The ASEE Environmental Engineering Division Newsletter

Spring 2012

A Message from the Division Chair

Hola! The upcoming ASEE annual conference will be held in San Antonio, Texas with sessions at both the Grand Hyatt Hotel and the Henry B. Gonzalez Convention Center. Thanks to the efforts of our Program Chair, Dr. Kauser Jahan of Rowan University, the Environmental Engineering Division is sponsoring a host of activities including traditional technical sessions, a practitioner panel, our annual Division meeting, and our awards dinner that is always a conference highlight. We hope that you will join your colleagues in the Environmental Engineering Division for an outstanding program.

The Division saw an increase in both the number of papers submitted and the overall quality. While this made it difficult to select the final papers to include in the program, it should provide the audience with a very informative experience. The final program includes three technical sessions with 16 papers organized in the categories of Sustainability Across the Curriculum, Hands-on Laboratory and Design Experiences, and Assessment. For the first time in recent years, we are hosting a Practitioner Panel where executives from some of leading environmental engineering firms in Texas will discuss their opinion about how prepared new graduates are for the workforce. Needless to say, this should be thought provoking and perhaps provocative. Thanks to the Bryan Flynn, outgoing president of the American Academy of Environmental Engineers for arranging A more detailed overview of the the panelists. Division Program can be found elsewhere in this newsletter.

We will be holding our traditional Environmental Engineering Awards Dinner on Tuesday evening, beginning at 7:00 PM at the Rio Rio Cantina located on the Riverwalk. What a great way to casually catch up with colleagues while enjoying a traditional southwestern dinner on the famous Riverwalk. As a reminder, if you'd like to attend the dinner, you must purchase a ticket through the ASEE registration process. To help us with planning for this event, please register for the Awards Dinner during advance registration, which closes on May 09, 2011.

At the Awards Dinner this year, we will be recognizing several recipients. One is the best paper award, which this year goes to Major Andrew Ross Pfluger, Mr. David-Michael P. Roux, and Dr. Michael A. Butkus, all with the U.S. Military Academy. The recipient of the Early Career Award is Dr. Sudarshan T Kurwadkar P.E. of Tarleton State University. Another award that we are pleased to present this year is the Best Student Paper, which this year goes to Ms. Sarah Kathryn Bauer, an undergraduate student at Rowan University. These awardees will present their papers during the Division's technical sessions.

Our annual business meeting will be held on Tuesday from 12:30 – 2:00 p.m. The meeting is open to all members and we appreciate your participation if you can attend. We will be electing new officers and taking suggestions for next year's program.

As the year draws to a close. I would like to thank the officers whom I have had the opportunity to work with over the past few years. For any of you who have ever served as program chair, you know how much work is involved and Dr. Kauser Jahan put in a remarkable effort. Not only did she perform all the normal tasks of a program chair, but she also maintains our website and is responsible for this newsletter that you are reading. Dr. Junko Munakata-Marr is the secretary and will be assuming the role as Program Chair next year. And, Dr. Stephanie Luster-Teasley is doing an outstanding job as treasurer, a job that contributes much to the success of the Division (and one that gets very busy this time of year). The Division also has four Directors including several of the past Division Chairs, Angela Bielefeldt, Kevin Bower, Ken Brannan, and Francis Hopcroft. This year the Directors helped me respond to several issues that arose for which I am thankful. As a Division, we still need to decide how best to use the experience of the Directors to continuously improve what we do for our members. I expect this will be a topic for discussion at our annual business meeting. Finally, thanks to all of you for the opportunity to serve ASEE through this Division. It has been a privilege and I look forward to continuing to work with you in the future to enhance environmental engineering education.

Sincerely,

Sharon A. Jones Professor and Dean University of Portland Shiley School of Engineering

Email: joness@up.edu

Be sure to check out the Division Web Site: users.rowan.edu/%7Ejahan/asee/Home.html

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Session M539: Integrating Sustainability Across the Curriculum Mon., June 11, 2012, 2:15 PM to 3:45 PM Grand Hyatt San Antonio, Mission A

Session T239: Hands-on Laboratory and Design Experiences in Environmental Engineering
Tue., June 12, 2012, 8:45 AM to 10:15 AM Grand Hyatt San Antonio, Mission A

Session T539: Panel Discussion: Environmental Education to Address the Grand Challenges Tue., June 12, 2012, 2:15 PM to 3:45 PM Grand Hyatt San Antonio, Mission A

Session W239: Interdisciplinary Experiences and Assessment in Environmental Engineering Wed., June 13, 2012, 8:45 PM to 10:15 PM Grand Hyatt San Antonio, Mission A

Session T439: Environmental Engineering
Business Meeting
Tue., June 12, 2012, 12:30 PM to 2:00 PM
San Antonio Convention Center, Exhibit Hall C

Session T739: Environmental Engineering Awards Dinner Tue., June 12, 2012, 7:00 PM to 9:00 PM Rio Rio Cantina

This year our annual Business Meeting will be held on Tuesday, June 12 from 12:30 PM to 2:00 PM. Members are strongly encouraged to attend to provide the Division with enriching feedback for improvements and input for the 2013 conference.

Elections will also be held for the Treasurer position.



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 the RIO RIO CANTINA at the San Antonio Riverwalk.

Details of the dinner are presented on page 6.

DIVISION AWARDS

BEST FACULTY PAPER AWARD 2012

"A Hands-on Experience in Air Pollution Engineering Courses: Implementing an Effective Indoor Air Pollution Project"

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. Andrew is an environmental engineer 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.

David-Michael P. Roux (U.S. Army) is an instructor in the Department of Geography and Environmental Engineering at the U.S. Military Academy at West Point. He teaches introductory courses in environmental science, environmental engineering, and air pollution control. David-Michael's academic and research interests include engineering education and

physicochemical/biological treatment in Environmental Engineering.



Michael A. Butkus, Ph.D., P.E. (U.S. Military Academy) is a professor of Environmental Engineering in the Department of Geography and Environmental Engineering at West Point. Michael received a Bachelor's Degree from the U.S. Merchant Marine Academy in

Marine Engineering, and earned a M.S. and his Ph.D. from the University of Connecticut in Environmental Engineering. Michael has conducted environmental research for both the military and civilian sectors. His research interests are primarily in the area of physicochemical treatment processes with recent applications in drinking water disinfection, lead remediation, and ballast water treatment.

EARLY CAREER AWARD 2012

"Undergraduate Environmental Engineering Research Experiences in a Predominantly Undergraduate Teaching Institute"



Sudarshan Kurwadkar, Ph.D., P.E. (Tarleton State University) is an assistant professor of Environmental Engineering in the Department of Engineering and Physics at Tarleton State University. Sudarshan received his B.S.

in Civil Engineering from Amrauali University, a M.S. in Civil Engineering from the University of Pune, a M.S. in Civil Engineering from the Indian Institute of Technology, and his Ph.D. in Environmental Engineering from the Missouri University of Science and Technology. His research interests include fate and transport of emerging contaminants, water quality investigations, and environmental regulatory issues pertaining to treatment, storage and disposal of hazardous wastes.

BEST STUDENT PAPER AWARD 2012

"Weaving Sustainability into
Undergraduate Engineering Education
through Innovative Pedagogical Methods:
A Student's Perspective"

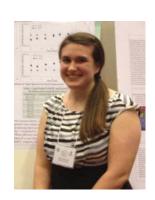
Sarah K. Bauer (Rowan University) is pursuing her B.S. degree in Civil and Environmental Engineering with an environmental emphasis at Rowan University. Sarah is currently working as an Environmental Engineering Research Assistant at



Rowan. She is president of Rowan's student chapter of the Society of Women Engineers and secretary of Rowan's student chapter of the American Society of Civil Engineers. She is the recipient of the Fall 2011 and Fall 2012 Bantivoglio Honors Concentration Research Fellowship.

Andrea R. McFarland

(Rowan University) is pursuing her B.S. degree in Civil and Environmental Engineering with an environmental emphasis at Rowan University. Andrea has worked as an Environmental Engineering assistant as PTP consulting, and is currently working as



an Environmental Engineering Research Assistant at Rowan. She is vice president of Rowan's student chapter of Engineers without Borders. Through EWB, Andrea has traveled to Africa to design and implement water retrieval systems for eight villages.

Mary Staehle, Ph.D.

(Rowan University) is an Assistant Professor of Chemical Engineering at Rowan University. Before joining the faculty at Rowan, Mary worked at the Daniel Baugh Institute for Functional Genomics and Computational Biology at



Thomas Jefferson University. Her research interests include biological control systems, specifically neural regeneration.

OFFICERS July 2012-June 2013

Division Chair: Kauser Jahan

Rowan University jahan@rowan.edu

Program Chair: Dr. Junko Munakata-Marr Colorado School of Mines **junko@mines.edu**

Secretary: Stephanie Luster Teasley, North Carolina A&T State University **luster@ncat.edu**

Treasurer: To be elected

Please note that we will be electing a Treasurer for 2012-2013. If you are interested in the position please contact Kauser Jahan at jahan@rowan.edu or be present at the Division business meeting.

BEST 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, 2012. Applicant will be un-tenured as of August 30, 2012. Applicant teaches at any 2- or 4-year University that offers at least one environmental engineering course.

The abstract must be submitted to the Environmental Engineering division.

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 2013 (Junko Munakata-Marr) at junko@mines.edu.

MERITORIOUS SERVICE AWARD

ASEE Members of the 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 Nominations should document these award. 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 2013 Atlanta, Georgia, USA June 23-26, 2013

CALL FOR PAPERS 2013

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 in teaching environmental engineering courses;
- Innovative uses of current and emerging technologies in teaching environmental engineering courses;
- Service learning in developing communities, e.g. "Engineers Without Borders";
- Development of new or hybrid courses in environmental engineering,
 e.g. Environmental Biology, Environmental Security, and Environmental and Public Health;
- Globalization, global warming, and sustainability;
- Recruiting environmental engineering students;
- Problem-based project learning;
- Undergraduate research experiences:
- Interdisciplinary projects and contests;
- Accreditation and assessment, e.g. BOK, graduate program accreditation, and innovations in assessment.

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 2012-2013 Program Chair, Dr. Junko Munakata-Marr of Colorado School of Mines at junko@mines.edu or the 2012-2013 Division Chair, Dr. Kauser Jahan of Rowan University at jahan@rowan.edu.

ENVIRONMENTAL ENGINEERING DIVISION ANNUAL SOCIAL AND AWARDS DINNER

Tuesday June 12, 2012 7:00-9:00 PM



Please join us for our annual division social and awards dinner at the Rio Rio Cantina on the San Antonio Riverwalk.

421 East Commerce Street San Antonio, TX 78205

Phone (210) 226-8462 http://www.rioriocantina.com/



<u>Appetizers - Served on Platters at Table</u> Tortilla Chips | Salsa

Fiesta Layer Dip

Refried Beans, Chile Con Queso, Spicy Beef, Chile Con Carne, Layered and Topped with Diced Tomatoes, Cheddar Cheese, Sour Cream, Green Onions, and Diced Black Olives

Entrée Choice Of: Beef Enchalads

Two Corn Tortilla Filled with Ground Beef Topped With a Mild Chili Sauce & Melted Cheese Companioned With Spanish Rice and Rio-Rio Refried Beans

Portobello Faiitas

Grilled Portobello Slices with Sautéed Onions, Green and Red Bell Peppers. Served With Sautéed Vegetables, Rio-Rio Vegi Beans, and Corn Tortillas. Garnish: Guacamole, Pico De Gallo, & Sour Cream

Chicken Flautas

(3) Corn Tortillas Filled with Tender Chicken and Fried Served with Spanish Rice and Refried Beans Garnish: Guacamole, Pico De Gallo, & Sour Cream

<u>Dessert</u> Kahlua Cinnamon Flan

<u>Beverages</u> Iced Tea and Water

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

Register for Session <u>T739-Environmental Engineering Division Awards</u>
<u>Dinner</u>

DIVISION AWARDS BANQUET 2011 Vancouver, British Columbia



Best Paper Award

Recipients Cindy Waters (Middle) and Stephanie Luster-Teasley (Right) with Division Chair Kenneth Brannan

Early Career Award

Recipient Isaac W. Wait from Marshall University with Division Chair Kenneth Brannan

2010-2011Program Chair Sharon A. Jones thanking outgoing Division Chair Kenneth Brannan for his dedication and support for the Environmental Engineering Division Activities