

Workshops and Platform Session on Diversity, Equity, and Inclusion during the 2021 AEESP Appetizer Virtual Event

July 13, 2021—July 14, 2021

Central Time

Register soon! Some workshops have the early application due dates.

Registration website: <https://cvent.me/Egn3DP>

July 13th, 2021 (Day 1)

11:15-1:15 Parallel Workshops (by career stage):

- **Careers in Environmental Engineering & Science after Graduate School**

Description: The AEESP Student Services Committee (SSC) plans to continue the tradition of conducting career-oriented workshops for graduate students. This workshop will be held as a sequence of two timed sessions and will be conducted virtually. The first part of the workshop will be an interactive panel discussion with members representing various career paths available to environmental engineers and scientists after their graduate degrees: academic, national lab, consulting, government positions, and non-governmental organizations (NGOs). This hour will then be followed by a 1-hour session where participants will be able to choose individual zoom links according to their specific interest. These individual interest group meetings will have their own panel discussions and Q&A, moderated by an SSC member. There will also be an introduction to the Academic Job Application Review (AJAR) process, which will be held over the subsequent summer/early fall. For the AJAR the SSC organizes a team of volunteer faculties to provide comments, feedback, and mentorship on academic application materials.

AEESP SSC Professional Development Workshop 2021: Careers in Environmental Engineering & Sciences After Graduate School

Inviting *graduate students and postdoctoral scholars* in the field of environmental engineering and sciences to join this virtual workshop on career development.

Date: July 13, 2021

Time: 12:15 -2:15 PM ET

Hour 1: Interactive panel discussion with members representing academia, national lab, industry (consulting or R&D), government positions, and entrepreneurship.

Register for Workshop

by June 30, 2021:

[Google Form Link](#)

Hour 2: Breakout rooms for participants with specific interest groups. The breakout rooms will have their own moderated discussion and Q&A.

Organized by
AEESP Student Services Committee
 AEESP | Association of Environmental
Engineering & Science Professors
1963-2013: Celebrating 50 Years of Advancing Environmental Engineering & Science



July 13, 2021—July 14, 2021

10:00 AM-3:00 PM CT

© Viewing in Central Time [Adjust](#)

Washington University in St. Louis - Virtual Event

Organizers: AEESP Student Service Committee

Patrick McNamara, Marquette University, Patrick.mcnamara@mu.edu (Chair)
Fabrizio Sabba, Northwestern University, Fabrizio.sabba@northwestern.edu (Vice-Chair)
Nirupam Aich, University at Buffalo, nirupama@buffalo.edu (Secretary)
Sanjay Tewari, Missouri S&T University, ewarisa@mst.edu (Vice-Secretary)
Lucia Rodrigues-Freire, New Jersey Institute of Technology, lucia.rodriguezfreire@njit.edu
Jeremiah Johnson, North Carolina State University, jjohns24@ncsu.edu
Mark H. Weir, The Ohio State University, weirmarkh@gmail.com
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Ellison Carter, Colorado State University, Ellison.carter@colostate.edu
Philip Larese-Casanova, Northeastern University, p.laresecasanova@northeastern.edu
Jennifer Benning, South Dakota School of Mines and Technology, Jennifer.benning@sdsmt.edu
Ramesh Goel, The University of Utah, rgoel@civil.utah.edu
Stephanie Bolyard, Environmental Research and Education Fund (EREF), sbolyard@erefdn.org
Lauren Stadler, Rice University, lauren.stadler@rice.edu
Sudeep Popat, Clemson University, spopat@clemson.edu
Marie-Odile Fortier, University of California Merced, mfortier2@ucmerced.edu
Ilke Celik, South Dakota School of Mines and Technology, Ilke.Celik@sdsmt.edu
Manish Kumar, University of Texas at Austin, manish.kumar@utexas.edu

Suggested Participants: graduate students and postdocs interested in exploring and planning for careers beyond their current degree/position

Participants of this workshop are asked to complete the following application form by June 20, 2021.

https://docs.google.com/forms/d/e/1FAIpQLSeD67iXp6XsbxhWSXxY9HiSvpR-hvN_yWimj2iRNRIKM5E1pQ/viewform

○ **NSF CAREER proposal workshop**

Description: The NSF CAREER program is a convergence of scientific discovery through cutting-edge research with the broader impacts that these endeavors have on the education system and society. This workshop will bring together NSF program managers and past CAREER award winners to help guide and field questions from early career scientists.

Organizers: Brent Williams, Washington University in St. Louis, brentw@wustl.edu, and John Fortner, Yale University, john.fortner@yale.edu

Suggested Participants: Anyone who are interested in submitting NSF CAREER proposals

Attendees should register for this workshop by June 29, 2021

○ **Leadership Training for Faculty: A discussion of the available opportunities and ROI (Return on Investment)**

Description: This workshop is designed to help mid-career professors learn about formal and informal programs designed to improve the skills and knowledge needed for leadership positions in academia. A starting point for workshop participants will be a pre-workshop survey of past experiences and goals. The survey data will inform the workshop organizers of the common interests and help guide the discussion. The panelists include members of our community who have completed various training programs (e.g., ELATE, HERS, Aldo Leopold, MBA) and moved into leadership positions at their universities. These people will provide testimonials of their experience, address the survey questions, and

facilitate breakout sessions in which workshop participants discuss leadership opportunities, challenges to taking on leadership positions, and pathways for gaining knowledge and skills to become effective leaders. This workshop will help empower mid-career professors to consider leadership opportunities as future department chairs, directors of research centers, and leaders at school and university levels.

Organizers: Terri Camesano (Worcester Polytechnic Institute), David Dzombak (Carnegie Mellon University), Daniel Giammar (Washington University), Keri Hornbuckle (University of Iowa), Staci Simonich (Oregon State University), and Jeanne VanBriesen (Carnegie Mellon University)

Contact: Keri Hornbuckle (University of Iowa) keri-hornbuckle@uiowa.edu

Suggested Participants: Associate and Full Professors Interested in Developing Leadership Skills

Participants of this workshop are asked to complete a pre-workshop questionnaire

<https://docs.google.com/forms/d/e/1FAIpQLSfm91LYWbGJvFRx516fT2Qcjo0tgO0Un7NvLU62H3gDSfrEjw/viewform>

July 14th, 2021 (Day 2)

10:00-11:15 Platform Session on Diversity, Equity and Inclusion

- **Welcome and Overview of the Day** – Young-Shin Jun, Chair of Workshops
- **Report from Converging COVID 2020 series**

Description: The goal of the AEESP “Converging COVID-19, environment, health, and equity,” series was to bring together different disciplines of environmental engineering and science (water, wastewater, air, food, waste, built environment) plus equity and climate change to discuss actions needed to form “a healthy, just and equitable society.” Throughout Fall 2020 we held six interactive themed sessions aligned with the Environmental Engineering Grand Challenges and COVID-19, that featured 30 speakers, and had over 600 attendees. Each themed panel was asked the same question of integrating equity and convergence in their research. We also convened a Youth Moving Forward session in Spring 2021. At this AEESP July 2021 appetizer event we will report out key results, findings, and recommendations from the AEESP Converging COVID-19 series.

Organizers: –Colleen Naughton, University of California-Merced, cnaughton2@ucmerced.edu and Maya Trotz, University of South Florida, matrotz@usf.edu.

Suggested Participants: All

- **Beyond Recruitment: Development of a Guidance Framework to Foster Black Junior Environmental Engineering Faculty Success**

Description: This workshop seeks to identify attributes of success for Black faculty academic success (e.g., professional development, promotion and tenure, and job satisfaction and support), and provide a guidance framework for faculty allies to support their Black junior faculty, junior faculty of color, and underrepresented faculty. Prior to the workshop, the organizers will identify predictors of junior faculty success (e.g., publications, service, teaching), and begin to collect and analyze survey data from participating Black junior faculty in Environmental Engineering regarding these success factors. We are interested in delineating the differences in factors that influence or predict junior faculty success in STEM

fields and comparing those factors to perceived success indicators among Black and non-Black junior faculty, cross-referencing those factors with indirect stakeholders (e.g., department chairs and deans). Findings from surveys and interviews with Black faculty will be presented during the workshop to interested attendees to create strategies and actionable items for allies and indirect stakeholders to support their Black faculty. We feel the nature of this workshop is timely considering the racial reckoning in the country and the important role Environmental Engineers play in protecting public safety in response to emerging challenges of our changing world.

Organizers: Maureen Kinyua (Chair), University of California, Davis, mnkinyua@ucdavis.edu; Jessica Ray (Co-Chair), University of Washington, jessray@uw.edu; William Tarpeh (Co-Chair), Stanford University, wtarpeh@stanford.edu; Jacelyn Rice-Boayue (Co-Chair), University of North Carolina Charlotte, Jacelyn.Rice@uncc.edu

Suggested Participants: All

- **Discussion and Questions and Answers** – Moderated by Young-Shin Jun

July 14th, 2021 (Day 2)

11:15-1:00 Parallel Workshops

- **AEESP Environmental Engineering Program Leaders (EEPL) Annual Workshop**

Description: This workshop serves as the annual meeting of the EEPL. The workshop will address four topics: i) DEI in engineering curricula (Susan Lord-USD), ii) updates on the ENVE ABET program evaluation and accreditation process (David Chin-UMiami and Berrin Tansel-FIU), iii) positive changes in teaching and communication from COVID-19 (Panel discussion), and iv) AEESP benefits to/from AEESP Sustaining Members (Paige Novak-UMn). Adequate time will be provided for questions and discussion.

Organizers: Andrew Jackson (Co-Chair), Texas Tech University, Andrew.jackson@ttu.edu; John Sutherland (Co-Chair), Purdue University, jwsuther@purdue.edu; Mark Barnett, Auburn University, Barnem4@auburn.edu; Thomas DiStefano, Bucknell University, distefano@bucknell.edu; Donna Fennell, Rutgers Univ., fennell@envsci.rutgers.edu; Barbara Minsker, Southern Methodist University, minsker@mail.smu.edu; Rachel Wagner, Saint Francis University, rwagner@francis.edu.

Suggested Participants: Any environmental program lead or individual with an interest in the administration of environmental programs.

- **Aerosol Science and Engineering and Public Health: Focus on COVID-19**

Description: The goal of this workshop is to facilitate the participation of aerosol and public health researchers for identifying multi-disciplinary gaps and problems, and the research needed to address them. A major emphasis of this workshop will be on the role of aerosol science in understanding and preventing COVID-19 transmission. Original research and review contributions are solicited across a range of related sub-disciplines, including, but not limited to (i) detection and transmission modes of SARS-CoV-2 in air and interfaces; (ii) environmental determinants, such as temperature, humidity, atmospheric particulate matter exposure, sunlight, and bioaerosol, on virus transmission, survival and infection potential; (iii) effectiveness of personal protective equipment, such as face mask and respirators; and (iv) non-pharmaceutical prevention strategies and their effectiveness for future pandemic.

Environmental Engineering at the Confluence



AEEESP
ST. LOUIS // 2022
2021 Virtual “Appetizer”

Aerosol Science and Engineering and Public Health: Focus on COVID-19

Wednesday, July 14, 2021, 11:15-13:00 CDT

- Lightning talks on “**Research Spotlight**” and “**Lessons and Perspectives**”
- Five topics on aerosols & COVID-19
- Insights from academia and industries
- Panel Discussion
- Live Q&A from the audience

Registration: <https://aeesp2021.wustl.edu>
Workshop Conveners: Yang Wang and Joshua Santarpia
Organizing Committee: Rajan Chakrabarty, Pratim Biswas, Daniel Giammar, and Young-Shin Jun

Workshop opening remarks

 Rajan Chakrabarty
Washington University

 Pratim Biswas (moderator)
University of Miami
Washington University

Dynamics of aerosols and environmental determinants

 Jose Jimenez
University of Colorado
Boulder

 Shamia Hoque
University of South Carolina

Environmental sampling of bioaerosols

 Chang-Yu Wu
University of Florida

 Joshua Santarpia
University of Nebraska
Medical Center

Respiratory aerosols and effectiveness of PPE

 Christian L'Orange
Colorado State University

 Yang Wang
Missouri University of
Science and Technology

Outdoor and indoor air quality and COVID-19

 Rajan Chakrabarty
Washington University

 Marina Vance
University of Colorado
Boulder

Insights from industries combating COVID-19

 Susanne Hering
Aerosol Dynamics Inc.

 Pat Keady
Aerosol Devices Inc.

Organizers: Rajan K. Chakrabarty, Washington University in St. Louis, chakrabarty@wustl.edu; Pratim Biswas, University of Miami, pbiswas@miami.edu; Yang Wang, Missouri Science & Technology, yangwang@mst.edu

Suggested Participants: All

○ **Equity in the Job Search: Tools to Successfully Navigate the Job Search and Promote Gender Equity in STEM**

Description: To help women overcome barriers in the academic job search, our event will combine practical “how-to” advice with discussion of gender bias and explicit tools to overcome it. Our workshop will be open to individuals of all genders and career stages and will provide data-supported awareness of implicit biases and critically needed methods to surmount those challenges in a university setting. Ultimately, we seek to impart the idea that everyone benefits from and can act to cultivate inclusivity.

Organizers: Desiree Plata, Massachusetts Institute of Technology, dplata@mit.edu and Bridget Hegarty, University of Michigan, hegartyb@umich.edu

Suggested Participants: All