

## 2017 Science of Nuclear Energy and Radiation Workshop SPEAKER and VOLUNTEER BIOS

**Sama Bilbao y León** joined the Department of Mechanical and Nuclear Engineering at Virginia Commonwealth University (VCU) in January 2011 as Director of Nuclear Engineering Programs and Associate Professor. She is one of the key individuals involved in the creation and development of the thriving new Nuclear Engineering program at VCU. Until December 2010, Sama was the Technical Head of the International Atomic Energy Agency (IAEA) Water Cooled Reactors Technology Development Unit and she was in charge of all IAEA activities in support of the development and near term deployment of advanced water cooled reactors and their associated fuels. From February 2001 until March 2008, Sama was a Nuclear Safety Analysis Engineer at Dominion Generation, where she worked on the development and licensing of new methodologies in core thermal-hydraulics and nuclear safety analysis in support of Dominion's nuclear power stations. Previously, as a researcher at the University of Wisconsin – Madison, Sama conducted research on experimental and computational thermal-hydraulics and nuclear safety, energy and environmental policy, as well as public perception. She also participated in the design of nuclear micro-batteries to power nano-devices. At the Escuela Técnica Superior de Ingenieros Industriales of the Universidad Politécnica in Madrid she was involved in the simulation and analysis of severe accidents and nuclear safety. In November 2013 Sama was appointed by Virginia Governor McDonnell and VCU President Rao to the Virginia Nuclear Energy Authority Board, and elected Treasurer. In January 2014 Sama was appointed to the Institute of Nuclear Power Operations (INPO) National Accreditation Board. She is currently the Chair of the Board of the Virginia Nuclear Energy Consortium.

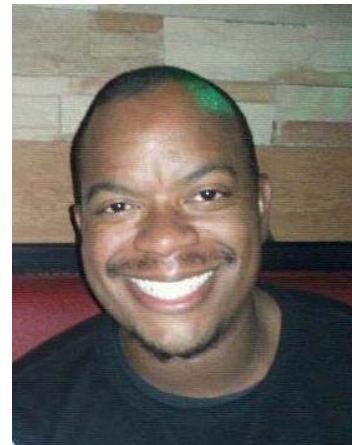
Sama is one of the seven founders of the North American Young Generation in Nuclear (NA-YGN), and served as Public Information Chair since its creation in 1999 until May 2005. Sama is also an active member of the American Nuclear Society (ANS) since 1995, both nationally and locally (currently VCU student section and Virginia local section). Her dedication to spreading the good news about



nuclear earned her the ANS 2002 Public Communications Award. In 2007 she received the NA-YGN Founder Award, the highest award given to an NA-YGN member, which rewards leadership, vision and dedication. In 2007, and again in 2010, Sama was elected to the national Board of Directors of the American Nuclear Society. In 2011, she received the ANS Mary Jane Oestmann Women's Achievement Award. In 2014 she received an ANS Presidential Citation for her continuous dedication to ANS. Sama is also a member of ASME, ASEE, SWE and WIN.

Sama holds a bachelor's degree in Mechanical Engineering and a master's degree in Energy Technologies from the Polytechnic University of Madrid; a master's degree and a PhD in Nuclear Engineering and Engineering Physics from the University of Wisconsin – Madison; and an MBA from Averett University.

**Daniel Bond** is a Ph.D. student in the Department of Mechanical and Nuclear Engineering with an interest in deep space shielding for manned missions to Mars using both material and spacecraft evaluation, as well as NASA's On-Line Tool for the Assessment of Radiation In Space (OLTARIS) and LANL's Monte Carlo N-Particle Code (MCNP). Prior to enrolling at VCU, Daniel worked for three years as an Instructor in the Department of Engineering at Virginia State University. He holds a master's degree in Nuclear Engineering from the University of California, Berkeley and a Bachelor's of Science in Physics from Howard University.



**Mark Crosthwaite** earned his Master in Education with an emphasis on Occupational Administration from the University of Louisville, Louisville, KY, in 1999. He received his Certificate in Nuclear Medicine Technology from St. Joseph Hospital, in Paramus, NJ, in 1978, and he earned a Bachelor of Arts in Biological Sciences from Drake University in Des Moines, IA, in 1976.

Mark accepted his second academic appointment in Louisville, KY in 1985 as an Instructor and Program Director of the Nuclear Medicine Technology Program at the University of Louisville. While there he completed his Master's degree, was promoted to Associate Professor and received tenure. The School of Allied Health closed in 2002 and the NMT program made its transition to the



community college. Afterwards Mr. Crosthwaite returned to clinical arena prior to accepting his appointment at VCU.

He has also served as a regional president in to different areas of the country for the Society of Nuclear Medicine Technology. Ha been a member of the Nuclear Medicine Technology Certification Board for ten years which included Chairing the organization for a year and a half. He has also lectured for continuing education in his profession.

His teaching interests include nuclear medicine, web based education, writing HTML programs for web based education, manipulating and creating graphic/photographic presentations. Mark also is an open water SCUBA instructor.

**Jason Dunavant** has worked as a health physicist for 32 years. Jason is certified by the American Board of Health Physics (ABHP) and is recently retired.

Jason obtained his BS in physics from the University of Houston and then was commissioned in the US Army's Medical Service Corps as a Nuclear Medical Science Officer with tours at the Army Public Health Center, MD; White Sands Missile Range, NM; U.S. Army Medical Center and School, TX; Walter Reed Army Medical Center, DC; Tripler Army Medical Center, HI; and US Army Materiel Command, VA. After retiring, Jason worked for Medstar Health, SAIC, and Georgetown University. Jason obtained his MS in health physics from the College of Veterinary Medicine at Colorado State University and his MS in systems management from Florida Institute of Technology.



An active plenary member of the national Health Physics Society (HPS) since 1987, Jason has served on the Continuing Education Committee and is the President Elect of the Baltimore-Washington Chapter. He is also a member of the DC Chapter of the American Nuclear Society and the American Society of Test and Measurement F23 Protective Clothing Committee. Jason has been a licensed x-ray inspector in the states of Maryland and Virginia along with the District of Columbia. Jason has served as an approved medical physicist under the Mammography Quality

Standards Act and for American Board of Radiology compliance. Previously, Jason served on the ANSI 43.3, Industrial X-ray; 43.16, Cargo Inspection Systems, and 43.17, Personnel Security Screening.

When not working in health physics, Jason volunteers with the Fairfax County Community Emergency Response Team, the Medical Reserve Corps, and the Friends of the Library. Jason has judged at the Fairfax County and State of Virginia Science Fairs for more than 15 years.

**Carol Appel Elmore** joined the Nuclear Public Affairs group in 1987 as Nuclear Information Center Coordinator. Her primary responsibility is providing free educational programs about energy sources (nuclear in particular) to school and college groups, community groups, and special summer programs. She has 41 years with the company, of which the first 12 years were with Surry Nuclear Training Department. During that time, she served for five years as Supervisor of Administrative Services, responsible for proper documentation and training records for all employees enrolled in the Surry's nuclear development programs and the licensed operator program.



Graduated from Surry Academy and also from Tidewater Community College in General Industrial Management Studies. Successfully completed the company's Nuclear Instructor Training/Certification (Basic and Advanced) Program. As a member and past Chairperson of the Surry County Tourism Bureau, worked to promote tourism within the community and visitors to Dominion's Nuclear Information Center. In September, she will join the Surry County Tourism Advisory Committee.

**Anderson English** is a new addition to the Mechanical Engineering department at VCU. He received his Associates in Engineering from John Tyler Community College in 2016 and is currently a Junior in the Mechanical and Nuclear Engineering program. He hopes to work in fuel manufacturing or core design. Some of his interests include mountain-biking and gaming.



**Dr. Braden Goddard** is an Assistant Professor in the Department of Mechanical and Nuclear Engineering at Virginia Commonwealth University and is the principal investigator for the Nuclear Security and Nonproliferation Laboratory at VCU. Dr. Goddard has over 5 years of domestic and international experiences in industry, national laboratories, and academia. His research interests include nuclear security and nonproliferation, with a focus on radiation detection and measurements. Dr. Goddard is a member of the Institute for Nuclear Materials Management Strategic Planning Committee and is a World Institute for Nuclear Security certified Nuclear Security Professional.



**Eugene S. Grecheck** is Principal of Grecheck Consulting LLC. He provides management and technical consulting to the nuclear industry, with emphasis on performance improvement, regulatory issues, and developing and integrating emerging technologies. He is also the Immediate Past President of the American Nuclear Society, representing nearly 11,000 worldwide members active in nuclear science and technology. Under his leadership, ANS has taken an active role, both in the US and internationally, in informing stakeholders of the vital role existing, and future advanced, reactors must play in meeting the world's growing energy needs in an environmentally responsible manner.



He retired from Dominion Nuclear in late 2013, following more than 38 years with the company. His career there included a wide variety of leadership positions at the company's nuclear stations as well as the corporate offices. He served as Plant Manager at North Anna, Site Vice President at Surry and Vice President of Nuclear Operations at Millstone. He led Dominion's new plant development activities for over a decade, including the submittals of the Early Site Permit and Combined Operating License applications for the proposed North Anna 3 project. He was also responsible for support services for the entire Dominion nuclear fleet, including training, security, emergency planning, and licensing, as



well as all engineering support for the fleet, including systems, programs, design, project management, safety analysis and nuclear fuels.

Grecheck received a bachelor's degree in physics and a master's degree in nuclear engineering from Rensselaer Polytechnic Institute, as well as an MBA from Virginia Commonwealth University. He also completed The Executive Program at the Darden Graduate School of Business at the University of Virginia. He is an affiliate faculty member of the VCU Department of Mechanical and Nuclear Engineering and a member of the Strategic Advisory Council for the Department of Mechanical, Aerospace and Nuclear Engineering at Rensselaer Polytechnic Institute.

Grecheck is an affiliate faculty member of the VCU Department of Mechanical and Nuclear Engineering and is Chair of the Strategic Advisory Council for the Department of Mechanical, Aerospace and Nuclear Engineering at Rensselaer Polytechnic Institute. He has previously served as Chairman of the Nuclear Energy Institute New Plant Working Group and member of the NEI New Plant Oversight Committee. He also represented the United States on the Senior Industry Advisory Panel for the Generation IV International Forum, and has participated on numerous advisory and oversight boards for the US Department of Energy, national laboratories, academic institutions, and nuclear technology suppliers. He also currently serves as the Chairman of the Board of Generation Atomic, a grass roots nuclear advocacy organization.

**Dr. Brian J. Gullekson** is a post-doctoral researcher in the Mechanical and Nuclear Engineering Department at VCU. His research includes incorporating public perceptions into a decision making model for ultimate nuclear fuel use and disposal options. He received a Ph.D. from Oregon State University in Nuclear Engineering with a minor in chemistry, an M.S. in nuclear engineering from Oregon State University, and a B.S. in chemical engineering from UMass-Lowell. His previous research involved analytical chemical research of molecular interactions for nuclear fuel reprocessing. His academic interests involve all aspects of the back end of the nuclear fuel cycle, from disposal



pathways, to chemical reprocessing, to legal and political resolution for disposal in the United States. His personal interests include playing and watching sports and obscure athletics, playing the bass guitar, and travelling.

**John Harrell** is currently Dominion Energy's Manager of Nuclear Safety Engineering. His organization is responsible for reactor core and nuclear plant system thermal/hydraulic design, safety analysis, and probabilistic risk assessment for Dominion Energy's nuclear fleet (North Anna, Surry, and Millstone Power Stations). His technical background is in nuclear safety analysis methods development, engineering analysis, licensing, and station support in the areas of reactor core thermal/hydraulic design, reload safety evaluation, accident analysis, containment analysis, and resolution of as-found conditions for safety-related systems, structures, and components. He previously served in various management positions in Dominion Energy's corporate Nuclear Engineering and Fuel organization, and as Manager of Engineering Programs at North Anna Power Station. He has Bachelor's and Master's degrees in Nuclear Engineering from the University of Virginia, and a Master's degree in Business Administration from the University of Richmond.



**W. Reed Johnson** graduated from the Virginia Military Institute with a BS in Physics in 1953, completed a year-long course in nuclear engineering at the Oak Ridge School of Reactor Technology, and in 1962 was awarded the D.Sc in Engineering Physics from UVA. From 1954-57 he worked in the nuclear submarine program, and on the Army Package Power Reactor. He was Project Engineer for the UVA Research Reactor and from 1962-64 Director for the Philippine Research Reactor. Reed was associated with the UVA Nuclear Engineering Program from its beginning in 1957 until the program was ended in 1998. He developed and taught graduate offerings in radiation shielding, nuclear power plant safety and nondestructive testing. >From 1974



until 1991, Reed was a member of the Atomic Safety and Licensing Appeal Panel resolving technical and legal issues in licensing many of the nation's nuclear power plants. Reed has been associated with the Science of Nuclear Energy and Radiation course for Middle and High School science teachers since its inception in the early 1980s.

**Matt Kellam** is the Military and Recruitment Program Coordinator for Dominion. With over 19 years of staffing and workforce development experience, Matt has lead teams specializing in technical staffing, military and veteran recruitment, college and university relations, student employment and scholarship programs, building partnerships with community and civic organizations, and more. In collaboration with educational, industry and government partners, Matt and his teams are responsible for establishing educational and career pathways into the Energy and Power industry.



Throughout his career, Matt has been recognized and awarded for his recruiting efforts and for his commitment to diversity and inclusion. He is a member of several of organizations and councils and holds leadership roles with a few of these groups. These groups and roles include the Center for Energy Workforce Development, Virginia Energy Workforce Consortium (chairperson), Virginia Nuclear Energy Consortium (workforce committee member), Virginia Values Veterans (inter-agency advisory council and steering committee member), Virginia Business Leadership Network (board member), Dominion Veterans Network / Employee Resource Group (advisor), and John Tyler Community College's Partnership to Ensure Educational Reform (PEER) Consortium (steering committee member).

Matt served in the United States Marine Corps Reserves for 6 years. He attended Virginia Commonwealth University and studied Mass Communications – Public Relations. Matt and his wife have two daughters and they reside in Richmond, VA.



**Dana Knee** has 23 years of experience in PWR and BWR safety analysis and licensing, specializing in reactor, system, and containment thermal-hydraulics. Since June 2010, Dana has supervised Dominion Energy's Nuclear Safety Analysis Applications engineering team, which is responsible for establishing and maintaining the bounding conditions of safe operation for the company's nuclear units and for evaluating complex plant operational issues (e.g., core power distribution anomalies, plant transient response, and boron dilution events). Dana represents Dominion Energy on industry groups including the PWR Owners Group Analysis Committee and EPRI focus teams that respond to NRC rulemaking and regulatory guidance document changes involving nuclear fuel and safety analysis.



Dana was the 2008-09 Chair for the Virginia Section of the American Nuclear Society (VA-ANS) and has been a Member-at-Large on the VA-ANS Executive Committee. Dana is active in public education on nuclear science and technology applications through ANS, including speaking appearances at Richmond-area schools, VAIS teacher conferences, and VA-ANS Science Teacher Workshops.

Dana received a Bachelor of Science in Nuclear Engineering and Engineering Physics from the University of Wisconsin in December 1993, a Masters in Business Administration from Virginia Commonwealth University in December 2007, and a Virginia Professional Engineer license in 2001.

**Greg Meinweiser** has worked at Dominion in the Nuclear Engineering and Fuel department for the past year. He is a Nuclear Safety Analysis Design Engineer who works to maintain and develop the bounding conditions of safe operation of all of Dominion's operating nuclear units. Previously, he worked with TerraPower on advanced nuclear instrumentation and control, PID control systems,



and nuclear power plant system physical and computational modeling research at the University of Tennessee. Greg graduated from the University of Tennessee with a Bachelor's and Master's degrees in Nuclear Engineering with a Certificate in Maintainability and Reliability and a minor in Business Administration.

**James Miller** holds a B.A. degree in physics from Shippensburg University and a M.S. degree in nuclear engineering from the Pennsylvania State University. He has also completed graduate work in astrophysics at the University of Maryland and Penn State, and is a veteran of the U.S. Navy. He worked as a nuclear engineer for 36 years in the Nuclear Analysis and Fuel department of Dominion Virginia Power. He is presently an assistant professor in the Department of Mechanical and Nuclear Engineering at Virginia Commonwealth University where he has taught courses in introductory nuclear engineering, reactor theory, the nuclear fuel cycle, nuclear power plants, computer modeling and simulation, thermodynamics, and the economics of nuclear power.



**Maria Molina Higgins** is a third year student of the mechanical and nuclear engineering PhD program at VCU. She synthesizes nanomaterials using ionizing radiation such as Gamma Rays and X rays. Additionally, her research involves the manufacturing of novel nanostructures that enhance the sensitivity of tissue to radiation therapy in clinical applications. Maria is an active member of the American Nuclear Society (ANS) chapter at VCU and an AAUW fellow.



**Karthik Mummidi** is a Research Assistant in Mechanical and Nuclear Engineering. Karthik's work includes developing and maintaining "My Footprint Calculator". His research focuses on calculating the environmental impact of individual's everyday activities. Karthik is a graduate of Virginia Commonwealth University (VCU) where he received his master's degree in Mechanical and Nuclear Engineering in May 2017. His interests include hiking, cooking and traveling.



**Supathorn Phongikaroon** earned his PhD and BS degrees in chemical engineering and nuclear engineering from University of Maryland, College Park in 2001 and 1997, respectively.

Prior joining the Virginia Commonwealth University (VCU) in January 2014, he held academic and research positions at University of Idaho in Idaho Falls, ID; Idaho National Laboratory in Idaho Falls, ID; and Naval Research Laboratory, Washington, D.C. During his research career, Dr. Phongikaroon has established chemical and electrochemical separation of used nuclear fuel through pyroprocessing technology and extended his expertise toward material detection and accountability in safeguarding applications. These developments include kinetics in ion exchange process, advanced chemical separation routines via cold fingers and zone freezing, electrochemical methods, laser induced breakdown spectroscopy, and computational modeling for electrorefiner. This effort has led to establishing a strong Radiochemistry and Laser Spectroscopy Laboratories at VCU. Dr. Phongikaroon's work has been published in over thirty papers in peer-reviewed journals and presented at over fifty international and national conferences and workshops.



**Catie Pittman** currently works as the Online Engineering Coordinator at Dominion Energy's North Anna Power Station (NAPS). Starting with the company in 2014, she previously worked as the Emergency Diesel Generator System Engineer and was also the Equipment Reliability Program Coordinator. She is the Co-Chapter Lead of the Dominion Energy – North Anna chapter of North American Young Generation in Nuclear (NAYGN), a group dedicated to providing opportunities for a young generation of nuclear enthusiasts to develop leadership and professional skills, and engaging and informing the public about Nuclear Science and Technology. Catie graduated with her Bachelor of Science in Chemical Engineering from Brown University in 2014 where she competed all four years in swimming.



**Michael Purdue** has worked in the nuclear industry for 8 years. The first five-plus years were spent at the U.S. Nuclear Regulatory Commission in Rockville, MD. At the NRC, Mike worked on Environmental Impact Statements for new reactor licensing, decommissioning funding assurance for nuclear plants, and rulemaking. For over two years, Mike worked at the Nuclear Energy Institute in Washington D.C. as NEI's Manager of Energy and Economic Analysis. At NEI, he maintained much of the industry's data that is used to advance the nuclear industry's policies. He also wrote economic benefits reports for many nuclear plants. He also spent time as a member of NAYGN (North American Young Generation in Nuclear). Since June, Mike has been employed at Dominion as an Electricity Market Policy Consultant where he represents Dominion in electricity market policy formulation most notably in New England.



He has a BA in Economics, History, and Political Science from the University of Pittsburgh and an MA in Applied Economics from Johns Hopkins University.

**Paul Riley** is a certified nuclear medicine technologist and nuclear cardiology technologist. He has 11 years' experience and 10 years' experience teaching at VCU's Nuclear Medicine Technology Program. He routinely performs continuing education lectures for the profession.



**David Sanderson** has worked in the nuclear power field for almost fifty years. He participated in the Navy nuclear power program, and served on the USS Enterprise. He went to work for Vepco (now Dominion) at Surry Power Station in 1971 as an operator. He has held Reactor Operator and Senior Reactor Operator licenses. After a few years, he moved into the Training Department and works as an Operations instructor until his retirement in 2010. He has since worked as a contractor in projects involving nuclear fuel manufacturing, post-Fukushima modifications, and cyber security.





**Carl Tarantino**, certified by the National Registry of Radiation Protection Technologists (NRRPT) and the American Board of Health Physics (ABHP), is recently retired, and a Health Physics consultant providing radiological/industrial safety evaluations, groundwater protection program assessments, and training services. Carl was employed by Dominion Resources for 33 years as a Power Reactor Health Physicist. Carl obtained his BA in Biology from St. John Fisher College, Rochester, NY and then commissioned in the US Navy's Medical Service Corps as a Radiation Health Officer, serving with the Navy's Environmental Health Center. Carl received his Masters of Science in Health Physics from the University of Florida's Environmental Engineering Program, Gainesville, and FL. and his MBA from Averett University, Danville, VA.

An active plenary member of the national Health Physics Society (HPS) since 1981, Carl has served on many committees, its Board of Directors, and a delegate at the 2012 International Radiation Protection Association (IRPA) meeting in Glasgow, Scotland. Carl has been an active member of his local Virginia chapter since 1983, (Past President and Central Council Person), and member of the Virginia section, American Nuclear Society since 1998. Carl has a passion for teaching Nuclear Science, mentoring new young health physicists, and promoting career opportunities in Health Physics.



**Daniell Tincher** is a Ph.D. student in the Mechanical and Nuclear Engineering Department at VCU and a DOE NEUP Fellow. His research focuses on real-time, event-driven modeling and simulation of nuclear power plants to engage nuclear engineering students and improve the efficiency of nuclear power plant studies. Prior to attending VCU, Daniell worked as a mechanical engineer in the Reactor Plant Planning Yard at Newport News Shipbuilding, in Newport News, VA. He performed engineering studies to improve performance and/or reduce operational and maintenance costs of aircraft carrier reactor plant fluid systems. Daniell received a master's degree in nuclear engineering from the University of South Carolina in 2010. His thesis examined the feasibility of minor





actinide transmutation in light water reactors to reduce the burden of high level waste, and he co-authored a paper regarding this work. Daniell received his bachelor's degree in physics from Presbyterian College in Clinton, SC in 2007.

**Nicole Waugh** is a Probabilistic Risk Assessment (PRA) engineer for Dominion Energy. Nicole's work includes maintaining and building PRA models for Surry and North Anna Power Station and performing risk informed applications. She has been working in PRA since January of 2016 and before that she was an intern in PRA for Dominion Energy since September of 2014. Nicole also interned in Nuclear Core Design at Dominion Energy and interned at Duke Energy in Primary Systems Engineering at McGuire Nuclear Power Station. Nicole is the current Vice-Chair of the Virginia Section of the American Nuclear Society and she previously served as the Secretary of the Virginia Section of the American Nuclear Society for the past two years. Nicole is a graduate of Virginia Commonwealth University where she received her B.S. in Mechanical Engineering with a Nuclear Concentration in December of 2015.



**Keith Welch** is a health physicist with 35 years' experience in radiation protection. He is currently the deputy manager of the radiation control department at Thomas Jefferson National Accelerator Facility, where he has worked for 24 years. Prior to working in accelerator health physics, he worked as a technician, supervisor and technical trainer at a commercial nuclear power station. He began his radiation safety career as a radiation control technician supporting overhaul and refueling of naval nuclear power plants. Keith is a Certified Health Physicist and registered Radiation Protection Technologist. Keith has a B.S. degree in technical management and a Master's degree in health physics.



**Christopher Wells** is a graduate of the University of Florida with BS and MS degrees in Nuclear Engineering. Since 2000 he has worked at Dominion Energy doing Methods Development work in the Nuclear Core Design group. His duties include development of reactor physics methodologies, computer software design for reactor physics applications, startup physics testing, and flux map analysis. Chris is currently working with industry partners on a multi-year effort to license the next generation of advanced reactor physics tools with the Nuclear Regulatory Commission. Chris enjoys discussing nuclear subjects with students of all ages and has participated in speaking engagements at Richmond area schools and Science Museum of Virginia events.



**Nick Wilson** currently works in Dominion's Nuclear Engineering & Fuel (NEF) department in the Fuel Project Engineering group. Previously, he worked in the Nuclear Core Design group, starting with the company in 2013. In addition to his normal work duties, Nick leads the NEF department's University Partnership program helping to recruit prospective students and maintain relationships with universities. Nick is also the President of the Dominion-Innsbrook chapter of North American Young Generation in Nuclear (NAYGN). He graduated with his Bachelor of Science from Purdue University in Nuclear Engineering in 2013. Currently he is enrolled at North Carolina State University pursuing a Master of Nuclear Engineering and at Averett university pursuing a Master of Business Administration. While attending Purdue, Nick was an active member of Purdue's local ANS chapter and an ambassador for the Purdue Professional Practice Program.



Nick obtained a B.S. in Physics from Florida State University in 2014. He was a member of the condensed matter physics high pressure research group at the National High Magnetic Field Laboratory in Tallahassee, FL for three years before coming to VCU for graduate studies. He is currently a PhD student in the Mechanical and Nuclear Engineering department and conducts research on liquid metal electrodes for used nuclear fuel fission product recovery under the direction of Dr. Supathorn Phongikaroon.

**Michael Woods** obtained a B.S. in Physics from Florida State University in 2014. He was a member of the condensed matter physics high pressure research group at the National High Magnetic Field Laboratory in Tallahassee, FL for three years before coming to VCU for graduate studies. He is currently a PhD student in the Mechanical and Nuclear Engineering department and conducts research on liquid metal electrodes for used nuclear fuel fission product recovery under the direction of Dr. Supathorn Phongikaroon.



**Connie Wooldridge** was an instructor in Henrico County at the Advanced Career Education Center at Highland Springs. She taught the High Tech Academy program from 2003-2016. Each year she taught VCU Chemistry, VCU Calculus, VCU Pre-Calculus, Engineering Explorations I, and Engineering Studies. Connie studied theatre and chemistry at Mary Baldwin College before getting a master in chemistry at Louisiana State University. She completed her education with a master in Mechanical and Nuclear Engineering at Virginia Commonwealth University. This year, she is excited to take some time off to be with her 3-year-old daughter.

