

**ENGINEERING TECHNOLOGY LEADERS: TAKING THE NEXT STEPS** 





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### **WELCOME TO THE 2022 ENGINEERING TECHNOLOGY LEADERS INSTITUTE**

We hope that you, as members of the Engineering Technology (ET) education community, will both contribute to and take from this event. We are excited to be able to meet in person once again!

2022–2023 ASEE President Jenna Carpenter has selected as her theme "Weed in, not out," and that certainly fits with ETLI and what ET programs have been doing for quite some time. You are encouraged to participate in discussions both in and out of sessions. Building our network of ET education supporters is essential to ensure a vibrant future for our students, programs, and industry.

Our schedule at the 47th annual ETLI meeting is a bit different from years past. We will start with an ETC Board Meeting on Wednesday late afternoon and a reception Wednesday evening. Our activities will conclude Friday evening with dinner on your own with friends and colleagues.

Since 2017, ETLI participants have visited various government offices in the Washington, D.C. region to discuss the value of ET education and explore opportunities for improvement. Our efforts have started to evoke change, and we will continue our visits this year.

Thursday begins with an overview of the "lobbying" process and working with legislators, followed by time on the ground meeting your representatives. We do this to influence policy and expand the awareness of ET programs and graduates. At the Thursday evening dinner, we will share experiences and summarize lessons learned from the visits. We hope that you will commit to help us affect the future of ET education by participating. We will open our Friday program with a presentation from Congressman Joseph Morelle of the 25th New York District. Joe is a member of the House Committee on Education and Labor and represents the district encompassing Rochester, including the Rochester Institute of Technology. Also on Friday morning: some excellent sessions related to the outcomes of a National Science Foundation (NSF) Manufacturers Identified Skills Gap study. Dr. Celeste Carter, NSF Program Director of the Division of Undergraduate Education, will then offer a helpful session on funding and collaborative opportunities for two- and fouryear Engineering Technology programs.

The remaining Friday sessions include a presentation by current ABET President Bill Wepfer that will address issues related to the Engineering Technology Accreditation Commission (ETAC). Dr. Gary Bertoline and friends will tell us about the Purdue Polytechnic and how it could be used as a wider framework to help ET programs grow and flourish into the future. Finally, there will be sessions for new ET department heads and leaders and a session on how to advocate for change at the state level to eliminate negative messaging related to licensure restrictions.

We hope you enjoy the Institute and the opportunity to network with your colleagues and leaders in the field.

BULL, PE

Marty Gordon ETC Chair, Rochester Institute of Technology

Hugh Jack ETLI Chair, Western Carolina University

### **2022 ETLI PROGRAM**

WEDNESDAY, SEPTEMBER 28	
REGISTRATION: MARBLE FOYER	5:00 P.M. – 7:00 P.M.
ETC MEETING: MADISON ROOM	5:00 P.M 6:30 P.M.
OPENING RECEPTION AND DINNER: OUTDOOR COURTYARD	6:30 P.M. – 8:00 P.M.
Weather backup: Washington/Jefferson Foyer	
THURSDAY, SEPTEMBER 29	
REGISTRATION: MARBLE FOYER	7:30 A.M. – 5:00 P.M.
BREAKFAST: SALON C Sponsored by HP	8:00 A.M. – 8:30 A.M.
WELCOME TO ADVOCATE DAY: SALON AB	8:00 A.M. – 8:10 A.M.
SPEAKER:         Image: Speaker in the	
Martin E. Gordon, PE, DFE is Professor and Director of External Academic Relations in the College of Engineering Technology at the Rochester Institute of Technology. He has been recognized for his excellence in teaching and dedication to students at RIT. A registered Professional Engineer (PE) and Diplomate Board Certified Forensic Engineer (DFE), Marty has over 40 years of engineering experience. He is a Past President of the National Academy of Forensic Engineers and was selected as the 2018 "Engineer of the Year" by the Rochester Engineering Society—one of the oldest regional engineering societies in the United States. Professor Gordon is a fellow in the National Society of Professional Engineers and the National Academy of Forensic Engineers. Gordon is the founder and President of Gordon Engineering, PC. Marty has consulted or provided forensic engineering expert testimony in nearly 300 cases in state and federal court—he is considered a national expert in traffic crash analysis and reconstruction. Marty holds a BS degree in Mechanical Engineering, an MS degree in Mechanical/Systems Engineering, and an MBA with a concentration in Organizational Behavior and Human Resources, all from the University of Buffalo. He currently serves as Chair of the Engineering Technology Council of ASEE and sits on the ASEE Board of Directors.	

### TRAINING—ADVOCATING SKILLS: SALON AB

This session features ASEE's federal relations partners, Lewis-Burke Associates LLC, a Washington D.C.-based government relations firm with over 30 years of experience advocating for non-profit universities and research organizations. The discussion will provide an overview of the current state of play in Washington, briefings on key federal issues that apply to engineering technology and workforce development, and tips for impactful ET advocacy to get participants ready for their visits to Capitol Hill. While anyone can attend this session, only those who specifically noted their interest in attending congressional meetings in their conference registration before September 15 will be able to participate in the visits.

### SPEAKERS:



### Bill Ruch, Principal, Lewis-Burke Associates, LLC

Bill Ruch is Lewis-Burke's leading expert in industrial transformation and commercialization, a complex area that involves assisting clients as they forge public-private partnerships and pursue regional economic development initiatives. Bill's diverse portfolio covers federal interests across the research and development spectrum, from the social and behavioral sciences and STEM education models to the transition of applied technologies from lab to market and advancement of workforce development strategies. His day-to-day can include providing in-depth analysis on federal trends, targeted advocacy on Capitol Hill and at federal agencies, and coalition building with relevant stakeholders to bolster messaging.



### Miriam Quintal, Managing Principal, Lewis-Burke Associates, LLC

Miriam Quintal, ASEE Washington Representative and Managing Principal at Lewis-Burke Associates, boasts a decade of advocacy and client success at Lewis-Burke, managing the federal relations portfolios for large academic institutions, scientific societies, and facility management organizations. Miriam leads Lewis-Burke's efforts representing ASEE, promoting engineering education to congressional and federal officials and helping to spur grassroots advocacy efforts by constituent groups. As Managing Principal, she oversees the firm's client engagement and issue practices to ensure success and advancement across the firm. Miriam fiercely protects client priorities, leveraging her unique combination of scientific training with political insight. Miriam is a prominent leader in National Science Foundation advocacy, co-chairing the Coalition for National Science Funding (CNSF) and working closely with the higher education and research advocacy community to guide policy for and champion the Foundation. Her wealth of knowledge and federal research enterprise acumen provide value to all components of client interests: supporting university leadership, shepherding research initiatives, and shaping policy across a range of issues. Major advocacy efforts have included successfully guiding large-scale science projects through the appropriations process, restoring funding for key programs proposed to be eliminated in the President's budget request, establishing new agency funding for research infrastructure, and creating opportunities for clients to showcase research and leadership in administration initiative areas. Miriam holds a Bachelor's Degree in Chemistry from Smith College and a Master's Degree in Organic Chemistry from Harvard University.

### 8:10 A.M. - 9:00 A.M.

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Amanda Bruno, Senior Associate at Lewis-Burke Associates

Amanda Bruno, Senior Associate at Lewis-Burke Associates, advises on federal activities that impact education, immigration, economic development, and workforce policy. Amanda's previous work in the higher education community brings an important perspective to ASEE.

9:00 A.M. - 9:30 A.M.

### TEAM FORMATION AND PLANNING: SALON AB

Unlike in previous years, in 2022 some congressional offices are only accepting virtual meetings. For these offices, Lewis-Burke will prioritize scheduling virtual meetings near the beginning or end of the day so that they can be taken in group members' hotel rooms. For Lewis-Burke to schedule these meetings, at least one participant from each group must serve as a Virtual Host for their group. Virtual Hosts will simply need to provide a Zoom or Microsoft Teams link for Lewis-Burke to send to congressional staff during the scheduling process, agree to serve as the point of contact for congressional staff in case of technical difficulties, and initiate the meeting. If multiple participants agree to be Virtual Hosts in one group, Lewis-Burke will select one host. Lewis-Burke will reach out to Virtual Hosts ahead of the scheduling process to confirm their role.

<b>DEPART FOR VISITS</b> Lyft will be used	9:30 A.M.
Note: Details for the visits will be established based on the survey that participants completed during registration.	
POST-VISITS DEBRIEF: SALON AB	5:00 P.M. – 6:30 P.M.
MODERATOR:	
John Irwin, Professor and Chair, Manufacturing and Mechanical Engineering Technology (MMET), Michigan Technological University Dr. John Irwin has presented published papers at ASEE conferences from 2002–present in ETD and EDGD. He is presently serving as Secretary for the ETD and Vice Chair for ETC. Dr. Irwin is a tenured Professor, Mechanical Engineering Technology and Chair of the MMET Department in the College of Engineering at Michigan Technological University. In addition, he is Director of the Research and Innovation in STEAM Education (RISE) Institute at Michigan Tech. He has a Doctorate in Curriculum and Instruction from Wayne State University, Detroit, Michigan. Dr. Irwin is PI for an NSF S-STEM grant until 2023. He is experienced	
in the manufacturing industry as well as the teaching profession, with five years in engineering design, several years part-time consulting in industry, and over 30 total years of teaching. Dr. Irwin's research focus is on teaching and learning in computer-aided design, analysis, and manufacturing subjects.	
DINNER AND NETWORKING: SALON C	6:30 P.M. – 8:00 P.M.

# FRIDAY, SEPTEMBER 30 REGISTRATION: MARBLE FOYER BREAKFAST: SALON C Sponsored by HP Join us for a light breakfast and some casual conversation before the program starts. This is a great chance to meet new friends and colleagues. WELCOME: SALON AB SPEAKER:



Doug Tougaw, PhD, PE, Dean of the College of Engineering, Valparaiso University and President-Elect of ASEE

Doug Tougaw has been at Valpo since 1996, and his research is split evenly between quantum computing and pedagogical investigations of creativity, teamwork, and ethics. He has previously served as ASEE Vice-President of Finance, Zone II Chair, and IL/IN Section Chair, and he has been a division leader in both the Engineering Ethics Division and the Entrepreneurship and Engineering Innovation Division.

### **KEYNOTE ADDRESS: SALON AB**

### THE ROLE OF ENGINEERING TECHNOLOGY IN ADVANCING THE FUTURE OF OUR WORKFORCE

### SPEAKER:



Joseph Morelle, Congressman, New York

Congressman Joe Morelle is proud to represent New York's 25th Congressional District, which includes almost the entirety of Monroe County. A lifelong resident of Upstate New York, Rep. Morelle is a former small business owner and previously served as the Majority Leader of the New York State Assembly before being elected to Congress in 2018.

Throughout his career, Rep. Morelle has worked diligently to improve and expand access to healthcare for all people, grow our economy, and create opportunity for Monroe County families. He continues that work through his service on four House committees: the House Committee on Rules, the House Committee on Budget, the House Committee on Armed Services, and the House Committee on Education and Labor.

### **NETWORKING BREAK: SALON AB FOYER**

9:15 A.M. - 9:30 A.M.

7:30 A.M. - 5:00 P.M.

7:45 A.M. - 8:30 A.M.

8:30 A.M. - 8:40 A.M.

8:40 A.M. - 9:15 A.M.

### **SESSION 1: SALON AB**

### INDUSTRY-IDENTIFIED SKILLS GAPS AND EDUCATION PIPELINE RESPONSE

Graduates from two-year technician and four-year Engineering Technology programs often begin their careers in manufacturing or the manufacturing services sector. The insertion of Industry 4.0 technologies into both of these arenas has altered traditional expectations of those graduates. Technician and engineer preparation programs have to invest significant effort in covering fundamental skills and supportive knowledge so that graduates can meet the initial expectations in their first "job" and still participate in lifelong learning. Given the course hour restraint and corresponding limits on time, educators need to be cognizant of the workplace skills industry needs now and in the next five years.

Community college technical programs in Engineering Technology must respond to documented regional workforce needs. In addition to servicing their own local and regional industry-identified skills needs, technician programs use additional strategies to zero in on necessary skills graduates need to immediately start work in a manufacturing facility. Faculty regularly cross-reference with other programs across the country, utilize Department of Labor competency models, and research skill standards that define national manufacturing credentials to validate and define the technical skills to include in their programs.

The session covers a National Science Foundation-funded study on manufacturer-identified skills gaps related to Industry 4.0 technology-driven applications. The results apply to programs at community colleges and universities. The survey and caucus process used as analytics tools will also be described. The presentation will demonstrate the project's outcomes in Florida and its implementation strategies.

### SPEAKERS:



Dr. Marilyn Barger, PE, FLATE (Florida Advanced Technological Education Center of Excellence)

Dr. Marilyn Barger is the Senior Educational Advisor of FLATE, the Florida Advanced Technological Education Center, which is a part of the FloridaMakes Network and previously funded by the National Science Foundation. FLATE serves the state of Florida and is involved in outreach and recruitment of students into technical career pathways; has produced award-winning curriculum design and reform for secondary and post-secondary Career and Technical Education programs; and provides a variety of professional development for STEM and technology secondary and post-secondary educators focused on advanced technologies. She earned a B.A. in Chemistry at Agnes Scott College and both a B.S. in Engineering Science and a Ph.D. in Civil Engineering (Environmental) from the University of South Florida, where her research focused on membrane separation science and technology for elementary, middle, high school, and post-secondary institutions, including colleges of engineering. Dr. Barger has presented at many national conferences, including those for the American Association for Engineering Education, National Career Pathways Network, High Impact Technology Exchange, ACTE Vision, League of Innovation, and others.

Dr. Barger serves on several national panels and advisory boards for technical programs and curriculum and workforce initiatives, including the National Association of Manufacturers Educators' Council. She is a Fellow of the American Society for Engineering Education as well as a member of the Tau Beta Pi and Epsilon Pi Tau honor societies. She is a charter member of both the National Academy and the University of South Florida's Academy of Inventors. Dr. Barger holds a licensed patent and is a licensed Professional Engineer in Florida.



Dr. Richard Gilbert, University of South Florida

Richard Gilbert is a retired Professor of Chemical and Biomedical Engineering at the University of South Florida's College of Engineering. Richard is the Co-PI for the grant that supports the NSF-designated Center of Excellence for Advanced Technological Education in Florida, FLATE. Now in its 13th year of operation, FLATE addresses curriculum, professional development, and outreach issues to support the creation of Florida's technical workforce. Richard has over 30 years of experience working with the K–14 education community. Other funded efforts include projects for the NIH and the US Department of Education. The latter was for the development of an engineering curriculum for elementary school applications. The former is for development of electric field mediated drug and gene applicators and protocols. This effort has generated over 20 patents and cancer treatment protocols currently in Phase II trials. Richard is a former US Air Force Office of Scientific Research Resident Research Scholar.

BREAK: SALON AB FOYER	10:45 A.M. – 11:00 A.M.
SESSION 2: SALON AB	11:00 A.M 12:15 P.M.
NATIONAL SCIENCE FOUNDATION FUNDING UPDATES AND OPPORTUNITIES	
This session will be led by Dr. Celeste Carter, NSF Program Director of the Division of Undergraduate Education. She will focus on funding and collaborative opportunities for two- and four-year engineering technology programs.	
SPEAKER:	
V. Celeste Carter, Ph.D., Program Director, Division of Undergraduate Education (DUE), National Science Foundation (NSF)	
V. Celeste Carter received her Ph.D. in Microbiology from the Pennsylvania State University School of Medicine. She completed postdoctoral studies at the University of California at Berkeley. She joined the Division of Biological and Health Sciences at Foothill College to develop and head both Biotechnology and Bioinformatics programs. She served as a Program Director twice in the Division of Undergraduate Education (DUE) at the National Science Foundation (NSF). Dr. Carter accepted a permanent program director position in DUE in 2009; she is the Lead Program Director for the Advanced Technological Education (ATE) program in DUE. Dr. Carter also works on other programs in DUE and serves on federal interagency working groups.	
BREAK	12:15 P.M. – 12:30 P.M.

### LUNCH: SALON C

Sponsored by ABET

### ABET AND THE FUTURE OF ACCREDITATION

SPEAKER:



Bill J. Wepfer, Ph.D., Professor Emeritus, Georgia Institute of Technology; ABET President-Elect

12:30 P.M. - 1:30 P.M.

1:30 P.M. - 1:45 P.M.

1:45 P.M. - 3:15 P.M.

Bill Wepfer served as the Eugene C. Gwaltney Jr. School Chair and Professor in the George W. Woodruff School of Mechanical Engineering at Georgia Tech from 2008 to 2018. Wepfer's research covered the areas of thermal systems, heat transfer and thermodynamics. Wepfer is a Fellow of the American Society of Mechanical Engineers (ASME), ABET and the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and a member of the American Society for Engineering Education (ASEE).

He was a member of the Engineering Accreditation Commission (EAC) of ABET for 12 years and served as Chair of the EAC during the 2014-15 accreditation cycle. Wepfer served on the Board of Governors of ASME (2016-19) and represents ASME on the ABET Board of Delegates. He has served on departmental advisory boards at Pennsylvania State University, Johns Hopkins University, University of Wisconsin-Madison and Marquette University. After 38 years of service, Wepfer retired from Georgia Tech on April 1, 2018, and holds the title of Professor Emeritus. He resides in Atlanta, Georgia, with his wife, Lynne.

### **REFRESHMENT BREAK: SALON AB FOYER**

### **SESSION 3: SALON AB**

### THE 21ST-CENTURY POLYTECHNIC: HOW ET CAN GROW AND FLOURISH

Purdue's former College of Technology was launched in 1964 with the creation of engineering technology programs. For many years the college flourished despite headwinds from the usual sources. At the turn of the century, the college's fortunes changed for the worse. Enrollment began to decline, and the value of the college at a research-intensive university came into question. Under new leadership in the college in 2011 and new leadership at the university in 2012, the College of Technology and its ET programs were reimagined. The transformation of the college and its ET programs into a 21st-century version of the Polytechnic Institute emerged. The result has been a complete reversal of fortunes for the college at Purdue University. New ET degree options were created, and a new building will open in January 2023. What was formed at Purdue can be replicated to advance all ET programs nationwide. Those attributes that contributed to the success of ET programs at Purdue will be shared and described. The presentation will be followed by a panel discussion on the topic of 21st-Century Polytechnics.

### **SPEAKERS AND PANELISTS:**



Gary Bertoline, Former Dean, Polytechnic Institute, Purdue University

Dr. Gary R. Bertoline is Senior Vice President, Purdue Online and Learning Innovation and a Distinguished Professor of Engineering Technology and Computer & Information Technology at Purdue University. He earned his PhD at The Ohio State University and was on the faculty in the College of Engineering for three years before coming to Purdue University in 1990.

He is leading the growth of Purdue Online programs to serve traditional students and workforce needs of industry. He is developing a Learning Innovation Hub and Skunkworks at Purdue to advance the effective use of technologies to enhance student learning and classroom engagement at scale.

He co-founded the Indiana Next Generation Manufacturing Competitiveness Center (INMaC) as well as the Polytechnic Institute initiative at Purdue University while serving as Dean. Also while Dean, he led the development of the Polytechnic initiative at Purdue, which is a major effort to transform the learning experience of students to better prepare graduates for life and work in the digital age. Gary is the visionary leader for the Purdue Polytechnic High Schools located in Indianapolis and South Bend, Indiana, with more schools planned.

Gary's research interests are in interactive immersive environments, intelligent manufacturing, and STEM and workforce education.



Ken Burbank, Professor and Head, School of Engineering Technology, Purdue University

Dr. Burbank received his BS, MS, and PhD degrees in Electrical Engineering, all from Brown University. Both his MS and PhD research efforts were centered on the optical and electrical properties of compound semiconductors.

After graduating from Brown University, Dr. Burbank entered the world of manufacturing. He went from Process Engineer to Section Head for Process Development, all in the analog integrated circuit industry.

After 10 years in industry, he went "back to school," and has been teaching in Engineering and Engineering Technology programs since. While in Rhode Island, he taught Electronics Engineering Technology and participated in thin film device research. After moving to Virginia and then North Carolina, his role became program development and leadership. Dr. Burbank moved to Purdue in 2011 and is now the Head for the School of Engineering Technology.

Interfacing the university with the engineering community has always been a passion for Dr. Burbank. While in Virginia, he was a member and leader in the Richmond Joint Engineers Council, a group that coordinated engineering society activities in central Virginia. First in Virginia and then in North Carolina, Burbank served the local sections of SME, progressing through the leadership roles. Dr. Burbank is a senior member of IEEE and an ASEE Fellow.

At the national level, Dr. Burbank has served as an officer of the Engineering Technology Council of ASEE for the past ten years and is an active voice in the ongoing Engineering Technology National Forum on the roles of engineering technology graduates.



Chris Pearson, Dean, College of Innovation & Technology, University of Michigan–Flint

Chris Pearson received his Ph.D. in Experimental Physics from the University of Minnesota in 1995. After two years as a postdoctoral researcher at UC Davis, he joined the faculty at the University of Michigan–Flint as an Assistant Professor of Physics, and was promoted through the ranks to Professor in 2011. His administrative appointments include chairing the Computer Science, Engineering, and Physics department and serving as the Associate Dean of the College of Arts and Sciences. In 2020 he began his tenure as the Inaugural Dean of the College of Innovation & Technology. The creation of this new academic unit signaled a bold step towards the future for the University of Michigan–Flint by providing high-demand degree programs in fields with outstanding career opportunities, such as Cybersecurity, Information Technology, Advanced Manufacturing & Robotics, Clean Energy & Sustainability, and others that have increasingly crucial roles in our technology-driven society. The College of Innovation & Technology will become a vital component of the economy in mid-Michigan by providing workforce development and upskilling opportunities to these rapidly expanding industries.



Mike Lacourse, Provost and Senior Vice President for Academic Affairs, Utah Tech University

Dr. Michael Lacourse is Provost and Vice President for Academic Affairs at Utah Tech University (St. George, Utah). He led the university's adoption of a polytechnic academic model in 2016 and subsequently led the creation of a new mission and strategic plan as an open, inclusive, comprehensive polytechnic university that resulted in a new institutional name. He conceptualized and led the planning of a highly productive innovation ecosystem, including Atwood Innovation Plaza, and now leads the planning of an innovation district. He also led the creation of two colleges and more than 70 new degree programs over the past 15 years at three universities.



### Glendalí Rodriguez, Provost and Vice Chancellor, University of Wisconsin-Stout

Glendalí (pronounced Glenda-lee) Rodríguez is Provost and Vice Chancellor for Academic Affairs for the University of Wisconsin–Stout (UW–Stout), Wisconsin's polytechnic university. She joined UW–Stout in August 2005 as a faculty member and served as Interim Provost from August 2019 until her appointment as Provost in November 2021. Glendalí led the Academic Affairs division through rapid changes, including the impact of the COVID-19 pandemic, staffing transitions, organizational restructures, and budget reductions. She remains a strong advocate of both student and employee success during this dynamic time in higher education. As a licensed architect, Glendalí taught UW–Stout courses in the areas of Construction, Interior Design, and Technology Education, prior to becoming a full-time administrator in January of 2014. As an administrator she uses her skills as design-thinker, problem-solver, convener, and collaborator. She is actively working with senior leadership and shared governance on UW–Stout's first Comprehensive Academic Plan and key efforts tied to UW–Stout's strategic plan (FOCUS2030). As a faculty member, she received teaching awards and participated as an advisor to student organizations. Her areas of research included service learning, Universal Design for Learning, and Building Information Modeling. She is a licensed architect in the state of Wisconsin and Spanish bilingual. She received a Master of Architecture degree from the Georgia Institute of Technology and a Bachelor of Arts from Yale University.

3:15 P.M. - 3:30 P.M.

### **REFRESHMENT BREAK: SALON AB FOYER**

### **SESSION 4: SALON AB**

### TRACK 1 - STATE LOBBY WORKSHOP-LICENSURE EQUITY AND CORRECTING NEGATIVE MESSAGING WITHIN YOUR STATE

In this workshop, a potential framework will be provided for working within your state to influence positive change. Specifically, the legislative changes necessary to eliminate inequitable professional engineering licensure laws.

A brief review of successes nationwide and ongoing efforts within one state will be presented.

Ample time will be given to providing attendees with the guidance they need to form state-specific coalitions for change.

The purpose of the workshop is to address the issues of negative messaging that affect all engineering technology programs due to inequitable licensure laws. All programs suffer from messaging that insinuates that baccalaureate engineering technology graduates are "less than" traditional engineering graduates.

### SPEAKER:



Marty Gordon, Professor, Rochester Institute of Technology

Martin E. Gordon, PE, DFE is Professor and Director of External Academic Relations in the College of Engineering Technology at the Rochester Institute of Technology. He has been recognized for his excellence in teaching and dedication to students at RIT. A Registered Professional Engineer (PE) and Diplomate Board Certified Forensic Engineer (DFE), Marty has over 40 years of engineering experience. He is a Past President of the National Academy of Forensic Engineers and was selected as the 2018 "Engineer of the Year" by the Rochester Engineering Society—one of the oldest regional engineering societies in the United States. Professor Gordon is a fellow in the National Society of Professional Engineers and the National Academy of Forensic Engineers. Gordon is the founder and President of Gordon Engineering, PC. Marty has consulted or provided forensic engineering expert testimony in nearly 300 cases in state and federal court—he is considered a national expert in traffic crash analysis and reconstruction. Marty holds a BS degree in Mechanical Engineering, an MS degree in Mechanical/Systems Engineering, and an MBA with a concentration in Organizational Behavior and Human Resources, all from the University of Buffalo. He currently serves as Chair of the Engineering Technology Council of ASEE and sits on the ASEE Board of Directors.

### **TRACK 2 - TRAINING FOR TECHNOLOGY DEPARTMENT CHAIRS**

This workshop is intended for new administrators of technical departments in two- and four-year schools. The session will cover core knowledge and tips for success. A panel session will provide opportunities for interaction with experienced administrators and problem-solving solutions that attendees may take back to their institutions. Participants will exchange ideas and experiences, talk through challenges, and build working relationships. The workshop will provide new administrators with the knowledge and opportunities to enhance their leadership skills and encourage the success of their institutional units.

3:30 P.M. - 4:45 P.M.

### SPEAKERS:



Jafar Al-Sharab, Professor and Head of the Engineering Technology Department, Northwestern State University

Dr. Jafar Farhan Al-Sharab is a Professor and Head of the Engineering Technology Department at Northwestern State University. He received a BS in Industrial Engineering from the University of Jordan, and a PhD from Vanderbilt University. Prior to joining NSU, Dr. Al-Sharab was an instructional and research faculty member at Rutgers University, where he was heavily involved in research and teaching at both the graduate and undergraduate levels. Dr. Al-Sharab was a visiting professor in the Department of Mechanical and Aerospace Engineering at New York University Tandon School of Engineering and also at Al-Balqa Applied University in Jordan. In addition, Dr. Al-Sharab served as a consultant for various technological companies, especially in the areas of structure-property correlations, nanotechnology, and advanced characterizations.

Dr. Al-Sharab is a member of the ICDD, ASEE, and other professional organizations related to his professional career and research interests. He enjoys teaching digital signal processing and biomedical instrumentation. In the last few years, he has been involved in various STEM-related activities.



Ken Burbank, Professor and Head, School of Engineering Technology, Purdue University

Dr. Burbank received his BS, MS, and PhD degrees in Electrical Engineering, all from Brown University. Both his MS and PhD research efforts were centered on the optical and electrical properties of compound semiconductors.

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At the national level, Dr. Burbank has served as an officer of the Engineering Technology Council of ASEE for the past ten years and is an active voice in the ongoing Engineering Technology National Forum on the roles of engineering technology graduates.

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ADJOURN	4:45 P.M.
INFORMAL DINNER WITH FRIENDS Sponsored by ABET	5:30 P.M.

### **ENGINEERING TECHNOLOGY COUNCIL**

### Prof. Martin E. Gordon DFE P.E.

ETC Chair, Professor and Director of External Academic Relations *Rochester Institute of Technology (CET)* 

### Dr. Clay Gloster, Jr.

ETD Chair, Vice Provost and Dean of the Graduate College North Carolina Agricultural and Technical State University

**Dr. Hugh Jack P. Eng.** ETLI Chair and Member at Large, Distinguished Professor *Western Carolina University* 

### Dr. Robert Weissbach P.E.

Chair, Department of Engineering Technology Indiana University - Purdue University Indianapolis

### Prof. Gary D. Steffen

Chair, Director Purdue University Fort Wayne

### Dr. Vukica M. Jovanovic

Associate Professor, Director Old Dominion University

### Dr. Jafar F. Al-Sharab

Department Head, Director Northwestern State University of Louisiana

### Dr. Vassilios Tzouanas

Associate Professor and Department Chair, Director University of Houston - Downtown

### Prof. Ronald E. Land

ETNF Chair, Professor Emeritus Pennsylvania State University, New Kensington

### **Dr. Ken Burbank**

Secretary/Treasurer, Professor and Head, School of Engineering Technology *Purdue University at West Lafayette (PPI)* 

### **Prof. Patricia Fox**

Past Chair, Clinical Assistant Professor Indiana University - Purdue University Indianapolis

### Dr. John L. Irwin

Chair-Elect, Professor/Chair Michigan Technological University

### **Dr. Norman L. Fortenberry**

Ex Officio Member, Executive Director American Society for Engineering Education

### **Dr. Jacqueline A. El-Sayed**

Ex Officio Member, Managing Director of Professional Services, Chief Academic Officer, and Director Institutional and Strategic Development American Society for Engineering Education

### **ENGINEERING TECHNOLOGY DIVISION LEADERS**

**Orlando Ayala** Assistant Program Chair CIEC Old Dominion University

### Marilyn Dyrud Program Chair, CIEC Oregon Institute of Technology

**Clay Gloster** Past Chair North Carolina Agricultural and Technical State University (CoE)

**John Irwin** Secretary Michigan Technological University

**Vukica Jovanovic** Program Chair Old Dominion University **Christopher Leblanc** Chair University of New Hampshire

Jay Porter Publicity Chair Texas A&M University

### Jay Porter

Webmaster Texas A&M University

### **Scott Segalewitz** Membership Chair

University of Dayton

### **Rustin Webster** Member-At-Large *Purdue University, New Albany*

**Wei Zhan** Treasurer Texas A&M University

## THANK YOU

### TO OUR SPONSORS FOR THEIR GENEROUS SUPPORT OF ETLI!







