



The American Society of Mechanical Engineers
International Gas Turbine Institute

AWARDS PROGRAM

ASME International Gas Turbine Institute

THE AWARDS

2024

ASME R. Tom Sawyer Award

2022

ASME Gas Turbine Award

2022

John P. Davis Award

2024

Dedicated Service Award

2024

ASME IGTI Aircraft Engine Technology Award

2024

ASME IGTI Industrial Gas Turbine Technology Award

2024

ASME IGTI Dilip R. Ballal Early Career Engineer Award

AWARD COMMITTEES



Honors & Awards Committee

Douglas Nagy

CHAIR



Aircraft Engine Technology Award Committee

Konstantinos Kyprianidis

CHAIR



Industrial Gas Turbine Technology Award Committee

John Gülen

CHAIR

2024 ASME 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.



Kenneth C. Hall

**JULIAN FRANCIS
ABELE PROFESSOR**

*Department
of Mechanical
Engineering and
Materials Science,
Duke University*

Kenneth C. Hall received his S.B., S.M., and Sc.D. degrees from the Department of Aeronautics and Astronautics at MIT. Following graduate school, Dr. Hall worked two and one-half years at United Technologies Research Center. In 1990, he joined the faculty of the Department of Mechanical Engineering and Materials Science at Duke University, where he is currently the Julian Francis Abele Professor of Mechanical Engineering. Dr. Hall's research has focused on novel methods for computing unsteady aerodynamics, structural dynamics, and aeroelasticity of aerospace vehicles and especially turbomachinery.

Dr. Hall is a past Vice President of the American Society of Mechanical Engineers (ASME), the former Chair of the International Gas Turbine Institute (IGTI) of the ASME, and a long-time member of both the Turbomachinery and the Structures and Dynamics Technical Committee of the IGTI. He served four years as Editor of the Journal of Turbomachinery.

Dr. Hall is a member of the National Academy of Engineering (elected 2020), and the winner of the 2018 American Institute of Aeronautics and Astronautics Aerodynamics Award "For seminal contributions in the development of novel unsteady aerodynamic theories and analysis methods for internal and external flows." He is a Fellow of the ASME, and a Fellow of the AIAA.

2022 ASME Gas Turbine Award

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

RECEIVING THE 2022 GAS TURBINE AWARD FOR THEIR PAPER: GT2022-79368

“Some Properties of the Exit Velocity Triangle of a Radial Compressor Impeller”



Michael Casey

CONSULTANT

PCA Engineers

Michael Casey was awarded a first-class degree in Engineering Science at Oxford University in 1970. He continued in Oxford to complete his D.Phil. thesis on “Cavitation inception on hydrofoils” in 1974.

He held postdoctoral positions in Durham and Cambridge Universities and then worked as an engineer and manager for nearly 30 years in various international engineering companies (WS Atkins, Sulzer Turbo, Rolls Royce plc, and Sulzer Innotec), working mainly on energy systems, turbomachinery design methods, applications of CFD and experimental methods.

From 2003 to 2011, he was Professor of Thermal Turbomachinery in Stuttgart University, Germany and at the same time was a consultant and director of PCA Engineers Limited. In retirement from Stuttgart University, he has continued to act as a consultant and director for PCA Engineers Limited in the UK.

He is a Fellow of the Institution of Mechanical Engineers and of the American Society of Mechanical Engineers. He has over 150 technical publications in the field of energy systems, mainly related to radial compressors, many of which have been awarded prizes. In 2021, together with Dr. Chris Robinson, he published a technical book entitled “Radial Flow Turbocompressors” with Cambridge University Press.

2022 ASME Gas Turbine Award

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

RECEIVING THE 2022 GAS TURBINE AWARD FOR THEIR PAPER: GT2022-79368

“Some Properties of the Exit Velocity Triangle of a Radial Compressor Impeller”



Chris Robinson

DIRECTOR

PCA Engineers

Dr Chris Robinson graduated from the University of Durham in the UK with BSc and MEng degrees in Engineering Science and was later awarded a PhD by Cranfield University for a thesis entitled ‘End-wall flows and blading design for axial flow compressors’.

He joined Rolls-Royce in 1979 as an undergraduate apprentice, returning as a Graduate in 1980. In 1982 he joined the axial compressor research team in the Civil Engine Group specializing in low-speed aerodynamic research for core engine compressors, becoming Group Leader in 1990. In 1992 he moved into transonic fan aerodynamics, firstly integrating CFD into the aero design process and later as a project engineer on the BR710 LP system.

In 1994 he joined PCA Engineers Limited to broaden his experience in a small, consulting environment. He became Engineering Director (1998-2004) then Managing Director (2004-2021) playing a key role in developing PCA into an internationally respected organisation. He has jointly authored many papers on aspects of centrifugal compressor design with Dr Mick Casey, including a book entitled “Radial Flow Turbocompressors” published by Cambridge University Press in 2021. He is presently a Director of PCA.

2022 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 2022 JOHN P. DAVIS AWARD FOR THEIR PAPER: **GT2022-81802**

"Gas Turbine's Role in Energy Transition"



S. Can Gulen

BECHTEL FELLOW

Bechtel USA

Dr. John Gülen, ASME Fellow, a senior engineer in Bechtel's Infrastructure & Power business unit, is an internationally recognized expert in steam and gas turbine combined cycle systems and thermal power plant engineering with numerous patents and publications to his credit. Dr. Gülen's contributions include development of heat balance software at Thermoflow, design, optimization, and testing of combined cycle systems with FB and H class gas turbines at General Electric and technical assessment of novel power generation technologies at Bechtel.

He was named a Bechtel Fellow in 2018. Dr. Gülen received his PhD degree from Rensselaer Polytechnic Institute and is a licensed professional engineer.

2022 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 2022 JOHN P. DAVIS AWARD FOR THEIR PAPER: GT2022-81802

"Gas Turbine's Role in Energy Transition"



Martin Curtis

PROCESS
ENGINEERING
MANAGER

Bechtel UK

Martin Curtis, a Fellow of the Institution of Chemical Engineers, is a process engineering manager in Bechtel's Energy business unit where he leads the process design of refinery, gas processing, petrochemical and energy transition projects. Martin has more than 30 years' experience in operations and the design of amine systems. He has been involved with gas turbine exhaust carbon capture using open art and proprietary technology since 2008.

Martin was the process engineering manager for Bechtel's Front End Engineering and Design (FEED) Study for a Carbon Capture Plant Retrofit to a Natural Gas-Fired Gas Turbine Combined Cycle Power Plant at Sherman, Texas (2022). He also led the process design of Ervia's Carbon Capture and Storage Pre-FEED Study for Gathering, Liquefaction, Temporary Storage and Shipping of Captured CO₂ at Cork/Dublin, Ireland (2022), with both projects developing open art solutions for carbon capture and transport. Martin is Bechtel's Subject Matter Expert for post-combustion carbon capture.

He received his M.Eng. degree from the University of Newcastle-upon-Tyne and is a chartered chemical engineer.

2024 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.



Jaroslaw Szwedowicz

PRINCIPAL SENIOR
KEY EXPERT FOR GAS
TURBINES

Siemens Energy

Jaroslaw (Jarek) Szwedowicz D.Sc., Ph.D., Eng. is a Principal Senior Key Expert for Gas Turbines at Siemens Energy in Zurich, Switzerland since 2017. Based on his longtime engineering experience, Jaroslaw consults various new developments and upgrades of large gas turbines. In addition, he supports RCA and technologies for extending lifetime, decarbonation and digitalization. Jaroslaw works globally with various R&D hubs of Siemens Energy in Europe, North America, and India.

Jaroslaw began his engineering career at the Gdansk University of Technology in Poland and continued at Instituto de Investigaciones Eléctricas in Mexico working on steam turbine technologies. Having returned to Europe Jaroslaw worked in various managerial positions at General Electric, Alstom Power, and ABB for developing solutions that integrated measurement, mechanical, and fluid engineering into one process. As a Technology Program Manager, he was responsible for developing Additive Manufacturing for gas turbine repair, wireless sensing, and predictive maintenance techniques. His R&D programs offered further enhanced performance, extended lifetime, digital-twin and environmental solutions across the plant life cycle through continuous product improvements.

Jaroslaw is the author/co-author over 60 publications and holds 5 patents with over 19 patent applications and over 130 technical reports. One of his articles received the Best Paper Award of ASME Structures and Dynamics com-

mittee for the novel work on fluid-structure interaction. His skills and experiences have a proven track record in innovation-based projects, technology roadmaps, successfully leading international teams for various products like e.g.: PdM, design against HCF, AM for repair, smart materials for system control, and wireless passive sensing. For 6 years Jaroslaw has been an Associate Editor of ASME Journal of Engineering for Gas Turbines and Power. For 12 years he is an Associate Editor of SAGE Journal of Mechanical Engineering Science of Thomson Reuters.

Jaroslaw is active voluntary in the American Society of Mechanical Engineers (ASME). He started his involvement in ASME with the local section in Switzerland, becoming its head and introducing positive changes, like new ASME Historic Mechanical Engineering Landmarks, Bachelor Awards, seminars, and many others. In 1999 Jaroslaw published his first paper at ASME Turbo Expo, in which he actively served as a reviewer and an organizer of technical, panel and tutorial sessions. He chaired ASME Structures and Dynamics Committee. Jaroslaw had the privilege of leading the Gas Turbine Segment, which resulted in a new strategy and focus on industry by organizing AMRGT (Advance Manufacturing and Repair for Gas Turbine) conferences and "Production and Maintenance Engineering" committee. For 4 years Jaroslaw has had the honor of being a member of the Nominating Committee interviewing candidates for ASME Board of Governors. Now Jaroslaw is a member of the IGTI Executive Committee and an active mentor in ASME Volunteer Leadership Pathway.

Jaroslaw's life is not only filled by mechanical engineering. His joy and pride are his wife Dorota, and daughter Maria and son Lukas. He also enjoys skiing, tennis, as well as nature and people wherever Jaroslaw goes.

2024 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.



Peter Baldwin

PRESIDENT

Base-e.net

Peter Baldwin has been involved in all aspects of the gas turbine and compressor industries for almost 60 years, and has broad general industry knowledge and practice, based on years of global commercial interactions.

Most recently, Pete has been an active contributor to the work of ASME/IGTI's Electric Power Committee, preparing its Annual Fuels Report.

Base-e; his Boston based independent consulting company focused on practical product positioning and commercialization strategies for Distributed Energy Technologies, Gas Turbines, and various Air & Gas Compression interests.

Pete is the immediate past President of Ramgen Power Systems, a Seattle-based developer of an advanced shock compression technology intended for use as a utility scale CO2 compressor in developing Carbon Capture & Sequestration (CCS) projects and applications. Ramgen had been support through U.S. Department of Energy funding grants with Dresser Rand as a notable strategic investor. DR has since exercised its option to acquire selected assets of Ramgen and were, themselves, subsequently acquired by Siemens Energy.

Pete is also the past President of Northern Research & Engineering Corporation (NREC), the world-class turbomachinery design services organization, now doing business as part of Concepts/NREC. Prior to its sale to Concepts, NREC was a wholly owned subsidiary of Ingersoll-Rand. NREC was responsible for the development of I-R's PowerWorks

Microturbine Technology, now offered by Flex Energy Solutions. NREC, in partnership with Westinghouse and UC Irvine, built and tested the world's first SOFC/GT hybrid at 53% net electric efficiency. NREC was also responsible for an advanced gas turbine recuperator technology that Rolls-Royce has since incorporated into their WR21 marine gas turbine engine, now operating on the Royal Navy's Type 45 destroyer.

Prior to joining NREC, Pete had been Vice President of Sales & Service, North America for Ingersoll-Rand's Air Compressor Group. The Air Compressor Group included reciprocating, rotary screw and centrifugal products and services, sold, and serviced through both company-owned and private distribution channels.

Pete was also the VP of Marketing at I-R, implementing in 1981 what we now call a CRM system, and negotiated a License-in with Kawasaki for their mixed-flow GM Blower. He also negotiated an MOU for a potential corporate-level JV with Daewoo.

Pete spent four years in Europe. The first assignment was as a Centrifugal Compressor Division Area Manager responsible for the UK and Scandinavia with the goal to reenergize the local sales effort. Pete promoted to the position of Product Manager Centrifugal Compressor for Europe, Mideast, and Africa, operating out of the Division manufacturing location in Milan, Italy. As product manager Pete was responsible for marketing strategy and direction, pricing, and promotional efforts as well as European specification product development and packaging.

Pete has been a Contributing Editor with Turbomachinery International magazine from 2000 to 2008, and Gas Turbine World since 2020. He has been an associate with Cambridge Energy Research (Now IHS) in their Distributed Energy Practice. He was also a successful Air compressor Sales Engineer with Ingersoll-Rand in North and South Carolina. Pete holds a BSME degree from Purdue University.

2024 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.



**David G.
Bogard**

**BAKER HUGHES
INCORPORATED
CENTENNIAL
PROFESSORSHIP
IN MECHANICAL
ENGINEERING**

*The University of
Texas at Austin*

Prof. David Bogard has served with the faculty in the Walker Department of Mechanical Engineering at the University of Texas at Austin since 1982. Holder of the Baker Hughes Incorporated Centennial Professorship in Mechanical Engineering, he served as the Associate Chair for Administration and Research for the department from 2007 to 2022. Prior to that, he was the Graduate Advisor for the department from 1997 to 2005.

Prof. Bogard has conducted research in turbulent flows and gas turbine cooling for more than 40 years, and has more than 220 refereed research publications. His research studies have focused on cooling of gas turbine components using sophisticated experimental models and computational simulations. He is particularly noted for the development of many designs for improving turbine film cooling, and the development of many new techniques for evaluating and quantifying film cooling performance.

Prof. Bogard is a Fellow of the ASME, and has served the Society as conference session organizer/chair and vanguard chair for multiple conferences. He has also served the Society as an Associate Editor, and is currently Editor-in-Chief for the ASME Journal of Turbomachinery. In recognition of his service to the ASME, he was awarded the 2022 ASME Dedicated Service Award.

2024 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.



Dr. Jay Kapat

UCF PEGASUS
PROFESSOR AND
TRUSTEE CHAIR
PROFESSOR

*Department
of Mechanical
& Aerospace
Engineering,
University of
Central Florida*

Dr. Jay Kapat is Pegasus Professor and Trustee Chair in the Department of Mechanical and Aerospace Engineering, and the founding Director of Center for Advanced Turbomachinery and Energy Research (CATER) at the University of Central Florida. He obtained his Sc.D. in Mechanical Engineering from Massachusetts Institute of Technology in 1991. He joined UCF in 1997 as an Assistant Professor, and was promoted to the ranks of Associate Professor and Professor in 2001 and 2005, respectively.

Since mid-2000's, Dr. Kapat has fully focused his research activities on turbo-machineries and associated technologies for power generation, aviation, and space propulsion, and created partnerships with leading OEM's in these industries. The most significant impact of his work stems from his vision for CATER, where he brought 10 core faculty members with multidisciplinary capabilities together to address some of the most complex research problems.

With research support of more than \$22M for his individual research, mostly from NASA, DOE and Siemens Energy, he has facilitated significant graduate- and undergraduate-level research, graduated 33 Ph.D., 61 MS and 17 BS Honors-in-Major (HIM) (Thesis) students, and published more than 350 papers in journals and conferences - mostly co-authored with his students. He has also 14 patents issued.

2024 Dilip R. Ballal Early Career Award

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



**Dr. Amrita
Basak**

**ASSISTANT
PROFESSOR,
MECHANICAL
ENGINEERING**

*Pennsylvania
State University*

Amrita is an Assistant Professor of Mechanical Engineering at the Pennsylvania State University - University Park. She received her Ph.D. in Mechanical Engineering from the Georgia Institute of Technology. Amrita holds two master's degrees - one in Aerospace Engineering from Georgia Tech and the second one in Chemical Engineering from the Indian Institute of Technology at Kanpur.

Between her academic stints, she spent approximately one year as a Process Engineer at Intel Corporation, Portland, Oregon and six years as a Lead Engineer at General Electric, Bangalore, India. At Penn State, Amrita's research group focuses on understanding the fundamental processing-structure-property relationships in advanced manufacturing of high-performance metallic alloys.

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 chair and recognize their time, expertise and effort required to do the job. Thank you for your service from July 1, 2022, to June 30, 2024.

AIRCRAFT ENGINE

Oscar Kogenhop

FANS AND BLOWERS

Zhiping Wang

COAL, BIOMASS & ALTERNATIVE FUELS

Dr Marina Braun-Unkhoff

HEAT TRANSFER

Atul Kohli

CONTROLS, DIAGNOSTICS & INSTRUMENTATION

Igor Loboda

MANUFACTURING MATERIALS & METALLURGY

Sascha Gierlings

ELECTRIC POWER

Richard Tomlinson

STRUCTURES & DYNAMICS

Thomas Weiss

ENERGY STORAGE

David Sánchez

STUDENT ADVISORY

Dimitrios Bermperis

ASME IGTI Committee Best Papers

Aircraft Engine

GT2023-101980: On the Flow Physics During the Transition of a Variable Pitch Fan From Nominal Operation to Reverse Thrust Mode

Dimitrios Vitlaris, David John Rajendran, Vassilios Pachidis, Richard Tunstall, John Whurr

GT2023-100546: Applicability of Numerical Simulation to the Classification of Fluid Dynamic Loss in Aeroengine Transmission Gears

Hidenori Arisawa, Mitsuaki Tanaka, Hironori Hashimoto, Tatsuhiko Goi, Takahiko Banno, Hideyuki Imai

Ceramics

GT2023-103720: Corrosion of Rare-Earth Disilicate Environmental Barrier Coatings in Gas Turbine Environments—Part 1: Steady CFD Model

Chong M. Cha, Robert A. Golden

Coal, Biomass & Alternative Fuels

GT2023-101383: Characterization of High-Pressure Hydrogen Leakages

Davide Cerbarano, Ermanno Lo Schiavo, Lorenzo Tieghi, Giovanni Delibra, Stefano Minotti, Alessandro Corsini

Combustion, Fuel, and Emissions

GT2023-102833: Generation of Entropy Waves by Fully Premixed Flames in a Non-Adiabatic Combustor With Hydrogen Enrichment

Alexander J. Eder, Bayu Dharmaputra, Marcel Désor, Camilo F. Silva, Alex M. Garcia, Bruno Schuermans, Nicolas Noiray, Wolfgang Polifke

GT2023-101994: Numerical Modelling of Swirl Stabilised Lean-Premixed H₂-CH₄ Flames With the Artificially Thickened Flame Model

Simone Castellani, Pier Carlo Nassini, Antonio Andreini, Roberto Meloni, Egidio Pucci, Agustin Valera-Medina, Steven Morris, Burak Goktepe, Syed Mashruk

GT2023-101148: Large Eddy Simulation of Soot Formation in a Real Aero-Engine Combustor Using Tabulated Chemistry and a Quadrature-Based Method of Moments

Philipp Koob, Federica Ferraro, Hendrik Nicolai, Ruud Eggels, Max Staufer, Christian Hasse

Controls, Diagnostics & Instrumentation

GT2023-100921: Integrated Control Design for a Partially Turboelectric Aircraft Propulsion System

Donald L. Simon, Santino J. Bianca, Marcus A. Horning

GT2023-102536: Quantitative Definition of Spray Edge With Extinction Diagnostics for Liquid Jets in Supersonic Crossflow

Aubrey J. McKelvy, James Braun, Guillermo Paniagua, Thierry Andre, Etienne Choquet, Francois Falempin

Cycle Innovations

GT2023-102606: A Methodology to Quantify Product Competitiveness and Innovation Requirements for Micro Gas Turbine Systems in Hydrogen Backup Applications

Giuseppe Tilocca, David Sánchez, Miguel Torres-García, Antonio Escamilla-Perejón, Simon Minett

GT2023-100529: Parametric Cycle Studies of the Water-Enhanced Turbofan Concept

Paul Ziegler, Sascha Kaiser, Volker Gümmer

Education

GT2023-100390: Updating Turbomachinery Aerodynamics Teaching on an Undergraduate Course Using 3D Design Tools

Grant Ingram

Electric Power

GT2023-101731: A Literature Review of NO_x Emissions in Current and Future State-of-the-Art Gas Turbines

Richard Dennis, Henry A. Long, III, Gary Jesionowski

Energy Storage

GT2023-107886: Overview of Long-Duration Energy Storage Systems: Part 1

Timothy Allison, Aaron Rimpel, Natalie Smith, David Sanchez

GT2023-101892: Techno-Economic Assessment of CO₂ Based Power to Heat to Power Systems for Industrial Applications

Silvia Trevisan, Syed Safeer Mehdi Shamsi, Simone Maccarini, Stefano Barberis, Rafael Guedez

Fans and Blowers

GT2023-101271: Flow Interaction Between Cascade and Flow Resistance Medium

Tong Lin, Mehmet Sarimurat, Thong Quoc Dang

Heat Transfer

GT2023-102294: Experimental Investigation of Transient Flow Phenomena in Rotating Compressor Cavities

Mikolaj J. Pernak, Tom E. W. Nicholas, Jake T. Williams, Richard W. Jackson, Hui Tang, Gary D. Lock, James A. Scobie

GT2023-103065: Quantifying Part-to-Part Flow Variations and Overall Effectiveness in Engine-Run Blades

Kelsey E. McCormack, Nicholas L. Gailey, Reid A. Berdanier, Michael D. Barringer, Karen A. Thole

Industrial & Cogeneration

GT2023-103655: Development and Testing of a Universal High Lift Power Turbine for the LM2500+ Engine

David Guerrero, Aspi Wadia, Francesco Bertini, Angel Elorriaga, Yonatan Lopez, Juan Paredes, Massimiliano Airaud, Dion Duckett, Alfredo Ruiz

Manufacturing, Materials and Metallurgy

GT2023-103009: Leveraging Additive Manufacturing to Fabricate High Temperature Alloys With Co-Designed Mechanical Properties and Environmental Resistance

Rishi Pillai, Q. Q. Ren, Yi-Feng Su, Rebecca Kurfess, Thomas Feldhausen, Soumya Nag

Microturbines, Turbochargers, and Small Turbomachines

GT2023-104145: Optimizing Micro Gas Turbine Operation in a Microgrid System With Natural Gas and Hydrogen Fuel: An AI-Based Approach

Reyhaneh Banihabib, Fredrik Skaug Fadnes, Mohsen Assadi, Boris Bensmann

Oil & Gas Applications

GT2023-102032: A Proposed Framework for Minimizing Starts and Extending Maintenance Intervals Through Optimized Scheduling With Mixed Integer Programming

Cody W. Allen

Steam Turbine

GT2023-103537: The Hybrid Pathway to Flexible Power Turbines: Part B, Fast Data Transfer Methods Between Varying Fidelity Simulations, to Enable Efficient Conjugate Thermal Field Prediction

Mark Baker, Budimir Rosic

Structures & Dynamics

GT2023-101671: Friction Saturated Limit Cycle Oscillations – Test Rig Design and Validation of Numerical Prediction Methods

Stefan Schwarz, Johannes Reil, Johann Gross, Andreas Hartung, David Rittinger, Malte Krack

GT2023-104108: Identification of Dynamic Force Coefficients for an Additively Manufactured Hermetic Squeeze Film Bearing Support Damper Utilizing a Pass-Through Channel

Bugra Ertas, Keith Gary, Tom Adcock

GT2023-103154: Measurement of Temperature and Load vs. Bearing Displacement in a Thrust Foil Bearing: Differences Between Light Load and High Load Operation

Luis San Andrés, Azael Duran-Castillo, Oscar de Santiago, Juan Jauregui, Daniel Lubell

Supercritical CO₂ Power Cycles

GT2023-107903: Materials for Supercritical Carbon Dioxide Applications

Ganesan Subbaraman, Steven Kung, Henry Saari

GT2023-100956: Supercritical Carbon Dioxide Shock Behaviour Near the Critical Point

Jinhong Wang, Teng Cao, Ricardo Martinez-Botas

Turbomachinery

GT2023-103005: Compressor Tip Leakage Mechanisms

James V. Taylor, Anthony M. J. Dickens, Harry Simpson

GT2023-103355: Direct Numerical Simulation of Transitional and Turbulent Flows Over Multi-Scale Surface Roughness - Part I: Methodology and Challenges

Massimiliano Nardini, Melissa Kozul, Tomas O. Jelly, Richard D. Sandberg

GT2023-103219: A Novel Axial Energy-Imparting Turbomachine for High-Enthalpy Gas Heating: Robustness of the Aerodynamic Design

Nikolas Karefyllidis, Dylan Rubini, Budimir Rosic, Liping Xu, Veli-Matti Puroala

Wind Energy

GT2023-102795: Wind Tunnel Experimental Study of the Effects of Blade Number on the Performance and Starting Behavior of a Low Tip-Speed Ratio and Micro-Scale Wind Turbine at Fixed Blade Geometry

Martin Bourhis, Shuo Zhang, Michael Pereira, Florent Ravelet

2024

Turbo Expo Early Career Engineer Travel 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 Uni. of Tech. 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

2024

Student Advisory Committee Travel Award Winners

Ahmed Fakhruddin Safdari

University of Central Florida

Lorenzo Da Valle

University of Liège

Aravind Chandh

Georgia Institute of Technology

Mahmoud Eltaweel

University of Hertfordshire

Chinmay Nair

University of Virginia

Marzuqa Ahmed

University of Central Florida

Christopher Loving

University of Central Florida

Michael Pierro

University of Central Florida

Dahae Jeong

Pennsylvania State University

Priyankar Garai

University of Central Florida

Dandan Peng

KU Leuven

Rafael González Almenara

University of Seville

Edwin Joseph

Munoz Lopez

Technical University of Munich

Renee Cole

Georgia Institute of Technology

Hara Prakash Mishra

*National Institute of Technology
Rourkela, India*

Ruonan Wang

University of Surrey

Ishita Jain

Indian Institute of Technology Kanpur

Shahzad Bobi

University of Central Florida

Lakshminarayanan

Seshadri

*Indian Institute of Science,
Bengaluru, India*

Syed Jiaul Hoque

*Indian Institute of Science,
Bengaluru, India*

Congratulations to all award recipients and thank you to all ASME IGTI committee award representatives whose work assists the honors and awards chair and the honors and awards committee.

