AWARDS PROGRAM

ASME International Gas Turbine Institute

THE AWARDS

2026

ASME R. Tom Sawyer Award

2024

ASME Gas Turbine Award

2024

John P. Davis Award

2026

ASME Dedicated Service Award

2025

Scholar Award

2026

ASME Aircraft Engine Technology Award

2026

ASME Industrial Gas Turbine Technology Award

2026

Dilip R. Ballal Early Career Engineer Award

AWARD COMMITTEES

Honors & Awards Committee

Douglas Nagy

CHAIR

Aircraft Engine Technology Award Committee

Oscar Kogenhop

CHAIR

Industrial Gas Turbine Technology Award Committee

John Gülen

CHAIR

2026 R. Tom Sawyer Award

Awarded to an individual who has made important contributions to advance the purpose of the gas turbine industry and the ASME 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.

Dr. Kenichiro Takeishi

FORMER PROFESSOR

Osaka University

Dr. Kenichiro Takeishi has made sustained and influential contributions to the advancement of industrial gas turbine technology over more than four decades, spanning industry, academia, and international professional activities. He began his career at Mitsubishi Heavy Industries, where he was responsible for the cooling design of turbine blades for all major generations of large industrial gas turbines, from early GTCC applications to advanced 1600–1650°C-class machines. His work combined practical design leadership with original heat transfer research and high-fidelity measurement and evaluation methods specifically developed to support turbine blade cooling design, enabling reliable operation of turbines under extreme thermal and mechanical conditions.

In 2004, he joined Osaka University as Professor of Mechanical Engineering, where he led collaborative research with industry on ultra-high-temperature gas turbines, including national projects targeting firing temperatures up to 1700°C. These efforts produced innovative film-cooling configurations and endwall heat transfer concepts that were successfully implemented in commercial gas turbines. After retiring from Osaka University, he continued his academic career at Tokushima Bunri University and later maintained active research engagement as an independent researcher.

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Dr. Takeishi has served the international turbomachinery community through extensive involvement with ASME and IGTI, including service as Associate Editor of the ASME Journal of Turbomachinery and the International Journal of Turbomachinery, Propulsion and Power. His career exemplifies sustained, forthright efforts to bridge industrial innovation and academic rigor in gas turbine technology.

2024 ASME Gas Turbine Award

The Gas Turbine Award was established in 1963 to recognize an outstanding contribution to the literature of combustion gas turbines or gas turbines thermally combined with nuclear or steam power plants.

RECEIVING THE 2024 GAS TURBINE AWARD FOR THEIR PAPER:

"Innovative Cavity Modeling for Centrifugal Compressors Aeromechanical Analysis"

Marco Batisti

PHD STUDENT

University of Florence

I am a PhD candidate in Industrial Engineering with a strong academic background. I completed my Master's degree in Mechanical Engineering in 2022 with full marks (110/110 cum laude) and a special merit mention, reflecting my commitment and performance throughout my studies.

My current research builds on the work developed during my Master's thesis, which led to the scientific article presented at ASME Turbo Expo in London in 2024 and which is now recognized with the IGTI Gas Turbine Award.

I am currently engaged in advanced research on the aerodynamics and aeromechanics of centrifugal compressors.

Lorenzo Pinelli

ASSISTANT PROFESSOR

University of Florence

Lorenzo Pinelli is an Assistant Professor at the University of Florence, where he obtained his Ph.D. degree in Industrial Engineering. Dr. Pinelli's research is largely concerned with the computational aeromechanics and aeroacoustics of turbomachinery for propulsion and energy production. He has developed numerical methods for flutter, forced response, and tone noise prediction in gas turbines during long-lasting research collaborations with Avio Aero, Baker Hughes, and Ansaldo Energia. He has been involved since 2008 in various R&T EU projects (DREAM, ENOVAL, FUTURE, RECORD, FLEXTURBINE and ARIAS) where he worked on innovative aeromechanical and acoustic research topics.

He teaches aero-engines, hybrid propulsion systems, aeromechanics and aeroacoustics at the undergraduate and graduate levels, and has supervised a number of PhD and MSc students. He has published 60+ research papers and has received two best-paper awards from the ASME Turbomachinery Committee.

Lorenzo Toni

SENIOR PRODUCT LEADER – CC, ST AND INTEGRATED SOLUTIONS

Baker Hughes

I'm currently a Senior Product Leader, managing a broad product portfolio that includes centrifugal compressors, steam turbines, and integrated solutions. My responsibilities include driving new product development (NPD), defining growth plans, and leading strategic initiatives

Prior to my current role, I have been Compressors Development Leader, Technical Leader for Compressors, Team Leader for Aerodynamic and Aeromechanical Design, Senior Engineer for Aerodynamics, and Test and Data Analysis Engineer at GE Oil & Gas and Baker Hughes. I currently hold 10 patents.

I hold a Ph.D. in Energy Engineering and an M.Sc. in Mechanical Engineering.

Alberto Guglielmo

SENIOR PRINCIPAL ENGINEER PHD

Baker Hughes

Senior Principal Engineer with 17+ years of experience in turbomachinery design, testing, and innovation. I specialize in axial and centrifugal compressors, with a strong focus on aeromechanical design, fracture mechanic and life prediction, rotordynamic stability, and high-speed impeller development.

Michele Marconcini

ASSOCIATE PROFESSOR OF FLUID MACHINERY

University of Florence

Michele is an Associate Professor of Fluid Machinery at the University of Florence, a role he has held since November 2020. He previously served as an Assistant Professor from 2007 to 2020 (Tenure Track, 2017).

He holds both an MSc in Mechanical Engineering (1996) and a PhD in Energy Engineering (2000) from the University of Florence.

A core past achievement is his expertise in Computational Fluid Dynamics for the design and analysis of turbomachinery and aeronautical propulsion systems, as well as several collaborations with industry. His research career, which began in 2000, spans involvement in 16 European Union-funded projects and a publication record of over 150 scientific papers, including 60 in international peer-reviewed journals.

He received a Best Paper Award from SAGE (2011) and ASME Turbo Expo (2022, 2024), as well as the 2024 Outstanding Associate Editor award from the ASME Journal of Turbomachinery.

He is deeply involved in academic leadership and education. He lectures on Turbomachinery and Aircraft Engines and serves on both the Scientific Board of the PhD program in Industrial Engineering and the University's Quality Assurance Board. He is a member of the HPC steering committee of the University of Florence.

Andrea Arnone

FULL PROFESSOR, DEAN OF THE SCHOOL OF ENGINEERING

University of Florence

Andrea Arnone is a full professor of Fluid Machinery and Dean of the School of Engineering at the University of Florence. Born in Florence, he completed his undergraduate degree in mechanical engineering at the University of Florence with honors. In 1988, he received his PhD from the University of Bologna discussing a thesis on Computational Fluid Dynamics. During his PhD studies, he worked as a visiting researcher at NASA Langley Research Center in Virginia, USA. After his doctoral degree, he worked at NASA Lewis Research Center in Cleveland, Ohio, as an associate researcher at the Institute for Computational Mechanics in Propulsion (ICOMP).

His research involves the use of computational fluid dynamics with a special focus on turbomachinery design and analysis. His goal is to develop the Traf solver to support advanced and innovative turbomachinery design and flow physics investigation. He has developed two- and three-dimensional codes (Traf) that cover applications from aerodynamics to aero elasticity and noise prediction in turbomachinery. These codes are currently used by several leading industries and research centers. He has tutored many undergraduate and PhD theses. Several of his students are now distinguished engineers in leading international companies, some of them are university professors.

2024 John P. Davis Award

Awarded to a paper that focuses on new or continuing gas turbine applications, identifies planning, installation, operating and/or maintenance problems and their solutions, and exemplifies candid exposure of real-world problems and solutions.

RECEIVING THE 2024 JOHN P. DAVIS AWARD FOR THEIR PAPER:

"Assessing the Environmental Impact of Aircraft / Engine Integration With Respect to Contrails"

Dr. Joseph Ramsay

AEROTHERMAL ENGINEER

Rolls-Royce plc

Dr. Joe Ramsay is an aerothermal engineer at Rolls-Royce plc. He graduated with an MEng in Aerospace Engineering from the University of Sheffield in 2022 and subsequently remained at Sheffield to undertake a PhD as part of the European research project NEXTAIR, working closely with Rolls-Royce's Future Methods and Fluid Mechanics teams in Derby, UK.

His doctoral research focused on the numerical simulation of aircraft contrails using computational fluid dynamics (CFD), with particular emphasis on exploring potential mitigation strategies through aircraft and engine design. This work contributes to ongoing efforts to reduce the non-CO_2 climate impacts of aviation.

Upon completion of his PhD in 2025, Joe joined the Fluid Mechanics department at Rolls-Royce. In his current role, he focuses on the development and application of artificial intelligence and machine learning methods in fluid mechanics to accelerate CFD workflows and improve simulation accuracy.

Indi Tristanto

CFD METHOD ENGINEER

Rolls-Royce

Indi Tristanto completed his Aeronautical Engineering degree at the university of Bristol before joining University College London and Advanced Design Technology as a turbomachinery researcher. Upon completing his PhD in Large Eddy Simulation of compressible turbulence flow at Loughborough University with jet aero-acoustic as the main application of interest, he became a lecturer at the School of Mechanical, Aerospace and Civil Engineering, University of Manchester and then a CFD method engineer at Rolls-Royce.

As CFD method engineer, Indi Tristanto is responsible for the development of flow physics model within the Rolls-Royce Hydra CFD systems. He has been awarded the Royal Society Industry fellowship for his work on multispecies thermo-fluid modelling for turbine and combustor interactions as well multi-phase flow for modelling contaminants ingestion during engine operations. Naturally, his research interest has broadened towards aircraft and gas turbine engine performance in recent years. The overarching theme of his current research is mitigation of gas turbine environmental impact and exploration of alternative propulsion systems technology, including aircraft architecture that serve as their vehicle of deployment.

Indi Tristanto is a Chartered Engineer of the UK Engineering Council, member of the Royal Aeronautical Society and the American Institute for Aeronautics and Astronautics. His interest in developing the next generation of engineers has led him to supervise a number of graduate research efforts; some has been published in the ASME IGTI Turbo Expo.

Professor Shahrokh Shahpar

ROLLS-ROYCE ENGINEERING FELLOW – AEROTHERMAL DESIGN SYSTEMS

Rolls-Royce

Shahrokh is a Rolls-Royce Fellow in Aerothermal Design Systems within Design and Service Engineering (Fluid Mechanics department). He previously worked in the Innovation Hub – Future Methods, where his research focused on the development and application of artificial intelligence, machine learning, and adjoint-based multidisciplinary design optimisation (MDO) methodologies for turbomachinery components.

His work at the Innovation Hub contributed to Clean Aviation research, including eVTOL systems, liquid hydrogen propulsion, aviation fuel cells, and Direct Air Capture (DAC) for CO_2 removal, as well as the modelling and optimisation of aircraft contrails to mitigate their radiative impact in the upper atmosphere. He currently serves as a Work Package Lead on three EU Horizon research and development programmes: NextAIR ("Multi-disciplinary digital enablers for next-generation aircraft design and operations"), DemoQUAS ("Design, Manufacturing, and Operational Quantification of Uncertainties to Increase Aviation Safety"), and ROSAS ("Robust Simulation Systems Exploiting AI-based Turbulence Models and High-Fidelity Algorithms"). These programmes involve collaboration with multiple universities and research centres across the UK and Europe. He supervises several PhD students and postdoctoral researchers. Further details, including short project videos, are available at: https://www.nextair-project.eu/.

Shahrokh has an established national and international reputation in computational fluid dynamics (CFD) meshing and automated aerothermal design optimisation. He has authored over 200 internal and external technical publications, receiving more than 3,300 citations, and holds fifteen patents. He has led the development and deployment of several aerothermal design systems that are now in routine operational use at Rolls-Royce, most notably FAITH and SOPHY (SOFT-PADRAM-HYDRA), which enable systematic high-fidelity aerodynamic, thermodynamic, and acoustic design optimisation. His current research interests include aerothermal topology optimisation, manufacturing and

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in-service degradation, uncertainty quantification, and robust design methodologies.

Shahrokh was sponsored by BAE Systems to undertake doctoral research in hypersonic flows, with particular emphasis on real-gas effects. As part of this work, he developed a Reynolds-Averaged Navier–Stokes (RANS) CFD code incorporating equilibrium and non-equilibrium chemistry. During the 1990s, he worked as a Senior Research Fellow on several UK and EU re-entry vehicle programmes, including HOTOL, SÄNGER, and HERMES.

Shahrokh is a four-time recipient of the prestigious Sir Henry Royce Award for Innovation at Rolls-Royce. He received the Royal Aeronautical Society's Sir Feddon Award in 2001 for his work on advanced propulsion design methodologies and the Royal Aeronautical Society Silver Medal in 2023 for contributions to aero-engine MDO. He is a Fellow of the Royal Aeronautical Society (FRAeS), the American Institute of Aeronautics and Astronautics (FAIAA), and the Royal Academy of Engineering (FREng).

He holds honorary professorships in the Department of Aeronautics at Imperial College and the Faculty of Engineering and Design University of Leeds. His STEM outreach activities include mentoring students in the UK Race to Space (R2S) rocketry programme. His professional service includes membership of the AIAA MDO Technical Committee and the NAFEM Optimisation Committee, participation on multiple university Industrial Advisory Boards, and Chairing the Paper Review Committee for the ASME Gas Turbine Conference 2026 in Milan.

Alistair John

PROGRAMME LEAD FOR AEROSPACE ENGINEERING

University of Sheffield

Dr. Alistair John is the Programme Lead for Aerospace Engineering at the University of Sheffield. An alumnus of the university, he earned his MEng and PhD in collaboration with Rolls-Royce, focusing on jet engine aerodynamics. Dr John is nationally recognized for founding Race2Space, a major UK initiative for student rocket propulsion, and for supervising Project Sunride, who achieved the UK's first student-led liquid rocket engine firing and who hold the European student liquid rocket altitude record. Awarded a National Teaching Fellowship in 2024, he leads the department's "design stream" to bridge the gap between academic theory and high-level industrial employability. Alistair supervises PhD students working with Rolls-Royce on multi-disciplinary optimisation and contrail mitigation.

2026 ASME Dedicated Service Award

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.

Douglas Hofer

CONSULTANT

Retired

Dr. Hofer retired from full-time work in January 2025 and is now consulting on power cycle thermodynamics, turbomachinery design, aerodynamic design, and applications of these to the energy transition. Prior to retirement he designed steam turbines for Westinghouse, managed the steam turbine aerodynamics team for GE, explored novel turbomachines at the GE Global Research center, and contributed to various projects including the STEP sCO2 test facility at Southwest Research Institute. His innovative work resulted in many publications and more than 50 US patents. He was elected an ASME Fellow in 2025.

Dr. Hofer received his Bachelor of Science and Master of Science degrees at the University of Florida and his PhD from Purdue University. His academic work focused on development of CFD codes and methods which he applied to his professional work in turbomachinery aerodynamics and thermodynamics.

Doug's first Turbo Expo was in The Hauge in 1994 and he has attended most conferences since then. During that time Doug has had many volunteer roles including authoring papers, reviewing papers, chairing sessions, and organizing tracks. Doug was instrumental in creating the Steam Turbine Committee and served as its second chair in 2011-2013. He served on the IGTI Executive Committee from 2019 to 2025. As Executive Committee chair in 2024 he oversaw the reorganization and merging of the IGTI and GTTG to better align with the ASME TEC Sector structure.

Dr. Marina Braun-Unkhoff

SENIOR RESEARCH SCIENTIST

German Aerospace Center (DLR), retired

Dr. Braun-Unkhoff holds a Diploma Degree in Chemistry from Ruhr University Bochum (Germany) working on atmospheric chemistry. She then joined the German Aerospace Center (DLR) at the Institute of Combustion Technology at Stuttgart starting her research on chemical kinetics and combustion chemistry and received a PhD Degree in Natural Sciences from Stuttgart University (Germany).

She has a strong background in physical chemistry and chemical kinetics, with more than 30 years of experience in combustion of practical fuels; both experimental and modeling. Major research areas are the use and application of alternative fuels—neat or in blends—for energy, transport, and aviation. This includes gasification of biomass and combustion of natural gas, syngas, low-caloric vent gases, biogas, and alcohols including further oxygenated molecules. Her research covers multiple aspects of modern combustion chemistry, which ranges from the development of reaction mechanisms for NOx and PAH/soot formation up to mechanisms of synthetic aviation fuels. In addition, she was deeply involved in investigations of efficient power production, in centralized and decentralized units. In recent years, Dr. Braun-Unkhoff was engaged in the first studies on exploring fundamental combustion properties of alternative synthetic jet fuel. She has (co-)authored about 80 peer-reviewed journal articles and even more conference articles on these subjects.

Dr. Braun-Unkhoff's outstanding status in the community is internationally recognized, with an extensive research network she was able to establish worldwide, collaborating with many research groups from Europe, the U.S, and China. Furthermore, she has received several honors for her scientific achievements, e.g., the Wilhelm-Jost Prize from the German Section of The Combustion Institute. She is a long -time member and also a Fellow of the Combustion Institute. Furthermore, she has been invited multiple times as speaker at international conferences. She has dedicated her service to the community through

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numerous conference appointments, as a reviewer for many journals and proposals as well as a lecturer at Stuttgart University (Germany) and a long served past member of the Advisory Board of Scientific and Technical Staff at DLR.

Dr. Braun-Unkhoff is presenter / (co-)authoring about 15+ technical papers in ASME, Journal of Engine, Gas Turbines and Power, and Journal of Energy Resources Technology. She has recently concluded the two-year term as Chair of ASME's technical committee on Coal, Biomass, & Alternative Fuels after serving previously as Vice-Chair and Point of Contact. She has held leadership positions in Turbo Expo at organizing and chairing numerous technical and panel sessions and serving as tutorial organizer. Dr. Braun-Unkhoff has also been recognized by ASME winning the IGTI Outstanding Service Award and is a three-time ASME Best Technical Paper Award winner.

2025 Scholar Award

The International Gas Turbine Institute Scholar Award is bestowed upon an individual who submits a learned and comprehensive paper that makes a significant and timely contribution to the science and practice of gas turbine engineering. The Scholar presents the award-winning paper as a lecture to an audience of his peers.

Mark G. Turner

RETIRED

Dr. Turner's background is in industry, academia, and the US Federal Government. From 1979-2000, Mark worked for GE Aerospace in both Cincinnati, OH, and Lynn, MA. From 2000-2001, Dr. Turner worked for a small company in Cleveland, AP Solutions. He was a Professor and Associate Department Chair from 2001-2020 in Aerospace Engineering at the University of Cincinnati. For just over five years, Mark was at NASA, where he just retired at the end of April 2026.

Most of the work that Mark has done has been related to simulation of turbomachinery with emphasis on design and understanding which is the subject of his scholar paper.

Mark Turner has published 36 journal articles, 52 peer reviewed conference papers, 7 technical reports, 65 non-refereed conference papers and 2 book chapters. In addition, he has given 25 invited presentations. He has advised and graduated 10 PhD students, 25 master's students, hired 42 undergraduate coop students, and advised 25 students with Undergraduate Research. In addition, he has taught 62 separate classes at the University of Cincinnati. At NASA, Mark has guided 5 interns.

Mark is a Fellow of ASME, is active in IGTI, was the Conference Chair for Turbo Expo in 2017, and has received five best paper awards. He is an Associate Fellow in

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AIAA. Mark has three patents. Outside of his professional work, Mark is interested in education. In 2003 he received the Building Excellence Award of Service from Cincinnati Public Schools for volunteer work on passing the $480-million bond issue to be used for the $985-million renovation and rebuilding of all the schools in Cincinnati Public Schools.

Dr. Mark G. Turner received his BS degree in Mechanical Engineering from Virginia Tech in 1979, his MS in Aerospace Engineering from the University of Cincinnati in 1986, and his Doctor of Science (ScD) in Aeronautics and Astronautics from MIT in 1990.

Dr. Mark Turner keeps an electric boat on the Ohio River, is married and has two grown sons.

2026 Aircraft Engine Technology Award

For Outstanding Contribution to Air Breathing Propulsion Through Inspiring Leadership, Education, and Research Having Major Impacts on Aircraft Engine Operational Capability, Performance, and Design.

Dr. John P. Clark

AERODYNAMICS ENGINEERING DISCIPLINE LEAD

Florida Turbine Technologies

Dr. John Clark is the Discipline Lead for Aerodynamics at Kratos, Florida Turbine Technologies. He joined Kratos in September of 2025 after more than 23 years with the Air Force Research Laboratory at Wright-Patterson Air Force Base, Dayton, OH. At AFRL he led the in-house research program in turbines for the Turbine Engine Division of the Aerospace Systems Directorate. He retired from the USAF as an AFRL Fellow, and he is a Fellow of the ASME. While at AFRL he was also named the AIAA Engineer of the Year in 2012. Prior to joining AFRL, he worked in the Turbine Aerodynamics group at Pratt & Whitney. He received his doctorate in Engineering Science from the University of Oxford where he was a student of the late Prof. Terry Jones.

2026 Industrial Gas Turbine Technology Award

For Outstanding Contributions to the Electric Power and Mechanical Drive Industries Through His Leadership, Research and Development, and Advocacy on Behalf of Industrial Gas Turbines.

Carlos E. Koeneke

CHIEF ENGINEER, PROJECT ENGINEERING

Mitsubishi Power Americas

Carlos has over four decades of turbomachinery experience, he started a Rotating Equipment position at a major petroleum-company after completing his undergraduate program in 1982. He pursued his master's degree in rotor-dynamics and vibration analysis while working and was awarded a Japanese Ministry of Education scholarship to pursue his Ph.D. at the University of Tokyo. He completed a thesis related to high-speed supercharger bearings under the effect of centrifugal force.

In 1993, he joined Mitsubishi Heavy Industries in Japan and was transferred to Mitsubishi Power Americas in 2001.

Carlos has written over 35 technical articles addressing GT topics. He is a long-term member of the Electric Power and Industrial & Cogeneration technical Committees and has actively participated in ASME conferences since 2003, reviewing paper, chairing or co-chairing sessions and participating in panels and technical sessions.

Since 2003, Carlos established a relationship with the insurance community and has conducted Insurance Forums in London, Singapore and the U.S.

In 2022, Carlos became the Gas Turbine Association vice-chair/treasurer and is currently the Chair.

He cooperates with academia by participating as UCF Faculty Scholar and Engineering Advisory Board Member at Embry-Riddle University. He also participates in the GUIde Research program led by Duke/Purdue Universities.

2026 Dilip R. Ballal Early Career Engineer Award

Awarded to an individual who has made significant contributions in the gas turbine industry within the first five years of their career.

Veeraraghava Raju Hasti

PH.D., ASSISTANT PROFESSOR

University of Central Florida

Veeraraghava Raju Hasti is an Assistant Professor in the School of Modeling, Simulation, and Training at the University of Central Florida. He received his M.S. (2016) and Ph.D. (2019) in Mechanical Engineering from Purdue University, USA. Prior to joining UCF, he held research faculty appointments at Purdue University and North Carolina State University and worked at the Indian Space Research Organization and Honeywell Aerospace.

Dr. Hasti's research focuses on combustion and emissions, advanced gas turbines, computational fluid dynamics, and the application of artificial intelligence for modeling, simulation, and optimization of energy and propulsion systems. His work has contributed to low-emission combustor design, sustainable aviation fuels assessment, smart power plant operation, and AI-enabled digital twins. As part of industrial R&D teams, he contributed to patented low-emission combustor technologies that have been transitioned to commercial aerospace platforms.

He is an Associate Fellow of AIAA, a Senior Member of ASME, and currently serves as Chair of the AIAA Gas Turbine Engines Technical Committee (GTE TC) and as an Associate Editor for Frontiers in Aerospace Engineering journal. Dr. Hasti is a recipient of multiple honors, including the AIAA Gordon C. Oates Air-Breathing Propulsion Graduate Award and the 2022 AIAA GTE TC Impact Award.

Outgoing Chairs

The core of IGTI is its committees, and the members of those committees drive our excellence. We greatly appreciate those individuals who commit to leading these committees as chairs and recognize their time, expertise and effort required to do the job. Thank you for your service.

COAL, BIOMASS & ALTERNATIVE FUELS
Angela Serra

CONTROLS, DIAGNOSTICS & INSTRUMENTATION
Dr. Lubomir A. Ribarov

EDUCATION
Ioanna Aslanidou

ELECTRIC POWER
Ben Emerson

ENERGY STORAGE
David Sánchez

FANS AND BLOWERS
Till M. Biedermann

HEAT TRANSFER
Eric Ruggiero

MANUFACTURING MATERIALS & METALLURGY
Scott Keller

STRUCTURES & DYNAMICS
Mateusz Golebiowski, Ph.D.

STUDENT ADVISORY
Janakiraman Thiyagarajan

ASME IGTI Committee Best Papers

Aircraft Engine

GT2025-151607: Design of Fuel Cell Systems in Aviation – Part I: Modelling and Component Design

Marcel Stoewer, Patrick Meyer, Marius Nozinski, Sebastian Lück, Stephan Kabelac, Jens Friedrichs, Jan Goeing, Dajan Mimic

GT2025-153200: On the Performance of Common-Core Turboprops

Mavroudis D. Kavvalos, Dimitrios Bermperis, Georgios Goinis, David Kaiser, Konstantinos G. Kyprianidis

Ceramics & Ceramic Composites

GT2025-152711: Oxidation Of An Environmental Barrier Coated Ceramic Matrix Composite In A Combustion Environment

Michael J. Presby, Roy M. Sullivan, Leland C. Hoffman, Bryan J. Harder, Kang N. Lee

Coal, Biomass & Alternative Fuels

GT2025-152708: Particulate and Gaseous Emissions of an Allison 250-C20b Turboshaft Engine Using Ft-Spk

Alexander Rabl, Marius Rohkamp, Mohammad Reza Saraji-Bozorgzad, Jan Bendl, Barbara Giocastro, Rares Cotenescu, Victor Burger, Thomas Adam, Andreas Hupfer, Volker Gümmer

Combustion, Fuel, and Emissions

GT2025-154116: OH-PLIF Measurements for Micromixed Flames in a Multi-Injector Burner at Elevated Pressures and Temperatures

Antoine Durocher, Luming Fan, Marc Füri, Julien Sirois, David May, Gilles Bourque, Jeffrey M. Bergthorson, Sean Yun, Patrizio Vena

GT2025-151747: Performance and Emission Footprint of Decentralized H2/NH3 Gas Turbines With On-Site Ammonia Decomposition and Exhaust Aftertreatment

Christian Goßrau, Nils Hendrik Petersen, Laurenz May, Manfred Wirsum

GT2025-152740: A Study on Combustion Characteristics of Radial Inward Flow Porous Media Burners for Ammonia-Hydrogen Flames
Guguloth Mahesh Nayak, Beni Cukurel, Joseph K. Lefkowitz

Controls, Diagnostics & Instrumentation

GT2025-151475: Uncertainty Quantification for Multi-Hole Pneumatic Probe Measurements in Transonic Turbomachinery Flows
Johannes Bachner, Andreas Pahs, Philipp Weggler, Florian Herbst

Cycle Innovations

GT2025-153747: Experimental Characterization of a Micro Gas Turbine Fueled by Ammonia-Natural Gas Blends
Chiara Anfosso, Daria Bellotti, Mario Luigi Ferrari, Loredana Magistri

GT2025-154015: Integrated Design and Operation Assessment of a Preheating System for Liquid Hydrogen Fuelled Engines
Pavlos Rompokos, Sangkeun Kang, Ioannis Roumeliotis

Education

GT2025-151877: Assessing the E2E Sustainable Propulsion Undergraduate Education and Research Program
David Gray, Karen Martinez Soto, Charles Haldeman, Todd Lowe

Electric Power

GT2025-153315: Development of a Full Scale Retrofittable Ammonia Combustor for Can Annular Frame Engine Implementation
Benjamin Emerson, David Wu, Cristian D. Avila Jimenez, Renee Cole, Jung-Keuk Park, Sanghyup Lee, James Harper, David Noble

Energy Storage

GT2025-153826: Thermodynamic Trade-Offs in Brayton High-Temperature Heat Pumps: Impact of Compressor Performance and Heat Exchanger Size
Matteo Benvenuti, Guido Francesco Frate, Lorenzo Ferrari

Fans and Blowers

GT2025-153292: Automated Clustering and the Path Towards Visual Analytics for Enhanced Process Optimization in the Pulp and Paper Industry

David Volponi, Francesco Gant, Axel Fiedler, Michael Florian Laubscher, Julio José Valero

Heat Transfer

GT2025-154071: A Novel Approach to Dirt Mitigation for Combustor Walls

Kyle McFerran, Karen A. Thole, Stephen P. Lynch, Gregory Boardman, Ryan Lundgreen, Stephen Kramer, Dibesh Joshi

GT2025-151270: Infrared Heat Transfer Coefficient Measurements in an Engine-Scaled Turbine State

William Davis, William Playford, Aurélien Perrot, Max Hewkin-Greggor, Julien Desset, Tony Arts, Nicholas R. Atkins

Manufacturing, Materials and Metallurgy

GT2025-152958: Learnings in the Qualification of ABD®900AM for Turbine, Aerospace, and Energy Applications

John Shingledecker, Alex Bridges, Nikki Harless, Richard Grylls, Zara Hussain, Seba Pereira, Shankar Srinivasan, Marco Musto, Kenneth Kroenlein, James Saal

Microturbines, Turbochargers, and Small Turbomachines

GT2025-153713: Insights Into the Cavitation Behaviour of a Boundary Layer Pump

Agapi Bakogianni, David John Rajendran, Eduardo Anselmi Palma, Vassilios Pachidis, Chloe Jo Palmer

Oil & Gas Applications

GT2025-151808: Gas Turbine Diagnostics by Means of Convolutional Neural Networks Fed With Time Series Data Encoded As Images

Enzo Losi, Mauro Venturini, Lucrezia Manservigi, Giovanni Bechini

Steam Turbine

GT2025-153354: Investigation of Liquid Film Atomization From the Trailing Edge of an Airfoil in a High-Speed Flow- Effect of Trailing Edge Thickness

Safiullah, Vincent McDonell, Soichiro Tabata, Shigeki Senoo

Structures & Dynamics

GT2025-151861: AI-Powered Probabilistic Damage Tolerance Approach for Impeller Mechanical Assessment

Lorenzo Cappelli, Dario Matina, Leonardo Pulga, Andrea Panizza

GT2025-152970: Forced Response of an Unstable LPT Bladed-Disk: New States with Different Blade Vibration Amplitude

Carlos Martel, Salvador Rodríguez-Blanco, Javier González-Monge

GT2025-151261: Leveraging Additive Manufacturing Design Strategies to Understand Vaned Diffuser Off-Design Performance

Matthew A. Meier, Nicole L. Key

Supercritical CO2 Power Cycles

GT2025-152393: Multi-Objective Technoeconomic Optimisation of Closed Loop CO2 Power Cycle for Spherical Tokamak Fusion Reactor

Dhinesh Thanganadar, Jacob Connors, Jack Acres

GT2025-152754: Performance Test of a 9MW-Class 3-Stage Axial CO2 Compressor

Jeongseek Kang, Alex Vorobiev, James Sutton, William Stewart, Harold Miller, Joshua D. Cameron, Scott C. Morris, Mark G. Turner, Kyle Sedlacko, Timothy J. Held

Turbomachinery

GT2025-153215: A Unified Framework for Compressor Stall Inception

Sam Grimshaw, Graham Pullan, Edward Greitzer, Zoltan Spakovszky

GT2025-151998: An Improved Correlation for Turbine Endwall Loss

John D. Coull

GT2025-152500: Aft Fuselage Boundary Layer Ingesting Propulsion System Design

Zhibo Chen, Marshall C. Galbraith, Zoltán S. Spakovszky, Edward M. Greitzer

Best Tutorials

Aircraft Engine

GT2025-TOB-01-03: Thinking Like An Engine - Demystifying The Gas Turbine Performance Model

Steve Sirica, Todd Lowe

Cycle Innovations

GT2025-TOB-06-03: Energy storage cycles at Power Plant Scale

Alberto Traverso

Industrial & Cogeneration

GT2025-TOB-17-02: Closed Cycle Gas Turbines for Emissions-Free Power Generation

Dr. Rakesh K. Bhargava

Supercritical CO2 Power Cycles

GT2025-TOB-30-03: Oxy-Fuel Combustion for Direct-Fired Supercritical CO2 Cycles

Francesco Di Sabatino, Seokwon Cho

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Xi'an Jiaotong University

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UCF

SHARAN SREEDEEP
GE Vernova Gas Power

SHREYAS HEGDE
Pratt and Whitney

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Rolls-Royce UTC

TROY KRIZAK
Hyphen Innovations

TARIK YAHOU
Safran Aircraft Engines

YIMING LIU
Trinity College Dublin

YOGA HUTOMO PUTRA
ExxonMobil Indonesia

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