Special Thanks

Dr. Clive A. Randall
Director, Materials research Institute
Technical Advisor, Center for Dielectrics & Piezoelectrics
Professor, Materials Science & Engineering

Planning Committee

Kathleen A. Gehoski
Materials Research Institute
Research and Development Engineer
Outreach Coordinator
kag31@psu.edu

David L. Fecko
Materials Research Institute
Industry Relations Coordinator
dlf5023@psu.edu

Kristin A. Dreyer
MRSEC—Center for Nanoscale Science
Program Director for Education and Outreach
kad4@psu.edu

Dr. Tiffany A. Mathews
MRSEC—Center for Nanoscale Science
Program Co-Director for Education and Outreach
tam276@psu.edu

Diversity in STEM: Materials and Strategies for Success

October 23, 2018
Welcome to The Materials Research Institute Diversity in STEM Workshop

Growth and comfort do not co-exist.

-Ginni Rometty, CEO IBM

Agenda

10:00 am  Welcome: Dr. Marcus Whitehurst,  
            Vice Provost for Education Equity

10:15 am  My Life in Science-Why Diversity Matters  
            Dr. Linda Sapochak, Division Director  
            National Science Foundation, Division of  
            Materials Research

10:45 am  Table Discussions

12:00 pm  Lunch & Short Talk: Pallavi Eswara,  
            Director, The Office of Postdoctoral Affairs

1:00 pm  Panel Discussion:  
            Facilitator, Dr. Eric Hudson,  
            Director of Education, Outreach, and Diversity  
            Programs 2DCC-MIP  
            MRSEC Diversity Committee Chair  
            Associate Professor of Physics  
            Associate Head for Diversity & Equity

2:00 pm  Networking Opportunity

3:00 pm  Program End
Table Hosts

Mr. Ayodele (Ayo) Duyile  
Dr. Aida Ebrahimi  
Dr. Wayne M. Gersie  
Dr. Enrique Gomez  
Dr. Maureen L. Mulvihill  
Dr. Tonya Peeples  
Dr. Joan Redwing  
Dr. Victoria Sanchez  
Dr. Linda Sapochak  
Dr. Samia A. Suliman  
Ms. Nichole Wonderling  
Dr. Lauren Zarzar  

Luncheon Speaker

Ms. Pallavi Eswara  

Panelists

Dr. Eric Hudson (facilitator)  
Dr. Ismaila Dabo  
Dr. Inanllely (Ina) Gonzalez  
Dr. Tonya Peeples  
Dr. Karen A. Thole  

Panelist

Dr. Karen A. Thole is a Distinguished Professor and Head of the Department of Mechanical and Nuclear Engineering at The Pennsylvania State University. She is the founder of the Steady Thermal Aero Research Turbine Laboratory (START) lab, which focuses on gas turbine heat transfer and is a center of excellence for a major turbine engine manufacturer. She has published over 220 archival papers and advised 70 dissertations and theses. She is currently on the ASME Board of Governors, which is the governing body of ASME. She is an ASME Fellow and was recently elected as an AIAA Associate Fellow. Dr. Thole co-founded the Engineering Ambassador Network, which is a professional development program with an outreach mission and it includes 20 institutions across the United States. She was recently recognized as SWE’s 2014 Distinguished Engineering Educator and in 2015 with ASME’s George Westinghouse Gold Medal and the Edwin F. Church Medal for Mechanical Engineering Education. In 2017, she received ABET’s Claire L. Felbinger Award for Diversity. She holds two degrees in Mechanical Engineering from the University of Illinois, and a PhD from the University of Texas at Austin.  
kthole@engr.psu.edu
Contributing Diversity Officers

Eberly College of Science
Dr. Kristin Finch
Mr. Artemio Cardenas

College of Engineering
Dr. Tonya Peeples

College of Earth & Mineral Sciences
Dr. Victoria Sanchez
Mr. James Guyton

Office of Graduate Educational Equity Programs
Dr. Stephanie Preston
Dr. Tierra Caldwell

Penn State Applied Research Lab
Dr. Wayne Gersie
Ms. Dara Sanoubane

Featured Guest and Table Host

Dr. Linda Sapochak

Dr. Linda Sapochak is the Division Director for the Division of Materials Research (DMR) at NSF. She has worked in DMR since 2008 as Program Director for the Solid State and Materials Chemistry (SSMC) program (5 years), for the Materials Research Science and Engineering Center (MRSEC) program in 2014, and as Deputy Division Director in 2015. Dr. Sapochak also served as the Acting Deputy Division Director in the Chemistry Division in 2013 and 2014. She has managed additional projects including the Emerging Frontiers in Research and Innovation: Green Sustainable Buildings, Sustainable Energy Pathways, and I-Corps. Prior to her position at NSF, she was an Assistant Professor in the Chemistry Department at the University of Nevada Las Vegas. She later accepted a position at Pacific Northwest National Laboratory, a DOE national lab in the Energy and Efficiency Division to develop organic and inorganic electronic materials for solid state lighting applications. She has over 50 scientific publications and 16 patents.
**Panelist**

Dr. Tonya Peeples

Dr. Tonya Peeples joined the Pennsylvania State University in 2018 as the first Associate Dean for Equity and Inclusion. Prior to joining Penn State, she served as Associate Dean for Diversity and Outreach, Associate Director of the University of Iowa Center for Biocatalysis and Bioprocessing (CBB), and Professor of Chemical and Biochemical Engineering at the University of Iowa. She earned her Ph. D. in chemical engineering from Johns Hopkins University. Throughout her career Dr. Peeples has been an active member of the CBB research community, serving as a member of the NIH training grant coordinating committee and as a member of the CBB executive board. Dr. Peeples has taught numerous courses on biochemical engineering and bioprocessing topics. Dean Peeples has also played a key role in advancing diversity and promoting opportunities for all students to pursue education and careers in Science Technology Engineering and Mathematics (STEM). She has advanced opportunities for students as an individual researcher and administrator and through her work in national partnerships. She is a member of the leadership team for a new NSF INCLUDES ALLIANCE, Aspire: The National Alliance for Inclusive and Diverse STEM Faculty (NAIDSF).

tzp225@engr.psu.edu

---

**Table Host**

Mr. Ayodele (Ayo) Duyile

Mr. Ayodele (Ayo) Duyile received his Bachelor of Science from Temple University. His major was Computer Science and his minor General Business Studies. Duyile went to Drexel University and earned a Master of Science in Project Management. He has been with Lockheed Martin since 2015 working as a Software Engineer.

Ayodele.duyile@lmco.com
**Table Host**

![Dr. Aida Ebrahimi](image1.png)

**Dr. Aida Ebrahimi** received her BSc and MSc degrees from University of Tehran, Iran, and PhD degree from Purdue University, all in Electrical and Computer Engineering. Since 2017, Ebrahimi has been an Assistant Professor of the Department of Electrical Engineering and an IGDP faculty of Materials Science and Engineering and Biomedical Engineering at Pennsylvania State University. Prof. Ebrahimi’s research interests include point-of-care platforms for healthcare and environmental monitoring, study/functionlization/application of 2D materials for biochemical sensing, and study of cellular biophysics using lab-on-chip platforms. Ebrahimi is a recipient of the Bilsland Dissertation Fellowship Award, Rising Star in EECS, and Meissner Fellowship Award. She is a member of the IEEE Electron Device Society (EDS), the IEEE Engineering in Medicine and Biology Society (EMBS), the Biomedical Engineering Society (BMES), and the American Physical Society (APS).

sue66@engr.psu.edu

---

**Panelist**

![Dr. Inanllely (Ina) Gonzalez](image2.png)

**Dr. Inanllely (Ina) Gonzalez** is a first-generation college graduate who was born in the Dominican Republic and moved to the United States at the age of fourteen. After a challenging journey of adapting to a new school, language, and culture, she pursued a science education at the City College of New York (CCNY), where she was an undergraduate researcher under the mentorship of Prof. Kevin Ryan. In the spring of 2012, Ina received a Bachelor of Science in Chemistry (with a French minor) from CCNY and later that year she started her graduate work at the Pennsylvania State University under the guidance of Prof. Ken Feldman; she completed a PhD in Organic Chemistry in the spring of 2017. Ina began her industrial career at PPG a year and half ago, where she is focusing on the synthesis of novel small molecules and polymers for different coatings application.

I.Gonzalez@ppg.com
Dr. Ismaila Dabo received his B.S. and M.S. in Mechanical Engineering from Ecole Polytechnique (France) in 2002 and 2004. He graduated with a Ph.D. in Materials Science and Engineering from the Massachusetts Institute of Technology (MIT) in 2008. His doctoral research under the supervision of Dr. Marzari was dedicated to predicting the electrical response of quantum systems embedded in electrochemical environments and to studying chemical poisoning in low-temperature fuel cells. After graduation, Ismaila Dabo became a postdoctoral researcher and then a permanent researcher at Ecole des Ponts, University of Paris-Est (France). He joined the Department of Materials Science and Engineering at Penn State in 2013.

ixd4@psu.edu

Dr. Wayne M. Gersie has been working with Penn State's diverse student body since 1998 in both a recruiting and retention capacity. He currently is the Director of Diversity Enhancement and Student Programs at the Applied Research Laboratory. He earned his bachelor's degree in Exercise & Sports Science, master's degree in Counselor Education and Ph.D. in Workforce Education and Development-Training and Human Resource Development all from Penn State University. Wayne was born in Paramaribo, Suriname before moving to Brooklyn, New York. He is fluent in three languages.

I strongly believe in the mission of the Multicultural Resource Center (MRC), because I am living proof of what impact its services can have on students. When I came to Penn State as a naïve freshman, I was fortunate to have the MRC staff as a resource to assist me in navigating through the challenges I faced. I think it is crucial for students to take advantage of the extensive resources available to them here at Penn State. Taking advantage of these resources ensures academic success which ultimately leads to graduation.

wmg109@arl.psu.edu
**Table Host**

**Dr. Enrique Gomez**

Dr. Enrique Gomez received his bachelor’s degree in Chemical Engineering from the University of Florida and his Ph.D. in Chemical Engineering from the University of California, Berkeley. Gomez is a professor in the Department of Chemical Engineering and materials Science and Engineering at Penn State University. The Gomez Group Lab focuses on understanding the role of structure on the electrical properties of complex soft matter. To this end, the lab combines synthesis capabilities, characterization tools such as X-ray scattering and electron microscopy, and in-house device fabrication and testing. A strong focus of the lab is examining the structure and structural evolution, both from equilibrium and non-equilibrium perspectives. Gomez holds 5 US patents and over 100 publications.
edg12@psu.edu

**Panelist Facilitator**

**Eric Hudson**

Dr. Eric Hudson is an associate professor in the Department of Physics. His research program focuses on atomic scale investigations of complex materials, such as high-temperature superconductors and topological insulators, as well as low dimensional systems, like graphene, using scanning probe microscopy techniques. Dr. Hudson primarily teaches introductory physics and pedagogy courses. He is passionate about improving science teaching and communication, and works with groups like the Center for Excellence in Science Education (CESE) to teach workshops for undergrads through faculty. He is also an ardent supporter of broadening participation in STEM, and serves as the Associate Department Head for Equity and Diversity in the Department of Physics and as the Director of Outreach and Diversity for two Penn State NSF centers, the Center for Nanoscale Science (a MRSEC) and the 2D Crystal Consortium (a Materials Innovation Platform).
ewh10@psu.edu
Pallavi Eswara

Pallavi Eswara is the Director of the Office of Postdoctoral Affairs. In this role, she designs and executes a curriculum of professional and career development workshops and seminars for postdocs and assistant research professors. She is also a part of the Big Ten Academic Alliance grants through NSF to promote diversity in STEM disciplines at the faculty level and NIH to train biomedical postdocs in grant writing and faculty to be grant writing and mentoring coaches. She has held leadership positions in local school boards and National Postdoc Association (NPA). She currently serves as a member of International Postdoc Taskforce at NPA and in the committees of Graduate Career Consortium. Eswara obtained her master’s in human Genetics from University of Michigan and a Masters in Biotechnology from University of Hyderabad, India. She has worked in research areas of molecular genetics and bioinformatics before joining higher education administration.
pxe10@psu.edu

Dr. Maureen L. Mulvihill

Dr. Maureen L. Mulvihill, President and CEO of Actuated Medical, Inc. (AMI), is an innovator who focuses on strong corporate culture and vision of improving patient outcomes. She is an out-of-the box thinker that has used many sources of financing to grow Actuated. Over the last 11 years, she has transitioned AMI from a concept-prototype company to a fully-integrated medical device company. Recognized for her entrepreneurial leadership, Maureen is an alumni of the Goldman Sachs 10k Small Business program and has been a Finalist for the Ernst and Young Entrepreneur of the Year® Award twice. Maureen was a 2017 US Delegate to the Global Entrepreneurship Summit in Hyderabad, India. She received her Ph.D. from Penn State University.
Maureen.Mulvihill@actuatedmedical.com
Dr. Tonya Peeples joined the Pennsylvania State University in 2018 as the first Associate Dean for Equity and Inclusion. Prior to joining Penn State, she served as Associate Dean for Diversity and Outreach, Associate Director of the University of Iowa Center for Biocatalysis and Bioprocessing (CBB), and Professor of Chemical and Biochemical Engineering at the University of Iowa. She earned her Ph. D. in chemical engineering from Johns Hopkins University. Throughout her career Dr. Peeples been an active member of the CBB research community, serving as a member of the NIH training grant coordinating committee and as a member of the CBB executive board. Dr. Peeples has taught numerous courses on biochemical engineering and bioprocessing topics. Dean Peeples has also played a key role in advancing diversity and promoting opportunities for all students to pursue education and careers in Science Technology Engineering and Mathematics (STEM). She has advanced opportunities for students as an individual researcher and administrator and through her work in national partnerships. She is a member of the leadership team for a new NSF INCLUDES ALLIANCE, Aspire: The National Alliance for Inclusive and Diverse STEM Faculty (NAIDSF).

tzp225@engr.psu.edu

Dr. Lauren Zarzar attended the University of Pennsylvania, earning bachelor's degrees in Chemistry and Economics. Subsequently, she attended graduate school at Harvard University in the Department of Chemistry and Chemical Biology and received both the NSF Graduate Research Fellowship and the NDSEG Fellowship. During the summers of graduate school, Lauren worked at the Advanced Materials Laboratory of Sandia National Laboratories investigating multiphoton patterning of responsive gels and nanocrystalline metals. As a postdoctoral associate at MIT, she developed complex multiphase emulsions that are dynamically reconfigurable and responsive to external stimuli. She is currently an assistant professor and the Virginia S. and Philip L. Walker Faculty Fellow at The Pennsylvania State University in the Department of Materials Science and Engineering and the Department of Chemistry. She was recently awarded the 3M Non-Tenured Faculty Award and the Army Research Office Young Investigator award. Her research is focused on the study of active materials that are adaptive and functional as well as on the use of laser direct writing for inorganic materials synthesis and deposition.

ldz4@psu.edu
Ms. Nichole Wonderling is the manager of the Materials Characterization Laboratory’s X-ray scattering, particle, and thermal laboratories. She started at Penn State in 2000 in the former Materials Research Laboratory after a research and development position at the North American Refractories Technical Center in State College, PA. Her research interests include powder diffraction, micro diffraction, high resolution diffraction, Laue diffraction, X-ray reflectometry, small angle X-ray scattering, X-ray fluorescence, non-ambient crystallization and phase identification/transformation studies, quantitative phase analysis via Rietveld and whole pattern fitting methods, and structure and orientation determinations.

nmw10@psu.edu

Dr. Joan Redwing received her B.S. in Chemical Engineering from the University of Pittsburgh and her Ph.D. in Chemical Engineering from the University of Wisconsin-Madison. After receiving her Ph.D., she was employed as a research engineer at Advanced Technology Materials, Inc. where she worked on the development of group III-nitride materials and devices. Dr. Redwing joined the faculty of the Department of Materials Science and Engineering at Penn State University in 2000. She holds appointments in the Department of Electrical Engineering and the Department of Chemical Engineering at Penn State and is a member of the Materials Research Institute. Dr. Redwing’s research interests are in the general area of electronic materials synthesis and characterization with a specific emphasis on semiconductor thin film, nanowire and 2D materials fabrication by chemical vapor deposition. She currently serves as secretary of the American Association for Crystal Growth and is an associate editor for the Journal of Crystal Growth and the Journal of Materials Research. She is a co-author on over 250 publications in refereed journals and holds 8 U.S. patents.

jmr31@psu.edu
Dr. Victoria Sanchez  Associate Dean of Educational Equity in Earth and Mineral Sciences. Previously, Sanchez served as Assistant Vice Provost for Educational Equity in the Office of the Vice Provost for Educational Equity, a role she held for more than eight years. In total, Sanchez has served in various roles at Penn State for over 20 years. As Associate Dean, Sanchez hopes to help the college excel as part of the Millennium Scholars program, which is focused on encouraging undergraduate students to pursue advanced degrees in fields related to science, technology, engineering and mathematics. Recruiting and retaining students from diverse backgrounds is a practice she emphasizes. Sanchez earned her bachelor’s degree in English and Mass Communication from the University of Louisiana in 1988; her master’s degree in English from Ohio State University in 1990; and her doctorate in English from Ohio State University in 1995.
vxs20@psu.edu

Dr. Samia A. Suliman  Assistant Professor, Engineering Science and Mechanics. Materials research Institute. She earned her bachelor’s in Physics from Imperial College of Science, master’s in Solid State Physics from Khartoum University, master’s in Electrical Engineering from Southern Illinois University, and her Ph.D. in Engineering Science from Penn State. In addition to teaching engineering mechanics courses she teaches foundational and advanced nano-micro electronics courses. Her research area is power semiconductor devices. She is a member of ASEE, IEEE, NSBE, AAUW. Suliman frequently contributes and participates with the Enhance Equal Opportunity/Cultural Diversity programs at Penn State.
sas178@psu.edu
Dr. Victoria Sanchez  Associate Dean of Educational Equity in Earth and Mineral Sciences. Previously, Sanchez served as Assistant Vice Provost for Educational Equity in the Office of the Vice Provost for Educational Equity, a role she held for more than eight years. In total, Sanchez has served in various roles at Penn State for over 20 years. As Associate Dean, Sanchez hopes to help the college excel as part of the Millennium Scholars program, which is focused on encouraging undergraduate students to pursue advanced degrees in fields related to science, technology, engineering and mathematics. Recruiting and retaining students from diverse backgrounds is a practice she emphasizes. Sanchez earned her bachelor’s degree in English and Mass Communication from the University of Louisiana in 1988; her master’s degree in English from Ohio State University in 1990; and her doctorate in English from Ohio State University in 1995.

vxs20@psu.edu

Dr. Samia A. Suliman  Assistant Professor, Engineering Science and Mechanics. Materials research Institute. She earned her bachelor’s in Physics from Imperial College of Science, master’s in Solid State Physics from Khartoum University, master’s in Electrical Engineering from Southern Illinois University, and her Ph.D. in Engineering Science from Penn State. In addition to teaching engineering mechanics courses she teaches foundational and advanced nano-micro electronics courses. Her research area is power semiconductor devices. She is a member of ASEE, IEEE, NSBE, AAUW. Suliman frequently contributes and participates with the Enhance Equal Opportunity/Cultural Diversity programs at Penn State.

sas178@psu.edu
Ms. Nichole Wonderling is the manager of the Materials Characterization Laboratory's X-ray scattering, particle, and thermal laboratories. She started at Penn State in 2000 in the former Materials Research Laboratory after a research and development position at the North American Refractories Technical Center in State College, PA. Her research interests include powder diffraction, micro diffraction, high resolution diffraction, Laue diffraction, X-ray reflectometry, small angle X-ray scattering, X-ray fluorescence, non-ambient crystallization and phase identification/transformation studies, quantitative phase analysis via Rietveld and whole pattern fitting methods, and structure and orientation determinations.

nmw10@psu.edu

Dr. Joan Redwing received her B.S. in Chemical Engineering from the University of Pittsburgh and her Ph.D. in Chemical Engineering from the University of Wisconsin-Madison. After receiving her Ph.D., she was employed as a research engineer at Advanced Technology Materials, Inc. where she worked on the development of group III-nitride materials and devices. Dr. Redwing joined the faculty of the Department of Materials Science and Engineering at Penn State University in 2000. She holds appointments in the Department of Electrical Engineering and the Department of Chemical Engineering at Penn State and is a member of the Materials Research Institute. Dr. Redwing’s research interests are in the general area of electronic materials synthesis and characterization with a specific emphasis on semiconductor thin film, nanowire and 2D materials fabrication by chemical vapor deposition. She currently serves as secretary of the American Association for Crystal Growth and is an associate editor for the Journal of Crystal Growth and the Journal of Materials Research. She is a co-author on over 250 publications in refereed journals and holds 8 U.S. patents.

jmr31@psu.edu
Dr. Tonya Peeples joined the Pennsylvania State University in 2018 as the first Associate Dean for Equity and Inclusion. Prior to joining Penn State, she served as Associate Dean for Diversity and Outreach, Associate Director of the University of Iowa Center for Biocatalysis and Bioprocessing (CBB), and Professor of Chemical and Biochemical Engineering at the University of Iowa. She earned her Ph. D. in chemical engineering from Johns Hopkins University. Throughout her career Dr. Peeples been an active member of the CBB research community, serving as a member of the NIH training grant coordinating committee and as a member of the CBB executive board. Dr. Peeples has taught numerous courses on biochemical engineering and bioprocessing topics. Dean Peeples has also played a key role in advancing diversity and promoting opportunities for all students to pursue education and careers in Science Technology Engineering and Mathematics (STEM). She has advanced opportunities for students as an individual researcher and administrator and through her work in national partnerships. She is a member of the leadership team for a new NSF INCLUDES ALLIANCE, Aspire: The National Alliance for Inclusive and Diverse STEM Faculty (NAIDSF).

Dr. Lauren Zarzar attended the University of Pennsylvania, earning bachelor’s degrees in Chemistry and Economics. Subsequently, she attended graduate school at Harvard University in the Department of Chemistry and Chemical Biology and received both the NSF Graduate Research Fellowship and the NDSEG Fellowship. During the summers of graduate school, Lauren worked at the Advanced Materials Laboratory of Sandia National Laboratories investigating multiphoton patterning of responsive gels and nanocrystalline metals. As a postdoctoral associate at MIT, she developed complex multiphase emulsions that are dynamically reconfigurable and responsive to external stimuli. She is currently an assistant professor and the Virginia S. and Philip L. Walker Faculty Fellow at The Pennsylvania State University in the Department of Materials Science and Engineering and the Department of Chemistry. She was recently awarded the 3M Non-Tenured Faculty Award and the Army Research Office Young Investigator award. Her research is focused on the study of active materials that are adaptive and functional as well as on the use of laser direct writing for inorganic materials synthesis and deposition.

tzp225@engr.psu.edu

ldz4@psu.edu
**Luncheon Speaker**

**Pallavi Eswara**

Pallavi Eswara is the Director of the Office of Postdoctoral Affairs. In this role, she designs and executes a curriculum of professional and career development workshops and seminars for postdocs and assistant research professors. She is also a part of the Big Ten Academic Alliance grants through NSF to promote diversity in STEM disciplines at the faculty level and NIH to train biomedical postdocs in grant writing and faculty to be grant writing and mentoring coaches. She has held leadership positions in local school boards and National Postdoc Association (NPA). She currently serves as a member of International Postdoc Taskforce at NPA and in the committees of Graduate Career Consortium. Eswara obtained her master’s in human Genetics from University of Michigan and a Masters in Biotechnology from University of Hyderabad, India. She has worked in research areas of molecular genetics and bioinformatics before joining higher education administration.

pxe10@psu.edu

---

**Table Host**

**Dr. Maureen L. Mulvihill**

Dr. Maureen L. Mulvihill, President and CEO of Actuated Medical, Inc. (AMI), is an innovator who focuses on strong corporate culture and vision of improving patient outcomes. She is an out-of-the-box thinker that has used many sources of financing to grow Actuated. Over the last 11 years, she has transitioned AMI from a concept-prototype company to a fully-integrated medical device company. Recognized for her entrepreneurial leadership, Maureen is an alumni of the Goldman Sachs 10k Small Business program and has been a Finalist for the Ernst and Young Entrepreneur of the Year® Award twice. Maureen was a 2017 US Delegate to the Global Entrepreneurship Summit in Hyderabad, India. She received her Ph.D. from Penn State University.

Maureen.Mulvihill@actuatedmedical.com
Dr. Enrique Gomez received his bachelor’s degree in Chemical Engineering from the University of Florida and his Ph.D. in Chemical Engineering from the University of California, Berkeley. Gomez is a professor in the Department of Chemical Engineering and materials Science and Engineering at Penn State University. The Gomez Group Lab focuses on understanding the role of structure on the electrical properties of complex soft matter. To this end, the lab combines synthesis capabilities, characterization tools such as X-ray scattering and electron microscopy, and in-house device fabrication and testing. A strong focus of the lab is examining the structure and structural evolution, both from equilibrium and non-equilibrium perspectives. Gomez holds 5 US patents and over 100 publications. edg12@psu.edu

Dr. Eric Hudson is an associate professor in the Department of Physics. His research program focuses on atomic scale investigations of complex materials, such as high-temperature superconductors and topological insulators, as well as low dimensional systems, like graphene, using scanning probe microscopy techniques. Dr. Hudson primarily teaches introductory physics and pedagogy courses. He is passionate about improving science teaching and communication, and works with groups like the Center for Excellence in Science Education (CESE) to teach workshops for undergrads through faculty. He is also an ardent supporter of broadening participation in STEM, and serves as the Associate Department Head for Equity and Diversity in the Department of Physics and as the Director of Outreach and Diversity for two Penn State NSF centers, the Center for Nanoscale Science (a MRSEC) and the 2D Crystal Consortium (a Materials Innovation Platform). ewh10@psu.edu
Panelist

Dr. Ismaila Dabo received his B.S. and M.S. in Mechanical Engineering from Ecole Polytechnique (France) in 2002 and 2004. He graduated with a Ph.D. in Materials Science and Engineering from the Massachusetts Institute of Technology (MIT) in 2008. His doctoral research under the supervision of Dr. Marzari was dedicated to predicting the electrical response of quantum systems embedded in electrochemical environments and to studying chemical poisoning in low-temperature fuel cells. After graduation, Ismaila Dabo became a postdoctoral researcher and then a permanent researcher at Ecole des Ponts, University of Paris-Est (France). He joined the Department of Materials Science and Engineering at Penn State in 2013.

ixd4@psu.edu

Table Host

Dr. Wayne M. Gersie has been working with Penn State’s diverse student body since 1998 in both a recruiting and retention capacity. He currently is the Director of Diversity Enhancement and Student Programs at the Applied Research Laboratory. He earned his bachelor’s degree in Exercise & Sports Science, master’s degree in Counselor Education and Ph.D. in Workforce Education and Development-Training and Human Resource Development all from Penn State University. Wayne was born in Paramaribo, Suriname before moving to Brooklyn, New York. He is fluent in three languages.

I strongly believe in the mission of the Multicultural Resource Center (MRC), because I am living proof of what impact its services can have on students. When I came to Penn State as a naive freshman, I was fortunate to have the MRC staff as a resource to assist me in navigating through the challenges I faced. I think it is crucial for students to take advantage of the extensive resources available to them here at Penn State. Taking advantage of these resources ensures academic success which ultimately leads to graduation.

wmg109@arl.psu.edu
**Dr. Aida Ebrahimi**

received her BSc and MSc degrees from University of Tehran, Iran, and PhD degree from Purdue University, all in Electrical and Computer Engineering. Since 2017, Ebrahimi has been an Assistant Professor of the Department of Electrical Engineering and an IGDP faculty of Materials Science and Engineering and Biomedical Engineering at Pennsylvania State University. Prof. Ebrahimi’s research interests include point-of-care platforms for healthcare and environmental monitoring, study-functionalization/application of 2D materials for biochemical sensing, and study of cellular biophysics using lab-on-chip platforms. Ebrahimi is a recipient of the Bilsland Dissertation Fellowship Award, Rising Star in EECS, and Meissner Fellowship Award. She is a member of the IEEE Electron Device Society (EDS), the IEEE Engineering in Medicine and Biology Society (EMBS), the Biomedical Engineering Society (BMES), and the American Physical Society (APS).
sue66@engr.psu.edu

**Dr. Inanllely (Ina) Gonzalez**

is a first-generation college graduate who was born in the Dominican Republic and moved to the United States at the age of fourteen. After a challenging journey of adapting to a new school, language, and culture, she pursued a science education at the City College of New York (CCNY), where she was an undergraduate researcher under the mentorship of Prof. Kevin Ryan. In the spring of 2012, Ina received a Bachelor of Science in Chemistry (with a French minor) from CCNY and later that year she started her graduate work at the Pennsylvania State University under the guidance of Prof. Ken Feldman; she completed a PhD in Organic Chemistry in the spring of 2017. Ina began her industrial career at PPG a year and half ago, where she is focusing on the synthesis of novel small molecules and polymers for different coatings application.
I.Gonzalez@ppg.com
Table Hosts

Mr. Ayodele (Ayo) Duyile  
Dr. Aida Ebrahimi  
Dr. Wayne M. Gersie  
Dr. Enrique Gomez  
Dr. Maureen L. Mulvihill  
Dr. Tonya Peeples  
Dr. Joan Redwing  
Dr. Victoria Sanchez  
Dr. Linda Sapochak  
Dr. Samia A. Suliman  
Ms. Nichole Wonderling  
Dr. Lauren Zarzar

Luncheon Speaker

Ms. Pallavi Eswara

Panelists

Dr. Eric Hudson (facilitator)  
Dr. Ismaila Dabo  
Dr. Inanllely (Ina) Gonzalez  
Dr. Tonya Peeples  
Dr. Karen A. Thole

Panelist

Dr. Karen A. Thole

Dr. Karen A. Thole is a Distinguished Professor and Head of the Department of Mechanical and Nuclear Engineering at The Pennsylvania State University. She is the founder of the Steady Thermal Aero Research Turbine Laboratory (START) lab, which focuses on gas turbine heat transfer and is a center of excellence for a major turbine engine manufacturer. She has published over 220 archival papers and advised 70 dissertations and theses. She is currently on the ASME Board of Governors, which is the governing body of ASME. She is an ASME Fellow and was recently elected as an AIAA Associate Fellow. Dr. Thole co-founded the Engineering Ambassador Network, which is a professional development program with an outreach mission and it includes 20 institutions across the United States. She was recently recognized as SWE’s 2014 Distinguished Engineering Educator and in 2015 with ASME’s George Westinghouse Gold Medal and the Edwin F. Church Medal for Mechanical Engineering Education. In 2017, she received ABET’s Claire L. Felbinger Award for Diversity. She holds two degrees in Mechanical Engineering from the University of Illinois, and a PhD from the University of Texas at Austin.

kthole@engr.psu.edu
Dr. Linda Sapochak is the Division Director for the Division of Materials Research (DMR) at NSF. She has worked in DMR since 2008 as Program Director for the Solid State and Materials Chemistry (SSMC) program (5 years), for the Materials Research Science and Engineering Center (MRSEC) program in 2014, and as Deputy Division Director in 2015. Dr. Sapochak also served as the Acting Deputy Division Director in the Chemistry Division in 2013 and 2014. She has managed additional projects including the Emerging Frontiers in Research and Innovation: Green Sustainable Buildings, Sustainable Energy Pathways, and I-Corps.

Prior to her position at NSF, she was an Assistant Professor in the Chemistry Department at the University of Nevada Las Vegas. She later accepted a position at Pacific Northwest National Laboratory, a DOE national lab in the Energy and Efficiency Division to develop organic and inorganic electronic materials for solid state lighting applications. She has over 50 scientific publications and 16 patents.
Special Thanks

Dr. Clive A. Randall
Director, Materials research Institute
Technical Advisor, Center for Dielectrics & Piezoelectrics
Professor, Materials Science & Engineering

Planning Committee
Kathleen A. Gehoski
Materials Research Institute
Research and Development Engineer
Outreach Coordinator
kag31@psu.edu

David L. Fecko
Materials Research Institute
Industry Relations Coordinator
dlf5023@psu.edu

Kristin A. Dreyer
MRSEC—Center for Nanoscale Science
Program Director for Education and Outreach
kad4@psu.edu

Dr. Tiffany A. Mathews
MRSEC—Center for Nanoscale Science
Program Co-Director for Education and Outreach
tam276@psu.edu

Diversity in STEM: Materials and Strategies for Success

October 23, 2018