

ASEE North Central Section Newsletter November 2015

EDITOR: Roland Arter, The University of Akron

ASEE 2016 North Central Section Conference

March 18-19, 2016, Central Michigan University, Mt. Pleasant, MI

The Chair's Message

I would like to wish everyone a Happy Holiday from Pittsburgh, PA. It is that time of year when the semester comes to an end and we are all trying to finish the semester, and get our finals done and grades entered. Before we complete this semester and start a new one, it is good to reflect on where we have been and where we are going with the ASEE North Central Section (NCS).

Our Treasurer, Andy Milks from The University of Akron has been busy working with headquarters to make sure our section is financially sound and he assures us that everything is fine and the section has a surplus of almost \$9,000. Thank you Andy for all your hard work.

Last year was a year for the officers to change and Andrew Kline from Western Michigan University stepped down as chair of the section. I would like to thank Andy for his great years of service to the section and look forward to working with him as I try to fill his shoes. Karinna M. Vernaza from Gannon University was elected Vice Chair, Gregory Bucks from the University of Cincinnati and Nicholas Blane from Grand Valley State University were also elected as Directors. They will join Rachmadian Wulandana from Wright State University and Jeffery Kastner from the University of Cincinnati as the section directors. Roland Arter from the University of Akron has agreed to continue as Secretary and Newsletter Editor. Roland has been serving the section in these positions for a number of years and is one of the key members of the board we are lucky we have him and his vast experience on the board. Betsy M. Aller from Western Michigan University continues to serve the section now as ASEE Campus Representatives Coordinator. Ahmed Abdel-Mohti from Ohio Northern University is our Best Paper Chair. Finally our last and most important board member is Kumar Yelamarthi from Central Michigan University. He is this years' 2016 Conference Program Chair and Web Master.

The Spring 2015 regional conference was held at University of Cincinnati in Cincinnati, Ohio on April 17 and 18, 2015 and had 80 papers / 16 posters and 147 attendees registered The section would like to thank Kathleen Ossman the 2015 Conference Program Chair and her team

from the University of Cincinnati for all their hard work and the great conference they provided. Each year the program chairs for our sectional conference improve the quality of the conference and provide a great opportunity for our members to present their work and network with fellow ASEE members. Kathleen set the bar very high but I am sure Kumar and Central Michigan will rise to the challenge this year and produce even a more outstanding conference.

As noted above and throughout this newsletter, the 2016 North Central Section Conference will be hosted by Central Michigan on March 18-19, 2016, in Mt. Pleasant, Michigan, Kumar Yelamarthi is the 2016 Program Chair and has put together a great venue for the conference. This is the perfect time of year to sit back and evaluate vour courses for this past semester and submit a paper to the conference based on your findings or consider having your students come a present a paper on their class projects. Please consider participating in the upcoming conference by attending and presenting some of your current work. For those who have attended the regional conference in the past, I encourage you to bring someone with you in April 2016 who has not previously attended. Presentations

by graduate and undergraduate students are also encouraged and welcomed as part of the regional conference. Our region has had several degree programs in engineering education added at campuses in the last few years, and our conference provides an opportunity for students and faculty to showcase engineering education pedagogy efforts as well as other project or research work. The conference is accepting abstracts right now so consider submitting something.

Now is also the time to nominate someone for the ASEE Outstanding Teacher award. Karinna has the procedure outlined in this newsletter.

Finally it might be a good time to mark your calendars for the up coming ASEE events. This April is our 2016 Sectional conference as noted above, the ASEE Annual National conference with be June 26 - 29, 2016 in New Orleans, LA, the 2017 ASEE Annual Conference will be in Columbus, Ohio, and in 2017 our section is joining with the Southeastern and Illinois-Indiana sections to host the Zone 2 conference in San Juan, Puerto Rico. The three sections make up the geographic Zone 2. In 2017 instead of a sectional conference we will be part of the Zone 2 conference. So mark your calendars for March 1 - 5, 2017.

Future Events:

- March 18 19, 2016, Our North Central Sectional Conference in Mt. Pleasant, Michigan
- June 26 29, 2016, ASEE Annual Conference, New Orleans, LA
- March 1 5, 2017, Our Zone 2 Conference, San Juan, Puerto Rico
- June 2017, ASEE Annual Conference, Columbus, Ohio

Dan Budny, Chair North Central Section ASEE



2016 American Society for Engineering Education, North Central Section Conference





March 18 - 19, 2016 Central Michigan University Mt. Pleasant, MI

ASEE 2016 North Central Section Conference Central Michigan University, Mt. Pleasant, MI

To all ASEE North Central Section Members, Visitors and Guests:

The ASEE NCS website is complete for the convention, but if you have addition questions please contact Dr. Kumar Yelamarthi directly at 989-774-7164 or at kumar.yelamarthi@cmich.edu.

The upcoming ASEE North Central Section (NCS) Convention is the major event of this area and will include presentations, workshops and poster competitions for engineering and engineering technology professionals, faculty and students. The program will include a luncheon and a banquet. It is an opportunity to exchange ideas, information and to network in general.

To find conference information go to <u>http://www.asee-ncs.org</u>, click the 2016 conference website tab "<u>here</u>" and select the appropriate category (hyperlink) below.

Conference Overview Conference Academic Host Planning Committee

Author and Reviewer Information Call for Papers - New Paper Submission System - New Author's Kit Template for all papers Criteria for Best Paper Awards List of Reviewers - will be updated Feb 28, 2016

Logistics (more information to come) Hotel Information (see page 6) Registration - will be active on January 11, 2016 CMU Campus Map

Program Information Schedule at a Glance Workshops - will be announced Feb 28, 2016 List of Authors - will be posted March 1, 2016

CONVENTION REGISTRATION INFORMATION

Convention Registration Rates.						
			Non-			
Registration Type	Final Date	Members	members	Students		
Early Registration	Feb 26	\$175.00	\$200.00	\$60.00		
Registration	Mar 18, 19	\$225.00	\$250.00	\$85.00		

Convention Registration Rates:

Registration will include the Friday Reception, the Saturday Lunch and Banquet.

ASEE NCS 2016 Conference Committee, Central Michigan University

Conference Chair:

Dr. Kumar Yelamarthi

School of Engineering and Technology Central Michigan University Mount Pleasant, MI 48859 Phone: 989-774-7164 Email: <u>yelam1k@cmich.edu</u>

Conference Co-Chairs:

Dr. Brian DeJong 989-774-1319 dejon1b@cmich.edu Dr. Ahmed Abdelgawad 989-774-2455 abdel1a@cmail.edu Dr. Ishraq Shabib 989-774-3692 shabi1i@cmich.edu

School of Engineering and Technology Central Michigan University Mount Pleasant, MI 48859

From the ASEE North Central Section,

Happy Holídays!

ASEE NCS NEWSLETTER – NOVEMBER 2015 ASEE 2016 North Central Section Conference Central Michigan University, Mt. Pleasant, MI

Hotel Accommodations

All hotels suggested here are within 5-10 minutes of driving distance to the conference location.

Recommended:

 Hampton Inn by Hilton http://hamptoninn3.hilton.com/en/hotels/michigan/hampton-inn-mt-pleasant-MPTMIHX/index.html Address: 5205 E. Pickard Rd, Mt. Pleasant, MI 48858 Cost: \$119 + tax Contact phone: 989-772-5500 Discount Code: ASEE NCS Conference Cut-off date: Feb 18, 2016

Other (sorted by distance):

- Comfort Inn <u>https://www.choicehotels.com/michigan/mt-pleasant/comfort-inn-hotels?brand=CI&checkInDate=2016-03-18&checkOutDate=2016-03-20</u> Address: 2424 S Mission St, Mt. Pleasant, MI 48858 Cost: \$159 + tax Contact phone: 989-772-4000
- Fairfield Inn & Suites by Marriott http://www.marriott.com/hotels/travel/mbsmp-fairfield-inn-and-suites-mt-pleasant/ Address: 2525 S University Park Dr, Mt. Pleasant, MI 48858 Cost: \$159 + tax Contact phone: 989-775-5000
- Mount Pleasant Inn & Suites Website: <u>http://www.mtpleasantinn.com</u> Address: 5500 E Pickard Street, Mt Pleasant, MI 48858 Cost: \$109 + tax Contact: 989-772-7777
- Days Inn
 <u>http://www.daysinn.com/hotels/michigan/mt-pleasant/days-inn-and-suites-mt-pleasant-mi/hotel-overview</u>
 Address: 5770 E Pickard Street, Mt Pleasant, MI 48858
 Cost: \$119 + tax
 Contact phone: 989-772-1101

2016 American Society for Engineering Education North Central Section Conference March 18-19, 2016 Mt Pleasant, MI



Call for Papers, Posters, and Workshops

Topic areas for consideration include:

- Accreditation issues
- Active learning
- Assessment
- Degree programs and curricula
- Design experiences: senior capstone and other
- Distance learning: methods, technologies, and assessment
- Diversity: valuing, achieving, and teaching it
- Ethics: creative ways to teach and assess teaching
- Faculty development
- First year courses and programs
- Globalization or Study abroad programs
- Innovative engineering and computer science courses

- K-12 initiatives and partnerships
- Laboratory experiences
- Learning models
- Lifelong learning and nontraditional students
- Partnerships (industry, government, university, international)
- Pedagogies
- Service learning
- Skills development: technical writing, presentation, teamwork
- Student retention and persistence
- Undergraduate research experiences
- Uses of technology and software in the classroom
- Other topics that address issues in education

All papers/extended abstracts/posters will be accepted on the basis of peer review process, and be included in the conference proceedings. Authors of published work are expected to present their work at the conference to facilitate the transfer of knowledge through presentations and discussions.

To accommodate for the participation of diverse groups, this conference accepts intellectual work in different categories:

- Full Length Faculty Paper (eligible for best paper awards-faculty)
- Full Length Student Paper (eligible for best paper award-students)
- Extended abstracts

Timeline:

Regular Faculty & Student Papers:

Regular Faculty & Student Fapers.				
Abstracts Deadline	Dec 15, 2015			
Abstract Acceptance Notification	Dec 31, 2015			
Draft Paper Deadline	Jan 29, 2016			
Paper Acceptance Notification	Feb 19, 2016			
Final Paper Deadline	Feb 26, 2016			
One-Page Papers:				
Extended Abstracts Due	Jan 29, 2016			
Acceptance Notification	Feb 19, 2016			
Final Extended Abstract Deadline	Feb 26, 2016			

PostersWorkshops for Faculty

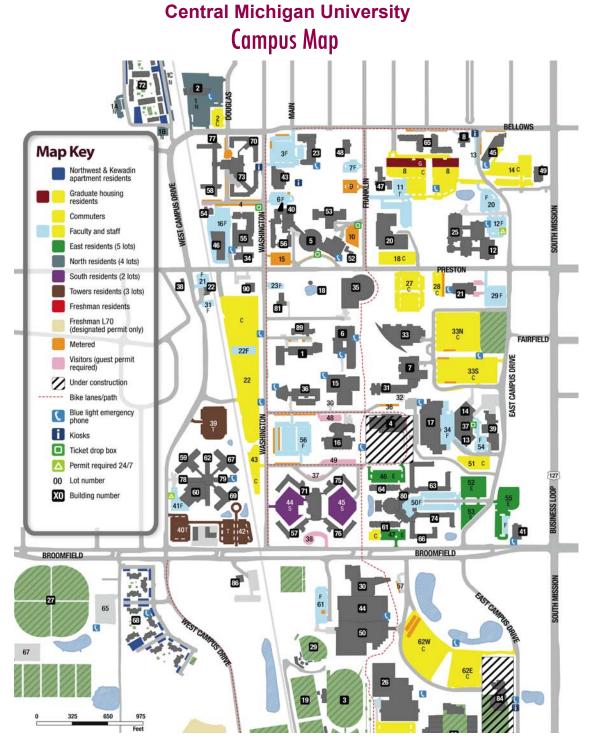
- Workshops for K-12 Teachers
- Workshops for undergraduate students

Posters

Poster Abstract Deadline	Jan 29, 2016
Poster Acceptance Notification	Feb 19, 2016
Final Posters Abstract Deadline	Feb 26, 2016
Workshops	

Workshop Proposal Deadline Feb 19, 2016

Website: www.asee-ncs.org



Building 5 – Bovee University Center

For GPS devices use **1200 S Franklin St, Mt Pleasant, MI 48859** for an address when traveling to the Central Michigan University.

SASEE 2016 Outstanding Teaching Award

From: Karinna Vernaza, Gannon University Vice-Chair, ASEE North Central Section (NCS)

Nominations for the American Society of Engineering Education (ASEE) North Central Section (NCS) Outstanding Teaching Award must be submitted using the on-line system at the ASEE Nationals Website. ASEE members who wish to nominate someone Log In at:

https://www.asee.org/.

Select the ASEE Award Nominations topic, and scroll down to select ASEE Section Outstanding Teaching Award for NCS. Select the ASEE NCS member you wish to nominate, and upload the nomination materials. Review "Accomplishments" for the nominee at:

http://www.asee.org/member-resources/awards/guidelines/awards-nomination-guidelines

DEADLINE TO NOMINATE AN ASEE NCS MEMBER IS JANUARY 15, 2016

Guidelines for ASEE NCS Outstanding Teaching Award

Qualifications: Candidates may be teachers of any subject included in an ABET/CEAB accredited engineering or engineering technology curriculum. In addition to technical courses, subjects may include the humanities and social studies, mathematics and science.

The teacher, as an individual, must:

- 1. Possess and be able to communicate a broad and accurate knowledge of the subject area.
- 2. Possess self-confidence, create a feeling of harmony between self and students and be able to meet difficulties with poise.
- 3. Possess a sense of proportion, stressing fundamentals and disregarding trivial detail. Give assignments that challenge students, demanding thinking in the completion of assignments.
- 4. Demonstrate such an intense interest and enthusiasm for the subject area and for the enhancement of learning processes that students are motivated to their fullest capacities.
- 5. Be available for advising and counseling students before and after graduation.
- 6. Teach a minimum of two semester or three quarter courses per calendar year.
- 7. Have considerable endorsement from students, using both regular course evaluations and individual letters of recommendation as evidence.
- 8. Attend the section annual meeting at which the award is presented; and make a presentation at that meeting (or the following section meeting) to share some element of his/her success as a teacher.
- 9. Possess a strong record of activity in ASEE or the educational activities of another professional society.

The teacher's contributions to the profession should include at least three of the following:

- 1. Participation in the development of courses or curricula.
- 2. Development of teaching equipment or development of a wider application of teaching equipment previously developed.
- 3. Contribution to the improvement of laboratories or other facilities.
- 4. Development or authorship of instructional material or a text that enhances the student learning process.
- 5. Publication of original work, through any medium, that enhances the engineering education process or adds to the literature pertaining to teaching methodologies.
- 6. Serve as a mentor to other teaching faculty or participation in the conduct of seminars and workshops that are focused on helping other teachers improve their classroom effectiveness.

All nominations must be submitted on-line through the ASEE National website:

https://www.asee.org/

Deadline for nominating is January 15, 2016. The deadline will not be extended!



AMERICAN SOCIETY FOR ENGINEERING EDUCATION, NORTH CENTRAL SECTION CONFERENCE



MARCH 18 - 19, 2016 CENTRAL MICHIGAN UNIVERSITY MOUNT PLEASANT, MI

FUTURE EVENTS...

Frontiers in Education 2016 The Crossroads of Engineering and Business

Important Due Dates:

Abstract Submissions: February 4, 2016 All Acceptance Communications: March 14, 2016 Preliminary Paper Submissions: April 25, 2016 Peer Review Final Acceptance Communication: May 20, 2016 Final Camera-Ready Paper Submission & Copyright: July 8, 2016 Early Registration & Hotel: September 20, 2016

Co-sponsored Event:

Integrating the "E" – Bringing Engineering into Your K-12 Classroom, workshops for K-12 regional instructors

Overview

The 46th Annual Frontiers in Education (FIE) Conference is a major international conference focusing on educational innovations and research in engineering and computing education. We welcome submissions related to educational issues in electrical and computer engineering, energy engineering, software engineering, computing and informatics, engineering design, and in other engineering disciplines. FIE 2016 continues a long tradition of disseminating results in these areas. It is an ideal forum for sharing ideas, learning about developments and interacting with colleagues in these fields.

Paper Categories FIE welcomes full papers up to eight-pages and work-inprogress papers up to four-pages that address the broad tracks of (1) innovative practice, (2) research-to-practice, and (3) research. Work-in-progress papers are typically in frontier areas where it is understood the work is in an early or intermediate stage and authors are seeking feedback from the community. Additional information may be found on the FIE 2016 Web site.

Oct. 12–15, 2016 Bayfront Convention Center, Erie, PA **fie-conference.org**







ASEE NORTH CENTRAL SECTION EXECUTIVE BOARD

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Best Paper Awards Chair	2015 Program Chair	2016 Program Chair	NCS Webmaster
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ASEE North Central Section 2015 Conference Awards

Outstanding Teacher Award: Frank M. Croft, Ohio State University

Outstanding Campus Representative Award: Terri M. Lynch-Caris, Kettering University

Best Paper Award:

- 1st Place Jeff Kastner, Anant Kukreti, "Using Challenge Based Learning to Teach the Fundamentals of Energy Transfer to High-School Math Teachers," University of Cincinnati.
- 2nd Place Shen Liu, "Teaching Engineering Computation Using a Flipped Classroom Model," West Kentucky Community and Technical College.
- 3rd Place Pattabhi Sitaram, Anca Sala, "Developing Student Mastery and Confidence in using FEA Software through its Integration in Many Fundamental Mechanics Courses," Baker College of Flint.

Best Student Paper Award:

- 1st Place Remington Wright, Taylor Franzen, James Deacon, Adam Lenk, Michael Prekop, Ishraq Shabib, "Portable Assisted Mobility Device," Central Michigan University.
- 2nd Place Thomas Bowersock, Victoria Kerr, Yuki Matoba, Andrew Warren and Alexandra Coman, "I AM AI - Interactive Actor Modeling for Introducing Artificial Intelligence: A Computer Science Capstone Project," Ohio Northern University.
- 3rd Place Logan Shelagowski and Thomas Mahank, "CFR Formula SAE Intake Restrictor Design and Performance," Saginaw Valley State University.

Best Student Poster Award:

- 1st Place Taylor Manahan, Mark Messner, Sam Weldon, "Low Cost Sting and Balance for an Open Circuit Wind Tunnel," Ohio Northern University.
- 2nd Place T. Megan Derwich and Andre Micou, "Personalized Medical Training and Treatment Through Virtual Simulation," Western Michigan University.
- 3rd Place Matthew Ackley, Justin Collins, Chris VanOverbeke, Ryan Welsh, Nassif Rayess, "Sterilight: A Revolutionary Disinfeding Device," University of Detroit Mercy.

For PICTURES FROM THE 2015 ASEE NORTH CENTRAL SECTION CONFERENCE go to <u>http://www.asee-ncs.org</u>, and click on "The 2015 ASEE NCS Conference will be held at University of Cincinnati. Date: April 17-18, 2015 Website

(hyperlink)"