ASME INTERNATIONAL GAS TURBINE INSTITUTE

Turbo Expo 2025

Final Program

JUNE 16-20, 2025

MEMPHIS, TENNESSEE

The American Society of Mechanical Engineers®
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Welcome Letters

Eric J. Ruggiero, PhD

Fellow of ASME
Conference Chair,
Turbo Expo 2025
Engineering Executive,
Advanced Programs

GE Aerospace

ESTEEMED COLLEAGUES:

Let me be one of the first to officially welcome you to the 70th ASME Turbo Expo in the beautiful city of Memphis, Tennessee! To me, Turbo Expo is more than just the preeminent technical conference on gas turbine engines - it reflects our innate human desire for personal connection and our astounding achievements as a global engineering community. Over the last few years, united in our common goal to minimize the environmental impact of propulsion and energy, our Turbo Expo community and keynotes have focused on carbon footprint reduction strategies and technologies to enable the 2050 Net Zero goals. As we mark the halfway point to reaching these goals, we need to accelerate our efforts and welcome disruption, which brings us to our 2025 Turbo Expo theme: Artificial Intelligence & Turbomachinery.

Innovation and disruption are always found at the intersection of disparate disciplines because they challenge us to think differently. The emerging field of AI and Machine Learning, in conjunction with supercomputing advancements offered by computing architectures like GPUs, places us at a unique nexus in the history of turbomachinery design. The complexities of gas turbines can now be viewed through a different lens thanks to AI, altering our perspective on design spaces and unlocking step changes in overall efficiencies of both propulsion and energy platforms.

Interactions between aero features, thermal cooling circuits, aeroelastic responses, combustion processes, mechanical systems, and the like are ripe for observation, dissection, and optimization in novel ways with AI. These insights promise to be gamechangers in the future design of propulsion and power platforms. But how can AI enable these gamechangers? On Monday, we will kick off the conference with a keynote talk by Marc Spieler, Senior Managing Director – Energy at NVIDIA. We are thrilled to welcome Marc to Turbo Expo to share his unique perspective on where AI can take us. His vision will set our velocity toward disruption.

The acceleration in knowledge that AI and Machine Learning can offer to us in turbomachinery design brings new challenges. New questions start to emerge: What is the role of an engineer working with AI-enabled design tools? What are the moral implications of flight safety decisions enabled by AI tools? What is the role of human-to-human interaction as designers lean more heavily on AI? Such questions need to be addressed today. On Tuesday, our Plenary panel will feature thought leaders from GE Aerospace, RTX, and Siemens Energy who will share their insights on how these emerging, AI-enabled tools are affecting the development of their engineering workforces. AI's impact doesn't stop there. Careful consideration should also be given to how engineering students are trained

CONTINUED...

in undergraduate level coursework to prepare them for entering the AI-assisted workforce and how fundamental research should be conducted by AI-assisted graduate programs and government research laboratories. Opportunities for disruption abound!

This week's exciting content was not curated by AI bots, but, rather, it was organized by an incredible number of amazing human beings from across the globe. I am extremely grateful for the support of the ASME staff and the countless volunteers who have so generously given of their time and talent to support the development of this year's conference. To our many researchers, students, reviewers, and organizers – thank you. A huge thank you to all our sponsors at many levels who are vital to the financial wellbeing of our conference. Thank you to the guidance of the IGTI Executive Committee, as well as the members of the Local Liaison Committee who have helped create unique opportunities near the Memphis area to showcase the role of gas turbines in the community. Finally, a special shout out to the dedicated service of our conference organizing committee, including our Executive Conference Chair Susan Scofield, our Review Chair Marc Polanka, our Technical Program Chair Rudy Dudebout, our Vice Review Chairs Shahrokh Shahpar, Sascha Gierlings, and Benjamin Emerson, our Tutorial Chair Ioanna Aslanidou, and our Local Liaison Committee Chair Bobby Noble.

This week will be action-packed here in Memphis! My ask of you is to approach this week's conference with an open mind to consider what innovation may emerge at the intersection of AI and turbomachinery. Reach out and shake hands with the incredibly talented gas turbine engineers and researchers that make up our conference, and let's channel the human spirit of innovation to set the direction that AI takes our community as we accelerate our efforts toward 2050 Net Zero.

I look forward to learning, networking, and shaping disruption in the propulsion and power fields with you in Memphis. #LetsDoThis!

Eric J. Ruggiero, PhD
Fellow of ASME
Conference Chair, Turbo Expo 2025
Engineering Executive, Advanced Programs
GE Aerospace

Susan Scofield

Executive Conference Chair, Turbo Expo 2025 Vice President of Business Operations

Siemens Energy, Inc.

DEAR TURBO EXPO 2025 ATTENDEES,

It is my distinct honor and privilege to welcome you all to this year's ASME Turbo Expo held in culture-rich Memphis, Tennessee. As the Executive Conference Chair, I am excited for the exceptional gathering of minds united by our shared dedication to driving advancements in engineering and technology at our event which stands at the forefront of innovation and collaboration in the field of turbomachinery.

This year we focus on an exciting and transformative theme: Artificial Intelligence Supporting the Design of Turbomachinery. AI has rapidly become one of the most disruptive and empowering forces across industries. In the realm of turbomachinery design, we anticipate AI to revolutionize the landscape, empower engineers to unlock unprecedented precision, achieve record-breaking performance, accelerate development, and redefine possibilities once were unimaginable. Turbo Expo 2025 is more than a conference—it is an opportunity to connect with peers, exchange knowledge, and ignite the spark of innovation. Whether you are here to present your findings, absorb new ideas, or network with like-minded professionals, I encourage you to embrace this chance to learn, share, and collaborate!

Adding to the excitement, we are hosting this year's conference in the vibrant city of Memphis, Tennessee, USA. Known as the "Bluff City," Memphis boasts a rich history that dates back to its founding in 1819. Situated along the Mississippi River, Memphis quickly became a hub for commerce, particularly in the cotton industry. The city is also renowned for its cultural contributions, especially in music, being the birthplace of blues and home to legendary artists like B.B. King and Elvis Presley. Memphis also played a pivotal role in the United States' Civil Rights Movement with landmarks such as the Lorraine Motel, now the National Civil Rights Museum, standing as a testament to its historical significance.

Memphis is also celebrated for its rich and dynamic culture that blends history with modern vibrance. Its culinary scene is a feast for the senses, with mouthwatering barbecue that has earned international acclaim. Beale Street, the heart of Memphis' music scene, offers lively entertainment, showcasing blues, soul, and rock 'n' roll that echo through its historic venues. The city's charm lies in its ability to harmonize its storied past with its energetic present, creating an atmosphere that is both welcoming and inspiring.

On behalf of myself and Eric Ruggiero (ASME TE'25 Chairman) – we thank you for joining us this year in what promises to be an inspiring and enriching experience. Together, let's accelerate the development of AI-driven solutions and the minds that create all of the innovation behind these tools to propel the turbomachinery industry toward new horizons.

Warm regards,

Susan Scofield

Executive Chair, Turbo Expo 2025

Vice President of Business Operations

Siemens Energy, Inc.

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ETN Global

Texas A&M Engineering TEES Turbomachinery Laboratory

GTSJ

Grand Opening & Awards Information

Schedule at a Glance

SUNDAY June 15	MONDAY June 16	TUESDAY June 17	WEDNESDAY June 18	THURSDAY June 19	FRIDAY June 20
	Registration 7:00 am - 6:30 pm Main Street Lobby	**Registration** 7:00 am - 5:30 pm Main Street Lobby	**Registration** 7:30 am - 5:30 pm Main Street Lobby	**Registration** 7:30 am - 5:30 pm Main Street Lobby	**Registration** 7:30 am - 11:30 am Main Street Lobby
	Speaker Ready Room 7:00 am - 5:30 pm Room 202	**Speaker Ready Room** 7:00 am - 5:30 pm Room 202	**Speaker Ready Room** 7:00 am - 5:30 pm Room 202	**Speaker Ready Room** 7:00 am - 5:30 pm Room 202	**Speaker Ready Room** 7:00 am - 12:00 pm Room 202
IGTI Executive Committee Meeting 1 10:00 am - 3:00 pm	**Conference Sessions** 8:00 am - 10:00 am See App	**Conference Sessions** 8:00 am - 10:00 am See App	**Conference Sessions** 8:00 am - 10:00 am See App	**Conference Sessions** 8:00 am - 10:00 am See App	**Conference Sessions** 8:00 am - 10:00 am See App
	Networking Coffee Break 10:00 am - 10:30 am Hall Outside 102 – 107 & Main Street Concourse	**Networking Coffee Break** 10:00 am - 10:30 am Hall Outside 102 – 107 & Main Street Concourse	**Networking Coffee Break** 10:00 am - 10:30 am Hall Outside 102 – 107 & Lower Level Lobby	**Networking Coffee Break** 10:00 am - 10:30 am Southwest Hall Entrance	**Networking Coffee Break** 10:00 am - 10:30 am Hall Outside 102 – 107 & Lower Level Lobby
	Keynote Session 10:30 am - 12:00 pm Cannon Center	**Plenary Session** 10:30 am - 12:00 pm Cannon Center	**Conference Sessions** 10:30 am - 12:00 pm See App	**Conference Sessions** 10:30 am - 12:00 pm See App	**Conference Sessions** 10:30 am - 12:00 pm See App
	Opening Lunch 12:00 pm - 1:30 pm East Hall Entrance	**Expo Open** 12:00 pm - 6:30 pm **Networking Lunch** 12:00 pm - 1:30 pm **Poster Session** 12:00 pm - 1:30 pm Southwest Hall Entrance	**Expo Open** 12:00 pm - 6:30 pm **Networking Lunch** 12:00 pm - 1:30 pm Southwest Hall Entrance	**Expo Open** 10:00 pm - 2:30 pm **Final Networking Lunch** 12:00 pm - 1:30 pm **Closing Ceremony** 1:00 pm - 2:15 pm Southwest Hall Entrance	**IGTI Executive Committee Meeting 2** 1:00 pm - 5:00 pm Room 115 A/B
Registration 3:00 pm - 6:00 pm Main Street Lobby	**Conference Sessions** 1:30 pm - 3:30 pm See App	**Conference Sessions** 1:30 pm - 3:30 pm See App	**Conference Sessions** 1:30 pm - 3:30 pm See App	**Conference Sessions** 1:30 pm - 3:30 pm See App	
Speaker Ready Room 3:00 pm - 6:00 pm Room 202	**Networking Coffee Break** 3:30 pm - 4:00 pm Hall Outside 102 – 107 & Lower Level Lobby	**Networking Coffee Break** 3:30 pm - 4:00 pm Exhibit Hall	**Networking Coffee Break** 3:30 pm - 4:00 pm Exhibit Hall	**Networking Coffee Break** 3:30 pm - 4:00 pm Hall Outside 102 – 107 & Lower Level Lobby	
	Conference Sessions 4:00 pm - 5:30 pm See App	**Conference Sessions** 4:00 pm - 5:30 pm See App	**Conference Sessions** 4:00 pm - 5:30 pm See App	**Conference Sessions** 4:00 pm - 5:30 pm See App	
	Welcome Reception 5:30 pm - 7:00 pm Ballroom A/B	**Expo Hall Networking Reception** 5:00 pm - 6:30 pm Exhibit Hall	**Expo Hall Networking Reception** 5:00 pm - 6:30 pm Exhibit Hall		
Council of Chairs Meeting 4:00 pm - 5:30 pm Ballroom C		**Technical Committee Meetings** 6:00 pm - 7:30 pm See App	**Technical Committee Meetings** 6:00 pm - 7:30 pm See App	**Technical Committee Meetings** 6:00 pm - 7:30 pm See App	
Early Career & Student Networking Mixer 6:00 pm - 8:00 pm Ballroom A/B			**Celebrating Women in Turbomachinery Event/ Dinner (Ticketed Event)** 7:45 pm - 10:15 pm		

REGISTRATION	NETWORKING RECEPTIONS
TECHNICAL CONFERENCE SESSIONS	NETWORKING COFFEE BREAKS
EXECUTIVE COMMITTEE MEETINGS	SPEAKER READY ROOM
PLENARY SESSIONS	TECHNICAL COMMITTEE MEETINGS

Theme: AI & Turbomachinery

MONDAY, JUNE 16, 2025 / 10:30 AM – 12:00 PM
CANNON CENTER

We invite you to the 2025 Turbo Expo, hosted by the American Society of Mechanical Engineers, where the focus will be on the transformative impact of Artificial Intelligence. This year's theme explores how AI is revolutionizing our engineering fields, from predictive maintenance and design optimization to advanced manufacturing and beyond. Engage with top industry leaders, uncover cutting-edge innovations, and gain insights into the future of engineering at this premier event.

Marc Spieler is responsible for global business development and strategy for the energy industry at NVIDIA. Through active engagement with major energy companies and related research labs, NVIDIA is creating energy and industrial HPC, visualization, and AI-enabled solutions to solve the industry's most difficult problems. Before joining NVIDIA, Marc spent 13 years with Halliburton, where he held leadership positions in commercial and strategic alliances, technology operations, customer financial services, and corporate development. Prior to Halliburton, Marc worked for Silicon Graphics, Inc., where he held a variety of sales and business development roles in the energy vertical. Marc holds an M.B.A. from Rice University in Texas and an M.S. in professional development and leadership, as well as a B.S. in marketing from Winona State University in Minnesota.

Marc Spieler
Senior Managing Director – Energy
NVIDIA

TURBO EXPO 2025 PLENARY PANEL

Theme: Envisioning the Future of Gas Turbines with Artificial Intelligence

TUESDAY, JUNE 17, 2025 / 10:30 AM – 12:00 PM
CANNON CENTER

This OEM Plenary Panel Session features GE Aerospace, Siemens Energy, and RTX (Pratt & Whitney). This session promises to deliver an exceptional experience from top business leaders and employers in our industry who will provide their perspectives on the current and future vision of working with AI in Gas Turbine Technology.

SPEAKERS

Richard Voorberg
President, North America
Siemens Energy

Pete Bradley
Principal Fellow
RTX (Pratt & Whitney)

Paul Sloup (PMP)
Executive Director of AI tools and FLIGHT DECK for the T&O organization
GE Aerospace

TURBO EXPO 2024

Award Recipients

Congratulations to all award recipients and thank you to all ASME IGTI committee award representatives whose work assists the awards and honors chair and the awards committee in the recognition of important gas turbine technological achievements. Thank you to Douglas Nagy for serving as the IGTI Honors and Awards Committee Chair, John Gülen as Industrial Gas Turbine Technology Award Committee Chair, and Konstantinos Kyprianidis as the Aircraft Engine Technology Award Committee Chair.

2025 ASME Dedicated Service Award

Awarded to...

Timothy C. Lieuwen
Zhiping Wang
Marc Polanka

2023 John P. Davis Award

Awarded to...

Nikolas Karefyllidis
Dylan Rubini
Budimir Rosic
Liping Xu
Veli-Matti Purola

2023 ASME Gas Turbine Award

Awarded to...

Mikolaj Pernak
Tom Nicholas
Jake Williams
Richard Jackson
Hui Tang
Gary Lock
James Scobie

2025 Aircraft Engine Technology Award

Awarded to...

Atul Kohli

2025 Industrial Gas Turbine Technology Award

Awarded to...

Peter Stuttaford

2025 Dilip R. Ballal Early Career Engineer Award

Awarded to...

James Braun

For details on the 2025 award winners, please refer to the 2025 Awards Program.

Programs will be available on the Turbo Expo Website.

Upcoming Award Opportunities

2026 ASME R. Tom Sawyer Award

NOMINATE TODAY →

by August 15, 2025

2026 ASME Dedicated Service Award

NOMINATE TODAY →

by November 1, 2025

2026 Aircraft Engine Technology Award

NOMINATE TODAY →

by October 15, 2025

2026 Industrial Gas Turbine Technology Award

NOMINATE TODAY →

by October 15, 2025

2026 Dilip R. Ballal Early Career Engineer Award

NOMINATE TODAY →

by August 1, 2025

For more information on how to submit a nomination for an award, visit:

asme.org/about-asme/honors-awards/honors-policy/how-to-nominate

IGTTA Award Lecture

ASME IGTI INDUSTRIAL GAS TURBINE TECHNOLOGY AWARD LECTURE

Driving Innovation and Gas Turbine Emissions Reduction

TUESDAY, JUNE 17, 2025 / 1:30 PM
BALLROOM C

Engineering innovation continues to be the basis for gas turbine solutions in the shifting energy generating landscape. A practical approach to gas turbine combustion innovation will be presented. Gas turbine combustion has been a strong area of innovation in the gas turbine industry with the development of low NOx emissions technology at ever increasing firing temperatures, and with an increasingly broad range of fuels. CO_2 emissions are dominant when burning hydrocarbon fuels. Climate change continues to drive low carbon solutions using fuels such as hydrogen and ammonia. A reduced carbon footprint is also achieved with the efficient utilization of waste gas as an improved energy source without flaring it into the atmosphere with little or no energy capture. Renewable energy has become the new baseload capacity in many regions of the World resulting in rapid fluctuations in the source of power generation as environmental conditions such as wind and solar vary. Gas turbine operating profiles have shifted dramatically to balance the power grid, presenting new challenges for reliable, available and flexible gas turbine power generation. Solutions for operational and fuel flexibility will be presented based on the development of innovative gas turbine combustion technology.

Peter Stuttaford
CEO
Thomassen Energy

AETA Award Lecture

ASME IGTI AIRCRAFT ENGINE TECHNOLOGY AWARD LECTURE

From Colorful Fluid Dynamics To Certified For Design And Discovery

THURSDAY, JUNE 19, 2025 / 8:00 AM
BALLROOM C

With exponential growth in computing capability, the past three decades have seen an ever-increasing application of computational fluid dynamics (CFD) in the aircraft-engine industry. Starting with aerodynamic airfoil design of high-performance turbomachinery, the state-of-the-art now includes predictions for cooling, heat transfer, combustion, and multi-phase flows, applied to a wide range of components across the engine for solving challenging problems. In the past three decades, CFD has matured from a tool that generates pretty pictures to a dependable means of certifying designs and enabling engineering innovation.

This talk will present a retrospective of how CFD has impacted performance and durability of turbomachinery in aircraft engines. Examples related to modelling of cooling flows and other applications will be provided to illustrate the significant improvements achieved via validated CFD analyses, use of optimization techniques and most importantly associated experimental data. The interplay of CFD with appropriate validation data through experiments that capture relevant design space, from low-speed wind-tunnels and high-speed cascades, to rotating rigs and engine data, will be highlighted. The CFD journey continues with several challenges requiring fidelity that is still not practical, what does the landscape look like for the next three decades?

Dr. Atul Kohli
Principal Technical
Fellow of Heat Transfer
Pratt & Whitney

ASME IGTI Technical Complimentary Webinars On-Demand

The ASME IGTI Student Advisory Committee (SAC) has organized technical webinars for the benefit of the IGTI community.

REGISTER AT GO.ASME.ORG/IGTI

AI and ML in CFD: Methods, Requirements, and Future Directions

As CFD advances through the development of new methods, high-performance computing (HPC), and multidisciplinary approaches, the integration of AI and ML is paving the way for innovative solutions and enhanced efficiencies. We will explore various methodologies for applying ML in CFD applications, including design, surrogate modeling, and geometric deep learning.

We will discuss the requirements for successful implementation, emphasizing the importance of automated process chains, data models, and data management strategies.

To watch on-demand, click here.

Astrid Walle
Siemens-Energy

CONTINUED

Turbomachinery CFD: Perspectives on Interactions

Computational fluid dynamics has become indispensable to modern turbomachinery development. Challenges (& opportunities) in turbomachinery CFD arise in a multi-physics multi-components interactive environment for aerodynamic performance, machine durability and structural integrity. A primary issue of interest is: How can we identify, predict and understand relevant interactions to influence turbomachinery designs? A perhaps less-often asked question may be: if and how can we leverage distinctive turbomachinery characteristics in Turbomachinery-CFD method development (e.g. achieving the same modelling fidelity & solution accuracy at a much faster speed to accelerate design iterations)?

This webinar will start with a brief overview of some fundamentals and major past milestones. We will then look at a few aero-thermal-dynamic interaction case examples of our previous research efforts on:

- Bladerow/stage interaction
- Shape design-Flow control interaction
- Aerodynamics-Aeroelasticity interaction
- Aerodynamics-Heat transfer/Cooling interaction

Some recent developments in harnessing scale interactions for efficient turbulence-resolving solutions will also be briefly discussed.

To watch on-demand, **click here**.

Prof. L. He
Statutory Chair of Computational Aerothermal
Engineering Department of Engineering Science
University of Oxford

CONTINUED

The Role of Hydrogen Combustion in Decarbonizing Future Civil Aviation

Hydrogen is now considered one of the ultimate solutions for decarbonizing the aviation industry. Without radical changes to gas turbine engines, emission targets can be achieved by burning hydrogen smartly in the combustion chamber. Hydrogen combustion research is of particular interest, as the very different thermochemical properties of hydrogen lead to distinct combustion characteristics, presenting both challenges and opportunities for applying new energy-efficient and low-emissions technologies.

This webinar will provide detailed insights into the current progress in gas turbine hydrogen combustion research, as well as a roadmap for maturing hydrogen combustion technologies and integrating them into aircraft.

To watch on-demand, **click here**.

Dr. Xiaoxiao Sun
Lecturer
Cranfield University

Application of Machine Learning to Turbomachinery Design

The latest developments in the world of machine learning and AI have brought about incredible opportunities for synergy with the simulation world. Various developments have been made in terms of applying these techniques to develop better products at a faster pace. From classical statistics-based models to deep neural networks, this lecture will give a flavour of applications of automated model creation for the purposes of turbomachinery design.

To watch on-demand, **click here**.

Akin Keskin, PH.D.
Rolls Royce

Ricardo Paiva, PH.D.
Rolls Royce

Combustors for Future Energy and Propulsion Needs

Global energy and propulsion systems are evolving rapidly with the push towards decarbonization. Within these evolving systems, the role of gas turbines to meet societal energy, reliability, and propulsion needs are evolving significantly in some ways, and staying the same in others. The combustor is a critical component in the gas turbine, which serves as the ultimate source of energy for the cycle, the source of its emissions, and that influences overall system operational boundaries and performance. The purpose of this talk is to provide a tutorial review of combustion science and technology, explain current R&D needs, and discuss the role of combustion systems in a decarbonizing society.

To watch on-demand, **click here**.

Tim Lieuwen, PH.D.
Georgia Institute of Technology

CONTINUED

Nature of Transonic Compressor Flow and its Design Implications

A key problem in transonic compressor and fan design is that although a 3D description of the flow is necessary to correctly capture the shock, accounting for it during the sectional detailed design is difficult because the key driving design parameters are still poorly understood. In this webinar, it is shown that for inlet relative Mach numbers between 0.85 to 1.20, the pressure rise across the shock is purely a function of the 3D streamtube area at the throat at over the inlet area A1. This finding is based on three key transonic flow features, discussed in detail within this seminar, being present together across a wide range of more than 2000 representative transonic compressor and fan designs published online *(whittle.digital)*.

The second half of the webinar discusses the implications of this newfound clarity to practical transonic rotor design. First, it outlines the important preliminary geometric design parameters set prior to the detailed design phase and then describes a simple and efficient physics-based method for designing optimal transonic multistage compressor rotors. The key to this novel method is that the spanwise variation of At /A1, is extracted directly from the 3D CFD. The spanwise distribution of the area ratio is then adjusted iteratively to 'aerodynamically balance' the shock structure across the blade span.

This simplified design process will be shown, through representative rotor redesign examples, to achieve highly satisfactory results whilst providing a physically intuitive way of understanding how the design was improved. Hence, it is of great practical utility and valuable learning for any compressor or fan designer.

To watch on-demand, **click** here.

Demetrios Lefas, PH.D.
University of Cambridge

CONTINUED

Exploring Additive Manufacturing for Advancing Turbine Cooling

Commercial aviation is responsible for between 2.0 and 2.5 percent of the total global CO_2 emissions of which 90 percent comes from large single-aisle and twin-aisle aircraft. With the exception of fully electric, the majority of the future aviation propulsion systems will use a gas turbine as the power plant. In response to the International Civil Aviation Organization's pledge to support an aspirational net zero aviation goal by 2050, the pace at which gas turbines are developed must hasten. While increasing turbine efficiencies is key to reducing carbon emissions, this must be balanced with component life, which is set by operational temperatures. Recent advances in the field of additive manufacturing (AM) have opened up possibilities to evaluate new features for cooling turbine airfoils with a much more rapid turnaround relative to conventional casting. The opportunity is to exploit the use of additive manufacturing in re-thinking cooling schemes for components while considering the inherent effects of the metal additive process. This talk will also provide insights on various challenges associated with additively manufacturing components.

To watch on-demand, **click** here.

Karen A. Thole, PH.D.

CONTINUED

Accelerating Turbomachinery Design: The Role of High-Fidelity Simulation and Machine Learning

To accelerate the deployment of cleaner energy and propulsion technologies, their development time and costs need to be considerably reduced. A key enabler for this is stronger reliance on computational fluid dynamics (CFD) for the design of turbomachinery components because CFD predictions with sufficient reliability can reduce the number of costly and time-consuming laboratory experiments and test campaigns. First-principles based simulations are most accurate and have the potential to elucidate mechanisms that can be exploited for further efficiency gains. Their excessive computational cost, however, preclude their use in a design context and therefore modelling is required. Unfortunately, the inaccuracies introduced by RANS- or URANS-based CFD modelling approaches can limit the impact CFD can have on technology development.

This presentation will present state-of-the-art high-fidelity simulations of bladed turbomachinery components, harnessing the power of the latest GPU-accelerated supercomputing systems. It will include discussion of cases with fully resolved realistic roughness and show how physical insight relevant to designers has been extracted. The talk will also introduce some of the inherent turbulence modelling errors and how those can be addressed with a novel machine-learning approach that can use both high-fidelity and sparse experimental data. It will be shown that closure models developed using the gene-expression programming approach, which are interpretable and easily implementable into CFD solvers, outperform traditional models both for the cases they were trained on and for cases not seen before.

To watch on-demand, **click** here.

Richard Sandberg, PH.D.
University of Melbourne

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IGTI International Gas Turbine Institute Executive Committee

The IGTI Division Executive Committee is structured into three departments dedicated to serving the gas turbine community. These departments encompass in total twelve committees that cover all aspects of the division's activities.

OPERATIONS DEPARTMENT

The Operations Department delivers networking opportunities and disseminates knowledge through Turbo Expo and associated events. It drives technical excellence through support of the technical committees and maintaining high standards in all publications through the peer review processes while ensuring financial goals are achieved in all IGTI departments.

PROFESSIONAL ENGAGEMENT DEPARTMENT

The Professional Engagement Department strives to create and serve a thriving global community of gas turbine professionals and enthusiasts. It is committed to attracting and maintaining a diverse membership, to engaging and developing members through all stages of their careers, and to recognising technical excellence and outstanding contributions to the community.

STRATEGY DEPARTMENT

The Strategy Department identifies and develops strategic topics that are not yet in an operational format within IGTI. This team works to curate and prototype next generation concepts based on what is needed or anticipated in our Technical Community. Ideation is done through connecting and working with critical networks within IGTI, other ASME Groups, government agencies and international think tanks.

The IGTI's vision is to be the world's leader and champion of innovative gas turbines and related energy systems to power a sustainable way of life.

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Thomassen Energy

Meet the GGTN Editorial Committee

The **Global Gas Turbine News (GGTN)** is published inside ASME's Mechanical Engineering magazine. The GGTN provides technical content as well as updates on happenings within the IGTI Community. If you are an ASME member, you automatically receive Mechanical Engineering as part of your membership. Keep up with Gas Turbine News by visiting our website.

Tamy Guimarães, *Chair*
Assistant Professor of
Mechanical Engineering
The Pennsylvania State University

Lorenzo Mazzei, PhD, *Member*
CFD Consultant
Ergon Research, Italy

Uma Maheshwar, *Member*
Chief Consulting Engineer
GE Aerospace
Engineering-India

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Professor Emeritus
University of Connecticut

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Hanyang University, South Korea

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RTS Technology Research Center (RTRC)

Manfred Klein, *Member*
Energy Consultant
MA Klein & Assoc.

Hafsa Ahmed, *IGTI Liaison*
Conference Coordinator,
ASME

Networking Events

Networking Events

EARLY CAREER ENGINEER & STUDENT MIXER

Sunday, June 15
6:00 - 8:00 p.m.

Looking to kickstart your networking for the conference week ahead? Join the ASME IGTI and SAC's networking and student mixer event, taking place on Sunday, June 15th. This event provides an excellent opportunity for students to connect with experienced professionals and peers from around the world and expand their professional network. Complimentary refreshments will be provided.

WELCOME RECEPTION

Monday, June 16
5:30 - 7.00 p.m.

All Conference registrants are invited to join their colleagues for complimentary light refreshments during the Monday evening event. In a casual atmosphere, greet friends, and meet the thinkers from around the world who are shaping the future of turbomachinery.

EXPO HALL RECEPTIONS

Tuesday & Wednesday, June 17 & 18
5:00 - 6:30 p.m.

All registered delegates are invited to the Exhibit Hall for complimentary drinks and networking with industry colleagues while viewing the exhibits of the industry's leading companies.

CELEBRATING WOMEN IN TURBOMACHINERY EVENT

Wednesday, June 18
7:45 - 10:15 p.m.

Attendees are invited to join colleagues for a networking event at the Presley Motor Museum at Graceland. Attendees will have the opportunity to network with peers in the industry and learn about the career paths of some successful women in the industry. This is a ticketed event. Pre-purchase during registration is required

LUNCHES

All Technical Conference delegate badges as well as exhibit booth staff badges include a lunch (M-Thr). Lunches for guests can be purchased onsite during registration. Take the time during lunch to walk the exhibit floor and visit the many exhibitors from around the world showcasing their products and services.

ASME TURBO EXPO 2026

TURBOMACHINERY TECHNICAL CONFERENCE & EXPOSITION

MILAN, ITALY • ALLIANZ MICO

SAVE THE DATE | **June 15 – 19, 2026**

Your Technical Conference Badge Includes:

- Access to every session in the Technical Conference and entrance to the exhibition
- A digital copy of Final Papers
- Professional Development Hours (PDHs) Certificate
- Admission to the networking events including the Grand Opening Keynote and Awards Program, the Plenary Session, the Welcome Reception, the Early Career Engineer/ Student Mixer, daily lunches in the exhibit hall, open bar afternoon receptions in the exhibit hall, morning and afternoon coffee breaks, facility tours and more.

PROGRAM IN LONDON INCLUDED:

- 2872 delegates representing more than 50 countries
- 625 student attendees
- 357 technical sessions with 1190 papers
- 22 Panel sessions
- 53 Tutorial sessions
- 3 Lecture sessions

The American Society of Mechanical Engineers®
ASME®

ASME
SETTING THE STANDARD

2026

Publication Schedule

2025
October 10
Abstract Submission

2025
October 27
Notification of Abstract Acceptance

2025
December 8
Submission of Full-Length Paper for Review

2026
January 12
Paper Review Complete

2026
January 19
Paper Acceptance Notification

2026
February 9
Submission of Revised Paper for Review

2026
February 23
Notification of Acceptance of Revised Paper

2026
March 12
Copyright Submission Deadline

2026
March 16
Final Paper Submission & Author Registration Deadline

Student News

Student Advisory Committee

The **Student Advisory Committee (SAC)** is a group of students who work to foster student engagement in the IGTI community and improve the Turbo Expo conference every year. Towards this goal, the SAC organizes various sessions and events during the conference, provides opportunities for students to work behind the scenes with leaders in their technical area, and awards travel funds to eligible degree seeking individuals.

SAC SESSIONS AT TURBO EXPO

The sessions organized by the SAC during the technical conference are focused on professional development and are open to all conference attendees. This year, SAC has curated The IGTI SAC Turbo Career Talks series. This series is an initiative designed to provide students and early-career professionals with valuable insights into career opportunities across academia, government, and industry during Turbo Expo 2025.

EARLY CAREER ENGINEER & STUDENT MIXER

Sunday, June 15, 6:00 P.M. – 8:00 P.M.

The Student & Early Career Engineer Networking Mixer is open to all conference participants and allows for both junior and senior attendees to socialize, network and discuss matters relevant to the turbomachinery field. Lights snacks and drinks will be available to all attendees. Attendees are encouraged to meet up with old friends, make new contacts and kick-off the conference week.

THIS YEAR'S ACTIVITIES INCLUDE

Student & Early Career Engineer Networking Mixer
Sunday 6:00 - 8:00 pm

Student Poster Competition
Tuesday 12:00- 1:30 pm.

IGTI SAC Turbo Career Talks: Government
Tuesday 4:00 - 5:30 pm

IGTI SAC Turbo Career Talks: Academia
Wednesday 4:00 - 5:30 pm

IGTI SAC Turbo Career Talks: Industry
Thursday 10:30 - 12:00 pm

SACTA Awardee recognition at the Closing Ceremony
Thursday 1:00 – 2:15 pm

SAC Meeting
Thursday 4:00 - 5:30 pm

Poster Session

TUESDAY, JUNE 16, 12:00 P.M. – 1:30 P.M.

The Student Advisory Committee is once again sponsoring a student poster session at ASME Turbo Expo. Be sure to stop by the poster session to see the results of their work and encourage them to become active in the ASME IGTI community.

STUDENT POSTERS DISPLAYED:

Main Exposition Floor
Tuesday, June 17th
12:00 p.m. – 1:30 p.m.

POSTER WINNERS ANNOUNCED:

Expo Hall Closing Ceremony
Thursday, June 19th
1:00 pm – 2:15 p.m.

GIFT CARDS FOR POSTER WINNERS

FIRST PLACE:
$500

SECOND PLACE:
$250

PEOPLE'S CHOICE
$100

THANK YOU, STUDENT POSTER JUDGES!

Mavroudis Kavvalos
German Aerospace Center (DLR)

Clement Joly
SoftInWay

Tim Allison
Southwest Research Institute

Christian Aalburg
GE Aerospace

Martina Ricci
Baker Hughes

Michael Presby
NASA Glenn Research Center

Debolina Dasgupta
Argonne National Laboratory

John Crane
National Energy Technology Laboratory

Marcel Otto
UCF

Randall Mathison
The Ohio State University

Andrew Nix
West Virginia University

Antonio Andreini
University of Florence

IGTI SAC TURBO CAREER TALKS

A Global Perspective on Career Development

OVERVIEW

The IGTI SAC Turbo Career Talks is an initiative designed to provide students and early-career professionals with valuable insights into career opportunities across academia, government, and industry during Turbo Expo 2025. These panels will feature distinguished experts from three continents—North America, Europe, and Asia—who will share their experiences and perspectives on career growth within the turbomachinery sector.

PANEL STRUCTURE

We will be organizing three 60-minute SAC Panels, with the possibility of a 30-minute extension if needed. Each session will focus on a specific career path:

Academia

Exploring research and teaching opportunities in turbomachinery.

Government

Understanding policy, regulatory, and research roles within public institutions.

Industry

Discussing career trajectories in the corporate sector, from engineering to leadership roles.

FORMAT

Each speaker will deliver a 10-minute presentation outlining their career path, key decisions, and work opportunities within their region. A 20-minute roundtable discussion will follow, addressing:

Major challenges in turbomachinery

The most in-demand skills in the field

(e.g., importance of a PhD, critical competencies for success)

The session will conclude with a 10-minute Q&A

allowing the audience to engage directly with the panelists

OBJECTIVES

Offer Diverse Perspectives

on global career opportunities in turbomachinery

Provide Practical Guidance

on essential skills and career decision-making.

Foster Engagement

between students, early-career professionals, and industry leaders

We look forward to insightful discussions, helping to shape the next generation of turbomachinery professionals.

IGTI SAC TURBO CAREER TALKS

IGTI SAC Turbo Career Talks

CATEGORY	NORTH AMERICA	EUROPE	ASIA
GOVERNMENT *Tuesday, June 17* *4:00 pm – 5:30 PM*	 **James D. Heidmann, PhD** NASA Glenn Research Center	 **Alexander Hergt** German Aerospace Center (DLR)	 **Je-Sung Bang** Korea Institute of Machinery and Materials
ACADEMIA *Tuesday, June 18* *4:00 pm – 5:30 PM*	 **Jacqueline O'Connor** Pennsylvania State University	 **Ricardo Martinez-Botas** Imperial College London	 **Wontae Hwang** Seoul National University
INDUSTRY *Thursday, June 19* *10:30 pm – 12:00 PM*	 **Lisa Brilliant** Pratt & Whitney	 **Astrid Walle** Siemens Energy	 **Dai Kato** IHI Corporation

ANNOUNCING THE IGTI ENDOWED SCHOLARSHIP

A New Opportunity for Future Engineers

The IGTI Division is excited to announce the launch of the IGTI Endowed Scholarship, a new initiative aimed at empowering students pursuing engineering degrees with an emphasis in turbomachinery. This scholarship represents our commitment to nurturing talent, fostering educational growth, and investing in the next generation of leaders in turbomachinery engineering.

By supporting this scholarship, we are helping students overcome financial barriers and enabling them to focus on their academic and professional development. This is more than just funding; it's an investment in a brighter future for the field of engineering.

Gretchen Crutchfield
Manager, Individual Giving & Engagement
ASME Foundation

WE INVITE YOU TO JOIN US IN MAKING A LASTING IMPACT

If you are interested in supporting the IGTI Endowed Scholarship with a financial donation, please visit:

Donate Today - ASME Foundation.

When asked "Do you have a preference of where you'd like your donation to go?", please select ***IGTI Scholarship*** from the list. Together, we can create opportunities for future engineers to reach their full potential.

QUESTIONS?

If you have any questions or if you would like additional information, please visit Gretchen Crutchfield Crutchfieldg@asme.org in booth 309 (next to the MIT Gas Turbine Lab booth) on the exhibition floor!

FIRST IGTI ENDOWED SCHOLARSHIP DONOR!

Mark has graciously donated $10,000 to the IGTI Endowed Scholarship Fund!

To learn more about the IGTI Scholar Award, view past award recipients, and to nominate someone visit the **ASME IGTI Scholar Award** page.

Mark Turner
Senior Technologist of Aeropropulsion
NASA Glenn Research Center

2025 STUDENT ADVISORY COMMITTEE TRAVEL AWARD RECIPIENTS

A.K.M. Nazrul Islam
Tokyo Metropolitan University

Alexandre Halby
von Karman Institute for Fluid Dynamics

Claire-Phonie B. Silaire
University of Central Florida

David Zamora
University of Central Florida

Elena R. Torres
University of Central Florida

Hanlin Wang
Texas A&M University

Hara Prakash Mishra
National Institute of Technology, Rourkela

Kangana C. Patel
University of Central Florida

Lorenzo Da Valle
von Karman Institute for Fluid Dynamics

Marzuqa Ahmed
University of Central Florida

Matthew Krull
The Pennsylvania State University

Ming-Feng Yeh
Texas A&M University

Pablo Enrique Rodríguez de Arriba
University of Seville

Pratikshya Mohanty
The Pennsylvania State University

Riccardo Gioia
Politecnico di Milano

Sean Kevin Hanrahan
The University of Melbourne

Shrey Sahai Gupta
Indian Institute of Science, Bangalore

Taha Sherif Mohamed Namany Sherif
Menoufia University & Menoufia National University

Tammy Nguyen-Huynh
The Ohio State University

Vincent Thielens
University of Mons

2025 TURBO EXPO EARLY CAREER ENGINEER TRAVEL RECIPIENTS

Achinie Nataliya Warusevitane
Coventry University

Anand Darji
Caterpillar India

Antonio Castillo Sauca
Purdue University

CP Premchand
University of Tennessee Space Institute

Deepanshu Singh
University of Cambridge

Dimitra Tsakmakidou
Rolls-Royce plc

Filippo Merli
von Karman Institute for Fluid Dynamics

Hien Minh Phan
Siemens Energy

Howon Yi
LG Electronics

Matthew Meier
The Pennsylvania State University

Pawel Przytarski
University of Genoa

Pradeep Parajuli
Leidos Inc./ National Energy Technology Laboratory

Ramees Khaleel Rahman
University of Central Florida

Ravi Nath Tiwari
University of Genova

Richard Lee Hollenbach III
Exponent Scientific and Engineering Consulting

Saarthak Gupta
University of Michigan

Saif Al Hamad
The University of Wisconsin-Milwaukee

Shreyas Hegde
Pratt & Whitney

Thomas Corbett
Pratt & Whitney

Waleligne Molla Salilew
Universiti Teknologi PETRONAS

Student Poster Presenters

TUESDAY, JUNE 17, 2025 / 12:00 PM – 1:30 PM

Yumin Kim, *Yonsei University*

GT2025-151743: Effect of U-Shaped Pedestal on Overall Cooling Effectiveness in Double Wall Impingement/effusion Cooling

Guillermo Barrios Cadenas, *University of Central Florida*

GT2025-152785: Characterization of a Toroidal Jet-Stirred Reactor for Ammonia/hydrogen Combustion at Jet Engine Conditions.

Marzuqa Ahmed, *University of Central Florida*

GT2025-155103: Species Measurements Inside a Toroidal Jet Stirred Reactor at Aircraft Gas Turbine Operating Conditions

Jonghyun Kim, *Chosun University*

GT2025-157874: Numerical and Experimental Study of In-Situ Sncr Reaction in Conceptual Design Burners

Winfield Horning, *The Pennsylvania State University*

GT2025-158555: Experimental Investigation on Thermohydraulic Performance of Additively Manufactured Rib Turbulators

Tammy Nguyen-Huynh, *The Ohio State University*

GT2025-159134: Development of an Adjoint Optimization System for Improvement of Turbine Cooling Passages

Fabian Jung, *Institut für Textiltechnik of RWTH Aachen University*

GT2025-159433: Development of All-Oxide Cmc With 3d Braided Fiber Reinforcements for Hot Gas Components

Hara Prakash Mishra, *National Institute of Technology, Rourkela*

GT2025-160044: Static and Dynamic Performance Optimization of Hydrodynamic Herringbone Micro-Grooved Journal Bearing Using Artificial Intelligence Approach

David Braxmaier, *Robert Bosch GmbH*

GT2025-160096: Design and Commissioning of a High-Speed (120,000 Rpm) Hysteresis and Power Loss Test Rig for Air Foil Journal Bearings

Sean Hanrahan, *The University of Melbourne*

GT2025-160468: The Benefits of Selecting Anisotropy Resolving Turbulence Models for Predicting Flow in Highly-Bent Serpentine Aircraft Intakes

Rachel Ross, *Pennsylvania State University*

GT2025-161898: Overall Cooling Effectiveness of Internally Cooled Additively Manufactured Blades

Tyler Wyka, *George Washington University*

GT2025-161907: Zero-Dimensional Aeroderivative Turbine Model for Alternative Fuel Analysis Aboard Ddg Class Ships

Ethan Taylor, *University of Central Florida*

GT2025-161909: Design of a Fuel Storage and Delivery System for Ammonia-Powered Turbofan Engines

Anthony Martin, *Valparaiso University*

GT2025-161992: Acoustic Cavitation Detection in a Centrifugal Pump Outlet

Tesfay Abreha Berhe, *Budapest University of Technology and Economics*

GT2025-162197: Increasing the Energy Efficiency of Cnc Machining by Optimizing the Tool Path

Ghanshyam Sarobar Mandal, *University of Central Florida*

GT2025-162412: Numerical and Cfd Analysis on Innovative Hybrid Seal Designs for Optimized Performance in Supercritical Co_2 Turbomachinery

Aaron Cecil, *Technetics Group*

GT2025-162611: Exploring E-Ring Sealing Performance in Aerospace Duct Systems

Hitesh Sharma, *Indian Institute of Technology Kharagpur*

GT2025-162635: Heat Transfer Augmentation at Hp Turbine Ngv Leading Edge With Sweeping Jet Film Cooling

Katherine Tyler, *Virginia Tech*

GT2025-162724: Erosion and Deposition Comparison of Biochar, Pumice, and Arizona Test Dust on Titanium Coupons

Abbigail Altland, *Pennsylvania State University*

GT2025-162742: Investigating the Performance of Additively Manufactured Channels in Laminar Flows

David Zamora, *UCF*

GT2025-162756: Development of a Test Cell for Ammonia Combustion in an Aircraft Turbojet Engine

Pablo Rodríguez De Arriba, *University of Seville*

GT2025-162804: Fundamental Thermodynamic Insights on Compressor Train Design for Indirect-Heating Solar D-Caes

Rejish Lal Johnson, *Von Karman Institute for Fluid Dynamics*

GT2025-162857: Aerothermal Design and Meta-Model Assisted Optimization of High-Speed Drive Turbine

Joseph Counte, *Sensor Coating Systems Ltd*

GT2025-162861: Uncertainty Evaluation of Thermal History Coatings Up to 1600 °C

Michael Pierro, *University of Central Florida*

GT2025-162873: High-Pressure Laser Absorption Measurements and Combustion Chemical Kinetic Modeling of Natural Gas/ammonia/hydrogen

Kyuman Kim, *Hanyang University*

GT2025-162878: Revamping of a High-Speed Rotordynamic Test Rig for Cryogenic Hydrostatic Bearings

Homin Lim, *Hanyang University*

GT2025-162885: Influence of Dimensional Tolerances on Additively Manufactured Hybrid Thrust Bearing Performance

Shaon Talukdar, *The University of Alabama*

GT2025-162889: Diffuser Integration With a Rotating Detonation Combustor for Power Generating Gas Turbines

Hyunsung Jung, *Hanyang University*

GT2025-162890: Effect of Plugged Orifices on Hybrid Journal Bearing Performance in Rocket Engine Turbopumps

Abhilash M. Prasad, *CATER / UCF*

GT2025-162900: Investigation of Oxidation Behavior of Spark Plasma Sintered Tungsten Alloys for High Temperature Thermal Management Systems

Chad Schaeffer, *The Pennsylvania State University*

GT2025-162902: Comparison of Predicted and Measured Combustor-Relevant Flow Fields

Arianna De La Paz, *University of Central Florida*

GT2025-162907: Past and Present of Fuel Handling Systems in Aviation and the Impact of Ammonia in Its Future

Mairah Ahmed, *UCF*

GT2025-162908: Reactor Designs for Onboard Ammonia Cracking in Aircraft Applications

Andrew Menendez, *University of Central Florida*

GT2025-162913: High-Fidelity Numerical Analysis of Ammonia Cracking in Tubular Reactors With Plug Flow Reactor as a Benchmark for Performance Assessment for Sustainable Aviation

Benjamin Turner, *University of Central Florida*

GT2025-162929: Impact of Extended Surfaces in an Ammonia Decomposition Reactor for a Sustainable Turbofan

Becca Jones, *Technetics Group*

GT2025-162930: Developing a Micro-Hardness Database for Nonstandard Thin-Walled Metallic Parts and Coatings

Alejandro Moreno, *University of Central Florida*

GT2025-163077: Modeling of Heat Transfer Coefficients and Design of Boiler Heat Exchanger in an Ammonia Aircraft Fuel System Using Supercritical Carbon Dioxide Waste Heat Recovery

Christian Gossrau, *RWTH Aachen University (IKDG)*

GT2025-163447: Generic Design of a Sequential Combustion System for H2 / Nh3 Gas Turbines

Session Organizer Information

ASME Conferences App

The ASME Conferences App contains all the information you need to run your session: Session Chair and Co-Session Chair guidelines, digital evaluation forms and speaker bios. Please be sure to download the app before the start of the conference. An email to download the app will be sent to all registrants prior to the start of the conference.

Certificates

Session Organizer certificates and PDH certificates will be emailed to you one month after the conference ends..

Presentation Uploads

Presenters (authors, panelists, tutorial instructors, lecturers) should plan to upload their presentations only on the computer in their session room. Please arrive 15 to 30 minutes prior to your session to upload your presentation. Presentations may be uploaded from a USB flash drive. There will not be a central network server for the sessions. **It is recommended that presentations be removed from the computer as soon as the presentation has ended.

Audiovisual Equipment Provided

Standard AV equipment provided in meeting rooms: LCD Projector, Laptop Computer, Projection Screen, Microphone(s), and a Wireless Remote/Laser Pointer.
Aspect Ratio is 16:9.

Speaker Ready Room

Sunday, June 15	*3:00 pm – 6:00 pm*
Monday, June 16	*7:00 am – 5:30 pm*
Tuesday, June 17	*7:00 am – 5:30 pm*
Wednesday, June 18	*7:00 am – 5:30 pm*
Thursday, June 19	*7:00 am – 5:30 pm*
Friday, June 20	*7:00 am – 12:00 pm*

Registration

As a non-profit organization, ASME requires all presenters to register for the conference and pay an appropriate fee. We are pleased to offer all presenters the discounted ASME Member registration rate.

Badge Ribbons

Role and attendance ribbons are available on the ribbon wall in the Registration area. See the display for available options.

Need Assistance?

ASME staff (red badges) are circulating the session room hallways to provide assistance as needed. Please see the Information Desk located by registration for immediate assistance.

Exhibition Information

Turbo Expo 2026 offers value-added activities designed to drive traffic to your booth. Exhibit booth staff registration includes daily lunches and afternoon open-bar receptions held in the exhibit hall—creating prime opportunities for networking and engagement with attendees. This is your chance to:

Attract new clients & visit current ones

Learn more about the changing needs of industry

Increase your sales

LEARN & CONNECT WITH OUR EXHIBITORS!

- 2025 Memphis Floor Plan
- 2025 Exhibitor Directory

ASME TURBO EXPO 2026

TURBOMACHINERY TECHNICAL CONFERENCE & EXPOSITION

EXHIBITION INFORMATION

Secure your booth now for prime space availability and see how Turbo Expo 2026 can generate bottom-line results for your marketing dollars.

BOOTH SPACE

$3900 USD

per 9 square meters (3x3)

Contact exhibits@asme.org for more information or stop by the ASME Sales booth (booth 339) to chat with the team and secure your space or sponsorship.

ALL EXHIBITORS RECIEVE

Constructed from the modular system–aluminum profiles with white infill panels to rear 2.5m walls 1m high dividing walls with a standard name board sign.

1 Technical Conference Badge

Per 9sm of space including access to the technical conference papers.

3 Booth Personnel Badges

Per 9 square meters of exhibit space..

Complimentary Exhibit Hall Passes

To share with customers and prospects to drive awareness of your company's booth.

Complimentary Lead Retrieval

(Savings of over $400).

Discounted Technical Conference Registration

For company employees.

40-Word Company Listing

In the digital Conference Program (Upgrade available to include logo and/or 100-word description).

Product Category & Company Description

In the online exhibitor directory/ Marketplace with press releases, logo, videos, brochures and more.

Opportunity to Present

On the exhibitor stage in the Hall.

GE Aerospace

DON'T MISS THE CHANCE

See the LEAP-1B Up Close!

Make sure to visit the **LEAP-1B engine display** in space 845! The engine will be showcased during exhibition hours from *Tuesday to Thursday*. Snap a photo and share it on social media using **#TurboExpo2025**.

CFM International's LEAP-1B engines power the Boeing 737 MAX and incorporate advanced aerodynamics, environmental (noise and emissions) and materials technologies that enable higher propulsive and thermal efficiency for better fuel efficiency along with CFM's legendary reliability and low lifecycle maintenance costs. CFM is a 50/50 joint venture between GE Aerospace and Safran Aircraft Engines.

CLOSING CEREMONY AND PEOPLE'S CHOICE AWARDS

Closing Ceremony & Kickoff to Milan 2026

EXHIBITION HALL: EXHIBITOR THEATER STAGE
THURSDAY, 1:00PM – 2:15PM

The Closing Ceremony recognizes several of Turbo Expo's volunteers and award recipients.

Stop by the exhibition on Thursday to win one of the People's Choice gift cards. To be eligible for a gift card, vote for the Exhibition Best Large and Small Displays and the People's Choice Student Poster. **Voting will be conducted though the ASME Events App.**

JOIN US IN CELEBRATING THE FOLLOWING INDIVIDUALS:

IGTI's Outgoing Committee Chairs

Turbo Expo Early Career Engineer Travel Award Recipients (TEECE)

Student Advisory Committee Travel Award Recipients (SACTA)

Student Poster Session Winners (including People's Choice!)

Turbo Expo 2026's Incoming Conference Committee

Enter for a chance to win 1 of 3 gift cards by Casting Your Ballot for the People's Choice Best Booth Award Winners!

THREE GIFT CARD WINNERS ANNOUNCEMENT:

$100	$250	$500

CAST YOUR BALLOT FOR:


Most Creative Display Design


Best Display Of Technology


Best Overall Exhibit


Best Method Of Crowd Attraction

*Entrant must be present to win at the Closing Ceremony. To qualify for the prize drawings, votes must be cast by **6:30pm on Wednesday**.*

Turbo Expo Exhibit Advisory Committee Roster

MISSION

To assist in the growth and expansion of the Turbo Expo exhibit with continued support to exhibiting companies and ASME expositions staff. Representatives serve as experts for fielding questions and providing resources and initiatives for continued success of the exposition.

If you are interested in joining thhis committee, contact exhibits@asme.org.

EXHIBIT ADVISORY COMMITTEE

JT Stone
MMP Technology/BINC Industries
5579 Spellmire Dr
West Chester, Ohio 45246 USA
Term: 2022-2026

Kate Guerrina
Concepts NREC
217 Billings Rd
White River, Junction, Vermont 05001 USA
Term: 2020-2025

Dr. Jakob Hermann
IfTA Systems GmbH
Junkersstrasse 8
D-82178 Puchheim, Germany
Term: 2018-2026

Kimberly Squilliante
SoftInWay Inc.
15 New England Executive Park
Burlington, Massachusetts 01803 USA
Term: 2024-2028

Exhibitor Listings

We look forward to seeing you in the exhibition hall. Be sure to stop by and visit with the exhibitors and sponsors. For more information on the exhibitors, download the Conference app today. Exhibitor full listings and an interactive floor map are available. You can also plan your visit in advance with marking favorites and must-see companies.

BOOTH 712

Adron Tool Corporation

adron.com

86 EDM wire machines, in addition to 10 CNC sinkers and CNC milling equipment, can machine parts up to 10,000 pounds and cut up to 32 inches. ISO 9001, AS9100 certified, and ITAR accredited.

BOOTH 513

ADS CFD Inc.

adscfd.com

Aerospace CFD you can count on.

BOOTH 504 HIRING

Advanced Design Technology Ltd.

turbo designsuite by Advanced Design Technology

adtechnology.com

ADT's software gives you full control of the aerodynamic design process to revolutionize your turbomachinery components.

BOOTH 832 HIRING

Aerodyn Ltd

aerodyn-global.com/

Aerodyn have extensive experience in serving the Aerospace, Power Generation, Defense, and Industrial markets. We specialize in slip rings, design and analysis, precision manufacturing, instrumentation, assembly, component and subsystem test, in-house and on-site validation, and test support.

BOOTH 722

Aeroprobe Corporation

aeroprobe.com/

At Aeroprobe, we deliver accurate measurement solutions for turbomachinery, enhancing performance with cutting-edge tools and services. Our Multi-hole Probes provide versatile, high-accuracy flow measurements within intricate turbomachinery components. Committed to accuracy, we conduct meticulous aerodynamic calibration in three advanced wind tunnels, ensuring reliable data for optimal efficiency and performance in turbomachinery applications.

BOOTH 716

AIKOKU ALPHA Corporation

aikoku.co.jp/en/

AIKOKU ALPHA is one of the world's most sought-after manufacturers of the structural aerospace components, engine parts, and impellers that require this sophisticated technology.

BOOTH 610

AMBA

AMBA

asmeinsurance.com/

The ASME Insurance Program has been delivering exceptional protection at specially negotiated rates since 1958. ASME members can choose from an array of insurance programs such as life, long-term care, accident and disability, professional liability, along with many other programs administered by AMBA Administrators, Inc.

BOOTH 705

Ambrell Corporation

ambrell.com

Ambrell is a leading manufacturer of induction heating systems. With power supplies ranging from 1 kW to 1,000 kW, there is a system that's perfect for your heating application. Free applications testing is available from THE LAB.

BOOTH 503

Ansys

ansys.com

When visionary companies need to know how their world-changing ideas will perform, they close the gap between design and reality with Ansys simulation. For more than 50 years, Ansys software has enabled innovators across industries to push boundaries by using the predictive power of simulation. From sustainable transportation to advanced semiconductors, from satellite systems to life-saving medical devices, the next great leaps in human advancement will be powered by Ansys.

BOOTH 609

APEX Turbine Testing Technologies

apexturbine.com

APEX Turbine Testing Technologies is a supplier of turbomachinery test and analysis solutions with a proven record of delivering integrated, reliable, industry-leading software applications world-wide for over 20 years.

BOOTH 324

ASME Foundation

asmefoundation.org

The ASME Foundation supports aspiring young people with groundbreaking programs in engineering education, career resources, and support for first, life-changing inventions. These are the future innovators who will build a better future for all of us.

BOOTH 134

ASME Headshot Lounge

Stop by the headshot lounge and get a new headshot. Photos are complimnetaryentary. Sponsor this area next year!

BOOTH 315

ASME Recharge and Relax Station

Stop by the Recharge and Relax Station during the exhibit hours and recharge your electronics while playing a game with a colleague.

BOOTH 339

ASME Sales and Exhibitor Lounge

Secure your space or sponsorship for Milan 2026 - stop by to see us.

PUB BINS

Associazione Italiana di Metallurgia

aimnet.it

AIM, founded in January 1946, is a non-profit cultural body organisation aimed at spreading the diffusion of the science and technology of metallic materials and other materials for engineering. The evolution of traditional materials, the development of advanced materials, production techniques and technologies require constant and valid updating training by those who study and work with materials.

BOOTH 316

ATE Antr. GmbH & Co. KG

ate-system.de/en

ATE is your experienced partner for special electric drives. We evelop and produce customized motor components and electric motors to meet your requirements.ines, CHP, compressors, and others.

BOOTH 625

BeCOVER

becover.eu

BeCOVER is a test center designed for low and high pressure compressors for civil and military applications. With a power of 20MW, closed loop capability and dual / triple flow configurations, BeCOVER is capable of testing the future compressor configurations.

BOOTH 644 HIRING

Boom Supersonic

boomsupersonic.com

At Boom, our mission is to make the world dramatically more accessible through a renaissance in supersonic passenger flight. We are developing Overture, a 64 seat Mach 1.7 airliner powered by Symphony turbofans. Join us!

BOOTH 415

Cadence Design Systems, Inc.

cadence.com

Cadence is a worldwide provider of computational fluid dynamics (CFD) and optimization software. With an industry leading meshing approach and a robust host of solver and post-processing capabilities, Cadence CFD technology enables designers to reach superior product quality and performance at a reduced engineering cost and time to market. Cadence CFD customers are the world's most innovative companies in markets such as turbomachinery, marine, automotive, and aerospace. For nine years in a row, Fortune magazine has named Cadence one of the 100 Best Companies to Work For.

BOOTH 639

Cambustion

cambustion.com

We develop and support high grade instrumentation for a range of gas and particle applications.

BOOTH 827

CBMM

cbmm.com/en

World leader in the production and commercialization of Niobium products, CBMM will celebrate its 70th anniversary in 2025, serving more than 500 customers in 50 countries. Headquartered in Brazil, with regional offices in China, the Netherlands, Singapore, Switzerland, and the United States, CBMM provides technology for sectors such as infrastructure, mobility, aerospace, healthcare, and energy. To support its growth plans, the Company is aligned with global trends in electrification, urbanization, and sustainability, driving research, development, and the adoption of Niobium across various industries. CBMM has established partnerships and made strategic investments in companies such as Echion Technologies and Battery Streak, aiming for new developments in Niobium-based materials for lithium-ion batteries.

BOOTH 940

CEROBEAR GmbH

cerobear.com

CEROBEAR manufactures next-level-technology, hybrid-ceramic ball and roller bearings for the Aerospace and Tech Industry. CEROBEAR serves applications like Aero-Engines, Aeroderivative Gas Turbines, Turbo-Chargers, -Pumps, -Compressors, -Expanders, Auxiliary Bearings (to AMB). CEROBEARs technology cuts cost, minimizes friction, increases reliability and safety.

BOOTH 523 HIRING

CFturbo Inc.

cfturbo.com

We are a Turbomachinery Software and Engineering company. Develop and sell Turbomachinery Software. Provide CAE Engineering Services.

BOOTH 527

Combustion Science & Engineering, Inc.

csefire.com

For more than 25 years, Combustion Science & Engineering, Inc. has been dedicated to the study, advancement, and application of combustion and fire sciences. Combining a wealth of knowledge and experience, from the private to public sector, from academia to industry, CSE's team offers exceptional technical leadership, and intelligent solutions. Areas of expertise include: Combustion and Fire Protection Engineering Consulting and R&D; Combustor Design; Fire Protection Hazard Analysis.

PUB BINS

COMPRESSORtech2

compressortech2.com

COMPRESSORtech2 covers gas compression products, systems, and technologies from the wellhead to city gate. This includes midstream, upstream, and downstream gas compression applications and hydrogen/carbon capture.

BOOTH 614 HIRING

Concepts NREC

Experts in Turbomachinery

conceptsnrec.com

Concepts NREC is the only company in the world with end-to-end capabilities to take turbomachinery products from concept to reality. For more than 65 years, Concepts NREC has been at the forefront of turbomachinery design and innovation, providing engineering services, design software, CAM software, precision manufacturing, assembly, testing, training, and installation.

BOOTH 726

Continental Controls Corporation

continentalcontrols.com

Providing a bridge to the future using innovative and effective fuel control for ultra low emissions with natural gas.

BOOTH 401

Convergent Science, Inc

convergecfd.com

An innovative, rapidly expanding computational fluid dynamics (CFD) company. Our flagship product, CONVERGE, is a revolutionary CFD software with truly autonomous meshing capabilities that eliminate the grid generation bottleneck from the simulation.

BOOTH 840

Cornerstone Research Group, Inc.

crgrp.com

Cornerstone Research Group (CRG) developed a computational framework for the optimization of turbine blades with cooling paths enabled by additive manufacturing (AM). CRG's lattice optimization tool will be utilized to optimize the cooling capabilities of a turbine blade's lattice skeleton.

BOOTH 622

cypris

cypris.ai/

Cypris is a market intelligence platform for R&D and innovation teams, providing insights from 500M+ global data points. Trusted by Fortune 100s and government agencies, Cypris supports product development, competitive strategy, and innovation. Learn more at cypris.ai.

BOOTH 609

datatel Telemetry

datatel-telemetry.de

datatel provides a wide range of wireless telemetry solutions for testing of rotor components, eg. in aero engines and industrial turbomachinery, gas and steam turbines, turbo pumps, CF compressors and turbochargers, bearing and seal test rigs etc.

BOOTH 522

e+a

eandausa.com

e+a makes rotors and stators that OEM customers use to build permanent magnet and induction motors and generators for high-speed, high-power applications in turbo-machinery.

BOOTH 526

ELE Advanced Technologies

eleat.co.uk/

ELE Advanced Technologies excels in precision engineering, producing high-integrity turbine components for aerospace, industrial gas, and automotive markets. With over 70 years of experience, we offer comprehensive manufacturing capabilities and end-to-end support, ensuring engineering excellence and innovation.

BOOTH 710

Energy & Turbomachinery Network

etn.global/

Energy & Turbomachinery Network (ETN Global) is a non-profit membership association bringing together the entire value chain of the gas turbine technology. Through cooperative efforts and by initiating common activities and projects, ETN Global encourages and facilitates information exchange and cooperation to accelerate research, development, demonstration, and deployment of safe, secure, affordable and dispatchable carbon-neutral energy solutions.

BOOTH 808

EOS North America

eos.info

We provide responsible solutions based on additive manufacturing (AM) technology to companies around the world.

BOOTH 717

Ergon Research

ergonresearch.it/

Ergon Research is a consulting and research firm operating in the mechanical, energy and informatics engineering fields. The mission of the company is the supply of specialized services for the development and design of innovative products. Our skilld experience in aero-thermodynamics permit to offer fast and cost effective solutions to many of our customers' needs.

BOOTH 403

Esteco

esteco.com/

ESTECO is an independent software vendor who develops digital engineering technology for MDAO (multidisciplinary design analysis & optimization) and SPDM (simulation process data management). Its COTS products VOLTA and modeFRONTIER are used to integrate and automate simulation workflows, conduct design of experiments, trade - and numerical optimization studies, and collaborate among geographically dispersed engineering teams.

BOOTH 208 | 210

Exhibitor Meeting Room

This room can be rented by exhibiting companies for meetings during Show hours. Request the sign-up from exhibits@asme.org or stop by the Exhibitor Lounge.

BOOTH 426

Florida Turbine Technologies, a Kratos Company

kratosdefense.com/about/divisions/turbine-technologies

Florida Turbine Technologies, a Kratos Company, located in Jupiter, Florida, leads aerospace innovation with 300+ experts. For 25 years, we've been at the forefront of next-generation technologies, specializing in rocket turbopumps, aircraft engines, and high-performance jet engines for cruise missiles.

BOOTH 826

Flowdy

flowdy.co.kr

FLOWDY is a manufacturing company specializing in rotating turbine parts of Steam Turbine and Gas Turbine and contributes to localization through Reverse Engineering processing of key components of power generation Turbine, which relied on imported products. We manufacture Compressor blades, Turbine (Hot Part) blades.

BOOTH 601

Flownex Simulation Environment

flownex.com

Delivers technology that enables you to study how flow and heat transfer systems will behave in the real world, where fluid is the driving factor. Flownex® SE system simulation relays the overall effect of changing specific properties on components.

BOOTH 333

Flowthermolab

flowthermolab.com

A platform for computational engineering, consultancy services and online education with high quality.

BOOTH 701

FOGALE Sensors

fogale.com/turbomachinery/

Fogale Sensors is a world leader in the procurement, installation and maintenance of clearance and vibration measurement systems for gas turbine blades and shaft monitoring for aerospace and power applications.

BOOTH 708

ForceBeyond

forcebeyond.com

We are a global supplier of world class fabricated products. As a total solutions provider, we are your one stop shop for high precision components.

BOOTH 741

Friendship Systems Inc

CAESES.com

FRIENDSHIP SYSTEMS is a leading software provider in simulation- and data-driven shape optimization of turbomachinery. Our product CAESES is an integration and automation platform that includes simulation-ready variable CAD, optimization algorithms, andpost-processing. Customers use CAESES together with their simulation tool (most often CFD) to design and develop better products, faster, and at lower cost.

BOOTH 617

GadCap Technical Solutions Ltd.

capacisense.com

To prevent premature gas turbine failure, by blade crack or blade rubbing, and to optimise efficiency in operation, CapaciSense combines blade tip clearance and blade vibration monitoring using non-contact long-life captive capacitive probes standing temperatures up to 1400°C. With over 30 years of experience, CapaciSense enables real-time monitoring of every blade at turbine harsh environment.

BOOTH 725

Gas Turbine Society of Japan

gtsj.or.jp/english

GTSJ aims to promote science, technology and social development through information exchange, publication, technology research and other activities in the fields of all types of gas turbines, and energy conversion systems.

BOOTH 626

GasTurb GmbH

gasturb.com

GasTurb is a powerful and flexible program for calculating design and off-design performance of gas turbines. It simulates the most common types of both aircraft and power generation turbines with a user-friendly graphical interface.

BOOTH 845

GE Aerospace

geaerospace.com

GE Aerospace is a world-leading provider o jet engines, components and integrated systems for commercial and military aircraft. GE Aerospace has a global service network to support these offerings. GE Aerospace will build upon our established 100+s of expertise, extensive partnerships, and commitment to customers. Together we will mobilize a new era of growth in aerospace and defense - one that balances the current needs of our industry with those of future generations, surpassing what is expected.

Stop by the GE Engine in space 845. CFM International's LEAP-1B engines powers the Boeing 737 MAX and incorporate advanced aerodynamics, environmental (noise and emissions) and materials technologies that enable higher propulsive and thermal efficiency for better fuel efficiency along with CFM's legendary reliability and low lifecycle maintenance costs. CFM is a 50/50 joint venture between GE Aerospace and Safran Aircraft Engines.

BOOTH 545

GridPro

gridpro.com

GridPro has reinvented traditional structured grid generation, with automation in its veins. For 25 years, we have set standards on mesh quality by focusing on orthogonality, smoothness and precise control.

BOOTH 714

GROB Systems, Inc

grobgroup.com

For nearly 100 years, GROB has been known for the development and manufacturing of machines and production lines for multiple sectors including aerospace, automotive, medical, and mold & die. GROB's portfolio includes universal 5-axis machining centers.The retractable spindle provides unmatched accessibility to the work piece, and even upside-down machining, in a collision-free environment. They are easy to install and maintain and provide outstanding performance and precision from lot size 1.

BOOTH 613

GTI Energy

gti.energy

GTI Energy is a technology development and training organization focused on developing, scaling, and deploying energy transition solutions. We leverage the expertise of our trusted scientists, engineers, and partners in collaborations that deliver the innovations needed for low[1]emission, low-cost, and resilient energy systems.

BOOTH 739 HIRING

Honeywell International

aerospace.honeywell.com

At Honeywell Aerospace Technologies, our mission is to be a driving force in the aerospace industry, shaping the future of flight while fostering growth, innovation, sustainability, customer satisfaction, inclusion, community involvement, and the wellbeing of our employees.

BOOTH 827

Hood Technology Corporation

hoodtechbvm.com

Hood Technology Corporation has supplied equipment for conducting non-contacting rotating blade vibration measurements since 1998. Hood provides sensors, electronics, data acquisition systems, software, and expertise to measure a wide range of turbomachinery, from turbochargers to aircraft engines to steam turbines.

BOOTH 728

HPI Energy Services LLC

HPIEnergy.com

Founded in 2002, Originally specializing in rotating equipment control systems, HPIES has invested in and grown our Mechanical Field Services and Renewable Energy Divisions, to facilitate our Global customer base across a full range of Gas Turbines, compressors and generators.

BOOTH 623

IfTA Ingenieurbuero fuer Thermoakustik GmbH

ifta.com/en/

IFTA systems monitor and prevent combustion dynamics in gas turbines for power generation worldwide and assure that engines are running reliably and efficiently. For more than 25 years IFTA has been dedicated to measure, analyze and monitor dynamics and vibrations.

BOOTH 938

IHI Bernex AG

ihi-bernex.com/en/

Since their introduction in the 1970s, Bernex CVD systems have proven their reliability in hundreds of installations, providing hard, wear-resistant coatings for customers worldwide.

BOOTH 823

ILT Tecnologie

ilttecnologie.eu/

ILT Tecnologie manufactures combustion chambers, transition pieces, and hot components for turbomachinery, specializing in superalloy sheet metal. We collaborate with partners to develop high-fidelity prototypes for energy markets and support global testing of gas turbine parts. Our in-house team provides full repair services for hot components. ILT meets OEM specifications and also applies its expertise to turbine engines in the aviation industry, ensuring high-performance solutions.

BOOTH 700

Impro Aerotek

improprecision.com

Impro Aerotek is a trusted partner to world-class OEM customers in the aerospace and IGT industries for medium-to-high complex casting and machined components. We work with over 100 materials including aluminum, stainless steel, and super alloy.

BOOTH 627

Indo-MIM Inc

indo-mim.com/binder-jetting-3d-printing/

The state-of-the-art manufacturing capability of INDO-MIM is a fusion of three units spread over 1 million square feet – the world's largest installed capacity for metal injection molding. Located in Bangalore, India, our modern facilities have a combined strength of over 2500 skilled engineers, scientists, technicians, and manufacturing associates.

BOOTH 734

Integral Analytics, LLC

integral-analytics.com

Integral Analytics combines data analysis techniques with machinery knowledge to drastically improve existing software, industrial equipment, and business processes for optimal performance. design, Integral Analytics is your one-stop shop for all of your analytics needs.

BOOTH 544

Integrated Global Services

integratedglobal.com

Integrated Global Services (IGS) is an international provider of on-site efficiency and reliability solutions for Heavy and Energy Industries. We eliminate corrosion and erosion in boilers, columns, and process vessels. Our furnace and fired heater services improve energy efficiency, reduce emissions, increase production, and eliminate preventable shutdowns.

BOOTH 635

IPETRONIK Inc.

ipetronik.com/en/

IPETRONIK's highly precise measurement technology, rugged DAQ and recorders are used for engine test cells, flight tests and new propulsion system tests under extreme climate conditions. For hybrid-electric engines, jet engines, gas turbines, flight test instrumentation (FTI), thermal vacuum test.

BOOTH 624

IPG Photonics

ipgphotonics.com

IPG Photonics is the world leading provider and innovator of fiber laser technology, providing the most reliable and productive laser solutions for any industry or application. From handheld laser welders to automated welding, cleaning, cutting, and drilling systems, IPG laser technology maximizes productivity for fabrication at any scale of production.

BOOTH 629

ITSM

itsm.uni-stuttgart.de

The ITSM is an academic institute performing scientific research on various types of thermal turbomachines and support our partners to deploy excelling products.

BOOTH 402

Kingsbury, Inc.

kingsbury.com

Kingsbury, in business since 1912, is the first and leading manufacturer of fluid-film thrust and journal bearings. With shaft sizes ranging from 25 to 1400 mm, and sliding velocities up to 130 m/sec. Please visit www.kingsbury.com for more details.

BOOTH 323

Kistler Instruments Corp.

kistler.com

The Kistler Group is the global leader in dynamic measurement technology for pressure, force, torque and acceleration. As an innovation partner for industry, research and development, we enable our customers to achieve technological breakthroughs. In this way, we are making a decisive contribution to more efficient production processes and a more sustainable future.

BOOTH 615

Kulite Semiconductor Products, Inc.

kulite.com

Globally recognized as the leading name in transducer technology, Kulite Semiconductor Products, Inc. maintains its edge with vigilant research, ingenious designs and forwardthinking minds. Kulite, which boasts over 400 patents, has developed high-performance, state-of-the-art custom and stock products.

BOOTH 612

LG Tech-Link Global, LLC

lgtechlinkglobal.com

LG Tech-Link Global provides access and support services for a unique micro-size sensor capable of high density, high accuracy max temperature measurements in harsh environments without intrusion into the flow.

BOOTH 524

Main-Metall International AG

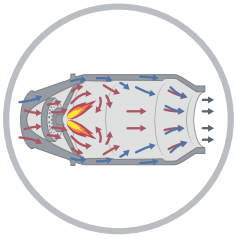
main-metall.com

On the move for more than 90 years - that is the secret of our success. Established as a foundry in 1926 Main-Metall has become a developer, producer and supplier of a wide range of high-quality plain bearings and guiding elements for the mechanical engineering and plant manufacturing industries.

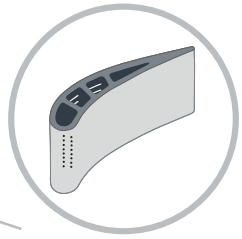
FLOWNEX®
SIMULATION ENVIRONMENT

TURBOMACHINARY

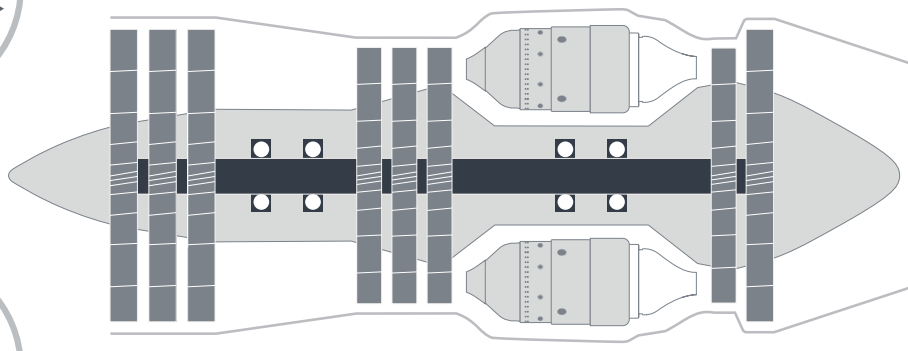
Flownex provides engineers with an easy to use, off-the-shelf 1D flow tool for modelling **combustion chambers, secondary air systems, blade cooling flows,** and **lubrication systems,** as well as overall integrated cycle models

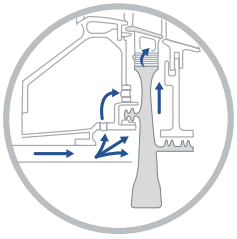


COMBUSTION CHAMBER

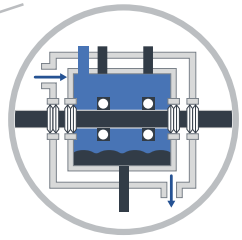


BLADE COOLING





SECONDARY FLOW



LUBRICATION SYSTEMS

Download
Gas Turbine Brochure

Contact us
www.flownex.com | sales@flownex.com

Find us on

BOOTH 645

MANNER Sensortelemetrie GmbH

sensortelemetrie.de

The core competencies of MANNER Sensortelemetrie GmbH are customer and application-specific measurement solutions as well as series applications on rotating and moving parts, especially when high requirements are placed on process engineering and meament data quality. Our patented sensor telemetry method guarantees reliable transmission of precise measurement data via non-contact induction and radio technology, even under the most difficult environmental conditions.

BOOTH 424

Maya HTT

mayahtt.com

Maya HTT is an industry-leading software developer and engineering solutions provider focused on CAE, CAD, CAM and PLM. A long-time partner of Siemens Digital Industries Software, Maya HTT collaborates in providing software, AI, and engineering servicesto help clients and partners worldwide boost performance, improve quality, drive down costs, reduce inefficiencies, and harness the value of their data.

PUB BINS

Mechanical Engineering Magazine

MECHANICAL ENGINEERING
THE MAGAZINE OF ASME

asme.org/membership/mechanical-engineering-magazine

Mechanical Engineering® is the award-winning flagship publication of ASME.

BOOTH 427

Miba Industrial Bearings U.S.

miba.com/en/product-areas/industrial-bearings

The Industrial Bearing Branch of Miba Bearing Group produces hydrodynamic bearings and labyrinth seals for use in critical rotating equipment, such as turbines, compressors, generators, motors, and industrial pumps.

BOOTH 311

MIT Gas Turbine Laboratory

gas-turbine-lab.mit.edu

The mission of the MIT Gas Turbine Laboratory is to advance the state-of-the art in aerospace power and propulsion by creating impactful solutions important to society with emphasis on innovative, novel, and transformative approaches.

BOOTH 500

MMP Technology

MMP® TECHNOLOGY

mmptechnology.com

MicroTek Finishing's Micro-Machining Process (MMP) is the only surface finishing technology of its kind in the world. Whether your goal is a specific reduction in surface roughness (i.e., an engineered surface) or a highly consistent aesthetic result (i.e., a mirror-like finish), MMP produces perfectly controlled surface states through an industrial process that is both repeatable and traceable across a wide range of materials. MicroTek Finishing's MMP is unique in its ability to selectively remove specific components of roughness evenly across the entire surface of the part. Please feel free to contact us to discuss your Advanced Superfinishing needs.

BOOTH 732

MTU Aero Engines AG

mtuusa.com

MTU is a specialist in stationary industrial gas turbines and offers its customers worldwide the full range of first-class performance and services.

BOOTH 509

National Aeronautics and Space Administration

nasa.gov

NASA Aeronautics is engaging with industry, academia, and other agencies to advance turbine engine technologies to meet the extreme challenge of aviation decarbonization. Visit the NASA booth to learn about our turbine work in the Sustainable Flight National Partnership.

BOOTH 423

NDTL Propulsion and Power

ndtl.nd.edu

NDTL is a research and development organization focused on large-scale, high-energy, high-complexity testing and leading-edge computational and analysis capabilities to develop advanced technologies for conventional and high Mach air-breathing propulsion, energy generation, advanced thermal management, and energy storage solutions.

BOOTH 744

Non-Contact Technologies, LLC

noncontact-tech.com/

Non-Contact Technologies (NCT) provides products and services for blade vibration and clearance measurements using non-contact optical, eddy current, or capacitive probes. NCT designs and fabricates data acquisition hardware and software. NCT's software suite includes probe placement, real-time monitoring, and post-processing.

BOOTH 733

North Wind Systems

north-wind.com

North Wind is an industry leader in designing, manufacturing, and testing complex aerospace hardware for ground and flight test applications. We leverage our vertically integrated capabilities to provide Research, Development, Test & Evaluation support to the vertical flight community. As an organization, our team collaborates closely with our customers to provide top-tier service through every stage of technology development and testing. Visit North Wind at Booth #733 to discover what we can do for your test needs today.

BOOTH 445

NOVA

nova.polito.it

NOVA is an engineering software, based on a set of novel models and algorithms, aimed at structural dynamic analysis of mechanical components – mainly, but not only – in aerospace and turbomachinery industries. In particular, NOVA is developed for efficient and accurate prediction of the nonlinear vibratory response of mechanical assemblies (e.g. bladed disks in gas turbines/aero-engines) coupled with friction joints.

BOOTH 724

Oklahoma State University

go.okstate.edu/aerospace/

The Oklahoma Aerospace Institute for Research and Education leads global aerospace innovation, testing cutting-edge technology and advancing exploration. Driven by visionary engineers and researchers, it propels us into not just a golden age of aerospace but an orange one.

BOOTH 735

OROS Americas Inc

oros.com

OROS designs and manufactures noise and vibration testing systems for nearly 40 years. OROS covers data acquisition, structural dynamics, acoustics and rotating applications as well as a range of related services. OROS is a dynamic company where inno

BOOTH 329

Pacific Instruments

pacificinstruments.com

Pacific Instruments, Inc. is an industry leader in the design, manufacture and support of state-of-the-art, computer automated physical measurement systems. Major aerospace and vehicle companies, government-funded research agencies and the military use these systems to measure, store and analyze information and results from research and development projects.

BOOTH 325

Parker Hannifin Corporation

parker.com

Parker Hannifin is a Fortune 250 global leader in motion and control technologies. For more than 10 years the company has engineered the success of its customers in a wide range of diversified industrial and aerospace markets.

BOOTH 332

PBS GROUP

pbs.cz

We are one of the leading European foundries focusing predominantly on investment casting with over 50 years of experience. At present our production program mainly consists of: blades and segments of stationary gas turbines, turbocharger wheels for the automotive industry, impellers and guide wheels for aircraft engines, and spinner discs for the glass industry. We also produce femoral components for the health sector.

BOOTH 633

PCA Engineers Limited

pcaeng.co.uk

PCA Engineers Limited is a UK consultancy specialist in aero-mechanical design of turbomachinery and the supply of engineering software. Experienced in radial and axial flow technologies, PCA has supported many of the world's leading manufacturers for over 30 years.

BOOTH 738

Peregrine Turbine Technologies, LLC

peregrineturbine.com

Peregrine Turbine Technologies is the world leader in the development of advanced supercritical CO2 Brayton cycle power systems. Our proprietary turbomachinery solutions are "heat source agnostic" (nuclear, geothermal, air combustible fuels, etc.) and are core to an array of power generation, energy storage, and propulsion applications.

BOOTH 727

Piezocryst Advanced Sensorics GmbH

piezocryst.com/en/

Piezocryst is a leading company in high temperature dynamic pressure sensing. Our sensors are designed to directly measure pressure pulsations in gas turbine combustors to obtain optimal data for machine protection and combustion control over the entire lifetime.

PUB BINS

Power Sourcing Guide

dieselandgasturbineguide.net/

The Power Sourcing Guide in print, digital and website version is a trusted reference and buyer's guide, directory, and search engine resource for professionals throughout the engine systems industries.

BOOTH 835 HIRING

Pratt & Whitney

prattwhitney.com/

Pratt & Whitney is a world leader in the design, manufacture and service of aircraft engines and auxiliary power units.

BOOTH 508

Präwest Präzisionswerkstätten GmbH & Co. KG.

praewest.com

24 hours a day, 365 days a year, we are meeting the challenges of our customers in our workshop with its ultra-modern machine park. A relationship of mutual trust has grown between ourselves and our customers based on decades of successful cooperation.

BOOTH 709

Renk Group

renk.com

The RENK Group, with around 4,000 employees, is a global leader in propulsion solutions for military and civilian markets. RENK America Marine & Industry, formerly Cincinnati Gearing Systems, provides local expertise and worldwide support for industrial and defense applications.

BOOTH 702

Rigaku Corporation

rigaku.com

Rigaku offers a diverse range of products, leveraging over 70 years of experience to enhance scientific and engineering capabilities. They provide X-ray metrology tools for semiconductor R&D and manufacturing, solutions for crystallography, and XRF spectrometers for elemental analysis in industries like mining and metallurgy.

BOOTH 409

Scanivalve

scanivalve.com

Scanivalve's line of Ethernet pressure and temperature measurement equipment serve applications in aerospace, power generation, turbomachinery, automation, process control, wind turbines, wind tunnels and more. Let us use our years of experience and innovation to meet your physical measurement requirements.

BOOTH 641

Sensor Coating Systems Limited

sensorcoatings.com

Advanced heat transfer diagnostic: SCS provides advanced thermal mapping, digitizing thousands of temperature data points on mission-critical components. The thermal history technology measures a range of 150°C – 1,600°C +/ 300°F – 2,900°F+, with increased capabilities enabling faster product delivery.

BOOTH 328

Sensorade

sensorade.eu/

SENSORADE is specialized in ultra-miniaturized pressure sensors for harsh environments. This unique technology served the Wind Tunnel and Testing Engineering community. SENSORADE is the only OEM offering the smallest (1.2mm) sensor with the highest performance in the world.

BOOTH 715

Sentek Instrument LLC

sentekinstrument.com/

NovaPT™-E is the world's highest temperature pressure sensor (1500° C or 2732° F). This passively operated sensor permits remote fiber optic signal transmission. The breakthrough product provides an ideal solution for monitoring of gas turbines, nuclear reactors and chemical processing systems.

BOOTH 822

Sesta Lab

sestalab.com/

Sesta Lab is an industrial area to test combustion system for gas turbine. The test size is between 1MW to 100MW in particular conditions. Sesta Lab is leader in fuel flex thanks to syngas systems, hydrogen, and many others. One of our test cell has optical analysis instrumentations.

BOOTH 428

Shaft Current Solutions, DBA Sohre Turbomachinery

sohreturbo.com

Protecting rotating equipment from the damaging effects of stray shaft electrical currents. Sohre Turbomachinery® grounding brushes use a proprietary silver and gold fiber technology. Continuous protection in adverse conditions, our brushes are the preferred long term, low maintenance choice.

BOOTH 608

Shandong Qingneng Steam Turbine Co., Ltd.

Sino-QNP Group is the largest privately-owned turbine manufacturer in China. In the field of steam turbine and gas turbine manufacturing, the group has continuously innovated and made breakthroughs, establishing a complete and mature R&D system. The main products of Sino-QNP include steam turbines, steam turbo-generators, gas turbines, compressors, power plant turnkey projects, and integrated services.

BOOTH 833

Siemens Digital Industries Software

SIEMENS

www.sw.siemens.com

Siemens Digital Industries Software is driving transformation to enable a digital enterprise where engineering, manufacturing and electronics design meet tomorrow. The Xcelerator portfolio helps companies of all sizes create and leverage digital twins that provide organizations with new insights, opportunities and levels of automation to drive innovation.

BOOTH 800 HIRING

Siemens Energy

SIEMENS energy

siemens-energy.com

We support companies and countries to reduce emissions across the energy landscape – for a more reliable, affordable and sustainable energy system.

BOOTH 510 HIRING

SoftInWay, Inc.

SoftInWay Incorporated

softinway.com

SoftInWay is an international R&D engineering company specializing in the development of clean, efficient, reliable turbomachinery & propulsion systems. SoftInWay supports its customers through its integrated & automated software platform, AxSTREAM.

BOOTH 335

Solar Turbines (+Logo)

Solar® Turbines

A Caterpillar Company

solarturbines.com

Solar Turbines Incorporated, headquartered in San Diego, California, is a wholly owned subsidiary of Caterpillar Inc. Solar manufactures the world's most widely used family of mid-sized industrial gas turbines, ranging from 1 to 39 megawatts. Over 16,000 Solar units are installed in over 100 countries with over 3 billion operating hours. Solar is a leading provider of energy solutions, featuring an extensive line of gas turbine-powered compressor sets, mechanical drive packages, and generator sets.

BOOTH 723

Southwest Research Institute

swri.org

Southwest Research Institute® (SwRI®), an independent, nonprofit R&D organization, performs turbomachinery research, development, and testing for advanced power generation, gas compression, industrial manufacturing, long-duration energy storage, and propulsion applications. We operate diverse laboratory facilities with unparalleled capabilities, including the accommodation of up to 10 MWe and 80 MWth.

BOOTH 309

Technetics Group

technetics.com

Technetics Group offers trusted engineered sealing solutions in the world's most demanding applications. With our global manufacturing locations, our experience is vast, and our solutions are comprehensive.

BOOTH 515

TEES - Turbomachinery Laboratory

Texas A&M Engineering TEES Turbomachinery Laboratory

tps.tamu.edu/

The Turbomachinery and Pump Symposia (TPS) serves as the premier training and networking opportunity for professionals in both pump and turbomachinery industries. TPS 2025 will be held at the George R. Brown Convention Center in Houston, Texas. The annual event combines a world-class program with an international exhibit hall. Each year the event attracts more than 4,500 people and 350 exhibiting companies from 48 countries.

BOOTH 816

TEMA ENERGY srl

tema-energy.it

TEMA Energy is an Italian Company specialized in manufacturing BURNERS & COMBUSTORS for Gas Turbines.

BOOTH 703

Texys Group

texysgroup.com

For 25 years, Texys Group has been designing, developing, manufacturing and distributing embedded and laboratory solutions for the measurement of physical quantities (pressure, effort, temperature, current, inertia), and is praised worldwide for mastering various technologies (infrared, fiber optics, extensometry, wireless communication, signal conditioning) through its flagship brand Texense.

BOOTH 605

Torquemeters Ltd.

Torquemeters LIMITED
high performance test & measurement systems

torquemeters.com

The company offers a standard range of Torquetronic™ ET phase shift torquemeters rated from 0.1Nm to 120kNm with 0.1% FS accuracy, and speeds of up to 130,000 rpm, which are typically supplied with Tordisc™ high speed couplings to connect the driving and driven machines. Torquemeters facility for the static calibration of shafts, within a 300-3500Nm range, to a high degree of accuracy for incorporation into torque measurement devices is accredited by UKAS and certified to ISO/IEC 17025: 2017.

BOOTH 738

Turbocam International

turbocam.com

TURBOCAM specializes in manufacturing core turbomachinery flow path components for aviation, rocketry, automotive turbocharger, and power generation, offering bold and creative solutions to today's challenges.

BOOTH 314

Turbomachinery International

TURBOMACHINERY INTERNATIONAL

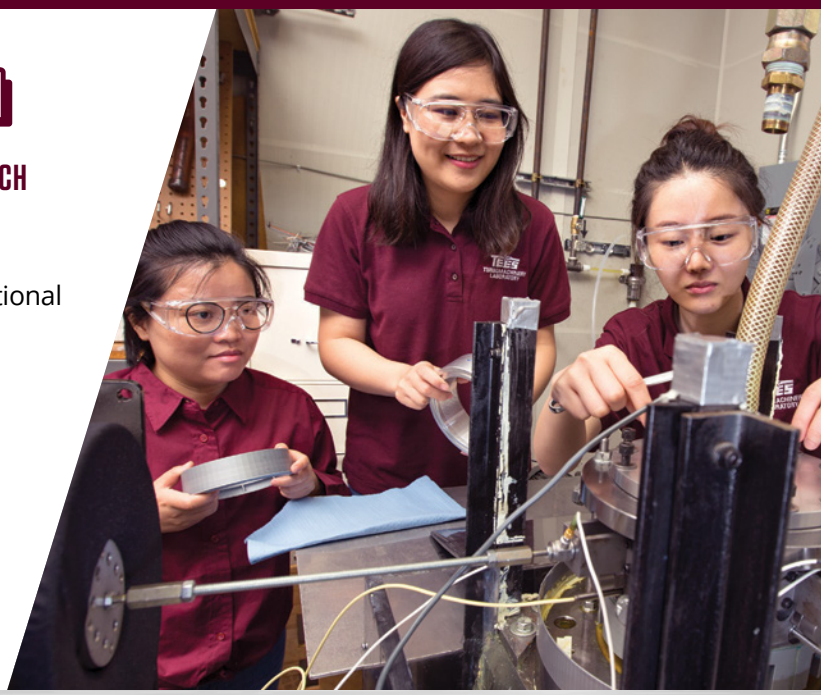
turbomachinerymag.com

For over 60 years, Turbomachinery Magazine has provided valuable insights to engineers and professionals in the turbomachinery industry. Turbomachinery Magazine addresses the day-to-day challenges and issues facing engineers, operators, managers, designe rs, maintenance people, and specifiers of turbomachinery worldwide.

BRINGING **EDUCATION** AND **INDUSTRY** TOGETHER.

EDUCATION **WORKFORCE DEVELOPMENT** **RESEARCH**

The Turbomachinery Laboratory at Texas A&M conducts a variety of fundamental and applied research through traditional grants and the Turbomachinery Lab Research Consortia.



RESEARCH AREAS

Rotordynamics & Mechanical Systems • Thermal Fluids & Combustion • Computational Modeling & Design

TEXAS A&M UNIVERSITY | TEES TURBOMACHINERY LABORATORY | TRC | EPRC

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turbolab.tamu.edu | tps.tamu.edu | atps.tamu.edu

BOOTH 408

Turbostream Ltd

turbostream-cfd.com

Ultra-fast multi-physics simulation suite.

BOOTH 422

Tutco SureHeat

tutcosureheat.com

TUTCO Sureheat electric heaters meets the demanding needs of high-temperature process heat applications. Our products have been integrated into a variety of OEM manufacturing processes and facilities worldwide.

BOOTH 525

U.S. Dept. of Energy-Fossil Energy & Carbon Management

energy.gov/fecm/office-fossil-energy-and-carbon-management

The U.S. DOE Office of Fossil Energy and Carbon Management (FECM) invests in research, development, demonstration, and deployment projects to reduce emissions from fossil energy production and use and key industrial processes, while strengthening U.S. energy and critical minerals security.

BOOTH 603

Vectoflow, Inc

vectoflow.com

Vectoflow is a leading provider of high-precision, customized flow measurement solutions for turbomachinery applications. Utilizing advanced additive manufacturing techniques, we design and produce robust, aerodynamically optimized multi-hole probes andflow sensors tailored to the most demanding environments. Our innovative approach enables enhanced performance, rapid prototyping, and unmatched design flexibility. Visit us to explore how Vectoflow can optimize your flow measurement challenges.

BOOTH 704

Vision Research

phantomhighspeed.com

Vision Research (VRI) designs, develops and manufactures industry-leading, cutting-edge Phantom High-Speed cameras for academia, industry and government labs. Products employ proprietary CMOS sensor technology designed for capturing video with class-leading image quality at high frame rates.

BOOTH 405

Wärtsilä Bearing Centre

wartsila.com

Wärtsilä is a global leader in innovative technologies and lifecycle solutions for the marine and energy
markets.

BOOTH 400

Waukesha Bearings Corporation

waukbearing.com

Custom-Engineered Fluid Film & Magnetic Bearing Solutions for High-Performing Rotating Equipment.

BOOTH 326

WIKA Optical Sensing Ltd.

wika.com/en-gb/lp_oxsensis.WIKA

WIKA Optical Sensing has developed an optical solution for particularly harsh environments, where extremes of temperature or Electro-Magnetic Interference (EMI) may prevent the use of traditional electrical sensors. Our range of sensors offer solutionsacross various temperature ranges, both with dynamic and static pressure measurement capability, and the addition of temperature measurement within the same sensor head.

BOOTH 804

Workforce Development ASME

ASME
SETTING THE STANDARD

asme.org/asme-programs/workforce-development

Helping to create, develop, and sustain a viable engineering workforce that can support current and future business and industry needs.

BOOTH 322

Zulu Pods

zulupods.com

Shaping the future of fluid delivery with innovation and integrity.

Exhibitor Categories

3D Inspection and Measurements

Aerodyn Ltd

Additive Manufacturing

GE Aerospace
Honeywell International
Maya HTT
Vectoflow GmbH

Aeroderivative Gas Turbine Repair & Overhaul

GE Aerospace
Honeywell International
IPG Photonics

Air Systems

Aeroprobe Corporation
Impro Aerotek USA

Analytical

Cambustion
Maya HTT
Vectoflow GmbH

Automated 3D Inspection and Measurements

Aerodyn Ltd

Axial & Centrifugal Compressors

Advanced Design Technology Ltd.
Aerodyn Ltd
datatel Telemetry
Friendship Systems Inc
GadCap Technical Solutions Ltd.
Turbostream Ltd

Bearings, Seals & Lubricants

Main-Metall International AG
Miba Industrial Bearings

Components

Aerodyn Ltd
ATE Antriebstechnik und Entwicklungs GmbH & Co. KG
ILT TECNOLOGIE SRL
Impro Aerotek USA
LG Tech-Link Global, LLC
WIKA Optical Sensing Ltd.

Consulting & Engineering Services

Advanced Design Technology Ltd.
Aerodyn Ltd
Aeroprobe Corporation
Flowthermolab Ltd
Friendship Systems Inc
ILT TECNOLOGIE SRL
LG Tech-Link Global, LLC
Maya HTT
Southwest Research Institute
Turbostream Ltd

Controls/Instrumentation

Aerodyn Ltd
Aeroprobe Corporation
Cambustion
datatel Telemetry
GadCap Technical Solutions Ltd.
GE Aerospace
Honeywell International
LG Tech-Link Global, LLC
Sensorade
Torquemeters Ltd.
Vectoflow GmbH

Design Process & Methodoligies

Advanced Design Technology Ltd.
Aerodyn Ltd
Aeroprobe Corporation
Friendship Systems Inc
LG Tech-Link Global, LLC
Maya HTT
NOVA
Siemens Digital Industries Software
Southwest Research Institute
Turbostream Ltd

Drive Train Equipment

ATE Antriebstechnik und Entwicklungs GmbH & Co. KG
Torquemeters Ltd.

Education

Flowthermolab Ltd

Emmisions Testing

Cambustion

Expanders

Advanced Design Technology Ltd.
Friendship Systems Inc

Fans & Blowers

Advanced Design Technology Ltd.
Aerodyn Ltd
datatel Telemetry
e+a
Friendship Systems Inc
GadCap Technical Solutions Ltd.
Turbostream Ltd

Fuel Systems

GE Aerospace
Impro Aerotek USA

Gas Turbines

Advanced Design Technology Ltd.
Aerodyn Ltd
Cambustion
datatel Telemetry
e+a
Friendship Systems Inc
GadCap Technical Solutions Ltd.
GE Aerospace
Honeywell International
ILT TECNOLOGIE SRL
Impro Aerotek USA
LG Tech-Link Global, LLC
Maya HTT
NOVA
Shandong Qingneng Steam Turbine Co., Ltd.
Turbostream Ltd

Gear Type Compressors

datatel Telemetry

Laser and Optical 3D Scanning

Aerodyn Ltd

Laser Drilling

ILT TECNOLOGIE SRL

Laser Machining

ILT TECNOLOGIE SRL

Laser Welding

Aerodyn Ltd
ILT TECNOLOGIE SRL

Maintenance and Operation

GE Aerospace
Honeywell International
ILT TECNOLOGIE SRL

Management

Aerodyn Ltd

Management & Maintenance of Rotating Equipment

Miba Industrial Bearings
Torquemeters Ltd.

Manufacturing Processes

Aerodyn Ltd
GE Aerospace
Honeywell International
ILT TECNOLOGIE SRL
Impro Aerotek USA
IPG Photonics

Monitoring Software

Maya HTT
Torquemeters Ltd.
Vectoflow GmbH

Oem Gas Turbine/Power Turbine

Cambustion
e+a
GE Aerospace
Honeywell International
ILT TECNOLOGIE SRL
Maya HTT

Package/Turnkey Applications

Aerodyn Ltd
datatel Telemetry

Process Control Systems

Vectoflow GmbH

Service for Turbines & Compressors

Aeroprobe Corporation
ILT TECNOLOGIE SRL
Maya HTT

Software & Computer Hardware

Advanced Design Technology Ltd.
Aeroprobe Corporation
Friendship Systems Inc
Maya HTT
NOVA
Siemens Digital Industries Software
Turbostream Ltd

Special Materials

ILT TECNOLOGIE SRL
Advanced Design Technology Ltd.
Aerodyn Ltd
Aeroprobe Corporation
datatel Telemetry
Friendship Systems Inc
Maya HTT
NOVA
Shandong Qingneng Steam Turbine Co., Ltd.
Turbostream Ltd

Testing

Aerodyn Ltd
Aeroprobe Corporation
Cambustion
datatel Telemetry
GadCap Technical Solutions Ltd.
ILT TECNOLOGIE SRL
LG Tech-Link Global, LLC
Sensorade
Siemens Digital Industries Software
Southwest Research Institute
Torquemeters Ltd.
Vectoflow GmbH

Wind Turbines

Aeroprobe Corporation
datatel Telemetry
Friendship Systems Inc
Turbostream Ltd

FACILITY TOUR

TV Allen Combined Cycle

TUESDAY, JUNE 17 / 8:00 – 11:00 A.M.

TVA Allen Fossil Plant / 2480 Hennington Ave, Memphis, TN 38109

The Tennessee Valley Authority provides electricity for 153 local power companies serving 10 million people in seven states, as well as directly to about 60 large industrial customers and federal installations. We don't get taxpayer funding; rather, our revenues come from sales of electricity. TVA also provides flood control, navigation, and land management for the Tennessee River system and assists local power companies and regional governments with their economic development efforts. The Allen Combined Cycle Plant is a 2x1 7HA.02 gas turbine facility serves Memphis and the surrounding communities.

**The tour, including travel time, will be approximately 4 hours. A complimentary van will depart from the Sheraton Hotel at 7:40 am and will arrive at TVA approximately 8:00am.The tour will be held from 8:00 to 11:00am and is restricted to 15 participants. Guests will be driven back to the Sheraton Hotel and can expect to arrive by 11:30am.*

Attendees:

15

Transportation:

7:40 A.M. Van pickup (Sheraton)

Registration:

Register As the numbers for this visit are restricted to 15, TVA may pre-screen participants.

Meals

None

More Info

Ashley McDonald

Thank you to sponsor EPRI for providing the transportation for the tour.

INDUSTRY TOUR

FedEx - Memphis, TN

WEDNESDAY, JUNE 18 / 8:30 – 10:00 A.M.

3050 Winchester Rd., Memphis TN, 38112

FedEx has grown tremendously since its first night of operations in 1973. Now FedEx serves more than 220 countries and territories and provides customers and businesses worldwide with a broad portfolio of transportation, e-commerce, and business services, offering integrated business solutions utilizing its flexible, efficient, and intelligent global network.

**The tour, including travel time, will be approximately 2 hours. A complimentary van will depart from the Sheraton Hotel at 7:45am and will arrive at the FedEx facility at 8:15am. The tour will be held from 8:30 to 10:00am and is restricted to 30 participants. Guests will be driven back to the Sheraton Hotel and can expect to arrive by approximately 10:30am.*

Special note, each attendee needs to wear long pants, closed toe shoes.

Attendees:

30

Transportation:

7:45 A.M. Van pickup (Sheraton)

Registration:

Visit this link. As the numbers for this visit are restricted to 30, FedEx may pre-screen participants.

Meals

None

More Info

Scott Rollen *(901-930-7491)*

Thank you to sponsor EPRI for providing the transportation for the tour.

IGTI Technical Committee Leaders

Aircraft Engine

Current Chair: Oscar Kogenhop
Vice Chair: Kurt Rouser
Incoming Chair: Kurt Rouser
Incoming Vice Chair: K. Todd Lowe

Ceramics

Current Chair: Michael Presby
Current Vice Chair: Spencer Jeffs
Incoming Chair: Spencer Jeffs
Incoming Vice Chair: Jamesa Stokes

Coal, Biomass & Alternative Fuels

Chair: Angela Serra
Vice Chair: Marcel Otto

Combustion, Fuels & Emissions

Current Chair: Dr. Sebastien Ducruix
Current Vice Chair: Jacqueline O'Connor
Incoming Chair: Jacqueline O'Connor
Incoming Vice Chair: Mirko Bothien

Controls, Diagnostics & Instrumentation

Chair: Dr. Lubomir A. Ribarov
Vice Chair: Craig R. Davison

Cycle Innovations

Current Chair: Ward De Paepe
Current Vice Chair: Alessandro Sorce
Incoming Chair: Alessandro Sorce
Incoming Vice Chair: Ioannis Roumeliotis

Education

Current Chair: Ioanna Aslanidou
Current Vice Chair: Prashant Khare

Electric Power

Current Chair: Richard Tomlinson
Current Vice Chair: Thomas Christiansen

Energy Storage Committee

Current Chair: David Sánchez
Current Vice Chair: Klaus Brun

Fans and Blowers

Chair: Till M. Biedermann
Vice Chair: Massimo Masi

Heat Transfer

Chair: Eric Ruggiero
Vice Chair: Stephen Lynch

Industrial & Cogeneration

Current Chair: Clement Joly
Current Vice Chair: Rakesh Bhargava
Incoming Chair: Rakesh Bhargava
Incoming Vice Chair: Mustapha Chaker

Manufacturing Materials & Metallurgy

Chair: Scott Keller
Vice Chair: Alex Bridges

Microturbines, Turbochargers & Small Turbomachines

Current Chair: Aaron M. Rimpel
Current Vice Chair: Mihai Mihaescu
Incoming Chair: Mihai Mihaescu
Incoming Vice Chair: Jorge García Tíscar

Oil & Gas Applications

C Current Chair: Jason Wilkes
Current Vice Chair: Michele Pinelli
Incoming Chair: Michele Pinelli
Incoming Vice Chair: Anand Srinivasan

Steam Turbine

Current Chair: Shigeki Senoo
Current Vice Chair: Kane Chandler
Incoming Chair: Kane Chandler
Incoming Vice Chair: Sebastian Schuster

Structures & Dynamics

Chair: Mateusz Golebiowski
Vice Chair: Adolfo Delgado

Student Advisory

Chair: Marco Castaldi
Vice Chair: Janakiraman Thiyagarajan

Supercritical CO_2

Current Chair: Timothy Allison
Current Vice Chair: Renaud Le Pierres
Incoming Chair: Renaud Le Pierres
Incoming Vice Chair: John Crane

Turbomachinery

Current Chair: Dr. Bronwyn Power
Current Vice Chair: Hamid Hazby
Incoming Chair: Hamid Hazby
Incoming Vice Chair: Lisa Brilliant

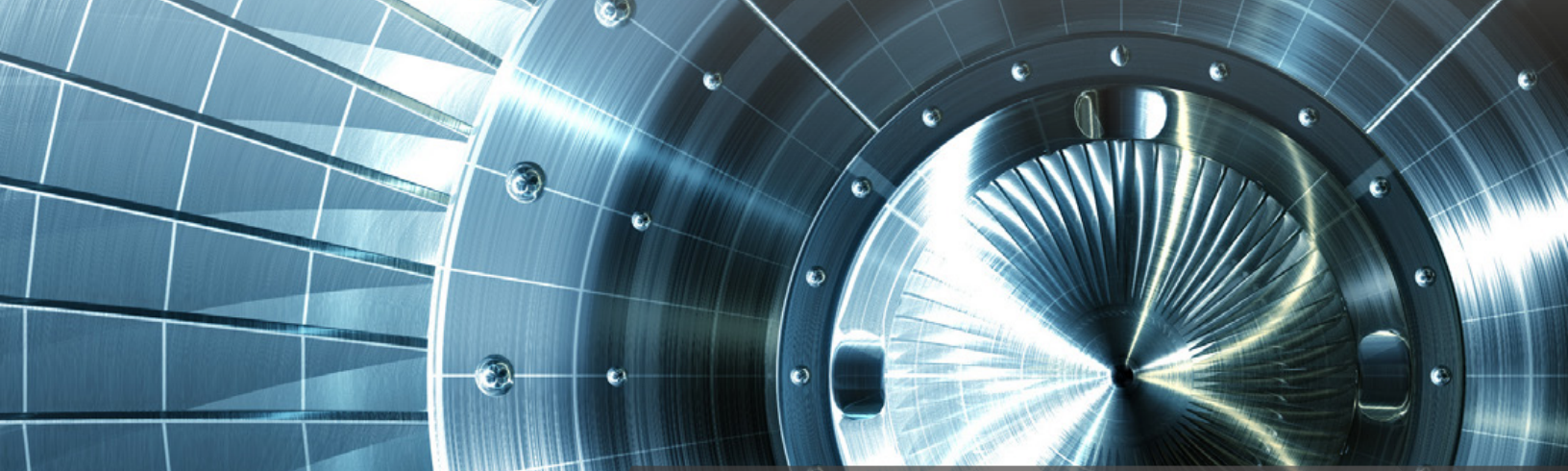
Wind Energy

Current Chair: Giacomo Persico
Current Vice Chair: Lorenzo Ferrari
Incoming Chair: Lorenzo Ferrari
Incoming Vice Chair: Stavros Vouros

Committee Meetings

Please refer to the ASME Conferences App for meeting room assignments.

Committee	Day	Time
Aircraft Engine	Thursday	6:00PM – 7:30PM
Ceramics	Wednesday	6:00PM – 7:30PM
Coal, Biomass & Alternative Fuels	Wednesday	6:00PM – 7:30PM
Combustion, Fuels & Emissions	Tuesday	6:00PM – 7:30PM
Controls, Diagnostics & Instrumentation	Wednesday	6:00PM – 7:30PM
Cycle Innovations	Thursday	6:00PM – 7:30PM
Education	Wednesday	6:00PM – 7:00PM
Electric Power	Wednesday	6:00PM – 7:30PM
Energy Storage	Tuesday	6:00PM – 7:30PM
Fans and Blowers	Wednesday	6:00PM – 7:30PM
Heat Transfer	Wednesday	5:30PM – 7:00PM
Industrial & Cogeneration	Tuesday	6:00PM – 7:30PM
Manufacturing Materials & Metallurgy	Wednesday	6:00PM – 7:30PM
Microturbines, Turbochargers & Small Turbomachines	Wednesday	6:00PM – 7:30PM
Oil & Gas Applications	Thursday	6:00PM – 7:30PM
Steam Turbine	Wednesday	6:00PM – 7:30PM
Structures & Dynamics	Tuesday	6:00PM – 7:30PM
Student Advisory	Thursday	4:00PM – 5:30PM
Supercritical CO_2	Wednesday	6:00PM – 7:30PM
Turbomachinery	Tuesday	6:00PM – 7:30PM
Wind Energy	Thursday	6:00PM – 7:30PM



The Global Journal of Energy Equipment

TURBOMACHINERY
INTERNATIONAL

Track Organizers

Track 01: Aircraft Engine

Oscar Kogenhop, *EPCOR*
Kurt Rouser, *Oklahoma State University*
Mavroudis Kavvalos, *German Aerospace Center (DLR)*
Curtis Vedder, *Honeywell*

Track 02: Ceramics and Ceramic Composites

Michael Presby, *NASA*
Spencer Jeffs, *Swansea*

Track 03: Coal, Biomass, Hydrogen & Alternative Fuels

Prof Domenico Borello*, Sapienza University of Rome*
Dr. Marina Braun-Unkhoff*, retired from German Aerospace Center (DLR)*

Track 04: Combustion, Fuels & Emissions

Santosh Hemchandra, *Indian Institute of Science*
Bobby Noble, *EPRI*
Samir Rida, *GE Vernova*

Track 05: Controls, Diagnostics & Instrumentation

Lubomir Ribarov, *U.S. Merchant Marine Academy*
Craig Davison, *National Research Council, Canada*
Tamara Guimarães, *Pennsylvania State University*

Track 06: Cycle Innovations

Ioannis Roumeliotis, *Cranfield University*
Alessandro Sorce, *UniGe*
Ward De *Paepe, UMONS*

Track 07: Education

Ioanna Aslanidou, *Mälardalen University*
Prashant Khare, *University of Cincinnati*

Track 8: Electric Power

Ben Emerson, *Georgia Institute of Technology*
Rick Tomlinson, *Chevron*
Thomas Christiansen, *Strategic Power Systems, Inc.*
David Noble, *EPRI*

Track 9: Energy Storage

David Sánchez, *University of Seville*
Klaus Brun, *Elliot Group*
Timothy Allison, *Southwest Research Institute*

Track 10: Fans and Blowers

Till Biedermann, *TH Nürnberg Simon Georg Ohm*
Massimo Masi, *University of Padova*
Zhiping Wang, *Morrison Products*

Track 11: Heat Transfer: Combustors

Cosimo Bianchini, *Ergon Research*
Carlo Carcasci, *University of Florence*
Lesley Wright, *Texas A&M University*

Track 12: Heat Transfer: Film Cooling

Lamyaa El-Gabry, *GE Aerospace*
Ardeshir Riahi, *Honeywell Aerospace*
Lesley Wright, *Texas A&M University*

Track 13: Heat Transfer: General Interest/ Additive Manufacturing Impacts on Heat Transfer

Silvia Ravelli, *University of Bergamo*
Jeffrey Bons, *The Ohio State University*
Lesley Wright, *Texas A&M University*

Track 14: Heat Transfer: Internal Air Systems

Hui Tang, *University of Bath*
Michael Barringer, *Pennsylvania State University*
Lesley Wright, *Texas A&M University*

Track 15: Heat Transfer: Internal Cooling

Wontae Hwang, *Seoul National University*
Riccardo Da *Soghe, Ergon Research*
Lesley Wright, *Texas A&M University*

Track 16: Heat Transfer: Tutorials

Hongzhou Xu, *Solar Turbines Inc*
Florent Duchaine, *CERFACS*
Lesley Wright, *Texas A&M University*

Track 17: Industrial & Cogeneration

Clement Joly, *SoftInWay*
Rakesh Bhargava, *Innovative Turbomachinery Technologies Corp*

Track 18: Manufacturing Materials & Metallurgy

Scott Keller, *Doosan Turbomachinery Services*
Alex Bridges, *EPRI*

Track 19: Microturbines, Turbochargers & Small Turbomachines

Aaron Rimpel, *Southwest Research Institute*
Mihai Mihaescu, *KTH Royal Institute of Technology*

Track 20: Oil & Gas Applications

Jason Wilkes, *Southwest Research Institute*
Michele Pinelli, *University of Ferrara*

Track 21: Steam Turbine

Christian Siewert, *Siemens Energy*
Sebastian Schuster, *Universität Duisburg-Essen*
Shigeki Senoo, *Mitsubishi Heavy Industries, LTD.*
Kane Chandler, *Arabelle Solutions*

Track 22: Structures and Dynamics: Aerodynamics Excitation & Damping

Yoon Choi, *GE Aerospace*
Mateusz Golebiowski, *GE Vernova*
Adolfo Delgado, *Texas A&M Univeristy*
Ted Brockett, *Honeywell Aerospace*

Track 23: Structures and Dynamics: Bearing & Seal Dynamics

Joerg Schiffman, *EPFL*
Mateusz Golebiowski, *GE Vernova*
Adolfo Delgado, *Texas A&M University*
Ted Brockett, *Honeywell Aerospace*

Track 24: Structures and Dynamics: Emerging Methods in Design & Eng.

Dipankar Dua, *Siemens*
Mateusz Golebiowski, *GE Vernova*
Adolfo Delgado, *Texas A&M University*
Ted Brockett, *Honeywell Aerospace*

Track 25: Structures and Dynamics: Fatigue, Fracture & Life Prediction

Michael Kraemer, *TUD*
Mateusz Golebiowski, *GE Vernova*
Adolfo Delgado, *Texas A&M University*
Ted Brockett, *Honeywell Aerospace*

Track 26: Structures and Dynamics: Probabilistic Methods

Kai Kadau, *Siemens Energy*
Mateusz Golebiowski, *GE Vernova*
Adolfo Delgado, *Texas A&M University*
Ted Brockett, *Honeywell Aerospace*

Track 27: Structures and Dynamics: Rotordynamics

Filippo Cangioli, *Waukesha Bearings*
Mateusz Golebiowski, *GE Vernova*
Adolfo Delgado, *Texas A&M University*
Ted Brockett, *Honeywell Aerospace*

Track 28: Structures and Dynamics: Structural Mechanics & Vibration

Luigi Carassale, *UniGenova*
Mateusz Golebiowski, *GE Vernova*
Adolfo Delgado, *Texas A&M University*
Ted Brockett, *Honeywell Aerospace*

Track 29: Student Poster

Marco Castaldi, *von Karman Institute for Fluid Dynamics / Ghent University*
Thiyagarajan Janakiraman, *Lund University / Scania CV AB*

Track 30: Supercritical CO_2

Tim Allison, *Southwest Research Institute*
Renaud Le *Pierres, Parker Hannifin (Heatric)*

Track 31: Turbomachinery: Axial Flow Fan & Compressor Aerodynamics

Lisa Brilliant, *Pratt & Whitney*
Daniel Wilkin, *GE Aerospace*

Track 32: Turbomachinery: Axial Flow Turbine Aerodynamics

Emil Göttlich, *Technical University Graz*

Track 33: Turbomachinery: Deposition, Erosion, Fouling, and Icing

Sergio Lavagnoli, *Von Karman Institute*

Track 34: Turbomachinery: Design Methods & CFD Modeling for Turbomachinery

Jeff Defoe, *University of Windsor*

Track 35: Turbomachinery: Ducts, Noise & Component Interactions

Stefano Bianchi, *Airbus*

Track 36: Turbomachinery: Multidisciplinary Design Approaches, Optimization, and Uncertainty Quantification

Marcus Meyer, *Rolls Royce Dahlewitz*

Track 37: Turbomachinery: Radial Turbomachinery Aerodynamics

Bob Mischo, *MAN Energy Solutions*

Track 38: Turbomachinery: Turbomachinery General Interest

Hamid Hazby, *Mercedes-AMG Petronas*

Track 39: Turbomachinery: Tutorials

Anna Laufer, *GE Aerospace*

Track 40: Turbomachinery: Unsteady Flows in Turbomachinery

Alexander Hergt, *DLR, German Aerospace Center (DLR)*

Track 41: Wind Energy

Giacomo Persico, *Politecnico di Milano*
Lorenzo Ferrari, *Università di Pisa*

SIEMENS energy

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Registration Information

TURBO EXPO 2025

Registration Information

Turbo Expo will be held at the Renasant Convention Center, Memphis, Tennessee, USA June 16–20, 2025.

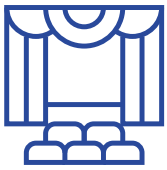
FULL CONFERENCE REGISTRATION INCLUDES:

Access to all conference sessions

including technical presentations, keynote sessions, panel discussions, tutorial of basics sessions, and award ceremonies

Admission to networking sessions

including the Welcome Reception, Student/Early Career Engineer Mixer & Exhibit Hall receptions



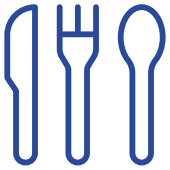
Admittance into the Turbo Expo exhibition hall

Tuesday, Wednesday and Thursday

Access to the Student Poster Session

Online access to all Turbo Expo 2025 final accepted papers

Opportunity to attend facility tours



Access to daily lunches (M-Thr)

Opportunity to register for the Celebrating Women in Turbomachinery Dinner

Conference Registration Pricing

MEMBER REGISTRATION

Registration Category	ADVANCE Mar 19 - 31	REGULAR Apr 1 - May 31	LATE June 1 - 15	ONSITE June 16 - 20
Full Conference	$1,300	$1,450	$1,550	$1,650
Full Conference-Student	$700	$850	$950	$1,050
Life Member	$700	$850	$950	$1,050
3 Day Conference	$1,060	$1,210	$1,310	$1,410

NON-MEMBER REGISTRATION

Registration Category	ADVANCE Mar 19 - 31	REGULAR Apr 1 - May 31	LATE June 1 - 15	ONSITE June 16 - 20
Full Conference	$1,500	$1,650	$1,750	$1,850
Full Conference-Student	$750	$900	$1,000	$1,100
3 Day Conference	$1,220	$1,370	$1,470	$1,570

SPONSOR & EXHIBITOR REGISTRATION

Registration Category	ADVANCE Mar 19 - 31	REGULAR Apr 1 - May 31	LATE June 1 - 15	ONSITE June 16 - 20
Exhibiting Company	$1,100	$1,250	$1,350	$1,470
Platinum Sponsor Employee	$900	$1,050	$1,150	$1,250
Additional Booth Personnel	$250	$250	$250	$250

GROUP REGISTRATION

Registration Category	ADVANCE Mar 19 - 31	REGULAR Apr 1 - May 31	LATE June 1 - 15	ONSITE June 16 - 20
Group 10-30	$1,180	$1,330	$1,430	$1,530
Group 31-50	$1,120	$1,270	$1,370	$1,470

Admittance

Full Payment is required to attend Turbo Expo. Badges will not be given to anyone with an outstanding payment.

Badge Pick-Up Information

Badges will not be mailed. All badges must be picked-up onsite. Photo identification is required for badge pick-up at the on-site registration desk. Full Payment is required to attend Turbo Expo. Badges will not be given to anyone with an outstanding payment.

Substitutions

Registrations may not be transferred or substituted at any time.

Complimentary Membership

Attendees who pay the Non-Member registration rate will be offered a complimentary 4-month ASME trial membership following the conference. ASME will be emailing eligible registrants and inviting them to join ASME within 90 days after the conference. For more information, visit the ASME Membership website.

Cancellation/Refund Policy

- Cancellations received on or before May 16, 2025 will receive a full refund, less $150 administrative fee.
- No refunds will be granted after May 16, 2025. **NO EXCEPTIONS**. No-shows will not be eligible for refunds.

Additional Information

STUDENT REGISTRATION RATES

Student registration rates are only available to undergraduate and graduate students who are enrolled full-time and have not yet received their Ph.D. Post-docs may not register as students.

Persons who register at the Student Member or Student Non-Member rate will be required to submit current valid student identification to ASME. If the identification is not validated, the attendee will need to register in one of the non-student registration categories.

GROUP REGISTRATION

Group registration is for groups of 10-30 or 31-50. Please contact igtiprogram@asme.org for assistance with group registration. All group registrations must be paid in full by June 3.

COMPLIMENTARY MEMBERSHIP

Attendees who pay the Non-Member registration rate will be offered a complimentary 4-month ASME trial membership following the conference. ASME will contact eligible registrants and invite them to join ASME within 90 days after the conference. For more information, visit ASME Membership website.

LETTERS OF INVITATION

You will be able to request your Conference Letter of Invitation during the Registration process which will be sent as a PDF attachment via email. **Once your fee is paid in full, your letter will be sent**. If you require a hard copy invitation letter to be mailed to you, you may request and pay for a hard copy invitation letter during the registration process.

INSURANCE AND LIABILITY

Participation in Turbo Expo 2025 is at your own risk. Please make your own health and travel insurance arrangements

PROFESSIONAL DEVELOPMENT HOURS (PDH)

A PDH Certificate will be emailed to you after the conference indicating the number of PDHs earned during the conference..

PHOTOS/VIDEOS/AUDIO RECORDINGS

Participants are reminded that material presented at ASME conferences is under the copyright of ASME. As a result, participants are prohibited from recording, screen-capturing, or photographing presentations in their entirety with the intent to distribute them to others.

Frequently Asked Questions

REGISTRATION

Why didn't I receive any tickets with my badge?

The tickets and/or products you purchased with your registration are encoded onto your badge. Please wear this badge to all Turbo Expo related events.

Registration Questions:

Refer to the registration desk onsite.

Do you have a list of registrants?

ASME does not share attendee lists.

Can I attend the Keynote Session?

The keynote session is open to all Turbo Expo badged registrants.

Can I pay cash onsite for the registration fees?

Yes. Payment must be made in USD.

Will I receive a receipt onsite for the fees paid?

There is a registration receipt station in registration.

Can I visit the exposition?

Exposition entry is included for all attendees with a technical conference badge or an exhibitor badge. To purchase a badge on-site, visit the Registration Desk.

I lost my badge. What should I do?

Go to the registration counter and ask for another badge to be printed. Registrants must provide a proper ID.

TECHNICAL PROGRAM & AWARDS

Session and Schedule Details:

See complete session details in the Final Program or on the Conference App.

Am I supposed to get a CD-ROM/ DVD of Conference Papers?

No, there is no CD or DVD for the Conference. Conference papers are available online.

Where/when is my committee meeting?

Refer to the Conference App for the schedule.

What audiovisual equipment is in the meeting rooms?

Each room will have a laptop and microphone, and laser pointer. Authors must have their presentation on a flash drive.

Do I have to upload my presentation onto a central network before my session?

No. Presenters (authors, panelists, lecturers, tutorial instructors) should plan to use their flash drive presentations only on the laptop in the session room in which they will be presenting. Please arrive 15 to 30 minutes prior to your session to prepare your presentation.

Where do I pick up the Best Paper Awards for my committee?

Committee awards are picked up by the designated leader at the Information Desk by Registration. Best paper award winners should attend their technical committee meeting to receive their award.

FREQUENTLY ASKED QUESTIONS

EXPOSITION

Can I take pictures in the exhibit hall?

If you are an exhibitor, you may take pictures of your own booth. Otherwise, there is no photography allowed in the hall without the permission of the exhibitor.

Where is my booth?

Refer to the Exhibit Directory in the Final Program.

When is the Expo open?

Exhibit Hall Hours are Tuesday and Wednesday from 12pm-6:30pm and Thursday from 10am-2:30pm.

Where are the Priority meetings for Turbo Expo 2025 exhibit space?

IGTI Exhibit Sales Office in the exhibit hall.

Where is the exhibitor service contractor desk?

GES is available in the exhibit hall.

TECHNICAL PROGRAM & AWARDS

Is there parking at the Renasant Convention Center?

To reach the Parking Garage for the Renasant Convention Center/Cannon Center: Navigate to 266 N. Front St. All attendees can reserve parking in advance herev. There are also pay machine kiosks located on Levels P1, P2 and P3 in the Renasant/Cannon garage, but you may encounter lines to make payment on major event days.

Is there a shuttle service between the Renasant Convention Center and my hotel?

No. However, depending on which hotel you booked, the Renasant Convention Center is a short walk away.

Is there any Wi-Fi access at the Renasant Convention Center?

There is complimentary Wi-Fi at the Renasant Convention Center. Network: Convention WIFI. Password: [enter email to access free Wi-Fi].

Is there a bank or ATM close by?

The ATM is located on L1 right behind the Front Desk.

Where can I purchase coffee or lunch?

There are scheduled coffee/tea breaks each morning and afternoon of the Conference. Lunch is included with all technical conference badges as well as exhibitor badges. There are also plenty of dining and drink options close to the convention center and Cannon Center. View a list here.

Where is the nearest mini market?

There are several options nearby. They include:

- Walgreens (*2 N Main St*)
- City Market (*66 2 Main St.*)
- Family Market (*533 N Fifth St*)
- Cordelia's Market (*737 Harbor Bend Rd*)
- South Point Grocery (*136 Webster Ave*)
- Second Street Shoppers (*99 S 2nd B*)
- DGX (*113 S Main St. Ste. 101*)
- Shell Gas Station (*464 N Main St.*)
- Sandra's Sundries (*77 Adams Ave*)

What is a good resource for information on the city?

You can visit the Memphis Tourism website for this information.

FREQUENTLY ASKED QUESTIONS

ATTENDEE SERVICES

Where are the first aid services?

For first aid assistance, contact an IGTI staff person or a security officer.

Is there a coat check/luggage check service available?

There is a complimentary luggage check available to conference attendees located in the registration area. No coat check service available. Please visit the registration desk for assistance.

Is there a dedicated space for nursing mothers?

Yes. The Mother's Room is located next to the Lower Level Boardroom.

Is there a dedicated space for prayer?

Yes. The prayer room is on the lower level, across from LL7.

How do I become a member of ASME?

asme.org/Membership/Join/

Will I be issued a PDH certificate?

Technical Conference delegates will receive an email by August with a certificate of their attendance (Professional Development Hours).

How do I get involved in an IGTI Committee?

If you are interested in getting involved with an IGTI Committee, attend the Technical Committee Meeting of your choice. IGTI Committee meetings are open to all. The Technical Committee Meeting Schedule can be found in the Final Program, the Conference App, and the website.

ENGINEERING WORKFORCE

ASME MET APPRENTICESHIP

THE START OF SOMETHING NEW

COHORT STARTS JUNE 2025

REGISTERED APPRENTICESHIP PROGRAM (RAP)

Registered Apprenticeship Programs (RAPs) are a key tool for developing and broadening the engineering talent pipeline to create opportunities accessible for all. A Registered Apprenticeship is an industry-driven, high-quality career pathway that allows employers to develop and prepare their future workforce to solve the challenges of tomorrow.

Our mechanical engineering technician apprenticeship program offers a unique opportunity for employers to connect with motivated individuals ready to learn and grow in their engineering career.

ASME

A U.S. Department of Labor Apprenticeship Building America, Round 2, grant provides funding for 85% of the cost of the ASME Registered Apprenticeship Program.

RAP INTEL

1 YEAR

APPROXIMATE TIME REQUIRED FOR APPRENTICE TO COMPLETE PROGRAM

144 HOURS

OF INSTRUCTION PROVIDED TO APPRENTICES

2,000 HOURS

OF ON-THE-JOB TRAINING FOR APPRENTICE WITH SKILLED & EXPERIENCED MENTOR

COLLABORATING TO DEVELOP A SKILLED ENGINEERING WORKFORCE

By partnering with the **American Society of Mechanical Engineers (ASME)** on our Registered Apprenticeship Program, your company will not only help develop the next generation of engineers, but also will benefit from access to talented and dedicated team members. These apprentices have earned their two-year degrees and seek on-the-job experience as well as training and guidance from a skilled mentor.

Just a few benefits of RAP include:

- An advantage in recruiting and developing a highly skilled engineering workforce
- Retaining top talent — 90% of apprentices continue employment after their apprenticeship program
- Potential eligibility for tax credit incentives

Join us in shaping the future of the engineering workforce and ensure your company gains a competitive edge in the global economy.

SCAN TO LEARN MORE & INQUIRE ABOUT NEXT STEPS

https://go.asme.org/apprenticeships

Tutorials of Basics

Track 01: Aircraft Engine

Basics of Aircraft Gas Turbine Engine Mechanical Systems
Author: Keith M. Boyer, Practical Aeronautics, Inc.

Thinking Like an Engine – Demystifying the Gas Turbine Performance Model
Author: Steve Sirica, Pratt & Whitney

Introduction to Aircraft Engine Conceptual Cycle Design
Author: Robert Clark, GE Aerospace

Build Your Own Gas Turbine Performance Model From Scratch
Author: Wilfried Visser, Delft University of Technology

The Basics of Gas Turbine Off-Design Performance
Author: Joachim Kurzke, Gas Turbine Performance Consultant

Performance Enhancement of Subsonic Turbofans
Author: Syed J. Khalid, GE Aerospace

Track 02: Ceramics and Ceramic Composites

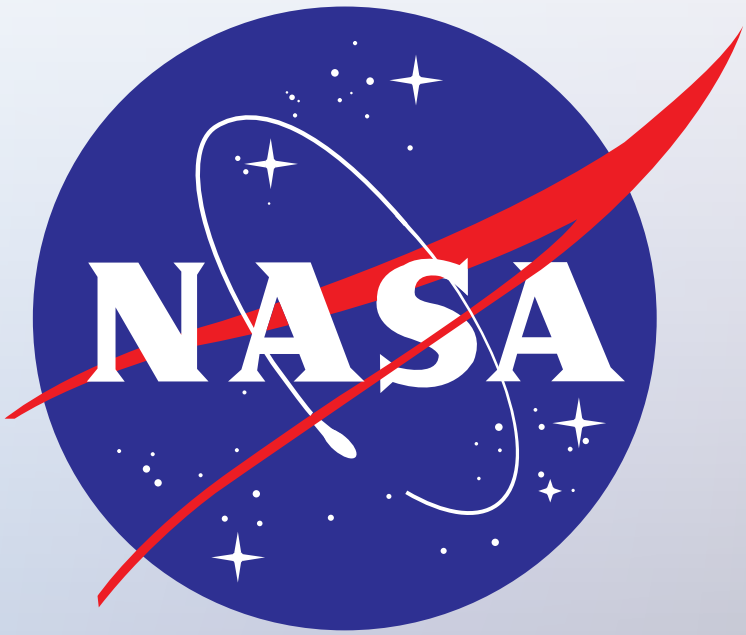
Particulate Damage of Protective Coatings for Gas Turbine Applications
Author: Jamesa L. Stokes, NASA John H. Glenn Research Center

Environmental Barrier Coatings for Gas Turbine Applications
Author: Michael Presby, NASA Glenn Research Center

Track 03: Coal, Biomass, Hydrogen & Alternative Fuels

Introduction to Sustainable Aviation Fuel: Production, Testing, and Its Current and Future Perspectives
Author: Francesco Di Sabatino, Southwest Research Institute

Life Cycle Assessment (Lca) Basics And Application To Optimize The Environmental Sustainability Of Gas Turbines
Author: Angela Serra, Baker Hughes



Track 04: Combustion, Fuels & Emissions

Combustion Dynamics in Gas Turbines – Phenomenon, Monitoring and Control
Author: Thomas Steinbacher, IFTA

Combustion Dynamics Fundamentals
Author: Jacqueline O'Connor, Pennsylvania State University

Combustion Fundamentals
Author: Michael Klassen, Combustion Science & Engineering, Inc.

Large Eddy Simulation for reacting flows
Author: Santosh Hemchandra, Indian institute of science

Track 05: Controls, Diagnostics & Instrumentation

Gas Turbine Engine Transient Simulation and Controls Basics
Author: Syed J. Khalid, GE Aerospace

Track 06: Cycle Innovations

Decarbonization Pathways For Power Plants "Integration With Carbon Capture"
Author: Majed Sammak, CCS integration leader

Micro-Gas Turbine: Technological Advancements and Market Research
Author: Antonio Escamilla Perejon, ETN Global

Energy Storgae Cycles at Power Plant Scale
Author: Alberto Traverso, University of Genova

Closed Thermodynamic Cycle Analysis And Optimization
Author: Owen Pryor, Southwest Research Institute

Track 07: Education

Creating a Pathway to Learning in Gas Turbine Engine Course Design
Author: Kurt Rouser, Oklahoma State University

Track 08: Electric Power

Decarbonizing Gas Turbines: A Practical Guide to Low Carbon Fuels
Author: Christopher Perullo, Turbine Logic

From Simulation to Reality: AI and Digital Twins in Electric Power
Author: Christopher Perullo, Turbine Logic

“Numbers To Live By” Or The Physics Behind The Energy Transition
Author: Alessandro Ramaglia, Ansaldo Energia, Genova, Italy

Track 09: Energy Storage

Hydrogen for power and energy storage
Author: Francesco Di Sabatino, Southwest Research Institute

Introduction to ASME PTC53-2022: Performance Test Code for Mechanical and Thermal Energy Storage Systems
Author: William M. Conlon, Pintail Power LLC

Thermo-Chemical Energy Storage and Transport
Author: David Sánchez, University of Seville

Compressed Air Energy Storage Systems
Author: David Sánchez, University of Seville

Long-Duration Energy Storage Technologies
Author: Natalie R Smith, Southwest Research Institute

Long-Duration Energy Storage Systems and Applications
Author: Joshua Schmitt, Southwest Research Institute

Track 10: Fans and Blowers

Aeroacoustic Effects of Fans and Blowers: A Pragmatic Guide for Designers and Engineers
Author: Biedermann, Till, Faculty of Mechanical Engineering and Building Services Engineering, TH Nürnberg Georg Simon Ohm, Nuremberg, Germany

Track 16: Heat Transfer: Tutorials

Experimental And Numerical Methods For Aerothermal Combustor-Turbine Interaction Research
Author: Tommaso Bacci, University of Florence

Flame-Wall Interactions In Gas Turbine Combustion Chambers
Author: Pradip XAVIER, INSA Rouen Normandie, Univ Rouen Normandie, CNRS, Normandie Univ, CORIA UMR 6614, 76000 Rouen, France

Rotating Channel Heat Transfer
Author: Srinath Ekkad, North Carolina State University

Track 17: Industrial & Cogeneration

Combustion and Emissions

Author: Michael Klassen, MA Klein and Assoc.

Closed Cycle Gas TUrbines for Emissions-Free Power Generation

Author: Rakesh K. Bhargava, Innovative Turbomachinery Technologies

Track 18: Manufacturing Materials & Metallurgy

Component Degradation Mechanisms in Industrial Gas Turbines

Author: William David Day, Power Systems Mfg., LLC

Metallurgy for the non-Metallurgist

Author: Douglas Nagy, Liburdi Turbine Services

Material and Manufacturing Considerations in Component Lifing Technologies

Author: Dheepa Srinivasan, MS Ramaiah University of Applied Sciences

Gas Turbine Coatings

Author: Dheepa Srinivasan, MS Ramaiah University of Applied Sciences

Welding Metallurgy for Ferrous Alloys in Energy Industry

Author: Shutong Zhang , Electric Power Research Institute

Track 20: Oil & Gas Applications

Gas Turbines for LNG Production Processes

Author: Matt Taher, Bechtel Energy

Oil and Gas Applications for Turbomachinery

Author: Rainer Kurz, RKSBenergy LLC

Industrial Gas Turbines

Author: Rainer Kurz, RKSBenergy LLC

SAFETY DESIGN OF GAS TURBINE PACKAGE

Author: Stefano Minotti , Baker Hughes

Metrology Equipment: Tools, Usage, and Best Practices for the Measurement and Assembly of Precision Turbomachinery

Author: Jason Wilkes, Southwest Research Institute

Track 21: Steam Turbine

Best Practices for Reactive Root Cause Analysis for Turbines in the Context of a Potential Dispute

Author: Author: Richard Hollenbach III, Exponent Scientific and Engineering Consulting

Track 23: Structures and Dynamics: Bearing & Seal Dynamics

A Review of Active Magnetic Bearing Technology: Past, Present, and Future

Author: Rasish Khatri, Calnetix Technologies

Annular Clearance Gas Seals: Models and Measurements for Leakage, Force Coefficients and their Effect in Rotor Stability

Author: Luis San Andrés, Texas A&M University

Track 25: Structures and Dynamics: Fatigue, Fracture & Life Prediction

Fracture Mechanics Based Fatigue Life Approaches

Author: Michael Kraemer, Technical University Darmstadt

Track 27: Structures and Dynamics: Rotordynamics

How to Apply API Standards to Turbomachinery Rotordynamics – An Introduction

Author: Clement Joly, SoftInWay

Introduction to Rotordynamics Fundamentals

Author: Thomas KErr, Southwest Research Institute

Torsional Vibration Measurement and Model-based Monitoring in Todays Reality of Power Generation Business

Author: Mateusz Golebiowski , GE Vernova

Track 30: Supercritical CO_2

Turbomachinery Design and Operation for Supercritical CO_2 Applications

Author: J. Jeffrey Moore, Southwest Research Institute

Heat Exchangers for Supercritical CO_2 Power Cycle Applications

Author: Michael Marshall, Southwest Research Institute

Oxy-fuel combustion for direct-fired supercritical CO_2 cycles

Author: Francesco Di Sabatino, Southwest Research Institute

Materials for Supercritical Carbon Dioxide Applications

Author: Henry Saari, Carleton University

Track 39: Turbomachinery: Tutorials

An Introduction to Root Cause Failure Analysis for Industrial Machinery

Author: John Macha, Southwest Research Institute

Introduction to CFD for Turbomachinery

Author: Michael Marshall, Southwest Research Institute

The Role of AI in Modern Turbomachinery Engineering

Author: Francesco Bertini, Avio Aero

Benefits of Multi-Fidelity Holisitic Modeling of Thermo-Fluid Systems

Author: Clement Joly, SoftInWay

Aerodynamics of Intermediate Turbine Ducts

Author: Filippo Merli, von Karman Institute for Fluid Dynamics

Track 41: Wind Energy

Data-Centric Predicitive O&M in Wind Turbines

Author: Valerio Francesco Barnabei, Sapienza University of Rome

Stage Presentation Schedule

Tuesday	Presenter	From	Time
Presentation by IFTA Systems GmbH		*IFTA Systems GmbH*	1:00PM – 1:30PM
CM247LC for turbomachinery applications with advanced PBF-LB/M strategies	Tobias Novotny	*EOS*	1:45PM – 2:15PM
Presentation by Cambustion		*Cambustion*	2:30PM – 3:00PM
Introduction to Seals for Turbomachinery	Andy Alcantar	*Miba Industrial Bearings*	3:15PM - 3:45PM
Accelerating turbomachinery design with intelligent structured meshing	Peter R. Eiseman	*GridPro*	4:00PM – 4:30PM
NOVA: Advanced Non-Linear Dynamic Analysis for Turbomachinery	Giacomo Saletti	*NOVA*	4:45PM – 5:15PM
Rebuilding the Unseen: How to Digitally Model Aircraft Engines Without Existing Geometry to Simulate Real-World Operation with AxSTREAM	Clement Joly	*SoftinWay Inc.*	5:30PM – 6:00PM
Wednesday	**Presenter**	**From**	**Time**
HVTS™ Cladding in Advanced Gas Turbines: Field Performance and Applications Beyond the Hot Gas Path	Eric Duvekot	*Integrated Global Services (IGS)*	1:00PM – 1:30PM
Presentation by Sensor Coating Systems		*Sensor Coating Systems*	1:45PM – 2:15PM
Enhancing the digital twin reliability using test data and a thermal adjoint-based solver	Hussein Daou	*Maya HTT*	2:30PM – 3:00PM
This presentation addresses the development and the manufacture of a gas turbine Resonator Ring, using a wire-directed energy deposition (DED) process - wire arc additive manufacturing (WAAM)	Tad Steinberg	*Siemens Energy*	3:15PM - 3:45PM
Presentation by ILT Tecnologie/Sesta Lab		*ILT Tecnologie/ Sesta Lab*	4:00PM – 4:30PM
Simulation- and Data-Driven Design of Turbomachinery	Mattia Brenner	*Friendship Systems Inc.*	4:45PM – 5:15PM
An overview of collaborative efforts to bring to market a highly efficient, cost effective sCO_2 geothermal engine for the power generation market	Tim Noronha & Eric Vollnogle	*Peregrine Turbo Technologies & TURBOCAM International*	5:30PM – 6:00PM
Thursday	**Presenter**	**From**	**Time**
Dramatically reducing the time to solution using GPU computing and other simulation technology advances in gas turbine applications	John Stokes	*Ansys*	12:15PM – 12:45PM
Closing Ceremony and Kick-off to Milan 2026			1:00PM - 2:15PM