



Turbo Expo 2025

Advance Program

JUNE 16-20, 2025

MEMPHIS, TENNESSEE

The American Society of Mechanical Engineers®
ASME®

ASME
SETTING THE STANDARD

Table of Contents

CLICK ANY CHAPTER BELOW TO SKIP TO THE SELECTED CONTENT.

CLICK  ON ANY PAGE TO RETURN TO THE TABLE OF CONTENTS.

Sponsors &
Exhibitors

3

Memphis,
Tennessee

5

Grand Opening
& Awards
Information

8

Technical Sessions

14

Exhibit
Information

36

Networking Events

43

Registration
Information

45

Leadership Team

50

Student Activities

53

Registration by
Continent

56

Schedule at
a Glance

57

Sponsors

Thank you to our Sponsors and Exhibitors!
Be sure to visit their booths during the event.

PLATINUM SPONSORS



HIRING

GOLD SPONSORS



SILVER SPONSORS



GE Aerospace

BRONZE SPONSORS



Solar Turbines

A Caterpillar Company

Attendee Bags

ADDITIONAL SPONSORS



Attendee Bags



Experts in Turbomachinery

Name Badge Insert



Lanyards



Exhibitors

ACTE Heat Exchangers 622	GadCap Technical Solutions Ltd. 617	Pal-Con, LTD 644
ADS CFD Inc. 513	Gas Turbine Society of Japan 725	Parker Hannifin Corporation 608
Advanced Design Technology Ltd. 504	GasTurb GmbH 626	PCA Engineers Limited 633
Aerodyn Ltd 704	GE Aerospace 432	Piezocryst Advanced Sensorics GmbH 727
Aeroprobe Corporation 722	GridPro 545	Präwest Präzisionswerkstätten GmbH & Co. KG. 508
AIKOKU ALPHA Corporation 716	GTI Energy 613	První brněnská strojírna Velká Bíteš, a.s. 332
Ambrell Corporation 705	Honeywell International 739	Rigaku Corporation 702
Ansys 503	HPI Energy Services LLC 728	Scanivalve 409
APEX Turbine Testing Technologies 609	IfTA Ingenieurbuero fuer Thermoakustik GmbH 623	Sensor Coating Systems Limited 641
Argonne National Laboratory 335	IHI Bernex AG 938	Sensorade 328
ATE Antriebstechnik und Entwicklungs GmbH & Co. KG 316	ILT TECNOLOGIE SRL 823	SENTES-BIR 627
BeCOVER 625	Impro Aerotek USA 700	Sesta Lab 822
Cadence Design Systems, Inc. 415	Integrated Global Services 544	Shaft Current Solutions, DBA Sohre Turbomachinery 428
Cambustion 639	IPETRONIK Inc. 635	Siemens Digital Industries Software 833
CFturbo Inc. 523	IPG Photonics 624	Siemens Energy 800
Cincinnati Gearing Systems 709	Kingsbury, Inc. 402	SoftInWay Inc. 510
Combustion Science & Engineering 527	Kistler Instruments Corp. 323	Solar Turbines 322
Concepts NREC 614	Kulite Semiconductor Products, Inc. 615	Southwest Research Institute 723
Continental Controls Corporation 726	LG Tech-Link Global, LLC 612	Technetics 232
Convergent Science, Inc 401	Main-Metall International AG 524	TEES - Turbomachinery Laboratory 515
datatel Telemetry 609	MANNER Sensortelemetrie GmbH 645	TEMA ENERGY srl 816
e+a 522	Maya HTT 424	Texys Group 703
EOS North America 808	Mee Industries Inc. 526	Torquemeters Ltd. 605
Ergon Research 717	Metrologic Group Service 525	Turbocam International 738
Esteco 403	Miba Industrial Bearings 427	Turbostream Ltd 408
Florida Turbine Technologies 426	MIT Gas Turbine Laboratory 311	Tutco SureHeat 422
Flownex Simulation Environment 601	MMP Technology 500	University of Stuttgart, ITSM 405
Flowthermolab Ltd 333	MTU Aero Engines AG 732	Vectoflow GmbH 603
FOGALE Sensors 701	National Aeronautics and Space Administration 509	Waukesha Bearings Corporation 400
ForceBeyond 708	NDTL Propulsion and Power 423	WIKA Optical Sensing Ltd. 326
FRIENDSHIP SYSTEMS AG 741	North Wind Systems 733	
	NOVA 445	
	OROS Americas Inc. 735	
	Pacific Instruments 329	

[Exhibitors and Exhibition Map](#)

City of Memphis

Memphis is a city known for its music and nightlife scene, 60+ attractions, civil rights landmarks, and world-famous barbecue.

WEATHER

Daily high temperatures range from 85°F to 90°F, rarely falling below 78°F or exceeding 95°F. Daily low temperatures range from 68°F to 73°F, rarely falling below 59°F or exceeding 78°F.

PARKING AT THE RENASANT CONVENTION CENTER

For those planning to drive, find directions and parking FAQs [here](#).

GETTING AROUND

From taxis to buses, trolleys to bikes, see a compiled list of details you need to get around Memphis without a car [here](#).

DINING

Eating in Memphis is an experience for the soul. The specialty here is barbecue, but they are also known for their wings. Additionally, you can find soul food, fine dining, twists on Southern classics, authentic Italian and Mexican cuisine, burgers, vegan fare, and much more. Check out the best eats [here](#).

[FREE MAP AND TOURIST GUIDE](#)

THINGS TO DO

With more than 60 unique attractions across the city, you'll find plenty of things to do in Memphis, Tennessee, whether you're looking for relaxation, excitement or classic memory-making.

[MORE TOURIST ATTRACTIONS HERE](#)

Elvis Presley's Graceland and Stax Museum of American Soul Music

National Civil Rights Museum

And other landmarks that tell of Memphis' powerful place in civil rights history.

Mississippi Riverfront

Beale Street
Live music.

Memphis Rock 'n' Soul Museum

Memphis Music Hall of Fame

The Blues Foundation's Blues Hall of Fame

Sun Studio

Birthplace of rock and roll and where Elvis Presley, Johnny Cash and Jerry Lee Lewis got their start.

Memphis Zoo
Award-winning.



ASME Turbo Expo Night at the Ballpark

Norfolk Tides vs Memphis Redbirds

June 19, 2025 / 7:05 p.m. CDT

AutoZone Park - 198 Union Avenue, Memphis, TN 38103

TICKETS: \$80.36

(can be purchased directly from the [vendor's website](#))

Celebrate innovation, networking, and America's favorite pastime as we cheer on the Memphis Redbirds in a special event designed for ASME Turbo Expo attendees. Enjoy an exciting baseball game, delicious ballpark snacks, and an opportunity to mingle with fellow engineers and professionals in a relaxed and vibrant atmosphere.

This is the perfect chance to unwind after a day of insightful conference sessions, while also enjoying the camaraderie of your colleagues and making new connections. Whether you're a baseball enthusiast or just looking for a great way to spend the evening, this event promises to be a memorable highlight of your Memphis experience.



AutoZone Park is a short 10-minute walk from the conference center.



TAKE ME OUT TO THE BALLGAME

*"It doesn't get more Americana than to sit back and enjoy an evening at the ballpark and watch a baseball game with friends. I grew up watching the Red Sox play at Fenway Park in Boston and developed a deep love for the game thanks to my Uncle Bob. I am excited to watch the Memphis Redbirds play this June with all my colleagues from ASME Turbo Expo! **Hope to see you at the park!**"*

- Dr. Eric Ruggiero, 2025 ASME Turbo Expo Conference Chair and long retired Little League 3rd baseman

LOCAL LIAISON COMMITTEE



Bobby Noble, Chair
EPRI



Suresh Babu
University of
Tennessee, Knoxville



Josh Barron
Southern Company



Michael Cashion
TVA



Vipin Kumar Agarwal
University of Memphis



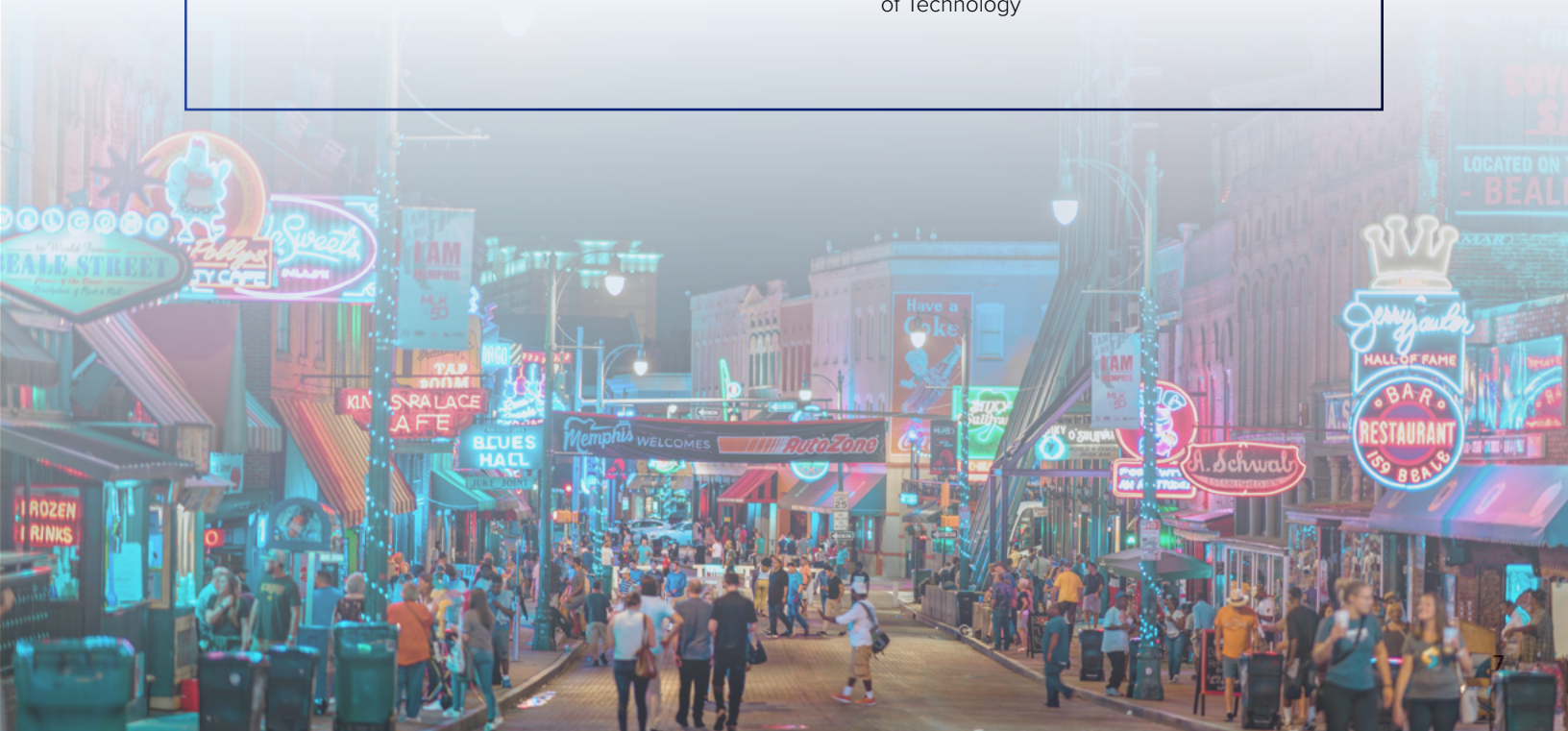
Meredith A. Neal
TVA



Ray Romesburg
Delta



David Wu
Georgia Institute of
Technology





Grand Opening & Awards Information

Awards & Scholarships

ASME Turbo Expo Early Career Engineer (TEECE) Travel Award

The Turbo Expo Early Career Engineer Travel Award is intended for early career engineers working in industry, in government or in academia to obtain travel funding to attend ASME Turbo Expo to present a paper which they have authored or co-authored. The purpose is to provide a way for more people to participate in the annual Turbo Expo.

The nominee must have obtained an academic degree (Bachelor, Master, PhD, or equivalent degrees) in an engineering discipline related to turbomachinery within five years from the year of the Turbo Expo that the applicant wishes to attend. The paper or poster being presented can be research results from work completed either while pursuing an academic degree, or after leaving school and entering the job field. Post-doctoral researchers in academic institutions are eligible so long as they have been in post no longer than five years full time equivalent.

TEECE AWARD WINNERS GET

One Complimentary ASME
Turbo Expo Technical
Conference Registration

Complimentary Hotel
Accommodations
(Sunday to Friday)

Up to \$1,000

*Toward approved travel
expenses.*

CONGRATULATIONS TO THE 2024 TEECE AWARD WINNERS

**Ananth Sivaramakrishnan
Malathi**

IIT Madras

Andrea Notaristefano

GE Avio Aero

Antoine Durocher

McGill University

Bogdan Cezar Cernat

*von Karman Institute
for Fluid Dynamics*

Deepanshu Singh

University of Cambridge

Dino Celli

Air Force Research Laboratory

Dr. Dimitra Tsakmakidou

Rolls-Royce

Dr. Donato Maria Palermo

GKN Aerospace Sweden AB

Elissavet Boufidi

*von Karman Institute
for Fluid Dynamics*

Eric DeShong

*Honeywell Aerospace
Technologies*

Howon Yi

LG Electronics

Lakshya Bhatnagar

Purdue University

Lukas Benjamin Inhestern

Purdue University

Majid Asli

*Brandenburg University of
Technology in Germany*

Manu S Kamin

University of Cincinnati

Marcel Otto

University of Central Florida

**Marco Bicchi,
Nuovo Pignone**

Baker Hughes

Thomas Corbett

Pratt and Whitney

Xiao He

Imperial College London

Yu Xia

Ansys UK Ltd



Student Advisory Committee Travel Award (SACTA)

SAC is pleased to announce that up to 20 Student Advisory Committee Travel Awards (SACTA) have been made available for students, with priority given to individuals participating in the ASME Turbo Expo 2025 and actively contributing to the growth of the SAC. The winners will receive reimbursement awards that cover up to \$2,000 of approved travel expenses (including accommodation, transportation, conference registration, etc.). Applicants for these awards must be seeking a degree. Communication with the SAC leadership team may be requested prior to, during, and following Turbo Expo.

ELIGIBILITY/EXPECTATIONS

Preference will be given to students who are or have been involved in SAC initiatives at Turbo Expo 2025 or earlier. Applicants must commit to active participation in the SAC Annual Meeting at the in-person Turbo Expo 2025 in Memphis. Additionally, they must be prepared to support the SAC leadership team during the poster session, if requested. Consistent communication with the SAC leadership team before, during, and after the ASME Turbo Expo 2025 is essential. Please note that to be eligible for the SACTA, candidates must have at least one paper or poster submitted and accepted for publication at Turbo Expo 2025. The candidate may be asked to verify the acceptance of their paper (as lead author or co-author) in order to be awarded the SACTA.

The following items must be included in the application for the SAC Travel Award:

- Application form
- Current resume or CV of the applicant
- Motivational letter from the applicant
- Support letter from the applicant's research advisor confirming applicant's degree-seeking status



The ASME R. Tom Sawyer Award

DEADLINE AUGUST 15

The R. Tom Sawyer Award is bestowed on an individual who has made important contributions to advance the purpose of the Gas Turbine Industry and to the International Gas Turbine Institute over a substantial period of time. The contribution may be in any area of institute activity but must be marked by sustained forthright efforts. The award was established in 1972 to honor R. Tom Sawyer who, for over four decades, toiled zealously to advance gas turbine technology in all of its aspects and includes a US \$1000 honorarium and a plaque presented during ASME Turbo Expo.

The nomination must be complete and accompanied by three to five Letters of Recommendation from individuals who are well acquainted with the nominees' qualifications. Candidate nominations remain in effect for three years and are automatically carried over. The completed reference form from a minimum of 3 people will need to be sent in with the nomination package. It is up to the "Nominator" to submit all required information.

Email completed nomination package to: igtiawards@asme.org.



Congratulations to the 2024 ASME R. Tom Sawyer Award winner Kenneth C. Hall.

The ASME Gas Turbine Award

The Gas Turbine Award is given in recognition of an outstanding individual--or multiple--author contribution to the literature of combustion gas turbines or gas turbines thermally combined with nuclear or steam power plants. The paper may be devoted to design aspects or overall gas turbines or individual components and/or systems such as compressors, combustion systems, turbines, controls and accessories, bearings, regenerators, inlet air filters, silencers, etc. It may cover topics specifically related to gas turbines such as high temperature materials or fuel considerations, including erosion and corrosion complications.

It can also be devoted to application or operational aspects of gas turbines for aircraft propulsion and ground power units, or automotive, electric utility, gas pipeline pumping, locomotive, marine, oil field pumping, petrochemical, space power, steel, and similar uses. This award was established in 1963 and includes a US \$1000 honorarium as well as a plaque presented during ASME Turbo Expo.



Congratulations to the 2022 ASME Gas Turbine Award winners Michael Casey and Chris Robinson.

John P. Davis Award

The John P. Davis Award will be awarded from time to time (not necessarily each year) to one or more papers that most significantly:

- (a) describe new or continuing gas turbine applications;
- (b) identify planning, installation, operating and/or maintenance problems and their solutions; and
- (c) exemplify candid exposure of real-world problems and solutions and are judged, therefore, to be of exceptional value to others supplying or using gas turbines and their support systems.



Congratulations to the 2024 ASME John P. Davis Award winners John Gulen, Martin Curtis for their paper titled Gas Turbine's Role in Energy Transition (GT2022-81802).

ASME Dedicated Service Award

DEADLINE NOVEMBER 1

The ASME Dedicated Service Award honors unusual dedicated voluntary service to the Society marked by outstanding performance, demonstrated effective leadership, prolonged and committed service, devotion, enthusiasm and faithfulness.

Nominations should be sent to igtiawards@asme.org



Congratulations to the 2024 award winners Peter Baldwin and Jaroslaw Szwedowicz.

The ASME IGTI Aircraft Engine Technology Award

DEADLINE OCTOBER 15

The Aircraft Engine Award recognizes sustained personal creative contributions to aircraft gas turbine engine technology. Eligible areas of accomplishment are aircraft engine design, and/or research and development performed in an industrial, academic or research laboratory environment in one or more of the following fields:

- Aircraft Engine Propulsion
- Airframe-Propulsion Integration
- Combustion & Fuels
- Controls
- Diagnostics
- Heat Transfer
- Manufacturing Materials & Metallurgy
- Operability
- Structures & Dynamics
- Turbomachinery

The Aircraft Engine Technology Award will include an optional opportunity to deliver a lecture or present an invited technical paper on the work for which the award is being bestowed, at ASME Turbo Expo. The recipient of the award will very desirably, but not necessarily, be a member of The American Society of Mechanical Engineers. The award will be made to a single individual.

Nominating and supporting letters should be sent to igtiawards@asme.org



Congratulations to the 2024 Aircraft Engine Technology Award winner David G. Bogard, University of Texas at Austin.

ADDITIONAL INFORMATION

Nominating letters should contain all information on the nominee's relevant qualifications. The Award Committee will not solicit or consider materials other than those described in the following. The selection committee will hold nominations active for a period of three years.

A minimum of two supporting letters from individuals, other than the nominator, must accompany the nominating letter. Supporting letters should reflect peer recognition of the nominee's breadth of experience with various aspects of industrial gas turbine technology.

The ASME IGTI Industrial Gas Turbine Technology Award

DEADLINE OCTOBER 15

The Industrial Gas Turbine Award recognizes sustained personal creative scientific or technological contributions unique to electric power or mechanical drive industrial gas turbine technology. Eligible areas of accomplishment are gas turbine design, application, operations/maintenance, and research/development/deployment, performed in an industrial, academic or research laboratory environment in one or more of the following fields:

- Combustion, Fuels, & Emissions Abatement
- Controls
- Diagnostics
- Electric Power Plant Integration
- Fluid Dynamics & Thermal Sciences
- Operation, Maintenance, & Life Cycle Cost
- Manufacturing, Materials, & Metallurgy
- Structures & Dynamics
- Thermodynamic Cycles
- Turbomachinery

The Industrial Gas Turbine Technology Award will include an optional opportunity to deliver a lecture or present an invited technical paper on the work for which the award is being bestowed, at ASME Turbo Expo. The recipient of the award will very desirably, but not necessarily, be a member of The American Society of Mechanical Engineers. The award will be made to a single individual.

Nominating and supporting letters should be sent to igtiawards@asme.org.



Congratulations to the 2024 Industrial Gas Turbine Technology Award winner Dr. Jay Kapat.

ASME IGTI Dilip R. Ballal Early Career Award

DEADLINE AUGUST 1

Early Career Awards are intended to honor individuals who have outstanding accomplishments during the beginning of their careers. Historically, there has been no such award to recognize early career engineers working in the area of turbomachinery.

An early career award is intended for those starting a professional career, which is typically after a relevant terminal degree: BS, MS, or PhD. A criterion of seven-years-from-degree will be used to define the nominee's eligibility. The nominee must receive the award prior to the completion of the seventh year beyond the terminal degree.

The recipient of the Dilip Ballal Early Career Award will be presented with the award at Turbo Expo. The award consists of a plaque, funds to support the travel and registration costs to Turbo Expo, free ASME membership registration for five years, and a US \$2000 honorarium.

NOMINATION REQUIREMENTS

The nomination package should include the following:

- a) A paragraph (less than 50 words) from the nominator highlighting nominee's contributions
- b) Nomination letter
- c) Two supporting letters
- d) Current resume of the nominee

Email nominations to igtiawards@asme.org.



Congratulations to the 2024 Dilip R. Ballal Early Career Award winner Dr. Amrita Basak.

For details on the 2025 award winners, please refer to the 2025 Awards Program. The program will be available on the Turbo Expo Website.



Technical Sessions

Technical Sessions

Aircraft Engine

Sessions within this track address issues of interest across a broad spectrum of aircraft engine technology subjects. Presenters will cover a range of topics including:

- Modeling, Simulation and Validation
- Whole Engine Performance and Novel Concepts
- Operability
- Inlets (incl. Boundary Layer Ingestion), Nacelles, Nozzles and Mixers
- Propellers and Open Rotors
- Propulsion System Integration in Conventional and Hybrid-Electric Aircraft
- Thermal Management Systems and Aero-Engine Oil Systems
- Aero-Engine Controls and Diagnostics

Ceramics and Ceramic Composites

Ceramics are important materials for consideration in the extreme environments found in the gas turbine engine hot sections due to their high temperature mechanical and physical properties as well as lower density than metals. The advantages of utilizing ceramic hot section components include weight reduction, improved efficiency as well as enhanced power output and lower emissions. In order to realize the potential of rotating and static ceramic components, some unique technical challenges are being overcome by the engineering community. Specific areas of research and development include:

- Design, development and processing of monolithic ceramic matrix composite (CMC) Materials
- Development, processing and characterization of Thermal and Environmental Barrier Coatings (TBCs/ EBCs)
- Modeling and validation of material performance
- Life Prediction
- NDE
- Test Methods and standards
- Design and fabrication of components
- Engine & laboratory testing of components

The technical and panel sessions sponsored by the ceramics committee cover breakthrough developments and demonstrations critical for the incorporation of ceramic hot section components for gas turbine engines.

- Ceramic Matrix Composites: Properties and Performance
- Ceramic Matrix Composites: Modeling and Life Prediction

Coal, Biomass, Hydrogen, & Alternative Fuels

Sessions focus on high-interest topics in the area of alternative fuel systems for gas turbines, including Hydrogen fuel systems, steam turbines and other turbomachinery technologies. Alternative and renewable fuels including gaseous and liquid hydrocarbon fuels, alcohols and ethers; as well as pure hydrogen, or high hydrogen content fuels. Alternative liquid hydrocarbon fuels derived from coal or biomass feedstocks or other technologies. Technical, tutorial, and panel sessions will cover the fundamental physical and chemical properties of alternate and renewable fuels, important to their use in gas-turbine engines and other power systems, as well as their application in different power systems, including application of life-cycle assessment as a mean to evaluate solutions sustainability. Sessions will be of interest to researchers/technologists/computational methods involved in the generation and utilization of non-conventional fuels in gas-turbine-based energy systems and for those wishing to start a new activity in this field.

- Hydrogen Fuel delivery systems
- Hydrogen and hydrogen content fuels for Gas Turbine Applications
- Alternative Fuel Chemistry and Fundamentals
- Alternative Fuel Use in Gas-Turbine Engines
- Basics of Hydrogen and Alternative Fuels
- Liquid Fuel Atomization and Combustion
- Computational Methods for Hydrogen and other Alternate Fuels
- Basics of Combustion Computational Fluid Dynamics
- Gas turbine in coal-biomass integrated cycles
- Life cycle assessment of gas turbine cycles, engines and components

Combustion, Fuels, & Emissions

Aero and Industrial Gas turbines with low specific fuel consumption and reduced CO₂ emissions require high combustor outlet temperatures with a continued emphasis on reducing emissions, without sacrificing operability or durability. In addition, Combustion systems are increasingly expected to operate with synthetic gaseous fuels or alternative liquid fuels, including novel fuels such as hydrogen or ammonia. The Combustion, Fuels & Emissions sessions will highlight new technology and design approaches, using both experimental and computational techniques, employed to achieve improved combustor performance including ultra-low pollutant emissions and enhanced operability such as turndown and transient response. Broad trends include a continued focus on combustion dynamics for lean-staged combustion systems, significant innovation in the development of combustion system such as Dry Low NO_x or novel rotary detonation, maturation of large eddy simulation analyses, as well as continued research of fundamental and applied topics in automation, mixing, ignition, autoignition, blowout and chemical kinetics.

Technical sessions include:

- Ignition & Auto ignition
- Atomization & Sprays
- Fundamental Combustion
- Novel Combustion Concepts
- Flashback & Blowout
- Pollutant Emissions Formation & Control: Combustor Performance
- Combustor Design & Development
- Chemical Kinetics
- Combustion Noise
- Pollutant Emissions: Modeling, Soot and Particulates
- Combustion Dynamics: Basic Mechanisms, Flame Response to Perturbations, Instability, Analysis, Model Development and Damping & Control
- Combustion Modeling: Combustor Simulations and Large Eddy Simulations
- High Hydrogen Combustion
- Dry Low-NO_x Combustor Development
- Micro Devices
- Jet-in-crossflow & Swirling Flows
- Combustor Diagnostics

Controls, Diagnostics & Instrumentation

The Controls, Diagnostics & Instrumentation Committee will host technical, panel and tutorial sessions that will closely examine the global challenges associated with Gas Turbine Engine Technology. These will include the latest developments in gas turbine engine control, prognostics, diagnostics and health management, artificial intelligence, and instrumentation technology, and the impact these technologies have in enabling more efficient and reliable engines, lowering engine emissions, and reducing engine operating costs. More precisely, the exchange of information between experts from Government, Academia and Industry is promoted on the following topics:

- Control System Technology
- Optimal and Intelligent Controls
- Active Component Control
- Distributed Engine Control
- Engine Health Management
- Gas Path Performance Diagnostics
- Structural and Mechanical Component Health Management
- On-Board Engine Monitoring and Diagnostics
- Prognostics for Gas Turbine Engines
- Modeling for Controls and Diagnostic Applications
- Life Usage Monitoring and Life Extending Control Algorithms and Sensors
- Optical and Non-intrusive Measurement Techniques
- Flow, Temperature, Pressure and Acoustic Instrumentation
- Advanced Data Reduction Methods
- Integrated Controls and Diagnostics
- Novel Sensors and Sensor Technologies
- Development of Standard and High Temperature Test Rigs and Probes

Cycle Innovations

The Cycle Innovations Committee is dedicated to the advancement of technology and innovation, with a particular focus on the thermodynamic cycles of gas turbine–based plants for power generation and propulsion. Special attention is also devoted to energy storage technology and management aspects. The Committee traditionally attracts paper submissions from a wide range of disciplines and scientific areas. Some of the thematic areas the Committee currently encompasses are listed below:

- Low or no emissions thermal cycles
- H₂ production and utilization
- Polygeneration cycles and process integration (power, heat, cooling, fuels, chemicals) for centralized and distributed power generation
- Advanced steam and humid air cycles
- (Semi)-Closed cycle gas turbine technology
- Novel propulsion systems for aircraft, rotorcraft and marine
- Innovative low and high temperature heat recovery cycles
- Renewable and bio-energy concepts and innovative cycles
- Fuel cell driven cycles and hybrid systems
- Externally fired gas turbines and high temperature heat exchangers
- Thermo-economic and environmental impact analysis
- Cycle simulation and analysis for performance and health assessment
- Innovative control systems for power plants
- Optimization of traditional and innovative energy and propulsion systems

Objectives:

Authors and presenters are invited to participate in this event to expand international cooperation, understanding and promotion of efforts and disciplines in the area of Cycle Innovations. Dissemination of knowledge by presenting research results, new developments, and novel concepts in Cycle Innovations will serve as the foundation upon which the conference program of this area will be developed.

A variety of sessions are available for presentations as it allows flexibility to the authors. All sessions are quality driven.

Education

Sessions encompass gas turbine/ turbomachinery education both in the university and in industry. Specific teaching tools and techniques will be discussed, including web-based and large-scale remote education, along with industry opportunities for gas turbine engineers. Anyone interested in gas turbine/turbomachinery engineering education is welcome, from students to PhDs. Academics will be exposed to ideas and best practices being used at other institutions as well as innovative approaches for gas turbine/turbomachinery education. Industry will have an opportunity to interact with educators to discuss relevant topic areas and to express the expectations with regard to changing needs. Discussions here have the potential to influence engineering education for a positive impact on future engineers. The sessions provide an active and constructive dialogue about gas turbine/ turbomachinery education among practitioners from the industry, students, educators and researchers.



Electric Power

The Electric Power Committee promotes the exchange of significant technical information about the application and operation of gas turbine power plant systems. This committee organizes panels and technical sessions that deal with the gas turbine as a major component of a power plant, its integration into the power plant and optimization of power plant components, as well as optimization of the overall plant. Paper sessions on these topics will be complemented by panel sessions to address current topics of the gas turbine industry. Presenters will include owner/operators, original equipment manufacturers and industry service providers.

The EPC sessions will include the following:

- The Pathway Forward: Future Gas Turbine Products & Technologies– OEM Perspective
- Voice of the Customer: User Experience with Gas Turbine Technology
- Gas Turbine Industry Update
- Hydrogen-Fired Gas Turbines: Demonstrations & Outlook
- The Gas Turbine's Role in the Decarbonized Power Generation Portfolio
- Tutorial: Hydrogen Impacts 101: Are You Asking the Right Questions?
- Tutorial: Leveraging Operational Gas Turbine Data at Scale: Tips and Techniques

AT THE FOREFRONT OF PROPULSION

We are looking for Futureshapers to help develop a new family of gas turbine engines that will help shape the future of the aerospace industry.



Scan the QR code to learn more
<https://careers.honeywell.com/us/en/campaign-aero>

THE FUTURE IS WHAT WE MAKE IT

Honeywell

Energy Storage

The mission of the committee is to provide opportunities for knowledge dissemination and professional networking related to non-battery energy storage for industry, academia, and government. The focus of these activities is, specifically, on turbomachinery-based energy storage systems.

Technical and panel sessions and tutorials on the following topics are welcomed: General Energy Storage, Pumped Heat (Thermal) Energy Storage, Carnot/Brayton Batteries, Compressed Air Energy Storage, Liquid Air Energy Storage, Pumped Hydro Energy Storage, Power plants including thermochemical energy storage in the form of synthetic fuels (energy vectors), Flywheel Energy Storage, Hybrid Energy Storage combining different power generation and energy storage technologies (photovoltaics, gas/steam turbines, thermal energy storage...). Regarding this latter topic, even though the focus of the committee is on non-battery energy storage, hybrid energy storage systems incorporating batteries are of interest for the community. The Energy Storage Committee provides an excellent forum for industry, academic and governmental institutions to discuss and exchange ideas within the general scope of energy storage.

Fans and Blowers

Improvements in fans and blowers are means to address the global energy challenge, with manufacturers increasingly focusing on improvement in fan efficiency under legislative pressure and as a part of their response to global climate change.

The academia-industry collaboration and the up-front use of Computational Fluid Dynamics (CFD) and Experimental Fluid Dynamics (EFD) are the key ingredients to facilitate the advancement from traditional empirical design methodologies. In response to these challenges, the ASME-IGTI Fans and Blowers Technical Committee consider all technical aspects associated with fans and blowers, with a special emphasis on:

- Design and optimization
- CFD and Artificial Intelligence methods for unsteady aerodynamics
- Noise generation, prediction, innovative noise reduction design
- Experimental challenges in- and out-of-lab
- Structural mechanical aspects (vibration, fatigue and flutter)
- Operations and system effects and interactions
- Maintenance, repair & life-time management
- Standards, compliance with legislation & regulations
- Smart industrial applications of fans and blowers
- Fan solutions for improved indoor air quality

Heat Transfer: Combustors

This track is jointly sponsored by the Heat Transfer and Combustion, Fuels & Emissions committees and includes all research activities in the area of combustor related heat transfer and cooling as well as topics related to combustor-turbine interactions. Papers describing research and technical advances in this area are invited to be submitted to this track.

Relevant topic areas include:

- Experimental, analytical, and numerical studies of heat transfer in combustors, including combustor liners, dome/splash plate, injector tip, and backside cooling of combustor liners
- Studies on new cooling designs for low-NO_x combustors, liners, and dome/splash plate
- Combustor simulators to study the impact of hot combustor exit flow on hot gas path components

Heat Transfer: Film Cooling

Papers describing research and technical advances in application of film cooling in turbomachinery are invited to be submitted to this track.

Relevant topic areas include:

- Blade/Vane Leading Edge Film Cooling
- Blade/Vane Trailing Edge Film Cooling
- Vane End-Wall Film Cooling
- Blade Platform Film Cooling
- Blade Tip Film Cooling
- Novel Film Cooling Designs
- Film Cooling Design Optimization
- Unsteady Effects in Film Cooling
- Effusion Film Cooling
- Deposition Effects on Film Cooling

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

Papers describing research and technical advances in the area of heat transfer in turbines which do not fit into blades/vanes internal and film cooling applications are invited to be submitted to this track.

Relevant topic areas include:

- Gas-path heat transfer
- Vane end-wall and blade tip/platform heat transfer
- Probabilistic methods in heat transfer analysis
- Experimental methods for heat transfer
- Numerical analysis of heat transfer
- Design tool development and validation
- Rotational effects on heat transfer
- Additive manufacturing impacts on heat transfer
- Radiation heat transfer
- Multimode heat transfer
- Heat exchangers and recuperators
- Innovative concepts relating to heat transfer

Heat Transfer: Internal Air Systems

This track is jointly sponsored by the Heat Transfer and Turbomachinery committees and includes both fluid dynamics and heat transfer aspects of turbomachinery internal air systems and seals. Papers describing research and technical advances in this area are invited to be submitted to this track.

Relevant topic areas include:

- Actively controlled sealing systems
- Internal air & seal, experimental, analytical, and numerical studies of flow and heat transfer phenomena in rotating cavities, rotor/stator systems and seals
- Heat transfer in rotor support and oil systems
- Secondary air systems analysis involving component interactions and system performance
- Two-phase flow phenomena in internal air systems involving oil jet and oil film disintegration, oil migration in secondary air systems and air/oil interaction including heat transfer, oil fires, film flows, bearing chamber and gearbox flows.

Heat Transfer: Internal Cooling

Papers describing research and technical advances in internal cooling schemes for turbomachinery components are invited to be submitted to this track.

Relevant topic areas include:

- Blade/vane internal cooling
- Internal cooling with impingement
- Internal cooling with heat transfer augmentation devices such as turbulators/pin-fins
- Internal cooling design optimization
- Innovative internal cooling designs
- Numerical studies of internal cooling
- Validation studies in internal cooling
- General internal cooling

Heat Transfer: Tutorials

Two heat transfer tutorials will be offered at Turbo Expo 2025. One will describe the techniques and intricacies of computing and measuring heat transfer coefficients in turbine relevant flows. Another tutorial will offer a review of advanced technology for internal cooling of turbine blades and vanes.

Industrial & Cogeneration

Representing gas turbine applications within the cogeneration and process industries, technical sessions in this track cover a wide range of topics on cogeneration/CHP (Combined Heat & power) systems, including but not limited to the following: thermoeconomic analysis, optimization and simulation methods, design, operation & maintenance aspect of Heat Recovery Steam Generators, operation & maintenance issues of cogeneration plants, gas turbine power augmentation technologies (inlet chilling, high pressure fogging, and wet compression or overspray, dry/humid air inject, steam injection, etc.), compressor fouling, inlet air filtration systems, compressor washing, gas turbine upgrades and modifications, environmental and regulatory issues, and lessons learned from field experiences.

Other applications such as non-gas turbine-based cogeneration/ CHP systems (steam turbine and reciprocating engine based systems, solar energy based systems, etc.), cogeneration and cold energy recovery in LNG plants, hybrid cogeneration systems (combined with fuel cells), and organic Rankine cycle based systems are also included. Panel/Tutorial sessions cover topics on cogeneration technologies, compressor washing technologies, inlet air filtration systems, gas turbine power augmentation technologies, dynamic modeling of cogeneration/CHP systems, gas turbine combustion processes and emissions issues, fuel related issues, and impact of Shale energy market.

- Design and Evaluation Considerations of Waste Heat Recovery TechnologiesThermo-Economic Analysis of CHP/Cogeneration Systems
- Techno-Economic Analysis of CHP Systems
- Operational & Maintenance Aspects
- Gas Turbine Power Augmentation Technologies
- HRSG's Design & Operational Issues
- Inlet Air Filtration for Gas Turbines
- Combustion & Emissions
- Gas Turbine Applications Involving Heavy Fuel Oils and Crude Oils
- Dynamic Modeling of CHP Systems
- Condition monitoring and diagnostics for CHP Systems
- Integration of cogeneration systems with energy storage technologies, and Artificial intelligence for energy and economic optimization

Manufacturing Materials & Metallurgy

The field of materials and metallurgy associated with gas turbine manufacturing has traditionally been the source of numerous disruptive technologies such as the development of superalloys, precision single-crystal investment casting and ceramic coatings. These in turn have allowed an incredibly accelerated pace of innovation. Next generation materials and processes will allow even higher efficiency and reliability as well as greater flexibility operational mode. A major goal is to balance these with lower emissions and lower life-cycle cost of turbomachinery. Materials with higher strength, lighter weight and improved durability are required for these applications. The continuing development in metallurgy and materials science has resulted in newer materials, better surface protecting methods, and more reliable component life. Development in manufacturing technologies, including better process planning/optimization, advance machining operations, additive manufacturing, newer coating and repair methods, helps to reduce the manufacturing cost and decrease overall operating cost of gas turbines. Condition assessment of parts after service and advanced repairs are required to further reduce life cycle cost and impact to the environment. The MMM committee is organized to disseminate the latest developments and research results in the areas of manufacturing, materials and metallurgy to gas and steam turbine designers, manufacturers, users, repair and service vendors, researchers and consultants. In addition to technical paper sessions, panel sessions are planned where highly experienced panel members will discuss their latest experiences and knowledge in manufacturing methods, repair/coating processes and component inspections. Tutorials and lectures will be given on gas turbine materials.

- Additive Manufacturing
- Advanced Manufacturing Technologies
- Thermal Barrier Coatings
- Gas Turbine Component Degradation and Life Prediction
- Advances in Gas Turbine Materials
- Advanced Repair Technologies
- Metallurgy for Non-Metallurgists
- Advanced Turbomachinery Manufacturing



Microturbines, Turbochargers, & Small Turbomachines

Microturbines & Small Turbomachines

- Alternate/Opportunity Fuels: Technical issues and economic viability (bio-fuels, landfill gas, etc.)
- Auxiliary systems (such as generators, power electronics and high speed alternators)
- Energy markets and the competitiveness of microturbines vs. reciprocating engines in DG applications
- Heat exchangers (recuperators, regenerators, CHP) design and optimization (CFD, heat transfer, stress analysis) and associated materials and materials degradation
- Intelligent control/engine health monitoring/life evaluation
- Microturbine technologies for long life, fuel efficiency, high power density, wide operability and robust design
- Microturbines systems and concepts for Distributed Power
- Materials for microturbines and small turbomachines: materials issues including durability and high temperature capability (creep, oxidation, fatigue, etc.), and raw material cost (i.e., the need for lower cost materials)
- Microturbine and small turbomachines component design & optimization (compressors, turbines, rotordynamics, bearings, etc.)
- Turbochargers and Superchargers
- Aero, aerothermal, and aeroacoustical analysis of radial, axial, and mixed-flow compressors and turbines (effects of downscaling, heat transfer, map enhancement, surge, choke, etc.)
- Novel charging solutions for downsized and low-emission engines (regulated multi stage charging, turbo compound, electrically assisted charging, variable compressor and turbine geometries, exhaust gas recirculation, etc.)
- Interaction between turbocharger and SI / CI engines (Transient performance, e.g. ball/air/magnetic bearings, TiAl /ceramic turbine wheel, charging concepts, etc.)
- Optimization techniques for multidisciplinary design challenges (e.g. boost pressure vs. efficiency vs. map width vs. transience vs. mechanical constraints vs. packaging vs. etc.)
- Microturbines: Design and Testing of Microturbines
- Microturbines: Innovative Microturbine Design and Uses
- Microturbines: Innovative fuels and uses in microturbines. Recuperator materials
- Turbochargers: Heat transfer & Systems
- Turbochargers: Concepts & Performance
- Turbochargers: Turbines design, testing and modelling
- Turbochargers: Compressors
- Turbochargers & Small Turbomachinery: Bearing systems & NVH

Oil & Gas Applications

The Oil and Gas Industry is a large user of turbomachinery. The demand for oil and gas is consistently growing and changing market conditions require innovative solutions. Operation and optimization of turbomachinery in a variety of Oil & Gas applications is therefore of great interest. Moreover, potentially extreme operation environments require the consideration of innovative design and operational attributes. Sessions in the Oil & Gas Applications Committee address both theoretical and practical Oil & Gas industry perspectives. The technical sessions provide the latest information on gas turbines and compressors in pipeline and compression stations. Particular emphasis is given to design, operation and maintenance, management, dynamic behavior, diagnostics and vibration and noise, as well as to all engineering issues in Oil & Gas applications.

Wet gas compression and multi-phase pumping are also addressed, due to the increasing interest in many installations. The Oil & Gas Applications Committee brings industry experts together in panel and tutorial sessions jointly held by both academic educators and industry professionals. Both basics of Oil & Gas installations and off-design operation issues will be covered, aimed to ensure improved efficiency and safe and reliable operation. The latest information about environmental impact, product upgrade, risk assessment, standards and legislation of gas turbines and compressors in Oil & Gas applications is also provided.

- LNG Liquefaction Plants
- Wet Gas and Multiphase Compression
- Gas Turbine Degradation and Water Washing
- Partical Behavior and Degradation
- Turbomachinery Performance Testing
- Design Details
- Compressor Stations
- Machinery Issues
- Oil and Gas Applications
- Surge Control and System Dynamics
- Hydrodynamic Torque Converters for Oil & Gas Compression and Pumping Applications: Basic Principles, Performance Characteristics and Applications
- Natural Gas Pipelines: Equipment Technology
- Wet Gas Compression
- Compact Compression
- Subsea Compression
- Gas Turbine Upgrades and Uprates
- Turbomachinery Instrumentation Components, Practices, and Uncertainty

Steam Turbine

Turbo Expo 2025 includes a track dedicated to Steam Turbines. While many of the analyses, computational methods, and experimental techniques are common for steam turbines and gas turbines, there are some unique features on steam turbines that warrant special consideration. Separate, co-located, steam turbine sessions at Turbo Expo provide a natural way of sharing many of the cutting-edge technologies while giving the steam turbine community a dedicated forum for the unique technical challenges associated with wet steam, long last stage blades, industrial and co-generation steam turbines, the unique mechanical integrity challenges for steam and more.

Structures and Dynamics: Aerodynamics Excitation & Damping

Authors are invited to present and discuss the following topics:

- Aerodynamic Forcing in Axial Fan and Compressors
- Aeroelastic Stability in Axial Fans and Compressors
- Non-synchronous Vibrations
- Non-Synchronous Vibrations in Fans
- Methods for Aerodynamic Forcing and Damping Prediction
- Aerodynamic Forcing and Damping in Radial Turbomachinery
- Turbine Aerodynamic Forcing and Damping and Seal Aeroelastic Stability

Structures and Dynamics: Bearing and Seal Dynamics

The field of materials and metallurgy associated with gas turbine manufacturing has traditionally been the source of numerous disruptive technologies such as the development of superalloys, precision single-crystal investment casting and ceramic coatings. The type of bearings discussed in this track include but are not limited to gas bearings, tilting pad bearings, fluid film bearings, magnetic bearings as well as squeeze film bearings.

Structures and Dynamics: Emerging Methods in Design & Eng.

Authors and presenters are invited to share and promote efforts and methods in the area of Structures & Dynamics: Emerging Methods in Design & Engineering, also expanding on new design and analysis approaches for additive manufactured technology. Dissemination of knowledge by presenting research results, new developments, and novel concepts in Structures & Dynamics: Emerging Methods in Design & Engineering will serve as the foundation for the conference program on this area. A variety of sessions are available for presentations, as it allows flexibility to the authors.

Structures & Dynamics: Fatigue, Fracture & Life Prediction

Structures & Dynamics: Fatigue, Fracture & Life Prediction Committee creates a forum to discuss theoretical and empirical approaches to determine the lifetime and maintenance requirements of turbo machinery. This includes theoretical prediction approaches for damage mechanisms which govern component lifetime; observations on material or component behaviour which relate to component lifetime; experimental methods to generate data to support these topics; empirical approaches based on inspection and evaluation of part condition and damage during service and at end of life. Cyclic, time dependent and pseudo-static damage mechanisms are covered as well as operational history and environments, and material behavior at these conditions. This includes Low and High Cycle Fatigue (LCF & HCF); the combination of cyclic and time dependent mechanisms, Thermo-Mechanical Fatigue (TMF); creep and stress rupture; fracture mechanics and processes relating to fatigue crack initiation and crack growth; any other damage mechanisms which affect component life.

Structures and Dynamics: Probabilistic Methods

Authors are invited to present and discuss on various developments in the area of probabilistic analysis, post processing and process modelling.

Structures and Dynamics: Rotordynamics

Main topics of the Rotordynamics Track of the S&D Committee are related to:

- Dynamic Analysis and Stability
- Modeling and Experiments
- Field Balancing and Case Studies
- Active Components and Vibration Control
- Nonlinear Rotordynamics
- Rotordynamics of Micro-machinery
- Rotordynamics of Industrial Fans
- Condition Monitoring and Malfunctions
- Case Studies of Rotating Machinery, and other subjects dealing with dynamic behavior of the rotors

Structures and Dynamics: Structural Mechanics & Vibration

Authors are invited to present and discuss on various developments with regard to structural mechanical and vibrational analysis, prediction and experimental validation.

Student Advisory

The Student Advisory Committee organizes events at Turbo Expo aimed to engage all degree-seeking individuals in the conference. The Student Advisory Committee (SAC) sponsors a Student Poster Competition, Student and Early Career Engineer Mixer and tutorial sessions each year to promote the sharing of technical knowledge and encourage meaningful networking opportunities for students and professionals alike.

Student Poster

The Student Advisory Committee is once again sponsoring a student poster session at ASME Turbo Expo. Student posters will be on display on the main exposition floor.

Supercritical CO₂

Supercritical CO₂ based power cycles provide significant efficiency and cost of electricity benefits to waste heat, thermal solar, nuclear, ship-board propulsion and fossil fuel power generation applications. They also provide for separation, compression, transportation, and storage (geologic) of CO₂ from fossil fuel power plants. The approach to geologic storage of CO₂ benefits greatly from the existing technology and knowledge amassed around CO₂ utilization and management in the oil & gas industry. While the end goals of the CO₂ based power cycles and the CO₂ storage applications are different, the properties of the working fluid, thermodynamics, technology and machinery used for these applications are very similar. The confluence of interests related to the use and management of supercritical CO₂ has created an imperative to further the understanding of these applications. The Supercritical CO₂ Power Cycle committee organizes sessions that focus on the dissemination of machinery and cycle related technologies of sCO₂ power plant applications.

- Fundamentals of sCO₂ Power Cycles
- sCO₂ Heat Exchangers
- Turbomachinery for sCO₂ Cycles
- sCO₂ Cycle Analysis and Optimization
- sCO₂ Combustion and Heat Transfer
- Materials for sCO₂ Cycles
- sCO₂ Cycle Testing
- sCO₂ Cycle Modeling
- sCO₂ Cycle Components

Turbomachinery: Axial Flow Fan & Compressor Aerodynamics

The field of materials and metallurgy associated with gas turbine manufacturing has traditionally been the source of numerous disruptive technologies such as the development of superalloys, precision single-crystal investment casting and ceramic coatings.

- Compressor Design
- Compressor Experiments
- Transonic Compressor Design
- Fan Design
- Design Concepts
- Test Rig & Facility Design
- Stall & Inlet Distortion
- End-Wall Flows & Passage Contouring
- Water Ingestion, Fogging & Pre-Cooling
- Transition & Roughness Effects
- Manufacturing & Deterioration Effects
- Tip-Clearance Flows
- Seal & Leakage Flows
- Casing Treatment
- Tandem Airfoils
- Flow Control

Turbomachinery: Axial Flow Turbine Aerodynamics

- Aerodynamic Performances and Design
- Aerodynamic Losses
- Aerodynamic Studies
- Unsteady Flows and Transition
- Tip Leakage Flows
- End-wall Profiling
- Low Pressure Turbine Aerodynamics

Turbomachinery: Deposition, Erosion, Fouling, and Icing

- Multi-phase (Water/Ice) Deposition in Gas Turbines
- Modeling Deposition in Turbine Cooling Passages
- Erosion in Turbines
- Deposition Modeling

Turbomachinery: Design Methods & CFD Modeling for Turbomachinery

- Compressor Design Methods & Applications
- Fan Design Methods & Applications
- Turbine Design Methods & Applications
- Radial Turbomachinery Design Methods & Applications
- Cavity, Bearings & Seal Design Methods & Applications
- Methods & Application for Hydrodynamics
- Component Interaction & Multi-Physics Coupling
- Preliminary Design Methods
- LES & DNS Methods & Applications
- Optimization Methods & Applications
- Novel Methods for CFD
- Novel Solver & Simulation Frameworks
- Application & Methods for Unsteady Flow
- Geometry Design & Meshing
- Flow Separation, Loss & Boundary Layer Interaction Methods

Turbomachinery: Ducts, Noise, & Component Interactions

- Compressor & Combustion Noise
- Fan & Engine Noise
- Gas Turbine Engine Intakes, Exhaust Diffusers, and Ejectors
- Gas Turbine Engine Transition Ducts and Flow Interactions

Turbomachinery: Multidisciplinary Design Approaches, Optimization, and Uncertainty Quantification

- Parameterization Approaches
- Manufacturing Tolerances and Uncertainties
- Surrogate-Assisted Approaches, including Sampling and Data Mining
- Axial Compressors, Propellers and Fans
- Turbine Design and Cooling
- Preliminary Design Systems and Approaches
- Adjoint Methods
- Multidisciplinary Optimization and Sensitivity Analysis (fluid, structure)
- Sensitivity Analysis and Design for AM

Turbomachinery: Radial Turbomachinery Aerodynamics

- Centrifugal Compressors
- Radial & Mixed Flow Turbines

Turbomachinery: Turbomachinery General Interest

Papers will cover topics of interest to the Turbomachinery Design & Maintenance community which may not be covered by the Turbomachinery primary topic tracks.

Turbomachinery: Tutorials

The tutorials will be of interest for all engineers & researchers concerned with understanding and improving the design process, testing and in-service performance of land and flight-based turbomachinery.

Turbomachinery: Unsteady Flows in Turbomachinery

- Unsteady Flows in Compressors
- Unsteady Flows in Turbines
- Stall & Surge
- Stall & Surge in Centrifugal Compressors
- Unsteady Flows in Centrifugal Compressors
- Analysis & Processing Techniques for Unsteady Flows

Wind Energy

Climate change, the rapid expansion of wind power, and the steady decrease in the cost of wind-generated electricity have made wind power an indispensable part of the global energy mix. Thus, the Wind Energy Technical Program will focus on innovations driving technological advances in the wind industry. The technical presentations cover aerodynamics, aeroelasticity, structures, condition monitoring of wind turbines, the interaction of wind turbines with other energy systems, wind farms, and floating offshore wind turbines. These topics are addressed for small and large machines and vertical and horizontal axis wind turbines. Special panel sessions highlight the industry's challenges, as well as research being undertaken in universities and research laboratories. For experts and beginners, tutorial sessions and workshops will be presented to detail developments and tools employed in the rapidly growing wind industry.

- Measurements and Simulations
- Structures and Aeroelastic Behavior
- Design and Optimization
- Wind Energy Systems
- Modelling of Wind Turbine Flows
- Vertical Axis Wind Turbines
- Operation & Condition Monitoring
- Small Wind Turbines
- Noise
- Blade Aerodynamics
- Reliability and Risk Analysis
- Wind Farms
- Offshore wind turbines

The energy transformation starts with you!

Discover our innovative turbomachinery products and solutions: from low carbon and net-zero power and heat generation to high efficiency products supporting the decarbonization of industry.

Join our team to shape the energy of tomorrow.

As part of our global team, you can work on the most advanced products and benefit from career growth and development opportunities.

Inviting applications from Bachelors, Masters, and PhD holders in all engineering disciplines.

LET'S MAKE TOMORROW DIFFERENT TODAY



[siemens-energy.com/jobs](https://www.siemens-energy.com/jobs)



Exhibition Information

The Exhibition

Turbo Expo has value added activities to promote traffic to your booth! Daily lunches and afternoon open bars in the exhibit hall are included in the registration package for exhibit booth staff. ASME Turbo Expo is known for its high-quality exhibitions of leading companies in the turbomachinery industry. This is your chance to:



Attract new clients & visit current ones



Learn more about changing needs of the industry



Increase your sales

The 3-day exposition will be held June 17-19 in Memphis, Tennessee

Turbo Expo brings together the top players in the turbomachinery industry and academia - attracting a key audience from aerospace, power generation and other prime mover-related industries.

EXHIBITION INFORMATION

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

BOOTH SPACE

\$37 USD

per square foot

(For corner booth, add \$2.00 USD per sq. ft)

Contact exhibits@asme.org for more information.

ALL EXHIBITORS RECEIVE

Exhibit space with:

- 8' black draped booth backdrop
- 3' side dividers
- Booth sign

Badges and Passes

- 1 Technical Conference Badge
Per 100sqft of space
- 3 Booth Personnel Badges
Per 100sqft of exhibit space.
- Complimentary Exhibit Hall Passes
To share with customers and prospects.

Advertising

40-Word Company Listing
In the digital Conference Program.

Discounted Advertising Opportunities

Product Category & Company Description
In the online exhibitor directory/ Marketplace with press releases, logo, videos, meeting setting and brochure option.

Savings

- Complimentary Lead Retrieval
- Discounted Technical Conference Registration
For company employees.

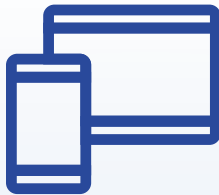
Visit the [online floor plan](#) and reserve your booth today.



Become a Sponsor

Featuring a variety of sponsorship opportunities designed to maximize your company's visibility, the sponsorship program provides even more ways to stand out from the crowd and make the most of your budget.

ALL SPONSORS RECEIVE RECOGNITION



Logo in the official Show Web and Event App



Logo in the Advance and Final Programs



Sponsor ribbons for employees



Recognition in announcements made during the Show



Recognition in the GGTN reaching over 90,000 ASME members



Logo on signage posted during the Show & Show Entrance Unit

Power Package Prices

PLATINUM CLUB

\$20,000.00

Reduced Exhibit Space Rate
by 10%.

Short Video Promotion
on sponsor page of Show website.

5 Complimentary 5-day Technical Conference Badges

Special Discounted Technical Conference Registration Rate
for employees.

Full-Page, 4-Color Ad
in Advance and Final Programs.

Attendee Giveaway
placed in attendee bags, provided by Sponsor.

Special Sign for Booth

Company Provided Banner
prominently displayed during the Show.

Complimentary Exhibit Booth Cleaning
during Show.

Pre-show Email
to registered attendees.

Ad in Conference App

GOLD CLUB

\$15,000.00

Reduced Exhibit Space Rate
by 7%.

4 Complimentary 5-day Technical Conference Badges

Half-Page, 4-Color Ad
in Advance and Final Programs.

Attendee Giveaway
placed in attendee bags.

Special Sign for Booth

Complimentary Exhibit Booth Cleaning
during Show.

Pre-show Email
to registered attendees.

SILVER CLUB

\$10,000.00

Reduced Exhibit Space Rate
by 5%.

3 Complimentary 5-day Technical Conference Badges

Quarter-Page, 4-Color Ad
in Advance and Final Programs.

Special Sign for Booth

Complimentary Exhibit Booth Cleaning
during Show.

Pre-show Email
to registered attendees.

BRONZE CLUB

\$5,000.00

Reduced Exhibit Space Rate
by 2%.

2 Complimentary 5-day Technical Conference Badges

Quarter-Page, 4-Color Ad
in Advance and Final Programs.

Special Sign for Booth

Complimentary Exhibit Booth Cleaning
during Show.

Pre-show Email
to registered attendees.

Additional Sponsorship Opportunities

ATTENDEE BAG INSERT

\$4,000 + Giveaway

Include company literature, promotional items or giveaways in the attendee registration packets.

We will place up to two items in the tote bags for attendees as they register. Include invitations to visit your booth or announcements of product demonstrations or other giveaways.

CONFERENCE AUDIO-VISUAL

\$10,000

Have maximum visibility in over 300 sessions.

Your logo will be posted on the audio-visual screens in the session rooms prior to presentations.

LIMIT 1 SPONSOR

CONFERENCE BAG CHECK

\$3,500

Consider sponsoring the bag check during the Conference.

Every attendee appreciates having a place to stow their luggage at an event. Your company name and logo will be prominently displayed in the bag check area. Opportunity to place flyers at the space.

LIMIT 1 SPONSOR

CONFERENCE COFFEE BREAK

\$5,000

For great conference visibility, sponsor the session coffee breaks.

Select the day of your choice. You may place literature or giveaways on the break stations.

LIMIT 1 SPONSOR

CONFERENCE WIFI

\$15,000

Wi-fi will be available for delegates in the conference area compliments of your company.

This is a valuable opportunity for high visibility to all attendees with a logoed landing page.

LIMIT 1 SPONSOR

DELEGATE LUNCHES

\$10,000

This sponsorship will allow for you to provide brochures and/or giveaways for the attendees on the lunch tables. Logo signage will be provided.

Sponsor can have attendant at the entrance to hand out materials to attendees.

LIMIT 1 SPONSOR DAILY

**EXHIBIT HALL
RECEPTION**

\$3,500

A refreshing way to get the visibility you want!

Signage with your company name and logo will be included on the carts throughout the exhibit hall during the afternoon receptions.

LIMIT 2 SPONSORS

**RECHARGE AND
RELAX STATION**

\$10,000

Allow attendees to power up while relaxing and playing games with colleagues.

Place your literature in the area that will have your logo.

LIMIT 1 SPONSOR

**STUDENT/EARLY CAREER
ENGINEER MIXER**

\$5,500

Meet with rising engineers in the turbine industry during this event.

Sponsoring company may provide company literature and a pop-up banner along with the company logo displayed on signage at the event. Perfect for organizations with open staff positions.

LIMIT 4 SPONSORS

**HYDRATION
STATIONS**

\$4,500

Include your company logo at all the Show water stations (exhibit hall, conference area and Keynote area).

Showcase your "green" message by providing environmentally friendly cups/ bottles to be distributed at Registration with your company name or logo.

LIMIT 1 SPONSOR

**WELCOME
RECEPTION**

\$5,000

Support the Welcome Reception, the largest social event during ASME Turbo Expo.

Opportunity to have a promotional banner and table for literature at the event.

**CELEBRATING WOMEN
IN TURBOMACHINERY**

\$10,000

Connecting, supporting, and inspiring females working in the turbomachinery industry.

This event provides an ideal environment for the sponsoring organization speaker to share ideas with like-minded turbomachinery professionals. Event includes a drink reception, seated dinner, and abundant networking. This sponsorship includes the sponsoring company providing a speaker for the event.

LIMIT 2 SPONSORS

HEADSHOT BOOTH

\$10,000

Have your logo and literature in the most popular headshot booth.

LIMIT 1 SPONSOR

MEETING ROOM

\$4,000

Provide high-level decision-makers with a state-of-the-art facility to network, collaborate and make critical business decisions.

LIMIT 1 SPONSOR

RIBBON WALL

\$1,000

The Ribbon Wall provides a colorful and visually impactful display.

Showcase your organization's brand and unique messaging to attendees as they pick up their Conference badge ribbons.

LIMIT 1 SPONSOR

ATTENDEE COMMUNICATION

\$2,500

Connect with the attendees' pre-Show with one email communication to the opted-in attendee list.

LIMIT 5 SPONSORS

CUSTOM SPONSORSHIPS

Contact ASME today to discuss the sponsorship that works best for you. ASME will work with you to customize a sponsorship that allows you the best visibility and return on your investment.

Let's Get Social!

Share with your friends and colleagues that you plan to attend the conference, author a technical paper, exhibit, or sponsor!

Contact *IGTI* if you would like to use the Conference logo.



GROUPS



Networking Events

Networking Events



EARLY CAREER ENGINEER & STUDENT MIXER

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

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
7:00 - 8:30 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 that will feature motivating talks. Attendees will have the opportunity to network with women in the industry and learn about the career paths of some successful women in the industry.

DAILY LUNCHES

All Technical Conference delegate badges as well as exhibit booth staff badges include a daily lunch (M-Th). Additional 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.





Registration Information

Registration Details

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 Reception & Exhibit Hall receptions



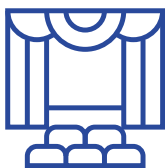
Opportunity to register for the Celebrating Women in Turbomachinery Dinner



Access to the Student Poster Session



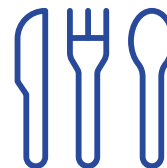
Online access to all Turbo Expo 2025 final accepted papers



Admittance into the Turbo Expo exhibition hall



Opportunity to attend facility tours



Access to daily lunches (M-Th)

Conference Registration Pricing

MEMBER REGISTRATION

Registration Category	ADVANCE	REGULAR	LATE	ONSITE
	Mar 19 - 31	Apr 1 - May 31	June 1 - 15	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	REGULAR	LATE	ONSITE
	Mar 19 - 31	Apr 1 - May 31	June 1 - 15	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	REGULAR	LATE	ONSITE
	Mar 19 - 31	Apr 1 - May 31	June 1 - 15	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	REGULAR	LATE	ONSITE
	Mar 19 - 31	Apr 1 - May 31	June 1 - 15	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.

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.

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 with the intent to distribute them to others.

Hotel Accommodations



SHERATON MEMPHIS DOWNTOWN HOTEL

*250 N Main St,
Memphis, TN 38103*

Rate: 188.00 USD/night

Last Day: Tuesday, May 13, 2025

[BOOK YOUR GROUP RATE](#)



MEMPHIS CROWNE PLAZA DOWNTOWN

*300 N. Second Street,
Memphis, TN 38105*

Rate: \$175.00 USD/night

Last Day: Tuesday, May 13, 2025

[CALL TO BOOK](#)

*Phone Reservations: 901-525-1800 or 800-2-CROWNE
(must say 2025 Turbo Expo upon reservation)*

Childcare Services

ASME will reimburse up to a total of \$250/per registered attendee for services incurred by a licensed service provider in Memphis, TN.

**DURING TECHNICAL
PRESENTATION HOURS**

June 16 - 20

TAKE ADVANTAGE [HERE](#).

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.



Chair
Caroline Marchmont
Ansaldo Energia



Past Chair
Doug Hofer
Southwest Research Institute



Vice Chair, Strategy Department
Susan Scofield
Siemens-Energy



Vice Chair, Professional Engagement Department
Sina Stapelfeldt
Imperial College London



Vice Chair, Operations Department
Jacqueline O'Connor
The Pennsylvania State University

Extended Leadership

PROFESSIONAL ENGAGEMENT DEPARTMENT



Honors and Awards Committee Head

Doug Nagy
Retired



Marketing & Technical Communications Committee Head

Cis De Maesschalck
Rolls-Royce



Early Career Committee Head

Dimitra Eirini Diamantidou
MTU Aero Engines



Professional Development Committee Head

Mike Koenig
Siemens-Energy

OPERATIONS DEPARTMENT



Turbo Expo Committee Head

Ricardo Martinez Botas
Imperial College London



Associated Events Committee Head

Jarek Szwedowicz
Siemens Energy AG



Technical Committees Head

Liping Wang
GE



Peer Review & Publications Committee Head

Vassilios Pachidis
Cranfield University



Finance & Performance Committee Head

Rich Dennis
Retired

STRATEGY DEPARTMENT



ASME Strategy Committee Head

Richard Sandberg
University of Melbourne



IGTI Strategy Committee Head

Natalie Smith
Southwest Research Institute



External Strategy Committee Head

Peter Stuttaford
Thomassen Energy

2025 TURBO EXPO ORGANIZING COMMITTEE



Conference Chair
Eric Ruggiero
GE Aerospace



Executive Conference Chair
Susan Scofield
Siemens-Energy



Review Chair
Marc Polanka
Air Force Institute of Technology



Technical Program Chair
Rudy Dubebout
Honeywell Aerospace



Vice Review Chair
Shahrokh Shahpar
Rolls-Royce



Vice Review Chair
Sascha Gierlings
Fraunhofer



Vice Review Chair
Benjamin Emerson
Georgia Institute of Technology



Tutorial Chair
Ioanna Aslanidou
Mälardalen University



**Local Liaison
Committee Chair**
Bobby Noble
EPRI



Student Activities

Student Activities

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 COMMITTEE MEMBERS



Chair

Marco Castaldi
*von Karman Institute
for Fluid Dynamics*



Vice Chair

Janakiraman
Thiyagarajan
Lund University



Secretary

Salvatore Carusotto
Politecnico di Torino

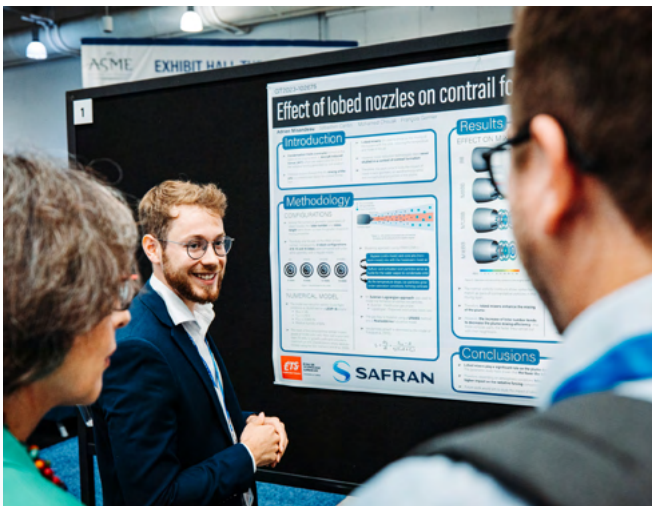
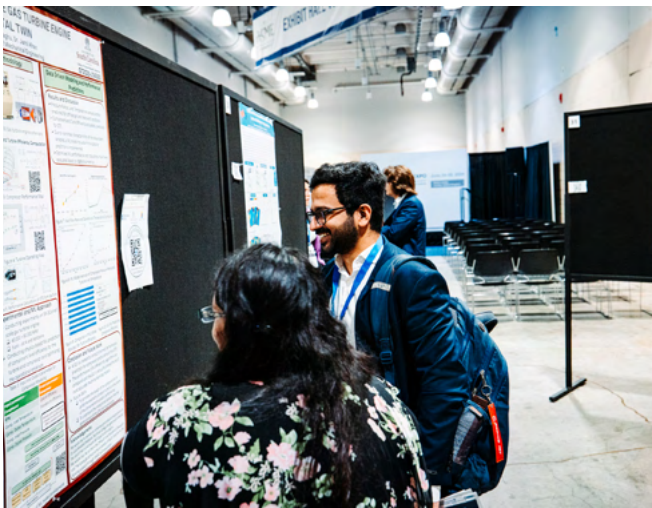


Past Chair

Dimitrios Bermperis
Mälardalen University

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. In previous years, the SAC has curated panel sessions led by community leaders on Turbomachinery Careers and Networking, as well as tutorial sessions titled “Effective Technical Presentations”, and “The Art of the Peer Review Process”. Details on the 2025 SAC Panel will be available in the Final Program and on the Turbo Expo Website.



POSTER SESSIONS

The Student Advisory Committee is once again sponsoring a student poster session at ASME Turbo Expo. Student posters will be on display on the main exposition floor on Tuesday, June 17th from 12:00 – 1:30 p.m. 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.

CASH PRIZES FOR POSTER SESSION WINNERS

1ST PLACE	2ND PLACE	PEOPLE'S CHOICE
\$500	\$250	\$150



EARLY CAREER ENGINEER & STUDENT MIXER

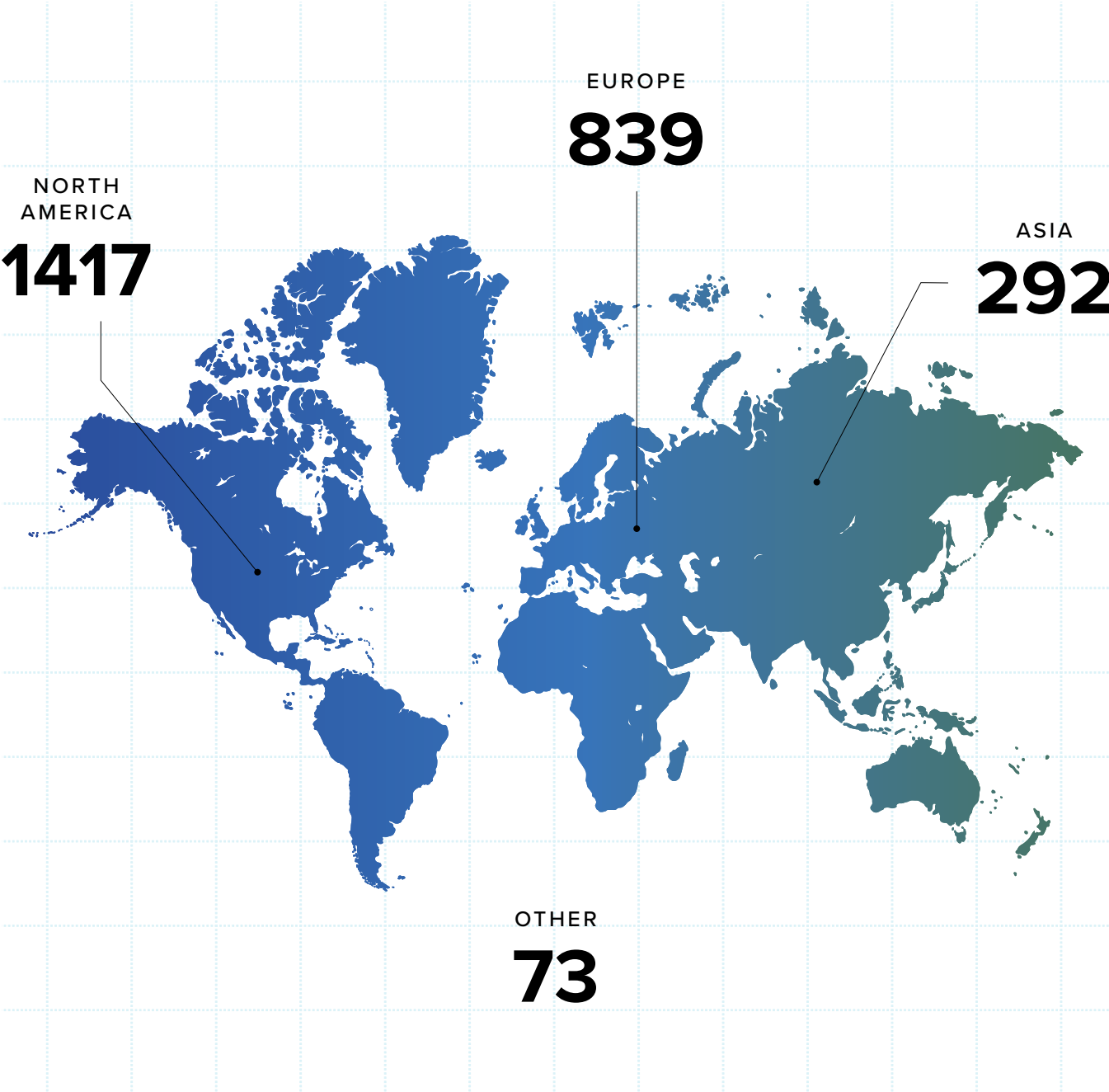
Renasant Convention Center

Sunday, June 15th, 6:00 PM – 8:00 PM

Kick off your week at Turbo Expo by connecting with fellow engineering students and early career engineers. This popular event allows students to make new friends and build their professional network in a casual evening atmosphere. Complimentary refreshments will be provided.

Registration by Continent

ASME Turbo Expo is proud to have Industry participants from all over the world. These individuals are active within the technical conference and participate as authors, panelists, reviewers, session organizers, session chairs, etc.



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	Registration 7:00 am - 5:30 pm	Registration 7:30 am - 5:30 pm	Registration 7:30 am - 5:30 pm	Registration 7:30 am - 11:30 am
	Speaker Ready Room 7:00 am - 5:30 pm	Speaker Ready Room 7:00 am - 5:30 pm	Speaker Ready Room 7:00 am - 5:30 pm	Speaker Ready Room 7:00 am - 5:30 pm	Speaker Ready Room 7:00 am - 12:00 pm
IGTI Executive Committee Meeting 1 10:00 am - 3:00 pm	Conference Sessions 8:00 am - 10:00 am	Conference Sessions 8:00 am - 10:00 am	Conference Sessions 8:00 am - 10:00 am	Conference Sessions 8:00 am - 10:00 am	Conference Sessions 8:00 am - 10:00 am
	Networking Coffee Break 10:00 am - 10:30 am	Networking Coffee Break 10:00 am - 10:30 am	Networking Coffee Break 10:00 am - 10:30 am	Networking Coffee Break 10:00 am - 10:30 am	Networking Coffee Break 10:00 am - 10:30 am
	Keynote Session 10:30 am - 12:00 pm	Plenary Session 10:30 am - 12:00 pm	Conference Sessions 8:00 am - 10:00 am	Conference Sessions 8:00 am - 10:00 am	Conference Sessions 8:00 am - 10:00 am
	Opening Lunch 12:00 pm - 1:30 pm	Expo Open 12:00 pm - 6:30 pm Networking Lunch 12:00 pm - 1:30 pm Poster Session 12:00 pm - 1:30 pm	Expo Open 12:00 pm - 6:30 pm Networking Lunch 12:00 pm - 1:30 pm	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	
Registration 3:00 pm - 6:00 pm	Conference Sessions 1:30 pm - 3:30 pm	Conference Sessions 1:30 pm - 3:30 pm	Conference Sessions 1:30 pm - 3:30 pm	Conference Sessions 1:30 pm - 3:30 pm	IGTI Executive Committee Meeting 2 2:00 pm - 5:00 pm
Speaker Ready Room 3:00 pm - 6:00 pm	Networking Coffee Break 3:30 pm - 4:00 pm	Networking Coffee Break 3:30 pm - 4:00 pm	Networking Coffee Break 3:30 pm - 4:00 pm	Networking Coffee Break 3:30 pm - 4:00 pm	
	Conference Sessions 4:00 pm - 5:30 pm	Conference Sessions 4:00 pm - 5:30 pm	Conference Sessions 4:00 pm - 5:30 pm	Conference Sessions 4:00 pm - 5:30 pm	
	Scholar Lecture 5:30 pm - 7:00 pm	Expo Hall Networking Reception 5:00 pm - 6:30 pm	Expo Hall Networking Reception 5:00 pm - 6:30 pm		
Council of Chairs Meeting 4:00 pm - 5:30 pm	Welcome Reception 7:00 pm - 8:30 pm	Technical Committee Meetings 6:00 pm - 7:30 pm	Technical Committee Meetings 6:00 pm - 7:30 pm	Technical Committee Meetings 6:00 pm - 7:30 pm	
Early Career & Student Networking Mixer 6:00 pm - 8:00 pm			Celebrating Women in Turbomachinery Event/ Dinner (Ticketed Event) 7:45 pm - 10:15 pm		

REGISTRATION

TECHNICAL CONFERENCE SESSIONS

EXECUTIVE COMMITTEE MEETINGS

PLENARY SESSIONS

NETWORKING RECEPTIONS

NETWORKING COFFEE BREAKS

SPEAKER READY ROOM

TECHNICAL COMMITTEE MEETINGS

SCHEDULE SUBJECT TO CHANGE AUGUST 5, 2024.

