Vice President Candidate 1

Chris Morgan



Chris Morgan is the Director of Research and Development at Moore Nanotechnology Systems, LLC (MNTS) in Swanzey, New Hampshire, USA. Chris joined MNTS in 2013 as Applications Manager and transitioned to a focus on research and development in 2018. In this role, he has been responsible for bringing a range of technologies to market, including ultraprecision machine tools, glass molding machines, grinding process technologies, and computer-aided manufacturing software. He is an inventor on several patents and has authored numerous journal and magazine articles. He has also presented invited talks at conferences and events around the world.

Chris earned his Ph.D. in Mechanical Engineering from the University of Kentucky in 2008, where his research focused on the precision grinding of hard and brittle materials. During his doctoral studies, he had the opportunity to intern at Panasonic in Osaka, Japan, where he received training in the application of polycrystalline diamond micro-tools for precision grinding. Following graduation, Chris founded a company focused on the development of machines and technologies for microgrinding, several of which remain in production today.

Chris began attending ASPE conferences in 2001 and served as a Director-at-Large of the society from 2023 through 2025. He has presented several papers at ASPE topical and annual meetings and has been an active participant in the precision engineering community for more than two decades. ASPE has played an important role in Chris's professional development, providing opportunities to learn from leaders in the field, establish professional relationships, and share ideas with colleagues. Looking toward the future, he believes the continued long-term success and sustainability of the society are critically important to ensuring that the next generation of precision engineers has the same opportunities to learn, connect, and grow professionally that have been so valuable throughout his own career.

Vice President Candidate 2

Richard Seugling



Dr. Richard M. Seugling is a Distinguished Member of the Technical Staff at Lawrence Livermore National Laboratory (LLNL) and serves as Manufacturing Engineering Section Leader within the Materials Engineering Division. With more than 20 years of experience at LLNL, he connects precision engineering research with the practical demands of national security and experimental science, advancing precision manufacturing and metrology in support of the Laboratory's mission.

At LLNL, Dr. Seugling's work has spanned the Precision Systems and Manufacturing group and the Defense Technologies Engineering Division, including contributions to the National Ignition Campaign and high energy density science programs. His experience reflects the importance of collaboration among scientists, engineers, and skilled trades professionals in translating ambitious concepts into successful experiments.

Before joining LLNL, Dr. Seugling held a National Research Council postdoctoral appointment at the National Institute of Standards and Technology. His research explored methods for defining the unit of mass and calibrating force in instrumented indentation machines. He earned his doctorate in mechanical engineering from the University of North Carolina at Charlotte.

Dr. Seugling has authored more than 50 publications and holds multiple patents. He has served as an associate editor of Precision Engineering journal, represents LLNL in the Interagency Manufacturing Operations Group within the National Security Complex, and is a corporate member of the International Academy for Production Engineering (CIRP).

As a candidate for ASPE Vice-President, Dr. Seugling is committed to strengthening connections across industry, academia, and national laboratories. His priorities include supporting the next generation of precision engineering professionals, encouraging interdisciplinary collaboration, and advancing the exchange of knowledge that enables innovation in research and manufacturing.

Nominating Committee Chair-Elect Candidate 1

Eric Buice



Dr. Eric Buice is a Mechanical Staff Engineer at the Lawrence Berkeley National Laboratory (LBNL), where he leads the engineering division's mechanical design and metrology groups and serves as the Chief Engineer for the Gamma-Ray Energy Tracking Array.

An active ASPE member since 2004, Eric has deep roots within the society, culminating in the honor of serving as ASPE President in 2018. Over the years, he has presented at numerous annual meetings, served on the annual meeting organization committee, and contributed to the precision design technical leadership committee (TLC).

His passion for the field began at the University of North Carolina at Charlotte's Center for Precision Metrology, where he earned his Ph.D. in Mechanical Engineering in 2008. Eric's extensive career also includes appointments at Delft University of Technology, Lawrence Livermore National Laboratory, and Carl Zeiss SMT. Across these roles, he successfully led teams developing optomechanical systems for the semiconductor industry and a complex inspection system for inertial confinement fusion capsules.

Having experienced the executive responsibilities of the Society firsthand, Eric understands the critical importance of strong, forward-thinking leadership. As Nominating Committee Chair, his vision is to leverage his broad network across national labs, academia, and industry to identify and encourage a diverse pool of talented future leaders within ASPE. He is committed to making the leadership pipeline transparent and accessible, ensuring ASPE continues to attract dedicated professionals who will champion the Society's technical relevancy, expand its membership reach, and foster the continued maturation of the TLCs.

Nominating Committee Chair-Elect Candidate 2

Brandon Chalifoux



I am an Associate Professor of Optical Sciences and Mechanical Engineering at the University of Arizona. I have been an active ASPE member for the last 13 years, since my first year in graduate school (MIT PhD 2019). Throughout that time, I have become increasingly aware of how important it is to have highly motivated people work together to govern the society. As an educator, I focus much of my attention on how to guide people who will soon lead teams, organizations, or intellectual advances. Combining the enthusiasm of early career people with the experience of those who are more established is an effective way to provide continuity, mentorship, and new ideas. If elected as nominating committee chair, I would build on the current committee's work and continue to focus on seeking a broad slate of nominees and awardees from both established and early-career members.

I served as a Member at Large on the Board of Directors from 2022 to 2025, I am co-chair of the Metrology and Characterization TLC, and I am a member of the Bylaws committee. I have introduced dozens of students to the society through advising Student Challenge teams and encouraging my students to present their research at the Annual Meetings. Aside from ASPE, I am a member of SPIE and Optica, and I serve as co-chair of the SPIE Optomechanical Engineering conference.

ASPE has been immensely rewarding for me, personally and professionally. I hope to serve as chair of the nominating committee to contribute to the society's continued vitality.

Director-at-Large Candidate 1

Martin Culpepper



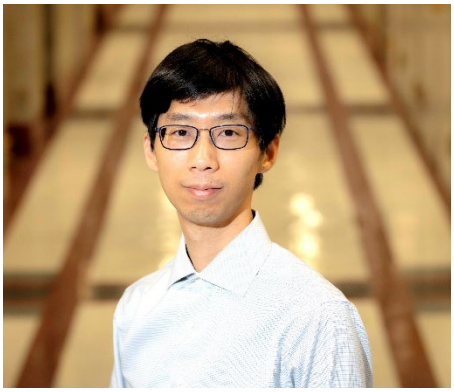
Dr. Culpepper is a Prof. of Mechanical Engineering at MIT. He received his BSME from Iowa State and MS + PhD from MIT. Over the last 30 years, his research and consulting have focused on precision machines that make, measure and move within manufacturing equipment and fabrication/instrumentation for life sciences. Before he joined MIT's faculty, he worked at Timken bearing and Teradyne. Martin is a Fellow of the ASME, the recipient of an NSF Presidential Early Career Award (PECASE), two R&D 100 awards, a TR100 award and the ASME Kornel F. Ehmann Manufacturing Medal. He currently holds the Ralph E. and Eloise F. Cross Professor in Manufacturing chair at MIT.

Martin's leadership experience includes (i) co-lead of MIT's emergency response to COVID and the rapid retasking of MIT shops to provide PPE across the US, and (ii) service as MIT's "maker czar", overseeing a multi-year, multi-million-dollar project to modernize MIT's shops (2015-2022). Martin co-founded the Higher Education Makespace Initiative (2015), served as its founding President (2016-2021), and chaired the group's first conference - International Symposium on Academic Makerspaces (2016). Martin also served as chair of the first International Conference on Micromanufacturing (2006). He served as an ASPE Director-at-Large (2005 – 2007).

Martin sees a need to more aggressively extend ASPE's influence and service into non-traditional fields wherein success will require precision engineering principles and practices. Particularly where this would enable (a) marked reduction in R&D cost, (b) decrease in time to deploy systems and (c) sub-micron accuracy/repeatability at scale. A key strength of ASPE is its culture of integration – science + engineering + manufacturing + industry. This places ASPE in a position to provide service and leadership to emerging science fields that have nascent ability to transfer that science to real-world impact.

Director-at-Large Candidate 2

Ping Guo



Dr. Ping Guo is an Associate Professor of Mechanical Engineering at Northwestern University, where he directs the Advanced Intelligent Manufacturing Laboratory and serves as Associate Director of the Northwestern Initiative for Manufacturing Science and Innovation. His research spans vibration-assisted ultraprecision machining, structural coloration, non-contact acoustic handling, and computer vision metrology.

Ping received his B.E. from Tsinghua University in 2009 and his Ph.D. in Mechanical Engineering from Northwestern in 2014, where he developed the elliptical vibration texturing process under Prof. Kornel Ehmann. After four years as an Assistant Professor at The Chinese University of Hong Kong, he returned to Northwestern in 2018 and obtained his tenure in 2023. He is an ASME Fellow and CIRP Associate Member, and his honors include the CIRP F.W. Taylor Medal, the SME Outstanding Young Manufacturing Engineer Award, and the ASME Chao and Trigger Young Manufacturing Engineer Award. He serves as Associate Editor of the SME Journal of Manufacturing Processes and the ASME Journal of Micro and Nano Science and Engineering.

An ASPE member and Annual Meeting attendee since 2015, Ping has presented work on structural coloration, Fresnel optics, and acoustic levitation bearings. He chairs the Precision Manufacturing Technical Leadership Committee, sits on the 2025 and 2026 Annual Meeting organizing committees, and serves on the Student Challenge committee. His students have earned two Graham Siddall Scholarships and shared first prize in the 2024 competition.

Ping believes the Society's rigor in error budgeting and uncertainty analysis is increasingly important as manufacturing turns to AI and data-driven measurement. If elected Director-at-Large, he will work to bring AI-enabled metrology and in-process sensing into ASPE programming, pursue co-sponsored sessions with ASME, CIRP, and SME, and expand student participation and ties to industry.

Director-at-Large Candidate 3

Tyler Hamer



Dr. Tyler T. Hamer is a Massachusetts Institute of Technology (MIT) lifer: He received his S.B. (2014), S.M. (2017), and Sc.D. (2021) in Mechanical Engineering at MIT and has been technical staff at MIT Lincoln Laboratory (MITLL) in the Controls and Autonomous Systems Engineering (2021-2025) and Software and Electronics Engineering (2026-present) groups since. As an active ASPE member for 10 years, Tyler has presented papers at 6 meetings, competed in numerous student challenges for which his team placed first (2016) and runner-up (2018), and reviewed annual meeting student scholarships (2022 & 2023) alongside *Precision Engineering* journal articles.

His background is applied precision mechatronics: modeling, deterministic-design, implementation, and control of mechanical, electrical, and magnetic actuators, sensors, and systems. At MITLL, his work includes Pointing, Acquisition, and Tracking for the successor lasercom terminal to the Orion Artemis II Optical Communications System, space-based imaging, and a hybrid-drive spherical control moment gyroscope (CMG) based on his dissertation's permanent-magnet-drive spherical reaction wheel under MIT Prof. David Trumper. The spherical CMG follow-on secured a utility patent, received an MITLL Outstanding Research Award, and led to a government-funded Phase 1 Small Business Technology Transfer (STTR) proposal with maglev attitude control startup Magma Space. Prior to MITLL, his work includes a low cost/power reluctance-drive lithography stage, a 100 kWth Concentrated Solar Power on Demand power plant, 3D radio frequency capacitive imaging, co-founding the RapidStop® Tourniquet (US Patent 10,278,708) startup, and Vecna Technologies' BEAR robot air-chisel end-effector. Alongside these technical achievements, Tyler has served as a control systems teaching assistant, intern mentor, and MITLL Women's Network ally.

As a Director-at-Large nominee, Tyler aims to increase cross-disciplinary knowledge exchange throughout ASPE. To achieve this, he proposes spearheading an open-source database of engineering tools by surveying technical leadership committees, universities, and companies to identify commonly used resources and working to make them available to the broader ASPE community.

Director-at-Large Candidate 4

Burak Sencer



Dr. Burak Sencer is an Associate Professor in the School of Mechanical, Industrial, and Manufacturing Engineering at Oregon State University (OSU). There he directs the Precision Manufacturing and Automation Laboratory (PMAL) and previously held the Tom and Carmen West Faculty Scholar endowed position. His research laboratory focuses on machining and machine tool dynamics, mechatronics and motion control, and in-process metrology. His group has received more than $10M in research funding as PI and co-PI. He has authored over 100 refereed papers and has received multiple JSPE Best Paper Awards and the ASME Blackall Machine Tool and Gage Award. He also holds a Teaching Excellence Fellowship at OSU's Center for Teaching and Learning.

Burak received his B.Sc. from Istanbul Technical University and his M.A.Sc. and Ph.D. from the University of British Columbia in Canada under Prof. Yusuf Altintas. He was then a JSPS Postdoctoral Fellow in the Ultra-Precision Engineering Laboratory at Nagoya University under Prof. Eiji Shamoto.

Burak has been an active ASPE member since joining OSU in 2015, presenting work with his students at Annual and Topical Meetings. In 2025, his student team won the ASPE Student Challenge. He co-chairs the Mechatronics and Control Track, has delivered ASPE tutorials, and has been a reviewer for the Precision Engineering journal. Beyond ASPE, he is an Associate Editor of the ASME Journal of Manufacturing Science and Engineering. He previously chaired ASME's Manufacturing Equipment and Automation Technical Committee and is co-chairing the joint 2027 MSEC/NAMRC/LEM&P conference at OSU.

As Director-at-Large, Burak will work to build stronger bridges with international partner societies such as EUSPEN and JSPE, including expanding joint topical meetings, and to bring more students and early-career engineers into the Society.