The ASEE Environmental Engineering and Science Division Newsletter

Spring 2018

A Message from the Division Chair

Dear Colleagues,

In anticipation of the ASEE Annual Conference in Salt Lake City, I'd like to present our yearly Environmental Engineering Division Newsletter. We are looking forward to the workshops, sessions, meetings, and awards dinner in June. Our program chair, Dr. Monica Palomo, has done a great job organizing two technical sessions, as well as our poster session and I am looking forward to hearing from many of you there.

All of our technical sessions will take place on Monday June 25th from 11:30 am to 4:45 pm with a break for lunch between 1:00 pm - 1:30 pm and another break between sessions from 3:00 pm - 3:15 pm. These presentations will focus on case studies and assessments that will help all of us in our teaching. The Environmental Engineering poster session will occur on Tuesday from 11:30 - 1:00 pm with lunch provided by ASEE. This is a great way to get to know your colleagues in environmental engineering. In addition we are co-sponsoring a panel of invited speakers to the "Energy Innovation and Environmental Impact" panel taking place on Sunday from 1:15 pm - 2:45 pm. The panel consists of 4 fantastic faculty who will share their perspective on the current trend in energy system innovation. Finally we invite you attend the distinguished lecture: A Voice for Change: Building an Inclusive Future with Local Policy and Engineering from the Mayor of Salt Lake City on Wednesday June 27th from 9:45 am -11:15 am.

There are a number of ways you can get involved in our division. First we invite you to attend the mixer on Sunday June 24^{th} from 4:30-6:30 pm in the Grand Ballroom. This is one of the most popular events of the conference and will include food, drinks and music. Come to our table, meet the executive team and get a green environmental engineering ribbon to attach to your nametag! On Tuesday at 5:00 pm we will have our business meeting in Room 251D. At this meeting we will be electing a new treasurer, hearing reports from our officers and our PIC chair and discussing the 2019 conference. After the meeting we will all head out to the division social taking place at BRIO Tuscan Grille on South Reagent Street. This is a ticketed event, with tickets available on the ASEE web site. At the dinner, we will get to know each other and recognize and celebrate the great work done by our colleagues.

It has been a wonderful experience to serve as the division chair, mostly because it has allowed me to get to know so many of you. I would like to thank those who have served before me including Dr. Mary Cardenas, Dr. Alison M. Cupples and Dr. Stephanie Luster-Teasley. These women have been incredible mentors for me. Extra thanks goes to Dr. Monica Palomo for organizing the division's program this year, Dr. Gnaneswar Gude for serving as secretary and producing this newsletter and Dr. Michelle Marincel for serving as treasurer. Finally I would like to thank all the authors and reviewers for their hard work in making our community stronger. I look forward to seeing you all soon and sharing ideas together.

Sincerely,

Dr. Stephanie Butler Velegol

2017-2018 Environmental Engineering Division Chair

Associate Teaching Professor Chemical Engineering

Penn State University University Park, PA



2017-2018 Program Chair

Dr. Monica Palomo

Associate Professor Civil Engineering

Cal Poly Pomona Pomona, CA



Dr. Veera Gnaneswar Gude

Associate Professor
Department of Civil and
Environmental Engineering

Mississippi State University Mississippi State, MS



Dr. Michelle K. Marincel Payne

Assistant Professor Department of Civil and Environmental Engineering

Rose-Hulman Institute of Technology
Terre Haute, IN







Meetings, Panels and Sessions

U445A-Energy Innovation and Environmental Impact

Panel Sun. June 24, 2018 1:15 PM to 2:45 PM Room 150 D, Convention Center - Salt Palace

M325-Environmental Engineering Division Technical Session 1

Mon. June 25, 2018 11:30 AM to 1:00 PM Room 255 A, Convention Center - Salt Palace

M425-Environmental Engineering Division Technical Session 3

Mon. June 25, 2018 1:30 PM to 3:00 PM Room 355 C, Convention Center - Salt Palace

M5112A-Impacts of Sexual Harassment in Academic Science, Engineering, and Medicine

Panel Mon. June 25, 2018 3:15 PM to 4:45 PM Room 255 F, Convention Center - Salt Palace

M525-Environmental Engineering Division Technical Session 2

Mon. June 25, 2018 3:15 PM to 4:45 PM Room 355 C, Convention Center - Salt Palace

M534-2018 Interdivisional Town Hall Meeting: Who's in the Driver's Seat of Engineering Education?

Panel Mon. June 25, 2018 3:15 PM to 4:45 PM Grand Ballroom J, Convention Center - Salt Palace

T325-Environmental Engineering Division Poster Session

Tue. June 26, 2018 11:30 AM to 1:00 PM Exhibit Hall A B & C, Convention Center - Salt Palace

T625-Environmental Engineering Division Business Meeting

Tue. June 26, 2018 5:00 PM to 6:00 PM Room 251 D, Convention Center - Salt Palace

T725-Environmental Engineering Division Social

Tue. June 26, 2018 7:00 PM to 9:00 PM BRIO Tuscan Grille.

80 South Regent Street, Salt Lake City, UT 84101. Five minute walk (0.2 miles) from the Salt Palace

W2112-DISTINGUISHED LECTURE: A Voice for Change: Building an Inclusive Future with Local Policy and Engineers

Wed. June 27, 2018 9:45 AM to 11:15 AM Room 155 E, Convention Center - Salt Palace

EED Business Meeting

This year our annual Business Meeting will be held on Tuesday, June 26 from 5:00 PM to 6:00 PM in Room 251 D, Convention Center – Salt Palace. Members are strongly encouraged to attend to provide the Division with enriching feedback for improvements and input for the 2019 conference.

Division Social Tuesday, June 26, 2018 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 *Brio Tuscan Grille 80 South Regent St., Salt Lake City, Phone: 801.359.4401.* All dinners tickets need to be bought online. No cash accepted at the event.

More dinner details are presented on page 6.

DIVISION AWARDS

2018 Best Paper Award

Collaboration in Assessment and Individual Validation for the "Digital Native"

Authors: David C. Zgonc

Nathaniel Sheehan Jeffrey A. Starke

United States Military Academy



Colonel (Retired) Jeffrey A. Starke retired after 25 years of active duty service. He spent the last seven years of his career as an Associate Professor in the Department of Geography and Environmental Engineering after earning his PhD from the University of Wisconsin at Madison. He taught senior-level design classes focused on biologically mediated processes and hazardous waste

remediation. He is a licensed engineer in the state of Delaware.



Captain Zgonc teaches Environmental Engineering for Community Development, Environmental Chemistry and Environmental Engineering Technologies.

Major David Zgonc is a Medical Service Corps officer and formerly served as an Engineer officer. He is a 2005 graduate of the United States Military Academy with a Environmental Engineering and a 2014 Graduate from Carnegie Mellow University with an M.S. in Environmental Engineering. He specializes in environmental engineering with academic interests sustainability, public health, and waste-to-energy resources. Environmental Engineering for



Captain Nathaniel Sheehan is a Medical Service Corps officer in the United States Army and an Instructor in the Department of Geography and Environmental Engineering at the United States Military Academy. He is a 2010 graduate of the United States Military Academy with a B.S. in Environmental Engineering and a 2013 Graduate from the University of Arkansas - Fayetteville with an M.S. in Engineering. He teaches

Physical and Chemical Treatment, Environmental Science, and Environmental Engineering Technologies.

OFFICERS July 2018-June 2019

Outgoing Division Chair: Dr. Stephanie Butler Velegol Pennsylvania State University

sbv1@psu.edu

Division Chair: Dr. Mónica Palomo Cal Poly Pomona

mpalomo@cpp.edu

Program Chair: Dr. Veera Gnaneswar Gude

Mississippi State University gude@cee.msstate.edu

Secretary: Dr. Michelle K. Marincel Payne Rose-Hulman Institute Of Technology marincel@rose-hulman.edu

Treasurer: To be elected at the business meeting

Please note that we will be electing a Treasurer for 2018-2019. If you are interested in the position please contact Dr. Mónica Palomo mpalomo@cpp.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, and a plaque.

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, 2018. Applicant will be un-tenured as of August 30, 2018. 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."

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 co-authors. Paper must focus on pedagogical issues.

The Division will award up to three awards each year with the awardees receiving \$500 each with a plaque.

If you have any questions, please feel free to contact the Environmental Engineering Division Program Chair for 2019 (Veera Gnaneswar Gude) at gude@cee.msstate.edu.

ASEE Annual Conference 2019 Tampa, Florida

CALL FOR PAPERS 2019

The Environmental Engineering Division of ASEE invites papers for the Annual Meeting to be held in Tampa, Florida. The division will offer sessions that include papers on the following topics:

- Innovative pedagogical methods (social media, flipped classrooms, active learning etc.) in teaching environmental engineering courses;
- Integrating sustainability in courses, across disciplines, in communities, especially as it relates to new ABET criteria;
- Innovative uses of current and emerging technologies in teaching environmental engineering courses;
- Extracurricular student projects/contests in environmental engineering, e.g. P3, EWB, IEDC, 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, energy, 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 or capstone experiences;
- Accreditation and assessment, e.g. ABET, graduate program accreditation, assessment, etc.;
- Community engagement through research or capstone experiences (e.g. service learning experiences).
- Environmental justice, environmental law, environmental policy, social equity, public affairs related to environmental engineering education
- K-14 education to promote environmental engineering and science profession

Please note that the Environmental Engineering Division now <u>requires</u> that oral and poster presenters publish their papers in the ASEE conference proceedings. Presentations papers are expected to contain assessment methods and results. Work in progress or papers without assessment will be considered for poster presentations.

Questions may be addressed to the Environmental Engineering Division 2018-2019 Division Chair, Dr. Mónica Palomo mpalomo@cpp.edu or the 2018-2019 Program Chair, Dr. Veera Gnaneswar Gude gude@cee.msstate.edu

ENVIRONMENTAL ENGINEERING AND SCIENCE DIVISION ANNUAL SOCIAL AND AWARDS DINNER

Tuesday, June 26, 2018 7:00-9:00 PM



Please join us for our annual division social and awards dinner at

Brio Tuscan Grille

80 South Regent St., Salt Lake City Phone: 801.359.4401 https://brioitalian.com/city_creek.html

Costs are \$35/person online registration only

"Tickets are required and must be purchased online or at the 2018 ASEE registration counter before the event"

Register for the EED Social and Awards Session

T725·Environmental Engineering Division Social and Awards Dinner Social Tuesday. June 26, 2018 7:00 PM to 9:00 PM