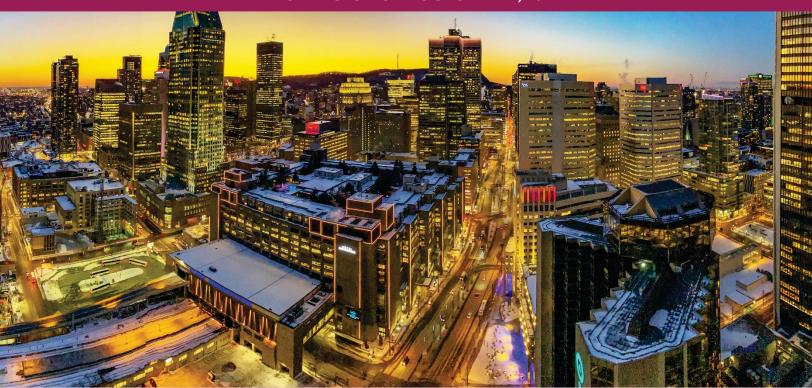
CALL FOR PAPERS

2025 ASME Pressure Vessels & Piping Conference ABSTRACTS DUE – OCTOBER 14, 2024



JOIN US AT THE 2025 ASME PVP CONFERENCE JULY 20 – 25, 2025, AT THE HOTEL BONAVENTURE MONTREAL, QUEBEC, CANADA

PRESSURE VESSEL AND PIPING TECHNOLOGIES IN A RAPIDLY CHANGING WORLD

Join us in Montreal, Quebec, Canada for the 2025 ASME Pressure Vessels & Piping Conference, as we contribute to supporting a rapidly changing world by advancements in Pressure Vessels & Piping Technologies. The PVP Conference is the ideal platform to keep up with new technologies, network and interact with experts, practitioners, and peers in the Pressure Vessels & Piping area. The PVP Conference is a recognized international forum with participants from more than 40 countries in Europe, Africa, the Middle East, Asia, the Americas and the Oceania islands. The ASME Pressure Vessels & Piping Division sponsors the PVP Conference with participation by the ASME NDPD Division.

PAPER & PANEL SESSIONS

More than 160 paper and panel sessions are planned, including tutorials, workshops, and Technology Exhibits. General topics will include:

- Codes & Standards
- · Computer Technology & Bolted Joints
- Design & Analysis
- Fluid-Structure Interaction
- High-Pressure Technology
- Materials & Fabrication
- Operations, Applications & Components
- Seismic Engineering
- Non-Destructive Examination

SCHEDULE FOR SUBMISSION*

October 14, 2024	Abstracts are due
November 11, 2024	Abstract Accept/Reject Notification
January 20, 2025	Submission of Full-Length Paper for
	Review
March 3, 2025	Peer Review Comments Returned
April 17, 2025	Copyright Agreement Form (for each
	paper) due
April 21, 2025	Final Manuscripts in ASME format for publication due

*All final manuscripts must be submitted in the standard ASME format for publication. All presented technical papers will be published as citable documents available post-conference.

FOR MORE INFORMATION

PVP Conference Chair

Ravi Baliga ADVENT Energy Consultants, Inc. Redwood City, CA USA rbaliga@adventeng.com

PVP Technical Program Chair

David Gross Dominion Engineering, Inc. Reston, VA USA dgross@domeng.com





(1) CODES & STANDARDS (C&S) Structural Integrity of Pressure Components CS-02 Hydrogen Effects on Material Behavior for Structural Integrity Assessment (Joint with M&F) CS-04 Integrity of Reactor Pressure Vessels and Internals for Codes CS-06 API 579/ASME Code Fitness-for-Service Activities CS-07 Recent Developments in ASME Codes and Standards CS-08 ASME Code Section XI Activities CS-09 Recent Developments in Japanese Codes and Standards CS-10 Recent Developments in Chinese Codes and Standards CS-11 Recent Developments in European Codes and Standards CS-12 High Temperature Codes and Standards CS-13 Developments in HDPE, Buried and Non-metallic Pipe Codes and Standards CS-15 Mechanical Properties of Nuclear Graphite and their Implementation in Codes and Standards (Joint with M&F) CS-16 Fatigue and Ratcheting Issues in Pressure Vessel and Piping Design CS-17 Environmental Fatigue Issues (Joint with M&F) CS-18 Fatigue Monitoring and Related Assessment Method CS-19 Fracture Toughness and Other Small Specimen Mechanical Properties (Joint with M&F) CS-20 Master Curve Method and Applications CS-21 Constraint Effects on C&S CS-22 Repair, Replacement and Mitigation for Fitness-for-Service Rules CS-23 Improvement of Flaw Characterization Rules for FFS CS-24 Probabilistic and Risk-Informed Methods for Structural Integrity Assessment (Joint with M&F)

Fatigue and Fracture Assessment & Management – A Probabilistic

Advanced Seismic Evaluation and Code (Joint with SE)

Materials surveillance for High Temperature reactors

2025 Technical Program Representatives:

Sureshkumar Kalyanam Westinghouse Electric Company 1000 Westinghouse Drive Cranberry Township, Pennsylvania, 16066-5228, USA Suresh.Kalyanam@westinghouse.com

Thomas Damiani EPRI 1300 West WT Harris Blvd Charlotte, NC 28262, USA TDamiani@epri.com

(2) COMPUTER TECHNOLOGY & BOLTED JOINTS (CT&BJ)

Applications of AI in Codes and Standards

- CT-01 Design and Analysis of Bolted Flange Joints
- CT-02 Packings and Valves

Perspective

CS-25

CS-26

CS-27

CS-28

- CT-03 Leak Tightness and Fugitive Emissions
- CT-04 Assembly of Bolted Joints
- CT-05 Threaded Fasteners
- CT-06 Elevated Temperature Behavior of Bolted Flange Joints
- CT-07 Computational Applications in Fatigue, Fracture, and Damage Mechanics
- CT-08 New and Emerging Methods of Analysis and Applications
- CT-09 Special Application of Bolted Flanged Joints
- CT-10 Lessons Learned from Bolted Flange Joint Failures
- CT-11 Computational FEA for Limit Load Elastic-Plastic Analysis and Creep
- CT-12 Joining of Multi Materials
- CT-13 Innovative Applications of Commercial FEA Software
- CT-14 New and Emerging Flange and Non-Metallic Design Codes
- CT-15 Gasket and Packing Testing Panel Session
- CT-16 Threaded Connections for Innovative and Light Weight Materials
- CT-17 Probabilistic and Risk Based Assessment
- CT-18 Hydrogen Storage, Sealing and Testing Technology (Panel Session)
- CT-19 AI, Data Engineering and Data Analysis
- CT-20 Analytical Methods of Hydrogen Applications

2025 Technical Program Representatives:

Linbo Zhu Xi'an Jiaotong University No. 99, Yanxiang Rd, Yanta Dist Xi'an, 710054, China Phone # +86-13659118758 linbozhu@mail.xjtu.edu.cn

Massimiliano De Agostinis University of Bologna Dept. of Mechanical Engineering Viale del Risorgimento 2, Bologna 40136, Italy Phone # +39 0512093455 m.deagostinis@unibo.it

(3) DESIGN & ANALYSIS (D&A)

- DA-01 Design and Analysis of Pressure Vessels, Heat Exchangers, and Components
- DA-02 Design and Analysis of Piping, Pipelines, and Components
- DA-03 Fatique
- DA-04 Inelastic, Nonlinear, and Limit Load Analysis
- DA-05 Small Modular Reactor Design
- DA-07 Thermal Stresses and Elevated Temperature Design
- DA-08 Fitness for Service Evaluations
- DA-09 Piping and Equipment Dynamics and Dynamic Response Analysis
- DA-10 Design and Analysis of Bolted Joints
- DA-11 Computational Fluid Dynamics in Design and Analysis
- DA-12 Fracture
- DA-15 9th International Symposium on Coke Drum Life Cycle Management
- DA-16 Vessel Design Philosophy
- DA-17 Composite Materials and Structures
- DA-19 Special Considerations in the Design and Analysis of Supports, Restraints, and Welded Attachments
- DA-20 Additive Manufactured Pressure Vessel Development
- DA-21 Design and Analysis of Hydrogen Pressure Equipment
- DA-22 Design and Analysis of Above Ground Liquid Storage Tanks

2025 Technical Program Representatives:

Andrew Owens Terra Power 15800 Northup Way Bellevue, WA 98008 Phone # (979)-480-4051 dru.owens@gmail.com

Kevin Mandeville DNV LE kevin.mandeville@dnv.com

(4) FLUID-STRUCTURE INTERACTION (FSI)

- FSI-01 Thermal Hydraulic Phenomena with Vessels, Piping and Components
- FSI-02 Flow-Induced Vibration
- FSI-03 Structures Under Extreme Loading Conditions
- FSI-04 FSI Design and AI for Industry
- FSI-05 Hydrogen Transport

2025 Technical Program Representatives:

Marwan Hassan School of Engineering Thornbrough Rm 2405 University of Guelph Guelph, Ontario N1G 2W1, Canada Phone # 519-824-4120, ext. 52429 226-979-3086 mahassan@uoguelph.ca

Joaquin Moran
Sheridan College
Joaquin.moran@sheridancollege.ca

(5) HIGH-PRESSURE TECHNOLOGY (HPT)

- HT-01 Design, Analysis and Life Prediction of High-Pressure Vessels and Equipment
- HT-02 Structures under Extreme Loading Conditions (Joint with FSI)
- HT-03 Fitness for Service and NDE of High-Pressure Vessels and Piping
- HT-04 Design and Analysis of High-Pressure Equipment for Industry
- HT-05 Additive Manufacturing, Isostatic Pressing for the High-Pressure Industry
- HT-06 Design and Analysis of High-Pressure Equipment for Oil and Gas Exploration and Production
- HT-07 Design and Analysis of High Pressure Hydrogen Equipment

2025 Technical Program Representatives:

Sean Berg 22 Church Street P.O. Box 300 Liberty Corner, NJ 07938 sberg@becht.com

Megan Tribble Sandia National Laboratory 1515 Eubank Blvd. SE Albuquerque, NM, 87123 Phone # +1 505-205-6613 mktribb@sandia.gov

MATERIALS AND FABRICATION (M&F)

- Application of Fracture Mechanics in Failure Assessment MF-01
- MF-02 Materials for Hydrogen Service (Joint with C&S)
- MF-03 Welding Residual Stress and Distortion Simulation and Measurement
- MF-04 European Programs in Structural Integrity
- MF-05 Fitness-For-Service and Failure Assessment
- MF-06 Materials and Technologies for Nuclear Power Plants
- MF-07 Code Fatigue Design Criteria and Environmental Effects (Joint with C&S, D&A, HPT)
- MF-09 Mechanistic Modelling of Deformation and Fracture
- MF-10 Pipeline Integrity
- Small-Scale and Miniature Mechanical Testing (Joint with C&S) MF-11
- MF-12 Leak Before Break
- MF-13 Composite and Non-Metallic Systems for Pressure Vessels and Piping (Joint with D&A)
- MF-14 Probabilistic Assessment of Failure (Joint with C&S)
- Fatigue and Fracture of Welds and Heat Affected Zones MF-15
- MF-16 Creep and Creep-Fatigue Interaction
- MF-17 Advanced and Additive Manufacturing and Material Technologies (joint with D&A)
- MF-19 Asian Programs in Structural Integrity
- MF-20 Material Quality and Failure Analysis
- MF-21 In-service Inspection and Monitoring (Joint with NDE)
- MF-22 3D Crack Growth Simulation Using FEA
- MF-23 Structural Integrity for Spent Fuel Canisters
- MF-24 Materials and Fabrication for Refining
- MF-25 High Strength Steels for Pressure Vessels and Piping Applications
- Collaborative Digital Framework for Asset Lifecycle Management MF-27
- MF-28 Emerging Manufacturing and Mitigation Process Simulation
- MF-29 Mechanical Properties of Nuclear Graphite and Composites and their Implementation in Codes and Standards (Joint with C&S)
- MF-30 Cryogenic Pressure Vessels and Piping
- MF-31 Pressure Vessels for Human Occupancy (joint with C&S)
- MF-32 Materials and Design for Carbon Capture
- MF-33 **General Papers**
- MF-34 Polymers for Hydrogen Service
- Material Surveillance for High Temperature Reactors (Joint with C&S) MF-35

2025 Technical Program Representatives:

Preeti Doddihal Kinectrics Inc. 800 Kipling Ave

Unit 2 Toronto, Ontario, Canada Preeti.Doddihal@kinectrics.com

Jessica Lam

Ontario Power Generation

jessica.lam@opg.com

(7) OPERATIONS, APPLICATIONS & COMPONENTS (OAC)

- OAC-01 Safety, Reliability, and Risk Management
- OAC-02 Qualification and Testing
- OAC-03 Monitoring, Diagnostics and Inspection
- OAC-04 Storage and Transportation of Radioactive and Other Hazardous Materials
- OAC-05 Pumps and Valves
- OAC-06 Operation and Maintenance of Pressure Vessels, Heat Exchangers, Piping and Supports
- OAC-07 Plant Life Extension Aging and Life Management

2025 Technical Program Representatives:

Ciska de Haan de Wilde

NRG

PO Box 25, Petten, OO, 1755ZG

Netherlands

Phone # +31-622495514

dehaan@nrg.eu

Sarah Suffield

PNNL

Sarah.Suffield@pnnl.gov

SEISMIC ENGINEERING 2025 Technical Program Representatives: SE-01 Earthquake Resistance and Seismic Margin Satoru Kai SE-02 Seismic Isolation **IHI** Corporation SE-03 **Damping and Vibration Control** 1, Shin-nakahara-cho, Isogo-ku SE-04 Yokohama, Kanagawa, 235-8501, Japan Machine Learning and advanced computation for Seismic Analysis of **Industrial Facilities** Phone # +81-90-2084-7452 kai4816@ihi-q.com SE-05 Structural Dynamics SE-06 Seismic Analysis and Design of Piping System Gianluca Quinci Roma Tre University SE-07 Seismic Evaluation of Systems, Structures and Components Via Vito Volterra 62, Rome, 146, Italy SE-08 Multi-Hazards and Margins Phone # +39 3387633874 SE-09 Advanced Seismic Evaluation and Code

(9) ASME NON-DESTRUCTIVE EVALUATION, DIAGNOSIS AND PROGNOSIS DIVISION (NDPD)

- NDE-01 Emerging Non-Destructive Evaluation and Applications
- NDE-02 NDE Techniques and Applications for Petrochemical and Power Plant Components
- NDE-03 NDE Reliability Using Artificial Intelligence, Modeling & Simulation, and Experimental Analysis
- NDE-04 Structural Health Monitoring of Complex Materials and Structures
- NDE-05 Risk Assessment of Aging Structures

2025 Technical Program Representatives:

gianluca.guinci@uniroma3.it

Vivek Agarwal
Instrumentation, Controls, and Data Science
Department
Dept. Human Factors, Controls, Statistics
Idaho National Laboratory,
2525 N Fremont Ave
Idaho Falls, ID 83415, USA
Phone # +1-208-526-1107
vivek.agarwal@inl.gov

Min Zhang
Praxair, Inc., a Linde Company
175 East Park Dr.
Tonawanda, NY 14150, USA
Phone # +1-716-879-2548
hitzhangmin@gmail.com

GUIDELINES FOR AUTHORS:

The Program Committee will observe the following criteria in selecting papers for the Conference:

- 1. The paper must not have had prior extensive publication or circulation. Publication in trade periodicals or other professional or technical journals is considered extensive publication.
- 2. The paper must be technically correct and should be of interest to a reasonable number of people working in the field of pressure vessels and piping. It may be theoretical, or may present the results of laboratory studies, and it may state or analyze a problem. The paper may also be a review-type paper but must be of significant value to the technical field. The paper should contain new knowledge or experience in some field related to pressure vessels and piping.
- The paper may present information about equipment, tools, and software used in PVP technology. Such papers must show the definite applications and limitations of such equipment, tools, or software, and must avoid any commercialism.
- 4. The abstract must have the necessary clearance before submittal. Prospective authors should provide information on any clearance problems when the abstract is submitted.
- 5. Both theoretical papers in various fields, and application papers presenting solutions to problems, are desired. Program time is limited, so the Program Committee will emphasize the quality of the contribution and its value in the field of PVP Technology.
- 6. The Program Committee has a stated policy against the use of commercial trade names, company names, or language that is commercial in tone in paper titles, figures, and slides, and these must be avoided. Trade names can only be identified once in a paper to explain details for processes or methods, allowing other researchers to reproduce the results. Beyond this exception, the presence of commercialism in the text of papers is cause for removal of the paper from the program.
- 7. In accordance with U.S. Copyright Laws, ASME must receive, and maintain on file, a copy of the Transfer of Copyright Form with the final paper, signed by all authors, for papers to be presented at the Conference, and published in Conference Volumes.
- 8. The final day for abstract submittals is October 14, 2024
- 9. Authors offering papers for the program should fully understand that a manuscript prepared to ASME specifications is required for each technical paper selected for the Conference. The manuscript will be published in an electronic format. Printed Conference Volumes may be available after the Conference. The maximum length for any paper is 10 pages, fully formatted.
- 10. The last day to submit Draft Papers to the Webtool for Review is **January 20, 2025**.
- 11. <u>Final Papers are due no later than</u> **April 21, 2025**. Once a final paper is submitted, no subsequent revisions will be accepted.
- 12. Instructions on preparation of manuscripts and presentation materials are available at:

 ${\color{blue} \underline{https://www.asme.org/publications-submissions/proceedings/authorguidelines.}}$

GUIDELINES FOR TECHNICAL PROGRAM REPRESENTATIVES (TPRs, TRACK ORGANIZERS)

- Remind Topic Organizers and Session Developers of the <u>due date</u> for abstract submittal: October 14, 2024
- 2. Ensure that authors of paper abstracts are notified of

- acceptance/rejection by November 11, 2024.
- 3. Check the wording of the title for each paper in your track.
- 4. Follow the key dates:
 - <u>Draft Papers are due to the webtool for review by</u> **January 20, 2025**.
 - > Peer review comments returned by March 3, 2025.
 - Copyright Agreement Forms are due by April 17, 2025.
 - Final Papers are due no later than April 21, 2025.
- 5. Ensure that Topic Organizers and Session Developers have assigned Session Chairs and Vice Chairs.
- 6. Communicate with Topic Organizers and Session Developers on a regular basis.

GUIDELINES FOR TOPIC ORGANIZERS (TOs) AND SESSION DEVELOPERS (SDs)

- Assign Session Chairs and Vice Chairs to your Sessions, once they are created, as soon as possible.
- 2. Assign abstracts/papers to a Session. <u>The final day for abstract submittals is</u> **October 14, 2024**
- Notify the authors of acceptance/rejection by November 11, 2024.
- 4. Communicate with the authors on a regular basis. <u>The last day to submit Draft Papers is</u> **January 20, 2025**.
- 5. Assign a **minimum** of two (2) Reviewers for each paper.
- 6. Communicate with the Reviewers on a regular basis.
- 7. Monitor activities related to:
- 8. Paper reviews Two (2) independent Reviewers for each paper. No one can be the reviewer for all the papers in their Topics(s) or Session(s).
- 9. The Copyright Agreement Form submittals are due no later than **April 17, 2025.**
- Final manuscripts submittals are due no later than April 21, 2025.
- 11. Follow the key dates.
- 12. Consolidate Sessions when necessary. Ideally, a Session should have four (4) papers. Avoid having Sessions with less than three (3) or more than five (5) papers.

Plan ahead for the ASME PVP 2026 CONFERENCE

Conference Chair

David Gross Dominion Engineering, Inc. Reston, VA USA Phone # +1 703-657-7311 dgross@domeng.com

Technical Program Chair

Kannan Subramanian Structural Integrity Associates, Inc. 602 Carmenere Drive Kenner, LA 70065 Phone # +1 504-812-7091 ksubramanian@structint.com