The ASEE Environmental Engineering Division Newsletter

Spring 2014

A Message from the Division Chair

Dear Colleagues,

I hope you are all eagerly anticipating the upcoming ASEE Annual Conference in Indianapolis! Our Program Chair, Stephanie Luster-Teasley, has organized a fabulous lineup of technical sessions with talks focused on pedagogy and innovation, problem-, project- and case-based learning, and sustainability and hands-on learning. In addition, she has coordinated a panel about hands-on and interactive environmental engineering education, which promises to be an active and engaging session. An overview of the specific Division conference programming is provided on page 2 of this newsletter.

In addition, the Division will participate again in the ASEE Division Mixer on Sunday from 4:15 to 5:45. This is a good time to meet Division officers, network and enjoy some food, drink, and music. Our schedule includes two key events on Tuesday evening. The Division business meeting is at 4 pm; please plan to attend so that you can provide input regarding our future activities. We will also elect a new Treasurer at this meeting—let me or one of the other officers know if you are interested in this position.

The other Tuesday evening event is our annual Social and Awards Dinner, to be held at 7 pm at Harry and Izzy's, 153 South Illinois Street. Buy your ticket online to join us in recognizing the outstanding contributions of our colleagues while we enjoy each other's company. The Division award winners, showcased in this newsletter, will be honored at the dinner—be sure to look for their presentations during the technical sessions.

Finally, as my term as Division Chair comes to a close, I would like to thank the officers who have made the Division run so smoothly this year. In particular, Stephanie Luster-Teasley has put together an exciting program for the Division at the Annual Conference. We'll look forward to Alison Cupples stepping into this role for the 2015 conference in Seattle. Mary Cardenas has deftly managed our finances in her first year as an officer. I would also like to thank those Board members who served as officers before me and showed me the ropes: Kauser Jahan, Sharon Jones, Ken Brannan and Angie Bielefeldt. It has been an honor and a privilege to serve this Division, as I am continually inspired by all of your efforts to improve environmental engineering education. I look forward to many more years of inspiration in the ASEE Environmental Engineering Division!

Sincerely, Junko Munakata Marr 2013-2014 Division Chair Associate Professor Civil and Environmental Engineering PROGRAM CHAIR 2013-2014

Dr. Stephanie Luster Teasley

Associate Professor

Civil, Architectural & Environmental Engineering
North Carolina A&T State
University

Greensboro, North Carolina

Secretary 2013-2014

Dr. Allison M. Cupples

Associate Professor

Civil & Environmental Engineering

Michigan State University

East Lansing, Michigan

Treasurer 2013-2014

Dr. Mary Cardenas

Associate Professor

Mechanical and Environmental Engineering

Harvey Mudd College

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Be sure to check out the Division Web Site:

http://users.rowan.edu/~jahan/asee/env_asee09/New%20Folder/Index.htm







Session M541: Environmental Engineering Pedagogy and Innovation

Mon., June 16, 2014, 2:15 PM to 3:45 PM Indiana Convention Center, Room 113

Session T241: Problem- Project- and Case-Based Learning in Environmental Engineering Tue., June 17, 2014, 8:45 AM to 10:15 AM Indiana Convention Center, Room 205

Session T441: Environmental Engineering Division Poster Session

Tue., June 17, 2014, 12:30 PM to 2:00 PM Indiana Convention Center, Exhibit Hall A B C

Session T541: Hands-on and Interactive Engineering Education Panel – Environmental Engineering Division Tue., June 17, 2014, 2:15 PM to 3:45 PM

Session T641: Environmental Engineering Division Business Meeting

Tue., June 17, 2014, 4:00 PM to 5:30 PM Indiana Convention Center, Room 232

Session T741: Environmental Engineering Division Social and Awards Dinner Tue., June 17, 2014, 7:00 PM to 9:00 PM Harry and Izzy's Restaurant

Session W241: Sustainability and Hands-on Engineering Education

Wed., June 18, 2014, 8:45 AM to 10:15 AM Indiana Convention Center, Room 208

This year our annual Business Meeting will be held on Tuesday, June 17 from 4:00 PM to 5:30 PM (Room 232). Members are strongly encouraged to attend to provide the Division with enriching feedback for improvements and input for the 2015 conference.



Division Social Tuesday, June 17, 2014 7:00-9:00 PM

This social event is open to all division members, prospective members, families and friends. The event provides a relaxed atmosphere to socialize and honor the Division Award recipients and the Outgoing Division Chair. The division honors the awardees with a plaque, honorarium and a free invitation for the dinner. This year the dinner will be held at Harry and Izzy's Restaurant on South Illinois Street.

Details of the dinner are presented on page 6.

DIVISION AWARDS

BEST FACULTY PAPER AWARD 2014

"A GIS-based Atmospheric Dispersion Modeling Project for Introductory Air Pollution Courses"

Andrew Ross Pfluger

(U.S. Military Academy) is an Armor officer currently serving as an instructor of the Department of Geography and Environmental Engineering at West Point, NY. Andrew received a B.S. in Civil Engineering from West Point, and



earned both a Master's Degree and an Engineer's Degree from Stanford University in Environmental Engineering.

Major Pfluger is an environmental engineer whose interests include environmental biotechnology, microbial ecology, and air pollution engineering. His graduate thesis examined the selective growth of type II methanotrophic bacteria in a biological fluidized bed reactor.

He was recognized for another Best Paper Award in 2012.

BEST FACULTY PAPER AWARD 2014

"A GIS-based Atmospheric Dispersion Modeling Project for Introductory Air Pollution Courses"

Michael Hendricks

(U.S. Military Academy)
Hendricks is an Engineer
Officer specializing in
Geospatial Intelligence
and Geospatial
Engineering. He served as
the 29th Engineer
Battalion Executive
Officer and U.S. Army



Pacific's Geospatial Officer supporting Pacific Command and numerous other organizations in the region with geospatial database development, mapping, and geospatial intelligence. His research interests include; geospatial support to land navigation training with GPS, GIS education, mobile education and mapping, and cartography. In addition, he is involved in producing large-scale topographic maps for the sport of Orienteering and is the officer representative to West Point's Orienteering team. COL Hendricks is the course director for Geographic Information Systems and Advanced Geographic Information Systems and director of the Geographic Sciences Lab.

Phil Dacunto

(U.S. Military Academy) is Engineer officer who has served in a variety of divisional and corps engineer combat assignments, to include service as an Engineer Battalion S3 Operation in Iragi Freedom.



LTC Dacunto teaches Environmental Science, Water Resources Planning and Design, Environmental Engineering Technologies, and Air Pollution Engineering.

BEST GRADUATE STUDENT PAPER AWARD 2014

"Ms. Hines and the Sick 5th Graders – Making hands-on outreach and learning about the environment engaging through the use of Case Stories!"

Janie G. Locklear

(North Carolina A&T State University) is a BS/MS student in the Department of Civil and Environmental Engineering. She is from Rennert, NC and is a Native American of the Lumbee Tribe.



Janie is the daughter of Regina Locklear and the

late Johnnie Locklear; she is also the wife to Allan Bullard of eleven years. Her first Bachelor degree was awarded in American History from the University of North Carolina at Chapel Hill in 2006. After teaching elementary school for five years, Mrs. Locklear returned to NCA&T in June 2011 to pursue Civil & Environmental Engineering.

Janie is mentored by Dr. Stephanie Luster-Teasley and is the first student in the NCA&T Civil Engineering BS/MS program. Janie is scheduled to graduate with her BS in December 2014 and MS degree in December 2015. After graduation, Mrs. Locklear plans to open her own consulting firm.

OFFICERS July 2014-June 2015

Outgoing Division Chair: Dr. Junko Munakata-Marr Colorado School of Mines

junko@mines.edu

Division Chair: Stephanie Luster Teasley North Carolina A&T State University

luster@ncat.edu

Program Chair: Alison M. Cupples, Ph.D.

Michigan State University cupplesa@msu.edu

Secretary: Dr. Mary Cardenas

Harvey Mudd College mary_cardenas@hmc.edu

Treasurer: To be elected at the business meeting

Please note that we will be electing a Treasurer for 2014-2015. If you are interested in the position please contact Stephanie Luster Teasley at luster@ncat.edu or be present at the Division business meeting.

BEST FACULTY PAPER AWARD

The author must be a current member of ASEE and of the Environmental Engineering Division. The paper must be submitted to the proceedings. The author (not a graduate student or colleague) must present the paper. For multiple authors, at least one paper author must be a division member, and the presentation at the conference must be made by a division member. In cases of multiple qualified authors, the prize will be split.

Prize is dinner for winner + 1 guest and recognition at the Division dinner, a plaque, and an honorarium of \$200.

EARLY CAREER AWARD

The Environmental Engineering Division of ASEE is pleased to announce the Early Career Grant. Recipients of this grant will receive an honorarium to cover a portion of the travel expenses, and will be guests at the Environmental Engineering Division Dinner.

Eligibility Criteria

Applicant will be in a tenure-track position as of August 30, 2014. Applicant will be un-tenured as of August 30, 2014. Applicant teaches at any 2- or 4-year University that offers at least one environmental engineering course.

Selection Criteria

A single recipient will be selected based on the paper submitted. A selection committee will judge the paper based on its ability to positively impact environmental engineering education.

Application Process

To apply, simply ensure that the last line of the abstract contains the following sentence:

"I am eligible for the Environmental Engineering Division Early Faculty Grant."

If you have any questions, please feel free to contact the Environmental Engineering Division Program Chair for 2015 (Alison M. Cupples) at cupplesa@msu.edu.

MERITORIOUS SERVICE AWARD

Members of the ASEE Environmental Engineering Division who, in the opinion of the reviewing officers, have performed activities or provided services to the Division benefiting the Division and deserving of special recognition are eligible for this award. For example, a member who provides sustained active contributions of major tasks over many years might be eligible for this award. The current Division Chair and Program Chair are ineligible to receive this award. Nominations should document these contributions. A call for nominations will be published in electronic and/or other publications for the Division. Nominations may be submitted to the Division Chair by letter, fax, or email, with a deadline of March 1st of the year in which the award is to be presented. The division officers will receive nominations and select an award winner.

BEST STUDENT PAPER AWARD

The Environmental Engineering Division of ASEE is pleased to announce the Best Student Paper Award. The first author of the paper must be an undergraduate or graduate student and they must present the paper at the Annual Conference. Faculty are allowed to be coauthors. Paper must focus on pedagogical issues.

The Division will award up to three awards each year with the awardees receiving \$1,000 each with a plaque. Awardees will be guests at the Environmental Engineering Division Dinner.





ASEE Annual Conference 2015 Seattle, Washington, USA June 14-17, 2015

CALL FOR PAPERS 2015

The Environmental Engineering Division of ASEE invites papers for the Annual Meeting to be held in Atlanta, Georgia June 23-26, 2013. The division will offer sessions that include papers on the following topics:

- Innovative pedagogical methods (social media, flipped classrooms, etc.) in teaching environmental engineering courses;
- Integrating sustainability in courses, across disciplines, in communities;
- Innovative uses of current and emerging technologies in teaching environmental engineering courses;
- Extracurricular student projects/contests in environmental engineering e.g. P3, EWB, WERC, Solar Scholars, etc.;
- Development of new or hybrid courses in environmental engineering, e.g. Environmental Biology, Environmental Security, Environmental and Public Health;
- Interdisciplinary approaches to addressing major (e.g. Grand) challenges such as climate change, food, water;
- Engaging students in environmental lifelong learning;
- Educational resources such as online case studies, web-based course modules for teaching environmental engineering topics;
- Recruitment and retention of diverse students in environmental engineering;
- Undergraduate environmental engineering research experiences;
- Accreditation and assessment, e.g. BOK, graduate program accreditation, assessment, etc.
- Other suitable topics will be considered

The Environmental Engineering Division now <u>requires</u> that presenters publish their papers in the ASEE conference proceedings.

Questions may be addressed to the Environmental Engineering Division 2014-2015 Division Chair, Dr. Stephanie Luster Teasley of North Carolina A&T University at luster@ncat.edu or the 2014-2015 Program Chair, Dr. Alison M. Cupples of Michigan State University at cupplesa@msu.edu.

ENVIRONMENTAL ENGINEERING DIVISION ANNUAL SOCIAL AND AWARDS DINNER

Tuesday June 17, 2014 7:00-9:00 PM



Please join us for our annual division social and awards dinner at Harry and Izzy's Restaurant.

153 South Illinois Street Indianapolis, IN 46225 Phone (317) 635-9594 http://www.harryandizzys.com/



Costs are \$25/person if you register online and \$35 on-site.

Register for Session

T741-Environmental Engineering Division Awards

<u>Dinner</u>