

## 2018 Annual Meeting

May 17 – 18, 2018

Simplot Ballroom Student Union Building Boise State University 1910 University Drive Boise, ID 83725

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#### **ISPE 2018 Annual Meeting**

#### Wednesday, May 16

3:00 - 5:00 PM **ISPE State Board Meeting** Micron Engineering Center (MEC) Conference Room 201 **Boise State University** 

#### Thursday, May 17

7:30 - 8:50 AM Student Union Building -Simplot AC Ballroom

Breakfast/ISPE Membership Meeting

9:00 – 9:50 AM	J.A. and Kathryn Albertson Family Foundation
Student Union Building –	Boise Whitewater Park Phase II (1)
Simplot BD Ballroom	Olivia Weick, P.E.

Project Engineer – Civil, McMillen Jacobs Associates The J.A. and Kathryn Albertson Family Foundation Boise Whitewater Park Phase II Project will replace the existing push-up berm diverting river flows into the Farmers Union Ditch Company irrigation canal with a series of three multi-use, in-river drop structures. The drop structures will provide irrigation diversion, surfer and kayaker recreation, and increased floodway conveyance capability in the river. Drop structure 1 has a variable crest using Obermeyer gates, while drop structures 2 and 3 are fixed crest. Additional project features include river bank stabilization, riparian planting, fish passage, habitat islands, river access, relocation of the Greenbelt pathway, and a plaza for public seating.

10:00 – 10:50 AM	Idaho Growth and Economic Development (1)
Student Union Building –	Matt Borud
Simplot BD Ballroom	Chief Marketing & Innovation Officer,
	Idaho Commerce

Matt will discuss some baseline statewide economic metrics, industries that have driven our recent growth, industries that are poised for growth, effective economic development programs and future considerations to continue to grow intelligently.

11:00 - 11:50 AM Student Union Building – Foundation Design (1) Simplot BD Ballroom

A Gate-Stop Approach to Solar

Blair Loftis National Director of Power Generation and Transmission, Terracon

Reduce risk and construction capital by focusing on project site compatibility as it relates to the minimum required embedment depth for your tracker foundations. Follow a gate-stop, stepwise process to assist in the prudent allocation of development capital while minimizing capital at risk.

#### 12:00 - 1:30 PM Lunch - NSPE Business Model (1) Student Union Building – Michael E. Aitken, P.E., F.NSPE NSPE President 2018-2019 Simplot AC Ballroom

Last summer, the NSPE House of Delegates approved to adopt a new business model for NSPE. Michael will present what the new business model is, how the changes affect ISPE, and what additional benefits we can take advantage of.

Engineering in the Third World: Creative Student Union Building – Problem Solving in the African Jungle (1)

> Dr. Don Plumlee, P.E. Chair and Associate Professor – Mechanical Engineering Department, Boise State University Dr. Sondra Miller, Ph.D., P.E. Associate Professor, Associate Dean for Undergraduate Studies - College of Engineering, Undergraduate Coordinator - Department of Civil Engineering, Boise State University

Engineering faculty from Boise State share their experiences working in the West African nation of Sierra Leone to build a cassava processing plant in conjunction with Village Hope Inc. Cassava, popular in tropical, developing countries, is both nutritious and thrives in soil unsuitable for growing many other crops. The design and construction of the plant utilizes functional, regionally appropriate technology, and once up and running will be operated by the local community. This unique model, in addition to providing much-needed jobs, will also generate profits to be invested in the community in the form of education, health care and economic development programs. This presentation will share some of the satisfactions and challenges of living and practicing engineering in a third world country.

#### 3:00 - 3:50 PM City of Boise Waste Reduction Initiatives (1) Student Union Building - Catherine Chertudi Simplot BD Ballroom Solid Waste Environmental Program Manager, Boise Public Works

Trash to Treasure – local and innovative solutions for managing discarded materials in the city of Boise Idaho. How a mid-size community is leading the nation in finding opportunities to divert materials from the landfill to create new products.

4:00 - 4:50 PM 2018 Report Card for Idaho's Infrastructure (1) Student Union Building – Scott Ellsworth, P.E., P.L.S. Simplot BD Ballroom Federal Aid Manager, Local Highway Technical Assistance Council John Falk, P.E. Dam Safety Program Manager, Idaho Department of Water Resources Seth Olsen, P.E. Senior Geotechnical Engineer, Cartwright Northwest The panel will present the Report Card on various infrastructure categories. Idaho is growing, is our infrastructure keeping up?

5:00 - 7:30 PM Social and Dinner Student Union Building -Simplot AC Ballroom

2:00 - 2:50 PM

Simplot BD Ballroom

#### Friday, May 18

7:30 – 8:00 AM Breakfast Student Union Building – Simplot BD Ballroom

8:00 – 9:20 AM Update on Board Activities (1.5) Student Union Building – Keith Simila, P.E. Simplot BD Ballroom Executive Director, Idaho Board of Professional Engineers and Professional Land Surveyors

Keith will summarize the year's events with the board including an update on legislative activities and trends in licensure. There were a few law and rule changes that affect engineers such as a bill related to trespass and a rule change on Qualifications Based Selections. The Lt. Governor's executive order report is completed and available for review and comment. New options for taking the PE exam will be discussed.

# 9:30 – 10:20 AMPublic-Private Partnerships to Expand StudentStudent Union Building –Entry in Postsecondary Opportunities and<br/>Careers (1)<br/>Dr. Angela Hemingway

Executive Director, Idaho STEM Action Center

Public-private partnerships are changing the face of Idaho education and will help shape Idaho's future workforce. Please come learn about these partnerships and how you can participate with your time, talent and/or funding.

10:30 – 11:20 AMSmart Grid Initiatives (1)Student Union Building –Rick Kidneigh, P.E.Simplot BD BallroomPrincipal Engineer of the Reliability Engineering<br/>Department, Idaho Power Company<br/>Shane Woods

Senior Engineer, Idaho Power Company

This presentation will provide an overview of initiatives Idaho Power Company is taking to develop a more flexible and dynamic distribution system. Idaho Power is implementing an Integrated Volt/Var system that will position the utility to handle variations caused by increased distributed generation and reverse power flow. The project is part of Idaho Power's Grid Modernization strategy and includes upgrades to Capacitor Banks, Voltage Regulators, and Load Tap Changers as well as implementing a new field area network for devices to utilize radio spectrum for communication. Additionally, an overview of Idaho Power's custom built voltage monitoring system will be given. Idaho Power engineers have developed 'Smart Grid Monitors (SGMs) that are deployed across its entire service territory. The SGMs provide real-time voltage data as well as outage information, temperature, and wind speed that is used to analyze system performance and solve Power Quality and Reliability issues.

 11:30 AM – 12:20 PM
 Flooding Panel (1)

 Student Union Building –
 Brandon Hobbs, P.E., CFM

 Simplot BD Ballroom
 Project Manager, US Army Corps of Engineers

 Tim Morgan, P.E., PMP
 Director of Transportation,

 Materials Testing & Inspection
 Angie Gilman, P.E.

The winter of 2016-2017 brought historic flows to the Treasure Valley and other parts of Idaho during the spring. This panel will discuss the lessons learned from the experience.

12:30 – 1:50 PMLunch – Protecting Licensure (1)Student Union Building –Michael E. Aitken, P.E., F.NSPESimplot AC BallroomNSPE President 2018-2019Threats to professional licensure are occurring all over the United States. Howwill it affect us?

#### Make Every Meeting a Success

Anna Borchers Canning, AICP Management Services Administrator, Idaho Dept. of Parks and Recreation

No matter what the meeting is about, no matter how contentious or benign the issues may be, there is a way to make every meeting a success.

2:00 – 4:50 PM Tour(s) (2)

Hydraulic Modeling Methods Used for Rivers and Channels (1) University of Idaho Water Lab

Professor Daniele Tonina

Associate Professor and Acting Director of the Center for Ecohydraulics Research, University of Idaho

This presentation will present and discuss the use of 1, 2 and 3 dimensional numerical modeling and statistical modeling for predicting flow hydraulics in open channels applied to ecohydraulics problems. The presentation will describe the strength and limitations of each approach and when one method is recommended with respect to the others.

AND

Spotlight on Engineering Research at Boise State University (1) Meet in ERB lobby outside ERB 1127 for introductions/short presentations before breaking into smaller groups to rotate between labs

- 1. **ERB 1112 Pavement and Railroad Engineering Lab** *Deb Mishra, Ph.D.* and students highlighting research with Idaho Transportation Department on:
  - Unbound Material Characterization for Improved Pavement Design in Idaho
  - Use of Visual Distress Survey and Deflection Data for Sustainable Pavement Rehabilitation Decisions
  - Evaluating the Alkali-Silica Reaction Potential of Idaho Aggregates for Improved Concrete Performance
  - Improving Pavement Performance through Optimal usage of Recycled Asphalt Pavement (RAP)
  - Micromechanical Analysis of Railroad Track Structure Behavior using the Discrete Element Method
- 2. ERB 2112 Advanced Nanomaterials and Manufacturing Lab -Highlighting Research on:
  - Application of MXene, a new class of two-dimensional materials, in developing water filtration systems

3. ERB 4102 - Air Quality Lab and ERB 4104 - Environmental Engineering Lab - Sondra Miller, Ph.D., P.E.

Highlighting project(s) on:

- Environmental Engineering: Rural and Urban Air Quality Research Lab
- Environmental Engineering: Water and Wastewater Quality Teaching Lab
- 4. ERB 4108 Chemical & Geotechnics Lab Bhaskar Chittoori,
  - Ph.D., P.E. Highlighting projects on:
    - Application of Microbial Induced Calcite Precipitation to Expansive Soil Stabilization
    - Developing a risk based unified framework for sustainability and resiliency assessments of civil infrastructure

#### OR

#### **ACHD Traffic Control Center**

Ada County Highway District Traffic Control Center monitors for traffic slowdowns throughout the Treasure Valley. They have 181 cameras on state routes, county roads, and city streets in northern Ada County and extending into Canyon County. They monitor for construction, crashes, emergencies, or any other traffic slowdown.

#### 2018 ISPE Annual Meeting Committee

Seth Olsen, ISPE President Joe Canning, ISPE President Elect Jim Baker, ISPE Secretary Treasurer Lewis Venard, ISPE National Director Kelsey Aldrich, ISPE Southwest Chapter President Greg Taddicken, ISPE Southwest Chapter President Elect Matt Derr, ISPE Southwest Chapter Secretary Treasurer Vincent Poxleitner, ISPE Southwest Chapter Director Scott Ellsworth, Southwest Chapter Lynn Olson, Future City

#### **Biographical Sketches**

#### Olivia Weick, P.E.

Olivia is a registered professional engineer and has been with McMillen Jacobs Associates for nearly 7 years. Her career has focused on civil and fisheries engineering for a variety of applications including habitat restoration, city parks, flood restoration, dams, hydropower, fish passage, and heavy civil. Typical projects include facility layout; site civil grading; yard, process, and utility piping; hydrologic and hydraulic analysis; and erosion and sediment control. Ms. Weick has been working on the Boise Whitewater Park as the project engineer for 3 years. Her responsibilities include developing the plans and specifications, writing the DDR, and coordination with the City of Boise, the project team, subconsultants, permitting agencies, user groups, and stakeholders.

#### Matt Borud

Matt is the Chief Marketing & Innovation Officer at Idaho Commerce. His role focuses on unifying the department's communication, marketing, and innovation initiatives through programs like the Idaho Global Entrepreneurial Mission (IGEM) grant program, Idaho Tourism, and Idaho Commerce's marketing program.

Before joining Idaho Commerce, Matt worked for a Boise-based software company called Balihoo where he focused on business development and client services for strategic accounts. Prior to Balihoo, Matt led recruiting services for Payette Group, an executive technical recruiting firm with offices in Boise and Menlo Park, CA. He began his career in sales operations at MPC Computers in Nampa.

Matt has a B.A. in Political Science, Business Administration, and German from the University of Oregon. Matt, his wife Gina, and daughter Remy live in Boise.

#### **Blair Loftis**

Terracon, Inc. - Portland, Oregon, Vice President, National Director-*Power Generation & Transmission* 

Blair Loftis is responsible for overseeing Terracon's Power Generation & Transmission market sector. This includes coordinating Terracon's professional services and technical expertise to assist our clients in the siting and design of renewable generation, conventional generation, and electrical transmission projects.

Blair has worked in the energy sector for the past 20 years. Prior to that time Blair spent a decade in the construction industry.

Before joining Terracon, Blair was the Global Director of Renewable Energy for another large A&E firm. Prior to that he was a Director of Corporate Strategy for one of the largest investor-owned electric utilities in the Western United States. In working through various positions of increasing responsibility for the utility Blair developed an acute understanding of utility operations and energy market dynamics. His accomplishments at the utility include: -- Designing processes and procedures to manage operational risk as it relates to the reliability of power stations and transmission networks,

-- Incorporation of financial hedge mechanisms to mitigate power station outage and smooth hydro power variability,

-- The complete re-tooling of an energy trading organization to maximize portfolio balance and minimize market exposure,

-- Successful negotiation of inter-jurisdictional regulatory compacts to increase return on equity, and

-- Creation of a system to ensure the accuracy of financial reporting in the wake of the Enron scandal and the emergence of Sarbanes-Oxley.

Blair's prior career in construction management took him throughout the American West and the State of Alaska. He was responsible for demolition of power stations, construction of Federal communication facilities in some of our Country's most remote locations, installation of military fuel depots, and the remediation of sites contaminated with fuel hydrocarbons, chlorinated solvents, agricultural chemicals, heavy metals, and dioxins.

Blair's unique background in the energy sector and construction management makes him uniquely positioned to provide value to developers of alternative energy resources. Blair also serves as an expert witness in litigation matters related to renewable energy project design and construction.

Blair graduated from the University of California at Davis with a Bachelor of Science in Toxicology. Blair lives in Portland, Oregon with his wife Jeanne and their four children. Blair's wife is a defense attorney and represents national clients in matters of complex litigation. Blair's hobbies include ultra-running and coaching youth athletics.

#### Michael Aitken, P.E., F.NSPE

Michael is currently serving on the NSPE Board of Direction on the Executive Committee as the NSPE President for 2018-2019. He holds a bachelor's degree in mechanical engineering technology from Metropolitan State University of Denver. He is currently working at MEA Consulting Engineers in the Denver area.

#### Dr. Don Plumlee, P.E.

Dr. Plumlee is the current Chair and Associate Professor of the Mechanical & Biomedical Engineering at Boise State University where he also has managed the Ceramic MEMS research laboratory since 2001. He takes pride in being able to provide something back to the profession in the way of engineering education and operating a research laboratory. Prior to arriving at Boise State University, Dr. Plumlee worked for Lockheed Martin Astronautics as a Product Engineer/Project Manager/Mechanical Designer on structural airframe components for several aerospace vehicles. He also worked at NASA's Marshall Space Flight Center (MSFC) as a co-op engineer in the Propulsion Laboratory; Dr. Plumlee is a member of the International Micro-electronics and Packaging Society, American Society of Mechanical Engineers and American Society of Engineering Education. As a licensed professional engineer, he has also been involved in the administration of the PE Review classes offered through the University of Idaho and FE Review classes offered through Boise State University.

#### Sondra M. Miller, Ph.D., P.E.

Associate Professor, Associate Dean for Undergraduate Studies - College of Engineering, Undergraduate Coordinator - Department of Civil Engineering, Boise State University. Dr. Miller earned her Ph.D. in Environmental Engineering from the University of Iowa, M.S. in Environmental Engineering and B.S. in Civil Engineering from the State University of New York at Buffalo. Dr. Miller is a licensed professional engineer in Idaho. Dr. Miller was an Associate Engineer with the Idaho Department of Environmental Quality prior to joining Boise State University. Dr. Miller's field of research is in the fate and transport of organic contaminants in natural and engineered systems, including air and water quality.

#### **Catherine Chertudi**

Catherine works for Boise Public Works Environmental Division and oversees a broad range of environmental issues including trash, recycling, composting, ground water remediation and protection, and hazardous materials management.

Catherine served on the Board of Directors for the Groundwater Foundation and is a long-time Groundwater Guardian community leader. In 2009, Catherine received an American Public Works Association, International Jennings Randolph Fellowship to study water management issues in Australia and was a speaker at the International Public Works Conference in Melbourne.

Catherine was selected as a 2016 Idaho Business Review. Idaho Women of Year award winner.

In her spare time, she loves photography, hiking and gardening!

#### Scott Ellsworth, P.E., P.L.S.

Scott is the Federal-aid Manager for the Local Highway Technical Assistance Council (LHTAC) in Boise. He has a B.S. in Forest Engineering from Oregon State University. He worked for CH2M Hill from 1981 until 2010. He moved to Boise in 1985 to work on the design of the I-184 Connector. He was project manager for various projects for ITD and ACHD as well as other local jurisdictions. He began working for LHTAC in 2011 and administers Federal-aid projects for local jurisdictions that have roadway responsibility across the state. He is a Professional Engineer as well as a Professional Land Surveyor in Idaho. Scott has been married to Susie for 36 years and has three daughters and one grandson.

#### John Falk, P.E.

Mr. Falk is a native Idahoan and currently works at the Idaho Department of Water Resources. He has served as the state Dam Safety Program Manager since 2007 after working 14 years in a similar capacity with the Oregon Water Resources Department in Salem.

He has served on the Association of State Dam Safety Officials (ASDSO) Board of Directors, and participates in numerous committees related to dams and mine tailings impoundments. Other professional employment has included manufacturing, mining, consulting engineering, and local government public works.

Mr. Falk graduated with a BSc in geological engineering from the Colorado School of Mines, and a MS in geotechnical engineering from Colorado State University. He is a licensed professional engineer in Idaho, Oregon, Washington and Utah. Hobbies include biking, gardening, music, home and ranch improvement, and all sorts of outdoor adventures.

#### Seth Olsen, P.E.

Seth is a Senior Geotechnical Engineer at Cartwright Northwest in Boise, Idaho. He has a BS and MS degree in Civil and Environmental Engineering from Utah State University. He has geotechnical experience in land development, transportation, forensic evaluations, and many others. He and his wife, Gina, try to keep up with their 4 kids. It has been his privilege to serve as the ISPE President this last year.

#### Keith Simila, P. E.

Keith Simila is the Executive Director to the Idaho Board of Professional Engineers and Professional Land Surveyors. He began in this position in 2013. As a licensed professional engineer his current job is to assist the board in licensing new engineers and land surveyors, work with the legislature and other stakeholders to update the laws and rules of the board, to engage in disciplinary actions that enforce the laws and rules of the board and to educate licensees, certificate holders and others in regard to licensure and professional practice issues.

Prior to 2013, Keith spent 33 years as an engineer with the US Forest Service. He retired as the Director of Engineering for a 4 state region (located in Ogden, Utah) which included Southern Idaho. Keith also worked as a practicing engineer in Boise, Salmon, and Priest River, Idaho, Missoula, Montana, Juneau, Alaska and Washington, DC.

Originally from Portland, Oregon, Keith graduated with a B.S. in Civil Engineering and Forest Engineering from Oregon State University. He has a Masters of Administrative Management from Regent University School of Business in Virginia Beach, Virginia.

Keith is now a Boise resident with his wife Anne of 35 years. He has 2 children and 3 grandchildren.

#### Dr. Angela Hemingway

Angela received her doctorate in curriculum and instruction from Boise State University, an M.S. focusing on microbiology, a B.S. in biology and chemistry, and a teaching certificate in science. She spent 14 years in high school and college STEM classrooms inspiring students to participate in science competitions and community service events. She transitioned to the State Department of Education where she served as Assessment and Accountability Director. In August 2015, Governor Otter appointed her the Executive Director for his newly formed Idaho STEM Action Center where she oversees a variety of STEM opportunities, ensuring Idaho's long-term economic prosperity.

#### Rick Kidneigh, P.E.

Rick is Principal Engineer of the Reliability Engineering department at Idaho Power Company in Boise, Idaho. For 14 years, he has been part of a team responsible for managing the protection, loading, voltage, and reliability of the electric distribution system in Idaho and Oregon. Rick has a Bachelor of Science degree in Electrical Engineering from Boise State University, and is a registered Professional Engineer in Idaho.

#### Shane Woods

Shane is a Senior Engineer for Idaho Power. He spent 3 years in the Military where he was deployed to Africa and South Korea. After his time in the military he received a B.S in electrical engineering from Boise State University. Shane was hired by Idaho Power as a Power Quality engineer where worked for 8 years helping customers solve Power Quality issues. From there he accepted a position as a Power Quality Support engineer where he worked on several projects including designing and programming custom telemetry units. The units are called Smart Grid Monitors or SGM's and are deployed across Idaho Power's service territory. The SGM's are designed to automatically report and record outage information. The data is used to alert dispatch of outages and to help solve customer complaints. When Shane isn't at work he can be found spending time with his wife and two kids enjoying the outdoors or remodeling their cabin. In his spare time, he is restoring a 1958 Massey Ferguson tractor.

#### Brandon W. Hobbs, P.E., CFM

Mr. Hobbs currently serves as the Idaho Outreach Coordinator, Idaho Silver Jackets Coordinator, and as a Project Manager for the U.S. Army Corps of Engineers, Walla Walla District. He has been with the Corps since 2010. Prior to Federal service, Mr. Hobbs worked as a civil engineer for five years in a private consulting engineering firm in Boise. He holds a B.S. in Civil Engineering from Washington State University and an M.S. in Civil Engineering from the University of Iowa, and is a licensed Professional Engineer and a Certified Floodplain Manager. When he's not working, Brandon loves to be outdoors with his wife and two daughters and play violin in Boise's Serenata Orchestra.

#### Timothy R. Morgan, P.E., PMP

Mr. Morgan is a licensed professional engineer and project management professional with nearly two decades of professional experience in the planning, development, engineering design and construction industry. He is the Director of Transportation for Materials Testing & Inspection. Mr. Morgan's career has taken him across the country and afforded him the opportunity to manage a variety of projects and programs ranging from small municipal work to \$100 million interchange reconstruction projects. Having worked for consulting firms, contractors, and public agencies, he is well versed in all aspects of delivering successful programs and projects. As a native Idahoan, Mr. Morgan is glad to call the Treasure Valley home with his wife Julie (MSEE) and three daughters.

#### Angela Gilman, P.E.

Angela Gilman was the County Engineer and Floodplain Manager for Ada County, Idaho, from 2013 to 2018. She has 27 years of civil design experience; much of it related to hydraulic modeling, flood related embankment repair work, and storm water system design. She completed the hydraulic modeling and scour analysis for over 100 bridges in the state of Idaho. Angela has a BS from Oregon State University and is a licensed Professional Engineer in Idaho, Oregon, and Washington. She's a Certified Floodplain Manager and Certified Erosion and Sediment Control Professional. She teaches floodplain management classes for FEMA and teaches erosion and sediment control classes for various local and state agencies around Idaho. Angela spends her spare time mountain biking, fly fishing, and traveling the world participating on volunteer design teams in developing countries.

#### Anna Borchers Canning, AICP

Ms. Canning has been employed as the Management Services Administrator for the Idaho Department of Parks and Recreation since 2013. Prior to joining IDPR, Anna enjoyed over 25 years of experience in both private and public land use planning. She was drawn to planning through her curiosity and delight of seeing of how the blend of the built and natural environments affected people's lives. Her life-long professional goal is to improve the built environment through thoughtful and useful planning. She was attracted to State Parks and Recreation for the same reason; how we plan for and use our parks and recreation areas has great impact on people's enjoyment of those spaces. On the weekends, Anna enjoys going to movies, being in a boat or in the water, and spending time with family, particularly her husband (who just happens to be an engineer).

#### **Daniele Tonina**

Mr. Tonina is currently an Associate Professor and Acting Director of the Center for Ecohydraulics Research at the University of Idaho. He held a 2-year post-doctoral research position at the University of California at Berkeley and one at the University of Trento. He received engineering degrees from the University of Trento (BS, MS, 2000) and the University of Idaho (PhD, 2005). He has investigated the interaction between surface and subsurface waters, riverine aquatic habitat and use of remote sensing in monitoring stream hydraulics. He is a professional engineering in Idaho and Italy and a member of the International Association for Hydro-Environment Engineering and Research, the American Society of Civil Engineers and the American Geophysical Union.

#### Dr. Bhaskar Chittoori

Dr. Chittoori joined as Assistant Professor in the Geotechnical Engineering area of the Civil Engineering Department of Boise State University in the fall of 2013. He received his Ph.D. degree in 2008 from the University of Texas at Arlington. His research interests are clay mineral quantification, sustainability assessment, advanced soil testing and interpretation, soil stabilization, soil reinforcement, along with finite element modeling of soil systems. He is a licensed civil engineer in the states of Texas and Idaho and a member of Chi Epsilon and Tau Beta Pi honor societies.

#### Dr. Debakanta (Deb) Mishra

Dr. Mishra received his bachelor's degree in Civil Engineering from Indian Institute of Technology (IIT) Kanpur, India in 2004, and master's degree (Civil Engineering) from Texas Tech University in 2006. He joined the University of Illinois at Urbana-Champaign (UIUC) in August 2006 to pursue a Ph.D. degree in Civil Engineering, with primary focus in the area of Transportation Engineering. After completing his Ph.D. in 2012, Dr. Mishra continued at UIUC as a Post-Doctoral Research Associate in the Department of Civil and Environmental Engineering. He joined Boise State University in August 2014 as an Assistant Professor in Civil Engineering. Dr. Mishra's research interests are primarily in the areas of Pavement/Railroad Engineering and Transportation Geotechnics. He is currently involved in several research projects sponsored by the Idaho Transportation Department, and the Federal Highway Administration.

#### Nagsh Mansoor

Naqsh is a Fulbright scholar from Pakistan pursuing her master's degree at Boise State University's Micron School of Materials Science and Engineering with focus on environmental materials. She is working to develop new, sophisticated water filtration membranes through the application of MXenes, a new class of 2D materials. <u>NOTES</u>

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For more information about the Idaho Society of Professional Engineers, or to become a member, please contact us

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