneapolis AIM moments: the downtown cityscape (top left); the Convention Center’s auditorium (top right); three presidents: Charles Sukup, Bill Clinton, and Don Erbach (mid-right); and a pea-pouring, Lego®-built robotic competition entry from Iowa State (bottom left). Other photos, taken by headquarters staff, include an antique tractor, a poster session viewer, and the 100th anniversary cake.
ASABE Celebrates Centennial in Style

The Minneapolis Convention Center provided the backdrop for an outstanding Centennial Meeting that honored the profession and toasted its future. Several meeting highlights commemorated ASABE’s 100 years and recognized and celebrated the agricultural and biological engineers who played a significant role during the past 10 decades.

Some of those memory-making highlights included a special address by former U.S. President William Clinton, a Centennial Gala Banquet, Tractor Trendsetters of the Last 100 Years, and the Top 15 Agricultural and Biological Engineering Achievements of the 20th Century.

Clinton Calls Future “An Engineer’s Dream”

ASABE welcomed and honored President William Clinton. The Society presented him with a commendation for the Clinton Foundation’s work on sustainable development through the Global Initiative and the Clinton-Hunter Initiative. These two initiatives also promote food security, clean water efforts, and partnerships.

Calling the next 50 years “an engineer’s dream” for the complex challenges that lie ahead, Clinton told Centennial meeting attendees that now more than ever they will be needed to solve looming problems related to climate change, resource depletion, and population growth.

“Substantial and largely unwelcome consequences” of climate change will make the next 50 years especially important for scientific engineers, Clinton said.

Depleted resources, from topsoil for farming to oil for jet fuel, are “a big, big problem,” according to the former president.

Where 2.5 billion newcomers are going to go to earn a living and eat, he added, will be up to folks like you in the audience. Clinton urged guests to encourage young people to pursue engineering careers.

“Get more kids to follow in your footsteps and just realize: It’s great to have that kind of responsibility, and it certainly will be an interesting time to be an engineer.”

“I really believe the 21st century will, more likely than not, be the most exciting time ever in all of human history to be alive.”

former U.S. President Bill Clinton

Centennial Gala Banquet

The Centennial Gala provided an exquisite touch to celebrate both the past and the future of ASABE. It was an evening to remember as the profession and its members were honored.

ASABE celebrated its 100th Anniversary with an elegant Centennial Gala Banquet, an engaging speaker, and several tributes to the profession and members of ASABE.

Past ASABE President Bob Gustafson served as the master of ceremonies and appeared as the Society’s first honorary member, Bascom B. Clark. Clark was editor and publisher of the American Thresherman and Gas Review, whose pages were first to announce the birth of ASAE.

ASABE life member and Fellow Harold Brock entertained and enlightened guests with recollections of a career spent with the likes of Henry Ford I, George Washington Carver, and Thomas Edison. Brock began his career at the Ford Motor Co. in 1929 as a 15-year-old apprentice to Ford. He commented that Ford had “an insatiable desire to get rid of animal power.”

A fitting tribute during the Gala was the acknowledgement of ASABE members and their lengths of membership. All members were asked to stand, and in 10-year membership increments sat down, until the only members left standing were those with more than 50 years of Society membership. Those dedicated members were honored with a special recognition and a warm thank you for their loyalty and service to ASABE.

Exhibit Hall Features 100 Years of Achievements

The exhibit hall highlighted several Centennial-related displays including Tractor Trendsetters of the Last 100 Years, a special centennial exhibit on tractor history. The display featured tractors that represented significant “firsts” — design advancements that pushed agricultural machinery to new levels. The exhibit also included a few of today’s “modern marvels,” offering meeting attendees a panoramic view of the progress for which the profession can take credit.

The Top 15 Agricultural and Biological Engineering Achievements of the 20th century, as polled by 2006 meeting attendees, were also showcased. In addition, several university programs displayed materials that helped advance agricultural and biological engineering over the past century.
Foundation Activities Earn $10,500

The ASABE Foundation hosted several activities at the Centennial Meeting. For the 10th year, the Silent Auction offered a variety of items for bidding. In addition, a golf outing provided some friendly competition on the golf course.

Proceeds from this year’s successful Silent Auction, raffles, and golf outing will go toward ASABE’s 100th Anniversary Fund. The Fund was established to create programs to increase recognition of the profession as part of ASABE’s Centennial and to commemorate the contributions of agricultural and biological engineers to humankind.

Foundation Golf Outing

This year’s Foundation Golf Outing was renamed The Gale A. Holloway Memorial Golf Outing in honor and memory of the former ASABE Foundation President and ASABE President.

Everyone had a great deal of fun along with some fierce, but friendly, competition. The winning foursome was headed by Wayne Skaggs, along with teammates Michael Burchell, Robert Evans, and Mari Chinn.

The ASABE Foundation would like to express thanks to those who sponsored lunches, carts, and hole contests: Billy Barfield, CNH, Fred Payne, Bob Schafer, Wayne Skaggs, and Dan and Mary Withrow.

Watch for information about the 2008 Foundation Golf Outing to be held in Providence, R.I.

Silent Auction

This year’s Silent Auction offered many items from new contributors. Several ASABE sections and universities also made donations to the Silent Auction. The sections included the Chicago, Florida, Michigan, and Minnesota sections. University donations were given by Iowa State University, Michigan State University, Oklahoma State University, Texas A&M, University of Arkansas, University of Illinois, University of Kentucky, and Virginia Tech.

Items available for bid at this year’s auction included an autographed football and basketball from the University of Florida National Champions, toys, books, prints, artwork, wine, items from Bush Hog, handmade scarves and hats, quilts, small kitchen appliances, Kansas State belt buckles, a bed and breakfast weekend, one week at a condo in North Carolina, a weekend in a Florida beach condo, jewelry, Longaberger baskets and pottery, coffee mugs, matted photos, and much more.


A special thanks to Dan Weaver of DW Safety Lights who donated a beautiful handstitched Amish quilt. This quilt was the focal point of the Silent Auction and brought in $1,500 in raffle tickets. The lucky winner was Keith Saxton.

Once again, Claude Brown of Ag Industrial Mfg., donated a case of wine, but this time it was a case of champagne with the ASABE 100th Anniversary label on each bottle. Don Slack was the lucky winner with that raffle bringing in $550.

If you would like to make a contribution to the Foundation, a pledge form is available online at www.asabe.org/foundation/pledgecard.pdf.

Thank you for your part in promoting the profession both now and into the future!
1. ASABE celebrated its birthday in style. The Centennial Gala provided an elegant touch to honor both the past and the future. Gala attendees received a bottle of champagne with an ASABE 100th anniversary label and a crystal paperweight with the centennial logo etched inside.

2. Jimmy Butt, past president and former executive vice president, enjoyed the Gala’s festivities.

3. ASABE life member and Fellow Harold Brock was the guest speaker at the Gala Dinner. Brock began his career at Ford Motor Co. in 1929 as a 15-year-old apprentice to Henry Ford.

4. A dessert “toast” concluded a memorable evening at the Gala.

5. Current and past ASABE executive vice presidents were honored during the Gala. Shown left to right: Jimmy Butt, Melissa Moore, and Russell Hahn.

6. Past ASABE President Bob Gustafson, shown with wife Yvonne, served as Master of Ceremonies and appeared as the first honorary member Bascom Clark.

7. ASABE welcomed President Clinton, who called the next 50 years “an engineer’s dream.” Shown left to right: ASABE Past President Otto Loewer, President Charles Sukup, President Clinton, incoming President Don Erbach, Executive Vice President Melissa Moore, and President-Elect designate James Dooley.
1. Hendry K. Sowa accepts an AE 50 Award from Don Erbach.

2. Finalists of the 100th Anniversary High School Multimedia Competition made oral presentations at the meeting. Shown left to right: David Fulton, third-place winner; Brian Buss, second-place winner; Aubrey Koehler, first-place winner; and Charles Sukup.

3. Charles Sukup (right) shakes hands with Kevin M. Keener who received the Nolan Mitchell Young Extension Worker Award.

4. Former CSBE/SCGAB presidents Digvir Jayas (right) and Shahab Sokhansanj embrace at the meeting.

5. Philip Westerman, shown with his wife Janet, was honored as an ASABE Fellow.

6. A reception offering an array of appetizers followed the Fellows Ceremony.

7. Charles Sukup (right) displays the Henry Giese Structures and Environment Award. Ray Bucklin (left) was the recipient of the award for his outstanding contributions.

8. ASABE President Charles Sukup hands over the presidential gavel to incoming President Don Erbach.

9. Stacy Hutchinson is being congratulated by Charles Sukup. Hutchinson received the A. W. Farrall Young Educator Award.
ASABE Fellows Inducted at Centennial Meeting

Kifle G. Gebremedhin, for his outstanding contributions in teaching and research in the area of structures and environment. He is a professor in the Biological and Environmental Engineering Department at Cornell University, Ithaca, N.Y.

Janusz S. Haman, P.E., for his superior leadership in the development of agricultural engineering education and research programs in Poland. He is a retired professor from the Agricultural Engineering Department at the Agricultural Academy in Krakow, Poland, and director of the Center for Science Advancement in Warsaw, Poland.

Awatif El-Domiaty Hassan, P.E., for significant accomplishments as a researcher, teacher, and for service to ASABE and other national and international organizations. She is professor emeritus of the Forestry, Biological and Agricultural Engineering Departments at North Carolina State University, Raleigh.

Larry D. Jacobson, P.E., for outstanding contributions in the design and development of engineering practices concerning animal housing, air quality, and manure management systems. He is a professor and extension engineer for the Bioproducts and Biosystem Engineering Department at the University of Minnesota, St. Paul.

Don D. Jones, P.E., for outstanding contributions and achievements in extension, applied research, and teaching in the area of agricultural structures and environmental systems. He is a professor and extension engineer in the Agricultural and Biological Engineering Department at Purdue University, West Lafayette, Ind.

Ronald L. McAllister, for his outstanding leadership and accomplishments in the field of agricultural safety engineering and dedicated service to the Society. He is manager, Support and Facilities, CNH America LLC, New Holland, Penn.

James Pat Murphy, P.E., for his outstanding leadership and contributions in the areas of environmental design, livestock structures, technology transfer of research information, and administration of agricultural extension programs. He is a professor and interim assistant director in the Extension Agricultural and Natural Resource Programs, and Biological and Agricultural Engineering Department at Kansas State University, Manhattan.

Gerald L. Riskowski, P.E., for his distinguished achievements in advancing the knowledge and science of agricultural structures and environment through teaching and research of postframe foundation design and animal ventilation systems. He is a professor and head of the Biological and Agricultural Engineering Department at Texas A&M University, College Station.

Kenneth A. Sudduth, P.E., for his innovative research that has significantly contributed to furthering the application of precision agriculture. He is an agricultural engineer and lead scientist for the USDA-ARS, Cropping Systems and Water Quality Research Unit at the University of Missouri, Columbia.

Clément Vigneault, P.E., for his research and contributions to postharvest technology. He is a research scientist for Agriculture and Agri-Food Canada, Horticulture Research and Development Centre in Saint-Jean-sur-Richelieu, Québec.

Phillip W. Westerman, P.E., for his outstanding contributions to agricultural waste management and environmental protection through research and technology transfer of innovative technologies. He is a professor, and research and extension engineer in the Biological and Agricultural Engineering Department at North Carolina State University, Raleigh.
Presidential Citations Presented

Presidential Citations for distinguished service to ASABE were presented to the following by President Charles E. Sukup: Jerry Wille and Ron Yoder, for their outstanding leadership and strong representation of ASABE in efforts to ensure the future of the Agricultural Engineering PE exam and in the evaluation of the potential for a Biological Engineering PE exam.

Brian Holmes, Sonia Jacobsen, Carolyn Jones, Prasanta Kalita, Lal Kushwaha, Mac Legault, and Dennis Murphy, for distinguished service to the Society and exceptional execution of their responsibilities to investigate potential limitations on non-engineer members within ASABE relating to obtaining the Grade of Fellow.

Fred Payne, Jim Koelliker, and Robert Schafer, for their outstanding work on identifying and leading the Foundation Board of Trustees through an analysis to improve the operating practices of the Foundation and improve management of the Foundation’s investment portfolio.

Bob Gustafson and Dolores Landeck, for their exceptional service to the Society and distinguished leadership of the Centennial activities to commemorate ASABE’s 100th Anniversary. Without their efforts and time, these activities would not have occurred.

Robert Peart, Ben Jones, and Wayne Maley, for dedicated and exceptional service to the Society by authoring Three Decades of Change – ASAE to ASABE, a supplement to Robert Stewart’s 7 Decades that Changed America. Their commitment to recording our history required more than two years and countless hours of dedicated effort for which the Society is grateful.

Jill Huenink, Carolyn Jones, and Laura Christianson, for distinguished service to the Society in the establishment of the ASABE 100 Multi-Media Competition for high school students including developing the concept, soliciting support, developing the competition rules, and promoting the event.

Tony Kajewski, Walt Hull, and Bill Splinter, for their organization and dedicated leadership in the presentation of Top Achievements displays for the 100th Annual International Meeting.

Oladiran Fasina, for his leadership and dedicated service to the Society in the development of an ASABE biomass definition standard, which can be used as reference by academia, government, and industry and communicates the technical leadership of ASABE in this rapidly expanding industry.

Roger Rohrbach, for his dedicated service to the Society and the Foundation as the Foundation Treasurer. He stepped into a newly created position and led efforts to re-examine the financial management of the Foundation.

Paul Heineman, for dedicated service to the Society by providing outstanding leadership as chair of the Membership Development Council. During his tenure, the Society had two record-breaking years of new membership growth.

Shay Simpson and Herb Willcutt, for their dedicated leadership in the organization and presentation of the Top Achievements display of the cotton picker for the 100th Annual International Meeting.

Headquarters Staff, for the extra time, dedication, and efforts they provided, above and beyond their normal duties, to ensure the completion and success of many of our 100th Anniversary activities.

Leadership Citations Honor Service to ASABE

Clifford Flood has made significant contributions to the publications effort of ASABE through his participation in the Publications Council over the past decade. In addition to his leadership contributions to the Publications Council, he was a key player in two significant publications developments. Flood served on the Forward Planning Committee launched in 1997. This committee was instrumental in implementing the ASABE Technical Library, a very significant step forward for ASABE publications. While chair of the Publications Council, Flood was also involved in the launch of an electronic peer-review system for ASABE, another important forward step for ASABE publications.

Thomas R. Way has performed a plethora of small- and medium-scope projects for the PM division and ASABE over the past several years. He served as secretary, vice-chair, chair, and past-chair of the PM division doing an exemplary job in each position. He was instrumental in significantly revising the PM division bylaws. For several years, he poured himself into the division editor role with extra attention to detail and always doing the behind-the-scenes work in a timely manner.

R. Heather Jaffan, as committee chair of the BE-03 standards, created a new program to solicit the development of Standards. She introduced a Roundtable Discussion that was attended by executives who provided significant input. Standards needs for biological engineering have been collected and the technical groups will work on these needs.

As a result of the first successful Roundtable Discussion, the new program to solicit the development of Standards in Biotechnology becomes an essential and integral component of the ASABE Annual International Meeting. The new vision in this program is to amass and assemble all applied research in biotechnology and nanotechnology and to extrapolate the development of standards. In addition, for the first time risk assessments and interventions will be incorporated as a critical element in the standards development.

The most significant outcome is that this new program is also aimed at creating awareness, incentives, and an educational platform to attract new ASABE members who are major actors in biotechnology and nanotechnology sectors as well as the end users for ASABE Standards.
2007 ASABE Award Winners

John Deere Gold Medal Award
John M. Laflen, P.E., ASABE Fellow, for leading the development of a new generation of erosion prediction technologies that have advanced soil and water conservation. Laflen is an adjunct professor at Iowa State University.

Cyrus Hall McCormick Jerome Increase Case Gold Medal Award
David W. Smith, ASABE Fellow, for his exceptional and meritorious engineering achievements. Smith is a retired senior engineer from Deere & Company Moline Technology Innovation Center, Moline, Ill.

Massey-Ferguson Educational Award
David H. Vaughan, in recognition of his outstanding contributions as a highly effective teacher, advisor, and researcher in the area of sustainable agriculture and energy. Vaughan is a professor at Virginia Tech.

Kishida International Award
R. Paul Singh, ASABE Fellow, for his visionary leadership and outstanding contributions to teaching, research, and technology transfer in food science and engineering worldwide. Singh is a professor at the University of California, Davis.

FPSA Foundation - FPEI “Distinguished” Food Engineering Award
Terry J. Siebenmorgen, P.E., ASABE Fellow, for his outstanding leadership as an educator, researcher, and administrator recognized internationally for improved rice and grain drying, milling, storage, and handling technology. Siebenmorgen is a professor at the University of Arkansas.

Hancor Soil and Water Engineering Award
Patrick G. Hunt, for his significant contributions to the science and implementation of innovative new systems for animal waste treatment to improve water quality. Hunt is a research leader, USDA-ARS, Coastal Plains, Soil, Water, and Plant Research Center, Florence, S.C.

NAMIC Engineering Safety Award
David L. Hard, for his leadership and accomplishments that have made a significant impact to agricultural safety and health and for outstanding service to ASABE and NIFS. Hard is an agricultural safety and health Scientist, NIOSH Centers for Disease and Prevention, Department of Health and Human Services, Morgantown, W. Va.

Evelyn E. Rosentreter Standards Award
Thomas B. Tuttle, for his outstanding contributions and leadership to national and international agricultural equipment standards development through his work with ASABE, AEM, SAE, and ISO. Tuttle is a project engineer for CNH America LLC, Burr Ridge, Ill.

Mayfield Cotton Engineering Award
Donald F. Wanjura, P.E., for his outstanding advancements in production mechanization, crop modeling, and irrigation technology. Wanjura is a retired agricultural engineer of the USDA-ARS, Wind Erosion and Water Conservation Unit, Lubbock, Texas.

Heermann Sprinkler Irrigation Award
Leslie W. Jochens, P.E., in recognition of leadership to the irrigation industry through his commitment to teaching effective practices, and for providing outstanding engineering expertise for technical, practical, and economic sprinkler irrigation system design and operation. Jochens is the director of Inter-Company Relationships and board chairman of Western Irrigation Supply House, Inc., Aurora, Colo.

Call for Nominations for 2008 ASABE Awards
Award nominations are due Oct. 31, 2007. For instructions visit www.asabe.org/awards/award.html.
2007 ASABE Award Winners

**New Holland Young Researcher Award**

*Indrajeet Chaubey*, for his outstanding record of innovative research and scholarly accomplishment in the areas of water quality modeling and management. Chaubey is an associate professor at Purdue University.

**Nolan Mitchell Young Extension Worker Award**

*Kevin M. Keener, P.E.*, for his outstanding contributions to the academic and industrial community through extension achievements in food process engineering research and education. Keener is an associate professor at Purdue University.

**A.W. Farrall Young Educator Award**

*Stacy L. Hutchinson*, for her outstanding leadership in engineering education and dedication to student learning and advising. Hutchinson is an associate professor at Kansas State University.

**Sunkist Young Designer Award**

*Miles Keaton, P.E.*, for his outstanding leadership and innovations in the design of agricultural equipment, and for service to the profession and community. Keaton is manager, Engineering and Technology for Remote Sensing Operations, John Deere Agri Services, Hoffman Estates, Ill.

**Rain Bird Engineering Concept of the Year Award**

*Quy D. Bui*, for the VariTarget™ Nozzle, a spray nozzle with variable flow rate and droplet optimization, developed by SprayTarget. Bui is president of SprayTarget, Rosemont, Minn.

**PEI Professional Engineer of the Year Award**

*Sonia Maassel Jacobsen, P.E.*, for her outstanding leadership in water resources engineering and service to the engineering profession. Jacobsen is an hydraulic engineer for the USDA-NRCS, St. Paul, Minn.

**G. B. Gunlogson Countryside Engineering Award**

*Gregory D. Jennings, P.E.*, for his exemplary leadership in protecting and improving water quality through extension, teaching, and research programs. Jennings is a professor and extension specialist for North Carolina State University.

**Henry Giese Structures and Environment Award**

*Ray A. Bucklin, P.E.*, for his outstanding contributions in research, teaching, and extension programs involving grain and animal structures and environment, and greenhouse design. Bucklin is a professor at the University of Florida.

**Award for the Advancement of Surface Irrigation**

*Keith E. Admire, P.E., Doyle Burch, and John Hester*, for contributions to increased efficiency of surface irrigation through the design and development of numerous best management practices for thin-walled, lay-flat plastic irrigation tubing. Admire is the director of the USDA-NRCS, National Water Management Center, Little Rock, Ark.

Burch is district conservationist, USDA-NRCS, NRCS Field Office, New Madrid, Mo.

Hester is a civil engineer and team leader at the USDA-NRCS, Irrigation and Water Quality Office, Dexter, Mo.

**Robert E. Stewart Engineering - Humanities Award**

*Lucas G. Maddy*, in recognition of his dedication, enthusiasm, and passion for integrating service as a student leader. Maddy is a graduate of Kansas State University.

*Joe Hynek*, in recognition of his efforts in linking the agricultural profession to the humanities through musical theater. Hynek is a research assistant and graduate student at Iowa State University.
Standards Developers Recognized

The following individuals were recognized for major contributions in the development of Standards during 2006.

**Douglas Durant**, for ASABE/ISO 5007:2003, ASABE/ISO 5008:2002, and ASABE/ISO 14269:1997. Durant was the project lead for the identical national adoption of these international standards. The adoption was made possible by the signing of SAE-ASABE copyright agreements in 2004, which gave ASABE a royalty-free license to publish SAE standards documents pertaining to agricultural equipment. It also allowed ASABE to facilitate and copyright national and international adoption of derivative standards, including ISO approved documents. Durant championed the Memorandum of Understanding between ASABE and SAE and the adoption of the standards to ISO as well as leading the adoption of said ISO standards as ASABE standards. Durant is the manager of product standards for agricultural tractors at the John Deere Product Engineering Center, Waterloo, Iowa.

**Oladiran Fasina**, for initiating and developing ANSI/ASABE S593 MAY2006. A terminology standard was needed to establish a communication basis of the fundamental aspects surrounding the use of plant matter as a commodity on an unprecedented scale, which would help establish a U.S. and international bio-economy. Fasina, diplomatic when addressing comments and balancing different viewpoints, was able to craft a consensus document from widely varying opinions among experts in the biomass and bio-energy field. Fasina is an associate professor at Auburn University, Alabama.

**Nancy Fitz**, for ANSI/ASABE S596 FEB2006. This standard was initiated by interested organizations, including the Ag Container Recycling Council and CropLife America, to develop a consensus American National Standard on best practices for container recycling that lays the groundwork for future decisions at state and federal levels. Fitz was named co-chair of the 19-person committee representing user, industry, association, and governmental interests. She provided exceptional leadership and remained neutral on contentious issues while making sure all points of view were heard. This standard will pave the way for other industry segments to begin their own container recycling programs and allow regulatory bodies to evaluate such programs. Fitz is a chemical engineer for the U.S. EPA Office of Pesticide Programs, Washington, D.C.

**Ron MacDonald**, for ANSI/ASAE EP364.3 NOV2006. This revision to EP364 will play an important part in helping prepare farmers for future disasters. As a consultant to farmers in the United States and Canada, MacDonald witnessed how clients were devastated and ill-prepared for natural disasters that caused power failures lasting more than a few hours. Standby generators on farms are often neglected, unsafe, and not ready for action when an emergency occurs. Maintenance procedures for standby generators vary greatly between manufacturers. MacDonald sought input from engineers, manufacturers, farmers, and insurers to meld together all ideas into a document that allows for individual customization. He also took a step toward international standardization by making the standard useful in both the United States and Canada. MacDonald is president of Agviro Inc., Guelph, Ontario.

**Steven J. Thomson**, for ASAE S327.3 FEB2007. Thomson was the project lead for the revision of S327 with the assistance of Robert Wolf of Kansas State University. Significant changes by industry innovations caused the need for this revision to ensure industry could communicate effectively and consistently. This standard has relevance for the entire crop production and protection industry and other terminology and definition standards. Thomson led a diverse committee of university, USDA, and industry representatives through many ballots, with each review generating numerous comments. He effectively resolved each comment to ensure individual views were reconciled. Thomson works for the USDA-ARS Application and Production Technology Research Unit, Stoneville, Miss.

Author Brian Greene Gives Keynote Address

Popular speaker, author, and physicist Brian Greene, conducted an exhilarating and, at times, humorous historical explanation of the universe, beginning with Newtonian physics. During the past 100 years, Greene noted, our understanding of the universe has been subject to three revolutionary upheavals that have swept away thousands of years of conventional thought. He said these developments provided the framework for examining the key elements of breakthrough thinking.

How did the universe begin? What happened at time zero? Greene stated that theorists have to be willing to reach out without hesitation or fear to answer questions such as these. Greene also questioned what drives someone toward new ideas.

The universe came into existence with a “big bang,” said Greene. The theories of Isaac Newton and Albert Einstein provided insight into understanding the universe, but many questions still remain. The only way to an understanding of the universe and what happened in the beginning is to have an understanding of the law of physics, noted Greene.

Over the last century, Greene added, physicists and scientists have theorized why the universe is the way it is. He says a key feature of the universe is the stars. If there were no stars, Greene noted, the universe would be a very different place.
CSBE/SCGAB Fellows Honored in Minneapolis

Suzelle F. Barrington, in recognition of her outstanding contributions to the engineering profession. She is a professor in the Department of Bioresource Engineering, McGill University, Ste-Anne-de-Bellevue, Quebec.

Daniel I. Massé, in recognition of his outstanding contributions to the field of agricultural engineering and for his service to the profession. He is a research scientist, Dairy and Swine Research and Development Center, Agriculture and Agri-Food Canada, Sherbrooke, Quebec.

Neil B. McLaughlin, in recognition of his excellent service to the Society and professional committees, the spin-offs from his seminal research instrumentation development, and his innovative data analysis methods applied in the fields of plant breeding, crop management, energy use in crop production, and soil dynamics. He is a research scientist, Agriculture and Agri-Food Canada, Ottawa, Ontario.

William E. Muir, in recognition of his exceptional research, teaching, and professional activities. He is professor emeritus in the Department of Biosystems Engineering, University of Manitoba, Winnipeg, Manitoba.

Shiv Om Prasher, in recognition of his exceptional contributions to the field of water resource engineering, teaching, and service to CSBE/SCGAB and ASABE. He is a James McGill Professor in the Department of Bioresource Engineering, McGill University, Ste-Anne-de-Bellevue, Quebec.

Philippe Savoie, in recognition of his outstanding contributions to the field of forage and biomass engineering and for his service to CSBE/SCGAB and ASABE. He is a research scientist, Soils and Crops Research and Development Centre, Agriculture and Agri-Food Canada, Quebec City, Quebec.

James S. Townsend, in recognition of his contributions to engineering for agricultural, food, and biological systems, spanning a 49-year period. He is a professional engineer, professional agrologist, SEATAB Consulting Services, Winnipeg, Manitoba.

2007 CSBE/SCGAB Award Winners

Glenn Downing Award
Roger Thériault, for his contribution in the power and machinery area and in agricultural engineering training through academic and administrative duties.

John Clark Award
Stephen P. Clarke, for his contributions to the fields of electric power and processing, and energy.

Industrial Award
IPEX Inc., in recognition of its innovation in large diameter pipes for water management.

CSBE Young Engineer of the Year Award
Satyanarayan Panigrahi, for his exceptional contribution to the advancement of agricultural material research.

Maple Leaf Award
Digvir S. Jayas, for his dedication, leadership, and excellent service to the engineering profession in Canada and the world.
Board of Trustees

The Board approved new Finance Committee member Sue Nokes of the University of Kentucky.

The Board has been focusing on ASABE’s global presence and how to enhance the Society’s global position. A Task Force (Chair Otto Loewer, James Dooley, John Sager, Robert Davis, Fedro Zazueta, and Rusty Unterzuber) was set up this past spring to discuss the issues. The Task Force reported back to the Board at the AIM and made the following recommendations:

1. Proactively seek to expand ASABE’s global participation.
2. Encourage the creation of global communities of interest.
3. Ensure that ASABE will pursue operational processes that enable members’ participation in Society activities regardless of location.
4. Allocate a portion of the 2008 Initiative Fund to efforts that will increase global participation.
5. Continue to conduct the business and technical communications of the Society in English.

The Board is currently reviewing suggestions on how to implement the recommendations of the Task Force.

A Professional Engineering Task Force was appointed (Chair Jerry Wille) to review and lead ASABE’s involvement in discussions with NCEES on the development of a Bio-related Engineering Exam and other pertinent issues. The Board approved funding for the Task Force to conduct a Professional Activities and Knowledge Study for the Agricultural Engineering exam. Wille and Ron Yoder will represent ASABE at the upcoming NCEES Annual Meeting session on emerging disciplines.

The Board approved final changes to the Fellows nomination instructions and form to coincide with the Bylaws changes approved this past spring. These changes enable members who are not engineers to qualify for Fellow designation.

The Board discussed ASABE’s public policy processes and procedures and determined the Society needs to be more proactive in this area. The Board will be working with the E-07 Committee.

Meetings Council

The Meetings and Conference Council discussed the following items: cancellation fees for students, regular members, and non-members; deadlines for the 2008 Annual International Meeting (AIM); 2008 strategic goals; a review of the 2007 AIM; meeting trends; comments on the technical program and poster session; and 2007-2008 Meeting Council assignments for the technical program and poster session.


Membership Council

The Membership Development Council (MDC) discussed the following items: the 10 percent across-the-board dues increase for 2008; the Board of Trustees approved changes to the ASABE Bylaws and Rules to allow non-engineer members to be Fellows; changing the existing ASABE Student Engineer of the Year Scholarship to the ASABE Preprofessional Engineer of the Year Award and the funding implications of doing so with the ASABE Foundation; ways to better promote ASABE competions and scholarships to encourage more entries; the bylaws for the newly proposed Gale A. Holloway Professional Development Award to honor the late ASABE Foundation President Holloway; and the call for funding proposals from all units under the MDC for possible funding by the 2008 Initiative Fund.

Publications Council

Textbooks. To celebrate the upcoming 25th anniversary of the publication of the first ASABE textbook, the Textbook and Monograph Committee (P-515) plans to launch a multi-year project to identify emerging teaching material needs and to facilitate their development.

Journals. The possibility of including embedded audio visual, 3-D images, and other enhancements in online journal articles will be evaluated during the next few months. The ASABE journal criteria is being revised to clarify that review-type articles are appropriate for publication in ASABE journals. Modifications to the criteria are also being considered to encourage manuscript submissions reporting unplanned research results that could provide valuable lessons for other researchers.

Biofuels Opportunities. With increased research activity in the biofuels area it appears that there are increased opportunities for ASABE publications. Focused issues of the journals and other special publications could play a role in disseminating the results. The need for core bio-fuels information, such as properties of material, was discussed and would fit well with the Web-based Design Topics category.

Standards Council

Special Sessions. T-13 sponsored a session on standards and regulations in Central America, South America, and China; a BE Standards Forums focused on potential needs in this area; and a coordinated SE-07/1 session discussed the needs of the rapidly expanding biofuels industry.

ASABE as ISO Host. ASABE hosted the 2007 Plenary Meeting of ISO TC23 SC4, Tractor Standard with International Chair Tom Tuttle presiding. In addition to U.S. participation, delegates also represented Germany, the United Kingdom, Italy, Kenya, Spain, and Canada.

Core Meeting Schedule. In 2006, the core Power and Machinery Committees followed a predetermined schedule allowing committee meetings to occur in parallel to technical sessions. This met with widespread acceptance. This strategy is proposed for all future meetings with the inclusion of the AEM student luncheon. The schedule has attracted the interest of members from ESH and other Divisions.


Membership Council

The Membership Development Council (MDC) discussed the following items: the 10 percent across-the-board dues increase for 2008; the Board of Trustees approved changes to the ASABE Bylaws and Rules to allow non-engineer members to be Fellows; changing the existing ASABE Student Engineer of the Year Scholarship to the ASABE Preprofessional Engineer of the Year Award and the funding implications of doing so with the ASABE Foundation; ways to better promote ASABE competitions and scholarships to encourage more entries; the bylaws for the newly proposed Gale A. Holloway Professional Development Award to honor the late ASABE Foundation President Holloway; and the call for funding proposals from all units under the MDC for possible funding by the 2008 Initiative Fund.

Publications Council

Textbooks. To celebrate the upcoming 25th anniversary of the publication of the first ASABE textbook, the Textbook and Monograph Committee (P-515) plans to launch a multi-year project to identify emerging teaching material needs and to facilitate their development.

Journals. The possibility of including embedded audio visual, 3-D images, and other enhancements in online journal articles will be evaluated during the next few months. The ASABE journal criteria is being revised to clarify that review-type articles are appropriate for publication in ASABE journals. Modifications to the criteria are also being considered to encourage manuscript submissions reporting unplanned research results that could provide valuable lessons for other researchers.

Biofuels Opportunities. With increased research activity in the biofuels area it appears that there are increased opportunities for ASABE publications. Focused issues of the journals and other special publications could play a role in disseminating the results. The need for core bio-fuels information, such as properties of material, was discussed and would fit well with the Web-based Design Topics category.
Outstanding Paper Reviewers for 2006

The high quality of ASABE’s peer-reviewed journals could not be maintained without reviewers willing to spend hours evaluating author manuscripts and making suggestions for improvements.

The Reviewer Recognition Program developed by the Referred Publications Committee selected nine outstanding reviewers from more than 800 participating in the process during 2006. During the year, associate editors ranked reviewer timeliness, review quality, and willingness to review. Those receiving recognition include:

Mark Casada, Mengshi Lin, Sreekala Bajwa, William Popendorf, Thomas Burks, Jim Glancey, Claire Baffaut, Michael Dukes, and Jactone Arogo.

Paper Award Winners

Papers published by ASABE during 2006 were eligible for 2007 Paper Awards. The Paper Awards Committee selects up to 2.5 percent of the published papers for Superior recognition. Another 2.5 percent of the Society’s publications earn Honorable Mention. This year’s winners were:

Superior Paper Award Winners


Honorable Paper Award Winners


IET Paper Award Winners


Xiangyu Song, Toon Leroy, Erik Vranken, Willem Maertens, Bart Sonck, and Daniel Berckmans, “Vision-based Trackway Analysis in Dairy Cow’s Locomotion.”

Samir Trabelsi and Stuart O. Nelson, “Dielectric Study of Water Binding in Grain.”
Educational Aids Blue Ribbon Recipients

Films, Satellite Conferences, Videotapes, Slide Sets, or Overhead Transparency Sets
William Field, Paul Jones, Jamie Loizzo, Gail Deboy, Steve Swain, Jenny Conder-Haskamp, Sharon Katz, Joan Crow, and Steve Doyle, for DVD titled: “Gaining Ground on Arthritis: Managing Arthritis in the Agricultural Workplace,” Purdue University.

Publications: Circulars
Jane Frankenberger, Eileen Kladivko, Gary Sands, Dan Jaynes, Norm Fausey, Matt Helmers, Richard Cooke, Jeff Strock, Kelly Nelson, and Larry Brown, for “Questions and Answers about Drainage Water Management for the Midwest,” Purdue University, University of Minnesota, Iowa State University, University of Missouri, University of Illinois, The Ohio State University, and the USDA-ARS.

Publications: Fact Sheets
Shay Simpson and Stephen Searcy, for “What is a Real Cost of a Cotton Module Tarp?” Texas Agricultural Experiment Station/Texas Cooperative Extension.

Publications: Manuals or Workbooks
Arthur M. Agnello, Gerald Chouinard, Annebelle Firlej, Franz Vanoosthuyse, William Turechek, and Charles Vincent, for “Tree Fruit Field Guide to Insect, Mite, and Disease Pests and Natural Enemies of Eastern North America,” Cornell University, Research and Development Institute for the Agri-Environment, Quebec; USDA-ARS, Md.; and Agriculture and Agri-Food Canada, Quebec.

Robert Stone, Linda Cooper, Jake DeBruyn, Arlene Robertson, Ted Briggs, Gilles Castonguay, Gary Parkin, and José Bicudo, for “Vegetated Filter Strip System Design Manual,” Ministry of Agriculture, Food and Rural Affairs, Ministry of the Environment, University of Guelph, and CH2M HILL.

Hugh Fraser and John Turvey, for “Minimum Distance Separation (MDS) Formulæ Implementation Guidelines Publication 707” (with supporting software), Ontario Ministry of Agriculture, Food and Rural Affairs.

Jonathan Kays, Adam Downing, Jim Finley, and Joy Drohan, for “The Woods in Your Backyard, Learning to Create and Enhance Natural Areas Around Your Home,” The Ohio State University.

Web Pages

2007 Centennial Meeting Overview

Celebrating 100 years of service and achievements, ASABE and 1,980 attendees came together in Minneapolis to honor the past, celebrate the present, and prepare for the future.

The 2007 Annual International Meeting (AIM) saw an increase in attendance over last year’s (1,865) event. Many attendees continued to experience the small but important improvements in ASABE’s annual programming of an online registration system, a large number of quality cultural and technical tours, and the increased number of activities in the exhibit hall including the Welcome Reception, the cyber café, and poster sessions. These activities brought a tremendous value to the exhibitors displaying their products and services.

One of the more notable displays honored the Top 15 Achievements in Agricultural and Biological Engineering of the last 100 years. Attention getting displays ranged from tractors (units from 1907 to the present), bio-fuels, farm safety, rural electrification, cotton pickers, precision farming, harvesting, sensors, and agricultural electronics.

This year’s meeting drew attendees from 36 countries including Argentina, Australia, Belgium, Brazil, Canada, China, Costa Rica, Denmark, Egypt, Finland, Germany, Hungary, India, Iran, Ireland, Israel, Italy, Japan, Jordan, Lebanon, Mexico, Netherlands, New Zealand, Nigeria, Norway, Peru, Philippines, Saudi Arabia, Senegal, South Africa, South Korea, Spain, Taiwan, Turkey, United Kingdom, and the United States.

The meeting program boasted more than 122 technical sessions with 1,236 papers for presentation. More than 376 poster presentations with some sessions tied into a renewable energy panel discussion were also included. Attendees had the opportunity to share in 11 continuing professional development courses and a technical tour with participants receiving credit towards relicensure in their state.

The meeting also offered attendees 132 hours of networking opportunities, numerous specialty programs and activities, and more than 175 committee and subcommittee meetings. In addition to this year’s exciting AIM, ASABE hosted both the 6th International Dairy Housing Conference and the inaugural Biological Sensorics Symposium prior to the meeting.

If you were not able to attend this year’s meeting, be sure to mark your calendar for the 2008 AIM, June 29 through July 2 in Providence, R.I. as we conclude the celebration of our Society’s Centennial Anniversary. We plan on seeing you there and look forward to new and exciting program twists!

More 2007 meeting highlights continued on page 23.
A WORD FROM THE PRESIDENT

ASABE Dues – An Investment in Your Career

ASABE President Donald C. Erbach
USDA-ARS (Retired)

I am honored to begin my year as ASABE President and want to sincerely thank each of you who were responsible for giving me this opportunity. I’ve been warned, however, that there will be times when the feelings of gratitude may diminish.

One of my first assignments is to inform you of a dues increase to take effect on Jan. 1, 2008. Following our very successful Centennial Annual International Meeting and moving on with centennial activities during the coming year, I am pleased that the Society is in quite good condition, with a stable budget and a growing membership. However, 2006 finished with a surplus only as a result of considerable pressure and very careful budgeting.

Money is required for the Society to deliver the services necessary to provide the value that you as a member expect and rightfully demand from ASABE. But establishing an appropriate and fair structure to raise money is never an easy task. It is a task with issues not unlike those faced by politicians when establishing a tax structure to fund government programs. To formalize and provide consistency in setting member dues, the “Periodic Review Procedures for ASABE Dues” was adopted in 2004. These “Procedures” are a process for reviewing the Society’s dues structure and for recommending changes that will:

1. maintain the financial viability of the Society,
2. maximize the desirability of ASABE membership, and
3. maintain fairness among the membership categories.

A Dues Review Committee led by Chair Sonia Maassel Jacobsen, (current chair of the Membership Development Council) evaluated the Society’s dues structure. The Committee’s review covered:

1. increases in member services since 2005,
2. percentage of Society expenses covered by member dues,
3. size of Society’s restricted reserve,
4. size of Society’s surplus or deficit from 2001 through 2006,
5. changes in Consumer Price Index since last dues increase in 2005, and
6. dues rates for other professional societies.

The Committee found that:

1. Expense increases associated with increased member services during the past three years have been small.
2. Historically, the percentage of Society expenses covered by dues has averaged about 23 percent, with a range of 20 to 30 percent considered reasonable. Currently, only about 20 percent of Society budget comes from member dues.
3. Though the restricted reserve is above the Finance Committee’s 50 percent target, it is insufficient to support many worthwhile new initiatives.
4. Cumulative surpluses and deficits over the past four years were about equal.
5. Over the past three years the consumer price index has increased an average of 3.3 percent per year or about 10 percent total.
6. ASABE’s dues for the age 35-64 category are comparable to those of other professional societies.

Based upon these findings, the Dues Review Committee recommended, and the Board of Trustees approved, a 10 percent dues increase, as shown in the table below, to take effect Jan. 1, 2008.

<table>
<thead>
<tr>
<th>Membership Category</th>
<th>Current Dues</th>
<th>2008 Dues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 34 and under</td>
<td>$90</td>
<td>$99</td>
</tr>
<tr>
<td>Age 35-64</td>
<td>118</td>
<td>130</td>
</tr>
<tr>
<td>Age 65-74</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>Age 75 and over</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Student</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>International Level I</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>International Level II</td>
<td>37</td>
<td>41</td>
</tr>
<tr>
<td>International Level III</td>
<td>59</td>
<td>65</td>
</tr>
</tbody>
</table>

On behalf of the ASABE members, I want to thank Chair Sonia Maassel Jacobsen and Dues Review Committee members Luther Wilhelm, Chi Thai, Roger Hoy, Audrey Alexander, Ron McAllister, Gary Bubenzer, Jacob Bolson, and Mark Crossley for their efforts.

It is important that ASABE manages its money wisely and provides the best value to you as a member. The ASABE staff is a talented group who, along with many ASABE members who volunteer their services, are working hard to efficiently provide value to members. However, it is also very important that the Society’s financial resources are adequate to maintain and enhance its ability to support and promote the profession of agricultural and biological engineering as well as enhance your individual careers. To continue as a viable, dynamic organization we must maintain our strong core capabilities and adopt new initiatives that allow ASABE to adapt to changing circumstances.

I’m sure you view your dues payment as a transaction involving a significant amount of money, and it is. However, in terms of the overall investment in your career, I think you would agree that it is really not that large. There is no return without an investment, and your annual ASABE membership dues are a small investment that yields large returns for your professional career.

I welcome your input. Please send your thoughts, ideas, and concerns to me at don.erbach@mac.com.
Gale A. Holloway Professional Development Award Established

A new award has been established in memory of the late Gale A. Holloway, Past President of ASABE, Past President of the ASABE Foundation, and ASABE Fellow. The award was created to encourage and recognize outstanding leadership and active involvement in ASABE for early career members. Holloway was passionate in assuring that early career members were actively involved in the professional, technical, and networking activities at ASABE meetings.

Named the Gale A. Holloway Professional Development Award, this award acknowledges and perpetuates Holloway’s dedication to assisting preprofessionals and early career ASABE members to become active members and work diligently to enhance the quality of meetings, technical information, and professional development within ASABE at both the national and section level.

The Award will be presented for the first time at the 2008 Annual International Meeting. An engraved recognition item will be presented to the award recipient. The selection of the awardee will be chosen by the Gale A. Holloway Award committee with final approval by M-102 Awards Coordinating Committee.

Nominating Procedure
To be eligible for this award, the nominee must be an ASABE member with less than 10 years professional experience. To nominate someone, complete a nomination form along with a written document detailing the nominee’s ASABE activities including ASABE leadership positions, participation in technical and professional development committees, meetings and specialty programs planning, and innovative work to improve quality and participation at meetings. Documentation regarding the nominees mentoring of preprofessionals will be beneficial. The nomination requires three to five letters of support substantiating why the nominee is deserving of the award. One of these letters should be provided by a management member from the nominee’s place of employment.


Cooperative Standards Program

New Revision

ANSI/ASAE S365.8 MAY2007, Braking System Test Procedures and Braking Performance Criteria for Agricultural Field Equipment. This revision addressed the remaining five Future Provisions in Annex B, the need for better brakes on high speed tractors, and requirements for 4 wheel drive and 2 wheel drive tractors with front assist.

ASAE S485.1, Implement Mounted, Screw-Type Jacks. This revision addressed several areas including side load on an “as installed” basis considering the strength and stiffness of the mounting surface of the implement.

ASAE S304.8 MAY2006, Graphical Symbols for Operator Controls and Displays on Agricultural Equipment. This revision was done in conjunction with the adoption by ASABE of ISO 3767-1 and ISO 3767-2. The revision of ASAE S304 contains only those symbols that are unique to the North American market for which International Harmonization has not yet occurred.

ANSI/ASAE EP364.3 NOV2006, Installation and Maintenance of Farm Standby Electric Power. This revision addressed issues and updates from information received from the 1998 ice storm in north eastern USA and Canada.

Proposed Project

Withdrawal of ANSI/ASAE S547, Tip Over Protective Structures for Front Wheel Drive Turf and Landscape Equipment. The standard is being withdrawn because manufacturers are currently producing machinery per OSHA 1928.52 for the U.S. Progress on international standard harmonization via ISO 21299 is at DIS stage.

X446.3, Loads Exerted by Irish Potatoes in Shallow Bulk Storage Structures. The standard is being revised to update references and address concerns on formulas for determining pressure on sloping walls.

X538.1, Design Loads for Bunker (Horizontal) Silos. This revision will address comments raised during reaffirmation. Minor changes will correct errors, update references, and make the standard easier to read.

X608, Headlamps for Agricultural Equipment. This is an update of SAE J975. The 2004 SAE-ASABE MOU signing gave ASABE a royalty-free copyright and license to publish SAE J975.

X576.1, Lighting and Marking of Animal Drawn Equipment. Methods for operating warning lights on animal drawn equipment are outdated and obsolete. For safety reasons, there is a need to standardize the marking and lighting of this equipment.

X303.4, Test Procedure for Solids-Mixing Equipment for Animal Feeds. The standard is being revised to allow for alternate tracer types.

X397.3, Electrical Service and Equipment for Irrigation. This standard is being revised to address changes to referenced codes and standards.

Withdrawn

ANSI/ASAE S395, Safety for Self-Propelled Hose-Drag Agricultural Irrigation Systems. The standard was withdrawn because the equipment it is written for is no longer manufactured.

For more information, contact the Standards Department, 269-428-6331 or 269-429-0300 ext. 315; fax 269-429-3852.
Inside ASABE

RESOURCE August 2007 17

Guruprasad Madhavan was recently honored with the Young Technologist of the Year Award by the Technology Alliance of Central New York. He is a graduate research assistant and pre-doctoral fellow at State University of New York.

Madhavan earned a bachelor of engineering degree from the University of Madras, India, and a master's degree in biomedical engineering and a master's of business administration degree, both from the State University of New York. He has been a member of ASABE for one year.

ASABE Fellow Stuart O. Nelson retired June 30, 2007, with 55 years of Federal service: two years in the U.S. Navy, and 53 years with the ARS-USDA at Lincoln, Neb., and Athens, Ga.

Nelson pioneered the measurement of dielectric properties of grain and other agricultural materials and investigated radio-frequency and microwave power applications including stored-grain insect control, seed treatment to improve germination, dielectric heating for conditioning of agricultural products, and the use of dielectric properties for sensing grain and seed moisture content.

A 57-year member of ASABE, Nelson chaired various technical, membership, research, and awards committees and was awarded the McCormick Case Gold Medal Award in 2000. He earned bachelor’s and master’s degrees in agricultural engineering, and a master’s in physics at the University of Nebraska, and a doctoral degree in engineering at Iowa State University.

In Memoriam

Karl James Gometz, 67, of Bakersfield, Vt., died May 23, 2007. Gometz was director of operations at Champlain Valley Exposition. He had previously worked for 23 years with Agway and later owned and operated Mountain Valley Restoration.

A 24-year ASABE member, Gometz graduated from the University of Connecticut and was a U.S. Army veteran.

Survivors include his wife, Ginny; and four children: Nancy LaRose, Karen Ovitt, Rick Gometz, and Rollin Miller. Memorials may be made to Friends of the Opera House, P.O. Box 1250, Enosburg Falls, VT 05450.

John J. Kolega, 81, of Mansfield, Conn., died May 18, 2007. Kolega was an associate professor of agricultural engineering at the University of Connecticut, retiring in 1989. He was an U.S. Navy veteran of World War II and a 65-year member of ASABE.

Survivors include his wife, Alice and seven children: Anne Theriault, Patricia Kolega, John Kolega, Margaret Kolega, James Kolega, Katherine Nash, and Mary Painter. Memorials may be made to the Covenant Soup Kitchen, 200 Valley St., Willimantic, CT 06226.

Richard L. Witz, P.E., 91, of Fargo, N.D., died June 16, 2007. He was professor emeritus of agricultural engineering at North Dakota State University, retiring in 1983. Witz also conducted research in the application of electricity, automatic controls, and instrumentation in agriculture. He had been a member of ASABE for 64 years.

Witz received a bachelor's degree in agricultural engineering from the University of Wisconsin and a master's degree from Purdue University. He is survived by his wife, Marjorie and a son, John. Memorials may be made to the Witz Memorial Scouting Fund, Fargo, ND 58103.

Puerto Rico Section Holds Silver Jubilee

Paul L. McConnie, a 60-year member of ASABE, was installed as the Father of Agricultural Engineering in Puerto Rico during the ASABE Puerto Rico Section Silver Jubilee meeting held in May. The meeting theme was Science and Technology in 2107.

ASABE President Charles Sukup gave the keynote address on “Agricultural and Biological Engineering and Our World: Past, Present, and in 2107.” Daniel Marciek, director of University Relations at Hewlett Packard, discussed “Globalized Engineering: Pathways to Economic and Social Success in 2107.” Eric Harmsen spoke on the “Impact of Climatic Change on Puerto Rican Agriculture.” Section Chairman Megh R. Goyal issued a Silver Jubilee Report and spoke on “Science and Technology in 2107.”

Highlights of these papers suggest that in 2107 nanotechnology will be replaced by femtotechnology, the 22nd century will be paperless, the population will migrate to higher lands, crop cultivation will be done by robots, agriculture will be sustainable, the number of biological engineers will exceed other engineers, and ASABE will change to WSABE (World Society of Agricultural and Biological Engineers). These publications are available from headquarters.

Megh R. Goyal, Section Chairman
Following Study, Dues Review Committee Recommends Increasing Dues

In early 2007, ASABE President Charles Sukup appointed a 2007 Dues Review Committee to study the ASABE dues structure and make recommendations to the Board of Trustees. Article C5, Sec. 2 of the ASABE Constitution specifies the procedure to be used for changes in the annual dues: “The annual dues for membership shall be as provided in the Bylaws. The Board of Trustees may, by a three-fourths ballot vote of its members, change any then existing schedule of annual dues, and may provide for payment of dues in installments. No change in dues shall be effective unless announced by publication in the Society’s membership publication or by letter to the membership, at least 3 months prior to the beginning of the period for which the change is to become effective.” The dues schedule and regulations concerning the dues are specified in Articles B5 and R5 (Fees and Dues) of the Bylaws and Rules respectively.

On April 21, the Board of Trustees approved the below changes to these two Articles to implement the recommendations of the 2007 Dues Review Committee. Deletions are denoted by strikethroughs and additions by underlines:

1. Bylaws - Article B5 (Dues and Fees) - Par. 1 The annual dues, admission fees and reinstatement fees shall be as follows for all members except Honorary Members and Life Status Members who shall pay no annual dues or fees:

<table>
<thead>
<tr>
<th>Membership Category</th>
<th>Annual Dues</th>
<th>Admission Fees</th>
<th>Reinstatement Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>$20.00</td>
<td>22.00</td>
<td>-</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>$32.00</td>
<td>35.00</td>
<td>-</td>
</tr>
<tr>
<td>Student Transfer</td>
<td>$32.00</td>
<td>35.00</td>
<td>-</td>
</tr>
<tr>
<td>Below age 35</td>
<td>$40.00</td>
<td>99.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Age 35 through 64</td>
<td>$118.00</td>
<td>130.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Age 65 through 74</td>
<td>$120.00</td>
<td>55.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Age 75+</td>
<td>$140.00</td>
<td>11.00</td>
<td>10.00</td>
</tr>
<tr>
<td>International Level I</td>
<td>$18.00</td>
<td>18.00</td>
<td>-</td>
</tr>
<tr>
<td>International Level II</td>
<td>$42.00</td>
<td>41.00</td>
<td>-</td>
</tr>
<tr>
<td>International Level III (Para. 13)</td>
<td>$59.00</td>
<td>65.00</td>
<td>-</td>
</tr>
</tbody>
</table>

(2) Bylaws - Article B5 (Dues and Fees) - Par. 11 Graduate Student dues are for members qualified for corporate membership who are currently enrolled in a curriculum whose major activity is completion of a postgraduate degree. Graduate student members transferring to corporate membership before the end of the calendar year following their year of graduation shall have dues at $32.35 for only their first year of corporate membership and shall have the regular admission fee waived.

(3) Bylaws - Article B5 (Dues and Fees) - Par. 12 Student members transferring to corporate membership before the end of the calendar year following their year of graduation shall have dues at $32.35 for their first and second year of corporate membership and shall have the regular admission fee waived.

Fellow Eligibility Changes

At its April 21 meeting at Society headquarters, the ASABE Board of Trustees overwhelmingly approved a proposal to allow any member to obtain the grade of Fellow, ASABE’s highest honor. This critical change paves the way for non-engineer members of the Society to attain Fellow status.

The action came about by a grass-roots initiative, with the Board of Trustees receiving a member request to consider the issue. An ad hoc Board Committee and a task force of the Membership Development Council examined the criterion and determined there is no reason that any member in good standing, engineer or not, should be precluded from Fellow eligibility.

Fellow nominations can be submitted at any time during the year, although the yearly cutoff for each class is April 15. For more details visit www.asabe.org/awards/index.html.

Fellow Bylaws Changes

Below are the following changes to the ASABE Bylaws and Rules allowing non-engineer members to be considered for election to the membership grade of Fellow and setting conditions for posthumous Fellow election. Deletions are denoted by strikethroughs while additions are underlined.

Article B4, Par. 3 A Fellow shall be an engineer a member of unusual professional distinction, with outstanding and extraordinary qualifications and experience in, or related to, the field of agricultural, food, or biological systems engineering. A Fellow shall have had 20 years of active practice in, or related to, the profession of engineering or the teaching of engineering; or the teaching of an engineering-related curriculum. Graduation from a professional engineering curriculum (or its engineering equivalent) shall be considered equal to 4 years of active practice. The designation Fellow shall have honorary status, to which engineers of distinction may be elected, but for which they may not apply. There shall be no direct admission to the Society as a Fellow; admission shall be only by transfer after a minimum of 20 years as a Member-Engineer or Member. The honor of Fellow shall not be awarded posthumously except if a nominee’s death occurs after the nomination has been received at Headquarters. Nominations of known deceased persons shall not receive consideration. Nomination and election to Fellow shall be in accordance with rules prescribed by the Board of Trustees. Two negative votes shall defeat an election.

Rule R4, Rule 3 All nominations for election to Fellow membership shall be referred to a Committee reporting to the Board of Trustees, which shall review the nominations and make recommendations to the Board. Final election to Fellow will be by approval of the Board. Committee evaluations of nominations for Fellow shall be based on at least the requirements of Article B4, Paragraphs 3 and 4 and 5.

David Smith, Chair

E-02 Constitution, Bylaws and Rules Committee
During the past century, mankind has achieved unprecedented technological advances in virtually every field of human endeavor, including major developments in agricultural and biological systems. Yet, we have not repealed the laws of biology or ecology and they remain as complex as they ever were in the natural world. As we move into the 21st century, there are many challenges to be addressed if we are to sustain the health of our planet and its ever-increasing number of inhabitants. The rates at which we are depleting finite resources (fossil fuels and minerals), plant and animal species, and natural ecosystems demand that we develop more sustainable solutions for the future. We must learn to live on and with the planet rather than in spite of it. Agricultural and biological engineers will be front and center in these efforts.

... a rapidly changing planet

Fifty years ago, farming in the developed world was still a relatively small-scale enterprise conducted by family farms that were largely self-sufficient. The positive link between agriculture and local ecosystems was fundamentally strong as farmers relied on traditional methods with few external inputs. Since agriculture became an industry, the natural harmony between farming and the environment has been severely eroded, with farmers today using more resources – water, energy and minerals – than ever before. Like other major industries, agriculture now has significant problems of waste byproducts disposal due to the massive use of inorganic fertilizers and pesticides, and the intensive concentration of livestock operations. These industrial innovations have increased farm outputs dramatically. However, along with higher farm output comes the potential for environmental degradation from nitrogen and phosphorus leachate and animal waste runoff. There are also major ecological impacts being exerted on farming by a rapidly changing planet. Continued development and urbanization are reducing the amount of land available for farming. Deforestation and increased carbon emissions are producing global climate changes that have far-reaching consequences for agriculture.

The future will likely include limits on greenhouse gas emissions and stricter regulations for protecting air, soil, and water quality. To remain viable, agriculture must revert to a more holistic cycle where resources are conserved and the ecological balance between farming and the environment is managed for sustainability. In the future, farmers will realize new revenue from a diverse portfolio of biodiversity protection, carbon sequestration, water conservation, and renewable energy production. Ultimately, farming will be viewed by society as the cornerstone of our dynamic ecosystems. Agricultural and biological engineers will play a crucial role, providing leadership and integrating technological advances, in support of this evolving scenario.

... a transition to carbon-neutral renewable energy

Modern agriculture is largely an industrial enterprise sustained and made to appear efficient and economic by very large inputs of energy and minerals, derived from non-renewable resources and typically imported from far away locations. The availability of inexpensive external energy has allowed agriculture to avoid its own energy production and channel most of its effort into the mass production of food, feed, and fiber commodities. Vast amounts of energy are consumed in machinery and much more energy is expended in producing fertilizers, pesticides, and farm equipment, and in packaging and transporting produce to distant markets. As the true costs of our energy consumption practices become recognized, the need for a transition to carbon-neutral renewable energy sources becomes more urgent. In addition to efficient food, feed, and fiber production from agricultural and biological systems, in the future ASABE members will add “fuel” to these production objectives. Bioethanol and biodiesel production, where crops are grown, harvested, and processed into liquid biofuels, are now being heavily promoted as the next opportunity in agricultural enterprise. However, crops and production systems currently available were developed primarily for food, feed, or fiber rather than for energy purposes. Large-scale expansion of biofuels production, therefore, has enormous implications for our agricultural...
systems and traditional commodity markets. It will affect our farms, the landscape, and the environment. The increased demand for grain is already being reflected in higher costs worldwide. Major advances in biomass conversion through thermo-chemical and/or fermentation processes will be required to develop sustainable biofuels production from new energy crops at sufficient scale to positively impact energy supplies. At the same time, the biological production potential of these crops must be evaluated and appropriate harvesting and materials handling systems developed.

Honoring “a small world after all”

One of the challenges for the future will be to promote and increase the productivity of small-scale agricultural enterprises. The globalization of agriculture and market domination by mega-corporations threatens the survival of our small to mid-sized farms and their counterparts in developing countries, and propels the migration of people from rural communities to overcrowded cities. Despite increased crop yields, industrial agriculture has compromised the health and security of our food supply. Smaller-scaled farms with diverse production provide food quality and safety; preserve soil, water, and biodiversity; and redistribute more of the wealth generated into the local community. Agricultural and biological engineers must engage with planners to build stronger, sustainable, and more self-reliant local and regional food systems, balancing the need for efficiency with the goals of economic opportunity, public health, ecological sustainability, social equity, and cultural diversity. Expanding markets for local farmers and food processors will preserve unique agricultural and ethnic traditions, and also protect farmland from urban sprawl. We must also ensure that the emerging renewable energy economy benefits family farms and rural communities. Systems and policies are needed to ensure that the opportunity offered by bioenergy will benefit family farmers in the United States and in other countries. This includes education and outreach for small and limited resource farmers to advance their knowledge base and technical capacity.

... a radical greening of our towns and cities

ASABE members must also look beyond the field to urban agriculture. City dwellers consume most of the world’s resources and generate most of its pollution. Large quantities of nutrients are sequestered in landfills where they are not available for plant growth that would remove carbon from the atmosphere. However, the size of a city creates economies of scale for energy generation, public transport, and recycling. Sustainable living will require a radical greening of our towns and cities, where most of us now live, turning every waste stream into a reusable resource. Urban farming creates green spaces, recycles waste, improves air quality, localizes food production, and is good for the microeconomy. Since a return to the “pasture perfect” ideal of the pre-industrial era is not likely, urban centers must become part of the solution to environmental perils, and ASABE members will need to focus equally on agricultural and biological systems within cities as in rural communities.

Urban farming benefits

Typically, cities import most of their food and the cost of “food miles” often exceeds the value of the produce itself. Farming in the city environs cuts down on packaging and freight by providing fresh nutritious food from local sources to meet the high demand. Community gardens also offer access to low-cost healthy foods for low-income households, helping to reduce hunger and food insecurity. These urban farmers need novel systems to maximize yields from small plots. Hydroponics, micro-irrigation systems, rooftop and market gardens, and suburban farms can reduce the distance food needs to travel to market, minimizing risks associated with unknown pesticide and human pathogen levels and exotic pests that could harm local ecosystems. Urban farming also benefits from access to an abundant source of free fertilizer in the form of compost and anaerobic digestion residues from the green fraction of municipal solid waste. There are further significant quantities of idled nutrients available in municipal wastewater. The challenge is to make it safe by treating wastewater to remove pathogens while conserving nutrients.

Treading lightly, tasting locally

To reduce our ecological footprint, our cities must develop innovative and holistic pollution-free and carbon-neutral solutions for transport, renewable energy, and waste-recycling systems. Energy can be based on a combination of wind farms, solar panels, and waste treatment plants that utilize anaerobic digesters to convert sewage and organic wastes into biogas and also produce biofertilizer for urban farming. Dual water-supply systems can be developed to conserve scarce water resources – one for drinking water and another gray water system to supply recycled rainwater for toilets and garden irrigation. Throwing things away is no longer possible or desirable because, in a world full of people, there is really no such place as “away,” and the embodied energy and nutrient resources are valuable commodities. A problem postponed is not a problem solved. The time is ripe to rethink energy and consumption strategies, harness our creativity, and embrace ecological sustainability. By supporting local agriculture, we can “taste the food less travelled.”

ASABE member Ann C. Wilkie is an associate professor, Institute of Food and Agricultural Sciences, Soil and Water Science Department, University of Florida, Gainesville; 352-392-8699, acwilkie@ufl.edu.
Resource is published eight times per year; January 1, February 15, April 1, May 15, July 1, August 15, October 1, and November 15. The deadline for ad copy to be received at ASABE is four weeks before the issue’s publishing date.

Advertisements are $125 per column inch length (column width is 3.5 inches) and include free placement on the ASABE Career Center at www.asabe.org/membership/careercenter.htm. The minimum ad size is two inches — approximately 100 words — to qualify for the free online listing. Ads are posted on the Web site within three business days of final approval and remain there for 30 days. If the insertion order is for two months, the cost is $110 per column inch per insertion and includes a 60-day free Web listing.

For more details on this service, contact Pam Bakken, ASABE Personnel Service, 2950 Niles Road, St. Joseph, MI 49085-9659, USA; 269-429-6337, fax 269-429-3852, bakken@asabe.org, or visit www.asabe.org/resource/persads.html.

FACULTY POSITION ANNOUNCEMENT
AGRICULTURAL SYSTEMS MANAGEMENT
UNIVERSITY OF MISSOURI - COLUMBIA

Position: Assistant Professor of Agricultural Systems Management
Tenure-track position. Starting date, negotiable.

Responsibilities: Teaching and Research. Provide leadership for continued development of a strong, progressive Agricultural Systems Management (ASM) program with special emphasis on the role of technology in profitable and environmentally sound agricultural production systems. Specific responsibilities include teaching (advising undergraduates, curriculum development, and development of new courses for both entering and upperclass students), research and service. The successful candidate will be expected to develop and sustain a complimentary research program in his/her area of technical strength and/or educational methods.

The research program may include: instrumentation, mechanical systems, electronics, environmental management, materials handling, pesticide application systems, precision agriculture and/or other research that supports the ASM program.

Qualifications: Doctorate in Engineering, Agricultural Systems Management or Agricultural Education with an emphasis in technical systems management is desired. Strong interest in teaching technical courses for ASM and other College of Agriculture, Food and Natural Resources students, and in academic advising of students and student clubs. Experience with agricultural production systems is desirable. Preference will be given to candidates with a proven record in research, and in building outstanding academic programs and internship experiences for Agricultural Systems Management and other students.

Salary/Benefits: Competitive, commensurate with qualifications and experience. Benefits package is included.

Applications: Electronic submissions are encouraged. Interested applicants should submit their vita, undergraduate and graduate course transcripts, and names of three references to:
Search Committee Chair - Agricultural Systems Management
University of Missouri-Columbia
215 Agricultural Engineering Building
Columbia, MO 65211-5200
email: RatliffDe@missouri.edu

Closing Date: Applications will be received until a suitable candidate is selected.

MU is an Equal Opportunity/Affirmative Action and ADA Employer, and specifically invites, and encourages applications from qualified women and minorities.

MICHIGAN STATE UNIVERSITY
Water Resources Engineering Faculty

The Department of Biosystems and Agricultural Engineering invites applications for an academic year, tenure track faculty position at the Assistant Professor level, with teaching (30%) and research (70%) responsibilities. Of the research appointment 25% is with the Department of Crop and Soil Sciences. The call is open to new hires.

Responsibilities: To develop a nationally and internationally recognized, interdisciplinary research program that incorporates an ecosystem approach to water quality resource management and modeling, that includes the consideration of irrigation, consumptive water use, groundwater withdrawal, surface water/groundwater interrelationship, and/or water table management. Teaching responsibilities typically include, teaching two courses per academic year, an undergraduate and a graduate course, with the opportunity to develop course(s) in his/her area of expertise. Additional responsibilities include mentoring undergraduate and graduate students and institutional and professional service.

Salary/Benefits: Competitive, commensurate with qualifications and experience. Benefits package is included.

Applications: Electronic submissions are encouraged. Interested applicants should submit their vita, undergraduate and graduate course transcripts, and names of three references to:
Search Committee Chair - Biological, Agricultural and Environmental Engineering
Michigan State University, 215 Farrall Hall, East Lansing, MI 48824
Phone: 517-355-4722; Fax: 517-432-2802; email: gardner27@msu.edu; safferman@msu.edu

Michigan State University, a research intensive premier Land Grant University enjoys a park-like campus of over 2,000 developed acres and over 3,000 acres of outlying research facilities and natural areas. The campus is adjacent to the city of East Lansing and the capital city of Lansing. The Greater Lansing area has approximately half a million residents. The local communities have excellent school systems and place a high value on education. Michigan State University is proactive in exploring opportunities for the employment of spouses, both inside and outside the University.

Michigan State University is committed to achieving excellence through cultural diversity. The University actively encourages applications and/or nominations from women, persons of color, veterans and persons with disabilities.
The USDA, Agricultural Research Service, National Peanut Research Laboratory in Dawson, Georgia, is seeking a POSTDOCTORAL RESEARCH ASSOCIATE, (Agricultural, Biological, or Food Engineer) for a TWO YEAR APPOINTMENT. Ph.D. is required. Salary is commensurate with experience plus benefits. Citizenship restrictions apply. The incumbent will investigate techniques such as NIR, ultrasound, or other electrical and spectral properties to determine peanut quality at the time of harvest. Peanut quality currently consists of moisture content, total kernel content, density, and hull percentage. Other physical/chemical properties that may be used include oil, sugar and protein content, O/L ratio, and aflatoxin contamination levels. Correlations can then be developed to relate NIR and ultrasonic measurements peanut quality parameters. For further information on Postdoctoral Research Associate Jobs, complete application instructions, and the full text announcement (RA-07-017H) please visit www.afm.ars.usda.gov/divisions/hrd/hrdhomepage/vacancy/07017.htm. Send application materials and references to Dr. Christopher L. Butts, USDA/ARS, P. O. Box 509, Dawson, GA 39842 or e-mail (chris.butts@ars.usda.gov). USDA/ARS is an equal opportunity provider and employer.

The successful candidate will lead Focus Team efforts addressing air quality and odor control. In this effort, the specialist will develop appropriate educational programs and materials, conduct training, and provide technical assistance related to interdisciplinary systems in production management. Other team members include veterinarians, agricultural engineering and livestock housing specialists, agricultural economists, nutrient management specialists, and animal production specialists. The individual hired for this position will collaborate with University Extension Regional Specialists, government, and other agricultural industry partners, and report to the University of Missouri Extension Commercial Agriculture Program Director, and the Division Director of the Food Systems and Bioengineering Division.

Qualifications: Required: PhD or MS degree with comparable experience in biological systems engineering, agricultural engineering, or related fields. Required: Prior training in manure management and/or air quality and odor control at the graduate level (or equivalent experience). Required: Excellent interpersonal and communication skills. Preferred: Professional Engineering (PE) license, or the ability and necessary credentials to obtain PE license within 36 months of initial date of employment.

Salary: Commensurate with qualifications.

Applications: Electronic submissions are encouraged. After initial screening, additional information may be requested. Applications will be received until a suitable candidate is selected. Applicants should send letter of interest, curriculum vita with 3 professional references, and educational transcripts to:

Search Committee Chair - Commercial Agriculture
University of Missouri-Columbia
215 Ag Engineering Building
Columbia, MO 65211-5200
email: RatliffDe@missouri.edu

MU is an Equal Opportunity/Affirmative Action and ADA Employer, and specifically invites, and encourages applications from qualified women and minorities.
Young Professionals Community AIM Activities

This year’s meeting was a great success for the Young Professionals Community (YPC)! The YPC booth provided opportunities for impromptu meetings and discussions. Hopefully, everyone who stopped by the booth learned more about what the YPC has to offer to younger ASABE members.

Fun Run/Walk

Sam McNeill was the first-place finisher in the second annual YPC Fun Run/Walk. He was followed closely by James Carrabba in second place, Brian Huinker in third, and Jessica Berberich in fourth place.

The race winner received a sport duffle bag donated by Polaris Industries. Other top finishers received a YPC Nalgene bottle. All participants received a race t-shirt. The event was made possible by generous donations from AGCO Corp., Ag Industrial Manufacturing, JM Lord Inc., and Polaris Industries.

Join us for the Third Annual Fun Run/Walk at next year’s meeting in Providence, R.I. One runner commented, “It was fun to meet other ASABE runners while fitting in a workout on the road!”

Information Session

The YPC information session, “What You Didn’t Know About ASABE,” catered to a mixed crowd of more than 35 first-timers, young professionals, and professional members.

A panel discussion on “How to Get to the Meeting” included representatives from undergraduate and graduate students, government agencies, and industry. Past President Jerry Wille discussed “Getting the Most Out of the Meeting.” Travis Tsunemori explained how to get involved in Standards Committees. Brady Lewis cleared up confusion clouding the “Parliamentary Procedure.”

All participants were given a handbook containing the topics discussed plus other useful information. Copies of the handbook are available at headquarters.

YPC Sponsored CPD Course

A two-part Continuing Professional Development course, “Effective Communication,” was hosted by the YPC. Part 1: Presentation Skills was given by Lee DeLorme, former director of public affairs for the U.S. Strategic Defense Initiative. DeLorme discussed the do’s and don’ts of making an effective presentation. Part 2: Speaking the Language was presented by Randall Reeder, associate professor at The Ohio State University. He discussed ways to make an effective technical presentation.

Business Meeting

The YPC business meeting included reports from special committees and fundraising efforts. A recap of the 2007 meeting events, including suggestions for next year, was also covered.

Elections were held with John Eisenmann elected to Vice Chair, Carolyn Jones to Meetings Council, Becky Ostermann to the Membership Development Council, Sherry Hunt as Publications Council Representative, and Scott Dixon as Standards Council Representative.

We look forward to seeing you next year.

Candice Johnson, YPC Executive Committee Chair

Graduate Student Research Award

This award recognizes excellence in the conduct and presentation of research to build the knowledge base needed by engineers who design equipment, facilities, and processes for the sustainable operation of a biological system. Cash prizes and plaques were awarded. Winners are chosen from two categories.

M.S. Category

First Place: Yulin Lu, Purdue University, for “Biomimetic Catalysis for Hemcellulose Hydrolysis in Corn Stover.”
Second Place: Laura E. Christianson, Kansas State University, for “Management Implications for a Poplar Phytoremediation Plantation.”
Third Place: Matthew F. Digman, University of Wisconsin, for “Real-Time Moisture Measurement on a Forage Harvester using Near Infrared Reflectance Spectroscopy.”

Ph.D. Category

First Place: Maria Librada Chu-Agor, Oklahoma State University, for “Numerical Modeling of Bank Instability by Seepage Erosion.”
Second Place: Kaushlendra Singh, University of Georgia, for “Effect of Factionation on Fuel Properties of Poultry Litter.”
Third Place: Vykundeshwari Ganesan, South Dakota State University, “Flow Properties of DDGS with Varying Soluble and Moisture Contents Using Jenike Shear Testing.”
1. A special Centennial exhibit featured tractor trendsetters of the last 100 years. Shown here is a 1916 J. I. Case 65-hp steam engine.

2. Dorothy Thar, executive assistant at ASABE headquarters, stands next to a 1918 Waterloo Boy.

3. Left to right: Lindsay Birt, Russell Persyn, Patricia Smith, and Adel Shirmohammadi take a break from meeting activities.

4. Several AE 50 Winners displayed their new technologies in the exhibit hall.

5. Wayne Maley announced several activities held in the exhibit hall.

6. The exhibit hall computer bank provided a place for meeting attendees to check their e-mail.

7. Charles Sukup’s executive assistant, Becky Fink, attended the meeting.

8. Meeting attendees could avail themselves of coffee and lemonade in the exhibit hall.

9. Floyd Dowell, (left) and Lester Pordesimo take a few minutes to smile for the camera.

10. Penn State’s Ag Safety and Health Program displayed a “Farm Hazard Hunt.”

11. Hypro Agricultural Products was an exhibitor at this year’s meeting.

12. Meeting attendees found time to renew old acquaintances.

13. Attendees found the Minneapolis Convention Center facilities conducive to socializing as well as attending numerous technical sessions.
1. Sara Rowland of Oklahoma State University presents her project at the student poster session. She took third place in the competition.

2. Brit’s Pub provided attendees a great place for English food and a relaxing atmosphere.

3. Attending the Past President Wives Breakfast were (l to r): Lola Huggins, Betty Loewer, Judy Skaggs, Betty Splinter, Yvonne Gustafson, Renee Rider, Sharon Scott, Mary Sukup, Phyllis Isaacs, Jane Wille, Jan Stephens, and Rhoda Kriz.

4. The Welcome Reception opened the Annual International Meeting.

5. This cascading fountain was nearby the Minneapolis Convention Center.

6. Melissa Moore and Jerry Wille tied in the YPC “Wet Behind the Ears” fund raiser. As the top vote getters, they were “targets” in the student Fountain Wars.

7. The meeting provided a great opportunity to catch up with friends and meet new ones.

8. Minneapolis welcomed ASABE with banners outside the Convention Center.

9. Meeting attendees find a chance to socialize with one another.

10. Past President Otto Loewer and Robert Fehr take a few minutes out of their busy schedules.

11. A Chinese delegation presented this beautiful painting to ASABE on the occasion of the Centennial. This symbolic painting extends wishes for a long life and good fortune.
Preprofessionals Meeting Activities

Robotics Student Design Competition Demonstrated

In this exciting new design competition, students develop solutions for agricultural problems that demand a high level of innovation, analysis, creativity, communication, and teamwork—all with the use of robotics.

Five schools participated in a demonstration competition held at the AIM: Iowa State, Kansas State, Oklahoma State, University of Illinois, and McGill University.

New Multimedia Competition

The 100th Anniversary High School Multimedia Competition was another new competition presented this year. High school students from across the nation were asked to submit entries on the topic, “How our lives would be different today if not for the last 100 years of advances in agricultural, food, and biological systems engineering.”

The three finalists were narrowed from a field of 30 entries. The students received scholarship awards of $5,000, $3,000, and $1,500, respectively.

First Place: Aubrey Koehler, senior at St. Joseph’s Academy, St. Louis, Mo.
Second Place: Brian Buss, sophomore at Southeastern High School, Augusta, Ill.
Third Place: David Fulton, sophomore at Lincoln Community High School, Lincoln, Ill.

Student Mile Winners

Student miles are determined by multiplying the number of students attending the annual meeting by the miles traveled from their branch. Winners of the 2007 Student Mile Competition were:

Engineering Branch
Oklahoma State University: 9,048 miles for 12 students.
Mechanization Branch
University of Nebraska: 433 miles for one student.

Student Honor Award Winners

Two preprofessionals received 2007 Student Honor Awards. These awards recognize outstanding scholarship attainment and general participation in student activities. Recipients are selected by their respective ASABE Student Branches.

From the engineering branches award recipients were: McKenzie C. Primerano, University of Maryland; Rachael E. Boone, North Carolina State; and Brandon D. Batten, North Carolina State.

From the mechanization branch the award recipient was: Jonathan L. Prophet, Kansas State.

Projects Poster Session

This competition gives students an opportunity to present research and design projects to industry representatives, faculty members, and students. Presenters were judged on the quality of their projects and oral presentations.

First, second, and third place winners received cash awards of $500, $300, and $200, respectively.

First Place: Cortney Timmons, Oklahoma State University, for “Distribution of Fungi in Soils Under Various Land Uses.”
Third Place: Sara L. Rowland, Oklahoma State University, for “Gasification of Salmon Harvesting Waste.”

The 2007-2008 International Preprofessional Council Officers are (l to r): James Bartlett, 2nd Vice President, Purdue University; Garrett Pomeranz, 1st Vice President, University of Minnesota; Jonathan Roth, President, University of Illinois; Hannah Uhlenhake, Advisory Board Chair, University of Wisconsin; Bryan Moes, Secretary, South Dakota State University; and Dane Mosel, Parliamentarian, University of Nebraska.
Preprofessionals Meeting Activities

K. K. Barnes Award Winners

First-Place winner of the 2007 K. K. Barnes Award was Ross V. Muhlbauer, Iowa State University, for “Low-Cost Method for Monitoring Flow from a Vegetative Treatment System.”

Second Place went to Jacob M. Bolson, Iowa State University, for “Temperature Stability of Zeltex AccuHarvest Mobile Near-Infrared Spectroscopy Units.”

Third Place went to Bryan D. Whitman, Iowa State University, for “Dairy Windrow Composting Infiltration/Rainfall Simulation.”

The winning papers can be viewed on the ASABE Web site at www.asabe.org/awards/competitions/kkbarnes.html.

G. B. Gunlogson Environmental Student Design Competition

First Place: Oklahoma State University, Clinton T. Cosgrove, Matthew L. Lemmons, Kevin D. Taylor, and Lance P. Klement, “Redesign of a Tree Shear.”

Second Place: University of Kentucky, Grant J. Wonderlich and Andrew M. Goodall, “Single Wheel Tester for Small Agricultural, Construction, and ATV Tires.”

Third Place: University of Kentucky, Eric R. Krogh and Justin R. Jackson, “Equine Mobile Feeder.”

The winning papers can be viewed on the ASABE Web site at www.asabe.org/awards/competitions/National.html.

AGCO National Student Design Competition

The 2007 winners of the AGCO National Student Design Competition honored at the Annual International Meeting were:

First Place: Oklahoma State University, Clinton T. Cosgrove, Matthew L. Lemmons, Kevin D. Taylor, and Lance P. Klement, “Redesign of a Tree Shear.”

Second Place: University of Kentucky, Grant J. Wonderlich and Andrew M. Goodall, “Single Wheel Tester for Small Agricultural, Construction, and ATV Tires.”

Third Place: University of Kentucky, Eric R. Krogh and Justin R. Jackson, “Equine Mobile Feeder.”

The winning papers can be viewed on the ASABE Web site at www.asabe.org/awards/competitions/National.html.

AEM Student Awards Program

This AEM student trophy competition recognizes the achievements of three schools in each of three categories: Large Student Branches, Small Student Branches, and Mechanization Branches. This year’s winners are:

Large Engineering Branches: Kansas State University.
Smaller Engineering Branches: University of Tennessee.
Mechanization Branch: Kansas State University.

Alpha Epsilon Awards

Winners of the 2007 Outstanding Chapter Awards are:

Most Outstanding Chapter Award: Virginia Tech, ETA Chapter.
New Project Seed Money Award: University of Illinois, Urbana, Champaign, Delta Chapter.

Kansas State University works on building their fountain. The team took second place in the Fountain Wars Competition.

Photo courtesy of Candice Johnson

Fountain Wars

First Place: Iowa State University, Kyle Shipley, Matt Thelen, Randy Svestka, Tony Mensing, Colter Kinney, Kyle Teach, John Maher, Laura Pepple, Brad Bond, and Clayton Thacker.

Second Place: Kansas State University, Anthony Mignano, Chris Robare, Rebecca Burns, Justine Sullivan, Megan Epler, Mike Anderson, Jessica Martin, and Rykki Belt.

Third Place: Florida State University, David Palubin, Lauren Hunter, Colleen Howard, Jon Alldridge, Magie Lanigan, and Andrea Lowe.

Open Competition


Second Place: Louisiana State University, Jacob Haffner, Ammar Qureshi, and Angelique Watson, “Design of Structures to Handle Flooding and Surge Flow.”

Third Place: Louisiana State University, Susan Losby, Steven McLawclin, Katherine Meche, and Jason Palmer, “Automated Dual Biosensor for Detection of Coliforms in Water.”
Diedrichs & Associates, Inc.

Integrated Product Development Services
Vehicles, Implements and Tools
Engineering, Design and Analysis
Prototype Build, Test and Evaluation
R. O. Diedrichs, P.E.
Cedar Falls, IA
319-266-0549
www.diedrichs.ws

DeHaan, Grabs & Associates, LLC
Consulting Engineers
PO Box 622, Monticello, MN 55364
(763) 681-1114, Fax: (763) 681-1116
www.dgengineering.com

DeLay, DeHaan, P.E., GREGORY G. GRABS, PE.
- Dairy, livestock, Feed, Silage and Other Production
  Facilities, Layout, Design, Sanitary, Environmental
  Design, Regulatory
  Permitting and Construction Development
  Best Management Practices, Waste Management
  Plans and Pollution Prevention Plans
  Environmental Audits and Assessments

Inductive Engineering
DALE GUMZ, P.E., C.S.P.
10805 230th Street
Cadott, WI 54727-5406
- Accident Reconstruction
- Mechanical & Electrical
- Safety Responsibilities
- Product & Machine Design
715-289-4721
dgumz@centurytel.net
www.inductiveengineering.com

Timothy R. Royer, P.E.
Timber Tech Engineering, Inc.
Consulting engineering and design services
for timber frame and light wood constructed
buildings. Design of manure containment
structures and agricultural engineering.
Concrete, masonry, and steel design. Also,
building code review and computer aided
drafting services.
22 Denver Road, Suite B, Denver, PA 17517
Phone: 717-335-2750  Fax: 717-335-2753
Email: trr@timbertecheng.com

Agri-Waste Technology, Inc.
L.M. (Mac) Safley, Jr., Ph.D., P.E.
President
5400 Etta Burke Court
Raleigh, North Carolina 27606
Phone: (919) 859-0669 Email: agriwaste2@aol.com
Fax: (919) 233-1970
Consulting Engineering

Richard W. Job and Associates, LLC
Rich Job P.E.
770 Reese Street
Liberty, MO 64068
Phone: (816) 415-8387: Mobil: (816) 223-5927
Email: rich.w.job@sbcglobal.net
Consultant:
Managing the product design and development
process; product safety evaluation process;
standards application and compliance
Member: ASABE, SAE

Diedrichs & Associates, Inc.
D. Joe Gribble, A.E.
Donald L. Gribble, P.E.
Ted A. Gribble, P.E.
(903) 783-9995
Fax (903) 784-2317
6355 Lamar Rd., Reno, Texas 75482
E-mail: engi@fiveg.com • www.fiveg.com
Professional Engineering and Consulting Services for Dairies, Beef
Feedlots, and All Types of Agricultural Waste Management Systems

Mock, Roos & Associates, Inc.
Engineers • Surveyors • Planners
Agricultural and Environmental Engineering
Soil and Water • Citrus • Dairies • Waste Management
Environmental Assessment • Best Management Practices
Farm Structures • Pump Stations • Agri-Businesses &
Farm Plans • Permitting and Design • Water Quality
Monitoring • Mapping, CAD & GIS
Dale Wm. Zimmerman, P.E.
President and Managing Principal
5720 Corporate Way • West Palm Beach, Florida 33407
Phone (561) 683-3113 ext. 214 • FAX (561) 478-7248

Miller Engineering Associates, Inc.
James M. Miller PE, PhD, President
Idaho: Boise-Twin Falls  Michigan: Ann Arbor
888-206-4394  734-882-6822
www.millerengineering.com
Email: jmiller@millerengineering.com
Agricultural, Chemical & Mechanical Engineers:
Guarding & Entanglement Accidents - Tractor & Harvester
Safety - Silage & Grain Storage Accidents - Warnings, Labeling
& Instruction Manuals - Worker Safety & Health (OSHA)
- Chemical Application & Exposures - EPA RCRA, Clean Water,
Compliance - Irrigation, Riparian & Hydroelectric - Dairy & Food
Processing Safety - Equine & Bovine Accidents

Bill Hughes, P.E.
910 Hobe Road
Woodstock, IL 60098
815-337-8555 FAX 815-337-8556
bill@innoquestinc.com www.innoquestinc.com
Engineering & Design Services for Sensors,
Instruments, Controls, Enclosures and
Mechanisms.

Phillip G. Metcalf, P.E.
Agricultural Engineer
Phone: (772) 781-6408 7881 S.W. Ellipse Way,
Fax: (772) 781-6409 Stuart, Florida 34997
Cellular: (863) 634-4878 Email: phillipm@ewr1.com
Web Site: www.ewr1.com

CURRY-WILLE & ASSOC.
CONSULTING ENGINEERS P.C.
Animal and Livestock Facility Design
Feed and Grain Processing and Storage
Fertilizer/Pesticide Containment Design
Agricultural Research Facilities
AMES, IA  Lakeville, MN
515-232-9078  612-469-1277
WWW.CURRYWILLE.COM

Mock, Roos & Associates, Inc.
Engineers • Surveyors • Planners
Agricultural and Environmental Engineering
Soil and Water • Citrus • Dairies • Waste Management
Environmental Assessment • Best Management Practices
Farm Structures • Pump Stations • Agri-Businesses &
Farm Plans • Permitting and Design • Water Quality
Monitoring • Mapping, CAD & GIS
Dale Wm. Zimmerman, P.E.
President and Managing Principal
5720 Corporate Way • West Palm Beach, Florida 33407
Phone (561) 683-3113 ext. 214 • FAX (561) 478-7248

Miller Engineering Associates, Inc.
James M. Miller PE, PhD, President
Idaho: Boise-Twin Falls  Michigan: Ann Arbor
888-206-4394  734-882-6822
www.millerengineering.com
Email: jmiller@millerengineering.com
Agricultural, Chemical & Mechanical Engineers:
Guarding & Entanglement Accidents - Tractor & Harvester
Safety - Silage & Grain Storage Accidents - Warnings, Labeling
& Instruction Manuals - Worker Safety & Health (OSHA)
- Chemical Application & Exposures - EPA RCRA, Clean Water,
Compliance - Irrigation, Riparian & Hydroelectric - Dairy & Food
Processing Safety - Equine & Bovine Accidents

Bill Hughes, P.E.
910 Hobe Road
Woodstock, IL 60098
815-337-8555 FAX 815-337-8556
bill@innoquestinc.com www.innoquestinc.com
Engineering & Design Services for Sensors,
Instruments, Controls, Enclosures and
Mechanisms.

Phillip G. Metcalf, P.E.
Agricultural Engineer
Phone: (772) 781-6408 7881 S.W. Ellipse Way,
Fax: (772) 781-6409 Stuart, Florida 34997
Cellular: (863) 634-4878 Email: phillipm@ewr1.com
Web Site: www.ewr1.com

CURRY-WILLE & ASSOC.
CONSULTING ENGINEERS P.C.
Animal and Livestock Facility Design
Feed and Grain Processing and Storage
Fertilizer/Pesticide Containment Design
Agricultural Research Facilities
AMES, IA  Lakeville, MN
515-232-9078  612-469-1277
WWW.CURRYWILLE.COM

Bill Hughes, P.E.
910 Hobe Road
Woodstock, IL 60098
815-337-8555 FAX 815-337-8556
bill@innoquestinc.com www.innoquestinc.com
Engineering & Design Services for Sensors,
Instruments, Controls, Enclosures and
Mechanisms.

Phillip G. Metcalf, P.E.
Agricultural Engineer
Phone: (772) 781-6408 7881 S.W. Ellipse Way,
Fax: (772) 781-6409 Stuart, Florida 34997
Cellular: (863) 634-4878 Email: phillipm@ewr1.com
Web Site: www.ewr1.com
The world is getting smarter about clean energy and how it can contribute to climate-change solutions. With the help of the Bush administration and the U.S. Environmental Protection Agency, countries around the world are joining efforts with companies and other organizations to use methane as a cleaner source of energy. It’s good for the environment. And it’s good for business – not just here, but around the world.

The Methane to Markets Partnership brings together market expertise, financing, and technology necessary for developing cost-effective methane recovery and use projects at landfills, coal mines, oil and gas systems, and agricultural operations. Partner countries are working in collaboration with the private sector, multilateral development banks, and other governmental and non-governmental organizations to make environmental and economic progress with respect to these projects. More than 550 public and private sector partners and 20 countries have joined Methane to Markets since the program’s launch in November 2004.

Later this year, the Partnership will highlight its efforts at the first Methane to Markets Partnership Expo, to be held in Beijing, Oct. 30-Nov. 1. This event will be a forum for participants to share information and join forces on project development, technology deployment, financing, and policy. Co-sponsored by the U.S. EPA and China’s National Development and Reform Commission, the Expo promises to be the premier international forum for promoting methane recovery and use project opportunities and technologies.

We are already seeing results from this partnership. For example, in the livestock industry methane emissions from livestock waste management systems can be captured and used as a cleaner source of energy, yielding significant environmental, human health, and financial benefits for farm owners. With assistance from the EPA and other federal partners, the U.S. geo-membrane industry and affiliated fabricators have been installing geo-membrane tops on appropriately designed waste lagoons in Mexico’s swine industry to recover methane gas for use. The thousands of potential projects around the world make this a significant market opportunity for the private sector that will deliver important global economic and environmental benefits.

By 2015, Methane to Markets has the potential to reduce annual methane emissions by up to 50 million metric tons of carbon equivalent – roughly equal to the greenhouse gas emissions from 50 500-megawatt coal-fired power plants in one year.

President Bush and the EPA are committed to being a good global neighbor by exporting America’s environmental successes to our international partners. Methane to Markets is precisely the kind of global public-private partnership that is required to address the challenges of both cleaner energy development and responding to climate change.

For more information, ASABE members are invited to visit www.epa.gov/methanetomarkets.

The Methane to Markets Partnership is precisely the kind of global public-private partnership that is required to address the challenges of both cleaner energy development and responding to climate change.

Robert J. Meyers is Principal Deputy Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue N.W., Washington, D.C. USA 20460, meyers.robert@epa.gov.
The program is simple. If you refer someone to us who joins ASABE and lists your name as the referee on their application, you will receive a $20 gift certificate for any ASABE product or service.

Just supply us with the name and contact information, and we will do the rest. Please direct all referral information to Tina Schultz at schultz@asabe.org, 800-371-2723, 269-429-0300, fax 269-429-3852.

Our membership continues to grow largely due to the efforts of our members. And who better to expound the virtues of ASABE membership than you? Your personal endorsement of ASABE is by far our most effective recruitment tool.

**AS YOU DISCUSS**

ASABE membership with your colleagues, remember to highlight these benefits:

**Professional development**
- Publish papers and present papers at technical sessions
- Assist in development of standards
- Committee participation — network with others
- Share your technical interests

**Electronic access**
- Fully-searchable database of ASABE technical publications
- More than 70,000 pages of material
- Online access to member contact information

**Resource: Engineering & Technology for a Sustainable World subscription**
- ASABE’s news magazine available in print and online
- Highlights new technologies and Society activities

**Discounts on meeting and conference registrations**
- Annual international meeting and specialty conferences
- Continuing professional development courses

**Discounts on books and publications**