

# SOUTHEASTERN SECTION NEWSLETTER



## University of Alabama to Host 2016 Conference

The University of Alabama will be hosting the 2016 Annual Meeting of the Southeastern Section of the American Society for Engineering Education. The conference will be held on the University of Alabama campus in Tuscaloosa, Alabama. The conference will run March 13 to 15, 2016. Engineering for Sustainability, the conference theme, and a number of other topics pertinent to engineering education will be explored at the conference. In addition to a variety of interesting peer-reviewed papers, the conference plans include several workshops on Sunday. More information about the conference is found in the President's message and Call for Papers. Call for Workshops will sent later this fall.

### Inside This Issue

University of Alabama to Host 2016 Conference	1
Message from Section President Scott Schultz	2
Highlights from 2015 Conference	3
Awards for 2015	4
Student Awards	5
Future Conference locations	5
Current section officers	6
Call for papers	7

If you haven't been to Tuscaloosa in the last few years, you may be surprised at some of the new facilities on the engineering side of campus. In addition to the new buildings surrounding the new Shelby Quad, attendees will have the opportunity to tour some of the new research laboratories, *e.g.* the Large-Scale Structures Lab, the Foundry, and the Engines and Combustion Lab.

*Shelby Quad at the University of Alabama.*



## University of Alabama to Host 2016 Conference

*(Continued from page 1)*

Beyond the research and academic facilities, growth at the University of Alabama has led to new entertainment and recreation spots on campus and across Tuscaloosa. The City of Tuscaloosa's outdoor amphitheater seats over 7,000 and hosts many concerts and cultural events. The Alabama Museum of Natural History in Smith Hall features exhibits from the Age of Dinosaurs and the Ice and Coal Ages. Ol' Colony Golf Course, a park and recreation project, is considered one of the best public golf courses in the country. Capitol Park, located in the heart of downtown Tuscaloosa, has partially excavated ruins of the site of the Alabama State Capitol, when Tuscaloosa was the seat of state government from 1826 to 1846. South of Tuscaloosa, Moundville Archaeological Park is part of the Alabama Museum of Natural History. It recently underwent a multi-



*University of Alabama, Historic President's Mansion completed in 1841.*

million-dollar makeover and is internationally recognized as one of the most important prehistoric Indian settlements and ceremonial centers in North America. Mildred Warner Westervelt Transportation Museum illustrates the region's history through ancient artifacts and interactive learning tools. Nearby, the Mercedes-Benz Museum & Visitors Center is one of Alabama's top tourist attractions.



### Message from Section President, Scott Schultz

Hello engineering educators and friends. I want to begin by thanking Tulio Sulbaran, section President 2014–15, and all the other section officers for their leadership and service. Thanks also to the University of Florida for hosting an outstanding 2015 ASEE–SE conference; site coordinators John Abbitt, Bruce Carroll, and Angela Linder; and technical program chair, Jerry Newman. Also, a special thanks to Priscilla Hill for chairing the 2015 ASEE–SE conference. I have attended these ASEE–SE conferences for the past 13 years and continually come away from them motivated and re-energized concerning our mission of educating young people. I am particularly

encouraged with the continued growth in numbers and quality of the student poster competition during the conference.

This coming year we are excited about returning to the University of Alabama, Tuscaloosa which last hosted the ASEE–SE conference in 2006. This year's conference theme is "Engineering for Sustainability" and is planned for March 13–15, 2016. Authors interested in presenting at this conference are requested to submit an abstract by September 4, 2015. Please see the call for papers in this newsletter for additional details. I want to thank Beth Todd who is serving as the host site coordinator and is actively planning an array of events. I also want to recognize Priya Goeser who has the "heavy lifting" task as technical program chair.

Building on the theme of Sustainability, what makes the ASEE–SE section vibrant and sustainable? First, the "founding fathers" of the section had the wisdom and

## Message from Section President, Scott Schultz

*(Continued from page 2)*

vision to craft the section bylaws and constitution which future officers have used a valuable guide for running the organization. And second, is our mechanism of encouraging and involving new members who aspire to leadership positions. The process of becoming more involved and taking on leadership roles is relatively simple.

1. Start by attending the annual section conference.
2. During the conference, we hold meetings during Monday and Tuesday breakfast at which Division officers are elected.
3. The Division officer election process begins by promoting the previous year's Vice Chair to the Chair position, and the Secretary to the Vice Chair position. A new Secretary is then elected. Therefore, taking on a Secretary office in a Division is the entry point to all additional officer appointments.

So please help continue sustaining the ASEE-SE section. Join us at the University of Alabama in March. Become an active member of the section, and consider becoming an officer within the organization.

*Current section officers,  
Conference information,  
and much more  
can be found at  
[asee-se.org](http://asee-se.org)*

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## Highlights from the 2015 Conference at Gainesville

The University of Florida hosted the 2015 Annual Section Meeting at Gainesville at UF Hilton Conference Center. It was well attended with 119 registered conference participants and 85 student poster presenters, representing 52 institutions. Our keynote speaker was Dr. Ken Galloway, Distinguished Professor of Engineering at Vanderbilt University, and immediate past president (2014-2015) of the national ASEE organization who spoke on the topic "ASEE 2015! - ASEE 2025?".

There were 5 workshops conducted on Sunday with 32 participants. The workshop topics were:

- *Embedded Systems Experiments Using the TI MSP430 Launchpad, and NI myRIO*



*Dr. Ken Galloway was the ASEE-SE Keynote Speaker*

- *Lecture Capturing with Free Open Source Software for Tablet-PC's*
- *Utilizing SolidWorks in an Engineering Curriculum,*
- *Convert your Existing Course Material into an Effective Virtual Learning Environment,*
- *How to use the flipped class to teach effectively*

Continued on page 4

*2015 Conference at Gainesville* continued from page 3

The Florida Museum of Natural History was a wonderful venue for the Sunday evening welcome reception. Delicious heavy hors d'oeuvres and live music from the UF Guitar Orchestra complemented the museums' comprehensive exhibits.

The Awards Banquet on Monday evening was also hosted at the UF Hilton Conference Center. A summary of the awards, including the student poster session awards is provided in the next section.

*Florida Museum of Natural History*



*Dinosaur Fossils Exhibit at Florida Museum of Natural History*



## Awards

At the 2015 Annual Meeting in Macon, a number of awards were given for excellence in engineering education. The list of recipients and the awards are:

Section Outstanding Teaching Award	Timothy Foutz, University of Georgia
Section Outstanding New Teacher Award	Mary Katherine Watson, The Citadel
Section Outstanding Mid–Career Teaching Award	Sandra Eksioglu, Clemson University
Section New Faculty Research Award, :First Place	Cindy Bethel, Mississippi State University
Outstanding Campus Representative Award	Larry G. Richards, University of Virginia
Tilsmans–Dion Section Service Award	Hodge Jenkins, Mercer University
Award for Outstanding Service to the Section	Thomas Dion, The Citadel

Outstanding Paper Award for 2015 ASEE–SE Conference: Sally Pardue and Nikolas McGehee,  
Tennessee Technological University

*“Upper Cumberland Rural STEM Initiative (UCRSI) STEM Mobile: A Sustainable Model for K–12 Outreach”*

## Student Poster Competition Winners 2015 ASEE-SE Conference

### **First and Second Year Engineering and/or Engineering Technology Design Teams**

First: Neal Welch, William De Witt, and Ryan Alyamani, “Constructing and Monitoring a Farnsworth Fusor”, Mercer University.

Second: Kevin Long, Michael Statham, Dylan Treend, “Construction and Testing of a Lab-Scale Composite T-Beam”, Mercer University

Third: Matthew Deremer, Luke Pace, Kyle Ulversoy, “THE MUSE Mario Kart Power Racing Project”, Mercer University

### **Junior/Senior Engineering and/or Engineering Technology Design Teams**

First: Nicholas Dawkins, Matthew Drys, Kristina Dukes, Adriane Guettler, Victor Odewale, “High Cycle Fatigue Mechanism for Electroactive Membranes”, Florida State University.

Second: Rob Ramey, Ryan Yeargin, and Gerald Vosburg, “Effect of Particle Size of Sodium Chloride as a Space Holder in Porous Sintered Aluminum Creation”, North Carolina A&T State University

Third: Jason Baum, Nicolas Cerf, Jeremy Leshin, Alexandra Lupu, Ricardo Rivera, Kyle Silvaes, Mihailo Zivkovic, “Determination of Oxygen Flow Rate through a Contact Lens”, The University of Florida

### **Undergraduate Research Individual**

First: Adriane Guettler, “Electroactive Smart Materials for Advanced Robotics”, Florida State University.

Second: Juan Vasconez, “Application of 3D Printing into Homemade, Electric Skateboards “, Embry-Riddle Aeronautical University

Third: Catherine Raybould, “Analysis of Alternatives for Refugee Housing”, Mercer University

### **Best Overall Student Poster**

Nicholas Dawkins, Matthew Drys, Kristina Dukes, Adriane Guettler, Victor Odewale, “High Cycle Fatigue Mechanism for Electroactive Membranes”, Florida State University.

## Future Conference Locations

**2017** Puerto Rico, Zone II Conference

**2018** Embry-Riddle Aeronautical University, Daytona Beach, FL

**2019** Auburn University, Auburn, AL

## Officers

### The new officers for the 2015-2016 year are:

President	Scott Schultz	Mercer University	478-301-2840
President Elect	John Brocato	Mississippi State University	662-325-1493
Immediate Past President	Tulio Sulbaran	University of Southern Mississippi	601-266-6419
Secretary	Cecelia Wigal	UT Chattanooga	423-425-4015
Treasurer	Daniel Kohn	University of Memphis	901-347-0382
Paper Management & Website Coordinator	Tyson Hall	Southern Adventist University	423-236-2916
Newsletter Editor	Hodge Jenkins	Mercer University	478-301-2831
Campus Rep. Coordinator	Kenneth Ball	George Mason University	703-993-1500
Proceedings Editor	Barbara Bernal	Kennesaw State University	678-915-4283

### Vice Presidents

Programs Unit Awards & Recognition Unit	Tanya Kunberger	Florida Gulf Coast University	239-590-7644
Publications & Promotion Unit	Tim Wilson	Embry-Riddle Aeronautical University	386-226-6994
	Tom Fallon	Kennesaw State University	678-915-7431

### Division Chairs

Administrative Division	Amber Thompson	Western Carolina University	828-227-2517
Bioengineering Division	Jim Houser	Appalachian State University	828-390-7960
Chemical Engineering Division	Pete Ludovice	Georgia Tech	404-894-1835
Civil Engineering Division	Adel Abdelnaby	University of Memphis	901-678-2746
Computer Engineering and Technology Division	Tyson Hall	Southern Adventist University	423-236-2916
Electrical Engineering Division	Thomas Murphy	Armstrong Atlantic State University	912-344-2709
Engineering Graphics Division	Simon Ghanat	The Citadel	843-953-5083
Engineering Technology Div,	Aidan Browne	UNC Charlotte	704-687-5033
Industrial Engineering Div.	Cecelia Wigal	UT Chattanooga	423-425-4015
Instructional Division	Monika Bubacz	The Citadel	843-953-0530
K-12	Lulu Sun	Embry-Riddle Aeronautical University	386-226-6691
Mechanical Engineering Div.	Richard Kunz	Mercer University	478-301-4061
Professional Skills Division	Amy Barton	Mississippi State University	662-263-7224
Research Division	Todd Schweisinger	Clemson University	864-656-5542
Software Engineering Division	Barbara Bernal	Kennesaw State University	404-455-0159



## ASEE Southeastern Section Conference

March 13-15, 2016  
UNIVERSITY OF ALABAMA  
TUSCALOOSA, AL



### ENGINEERING FOR SUSTAINABILITY

Providing sustainable outcomes for a constantly changing world is a major challenge for future engineers. A wide variety of technologies may be developed to handle these various needs. Will our students be equipped to deal with a constantly changing society? Curricula, courses, and other learning experiences that provide the engineering preparation necessary to meet these future challenges are the focus of this conference.

#### CALL FOR PAPERS AND PRESENTATION ABSTRACTS

Authors are invited to submit full-length manuscripts for presentation at the conference and inclusion in its proceedings. Papers addressing the conference theme will have first priority and may include topics related to the following:

- Innovative Curricula or Courses
- First Year Engineering Programs
- Organizational Structures to Promote Interdisciplinary Engineering
- Distance Learning in Engineering
- Ethics and Professional Practice
- Technologies for Efficient Learning
- Engineering K-12 Outreach Programs
- Engineering Learning Communities
- Experiential Learning
- ABET Accreditation Projects
- Engineering Recruitment
- Engineering Retention
- Partnerships
- Engineering Common Cores
- Teaching/Learning Practices
- Capstone Design Courses or Projects
- Engineering Professional Development

Authors may also address other topics of interest to the engineering education community. Guidelines for manuscript preparation are available via the Author Instructions at [www.asee-se.org](http://www.asee-se.org) at the Conference page.

Papers will be accepted based on a peer review of manuscripts. Authors are expected to present their papers at the conference to facilitate the transfer of knowledge through discussion and debate. All accepted papers presented by a timely-registered author will be included in the conference proceedings. A limited number of abstracts may be accepted for presentation. These abstracts will be neither peer-reviewed nor included in the conference proceedings.

An author/co-author can be associated with as many papers/presentations as is appropriate, but a registrant can serve as the presenter of record on a maximum of three presentations.

A poster session in which undergraduates discuss their experiences in engineering education (design projects, research, etc.) is anticipated. Information about this session will be available in the fall.

#### SCHEDULE FOR SUBMISSION OF PAPERS AND ABSTRACTS

Friday, September 4, 2015	Abstracts submitted by authors for consideration
Friday, September 11, 2015	Authors notified regarding acceptance
Friday, November 6, 2015	Manuscripts due from authors for review
Friday, December 11, 2015	Reviewed manuscripts returned to authors
Friday, January 8, 2016	Final manuscripts and extended abstracts due from authors
Friday, January 22, 2016	Deadline for presenters to register for conference

**Submit a 250-300 word abstract in doc, docs, or pdf file format by September 4, 2015**  
Conference paper submission site can be found at [www.asee-se.org](http://www.asee-se.org) or [papers.asee-se.org](http://papers.asee-se.org)

#### CONTACTS

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