PVP® 2022

Pressure Vessels & Piping®

July 17 – 22, 2022

JW Marriott Resort and Spa, Las Vegas, NV

CALL FOR PAPERS

WE ARE BACK! After 2 years of meeting virtually and overcoming the immense challenges that COVID-19 has placed in our path, it is time to return to each other's presence in the time-honored tradition of an in-person meeting. The PVP Division is pleased to announce our plans to meet during the summer of 2022 at the JW Marriott Las Vegas Resort & Spa in sunny Las Vegas, Nevada, USA. The 2022 Pressure Vessel & Piping Conference will provide us with the opportunity to examine the industrial challenges, discuss potential approaches to derive solutions using academic and government institutions throughout the global PVP community in a model of cooperation and collaboration.

As a recognized international forum with participants from more than 40 countries in Europe, Africa, the Middle East, Asia, the Americas and the Oceania islands, this year's PVP Conference will be the ideal setting for staying abreast of the latest in PVP engineering innovation and emerging technologies, while communicating and collaborating with fellow experts, practitioners, and peers. More than 180 paper and panel sessions are planned, as well as on-line tutorials and workshops, including a Technology Demonstration Forum and exhibition. The ASME Pressure Vessels & Piping Division sponsors each year's conference with participation by the ASME NDPD Division.

GENERAL TOPICS

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

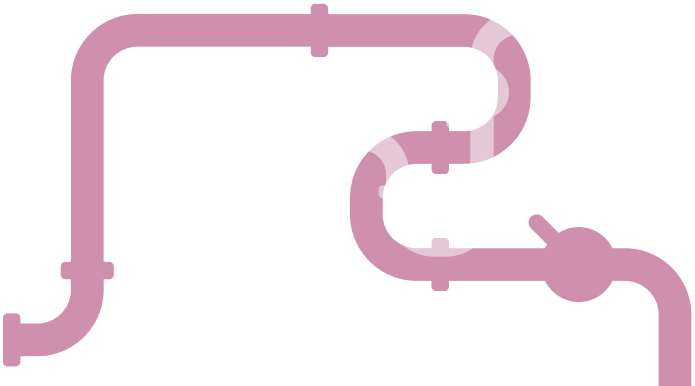
SCHEDULE FOR SUBMISSION*

November 8, 2021	Abstracts are due
December 1, 2021	Notified of abstract acceptance
January 24, 2022	Draft papers are due
February 28, 2022	Peer review comments returned
March 14, 2022	Revised Draft Paper Submission (if required)
March 28, 2022	Revised Draft Paper Notification
April 4, 2022	Copyright Agreement Form must be submitted for each paper
April 8, 2022	Final manuscripts* due for publication

**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

The conference website URL is: https://event.asme.org/pvp. Technical paper abstracts must be submitted electronically through the website. Please visit the website for additional information.



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(1) CODES & STANDARDS

Structural Integrity of Pressure Components

Fatigue and Ratcheting Issues in Pressure Vessel and Piping Design

Environmental Fatigue Issues (Joint with Materials & Fabrication)

Interaction and Flaw Modeling for Multiple Flaws

Technical Convergence and Emerging Codes and Standards

API 579/ASME Code Fitness-for-Service Activities

Recent Developments in ASME Codes and Standards

Hydrogen Effects on Material Behavior for Structural Integrity Assessment (Joint with Materials & Fabrication -2)

ASME Code Section XI Activities

Recent Developments in Chinese, European, and Japanese Codes and Standards

High Temperature Codes and Standards

Repair, Replacement and Mitigation for Fitness-for-Service Rules

Probabilistic and Risk-Informed Methods for Structural Integrity Assessment

Integrity Issues for Buried Pipe

Qualification of advanced manufactured components (e.g., additive, PM-HIP, diffusion bonded, spark plasma sintering) for nuclear service

Developments in HDPE and Non-metallic Pipe Codes and Standards

Integrity of Cast Stainless Steel Pipe

Use of Modern FEA methods for Code Assessment

Fatigue Monitoring and Related Assessment Method

Fracture Toughness and Other Small Specimen Mechanical Properties (Joint Materials & Fabrication -11)

International Session for GEN IV Reactors Design and Construction

Integrity of Reactor Pressure Vessels and Internals for Codes

Development of Stress Intensity Factors for Codes (Joint with Materials & Fabrication -8)

NDE Personnel Qualification

Fatigue Assessment & Management a Probabilistic Perspective

Code Assessments of Beyond Design Basis Events

Steam Generator Tube Integrity Assessments

Code Applications of Flaw Tolerance Methods

Master Curve Method and Applications

Improvement of Flaw Characterization Rules for FFS

Quality Assurance, Nondestructive Testing, and NDE Personnel Certification

Development with Small Modular Reactors

Very High Cycle Fatigue Behavior

Advanced Seismic Evaluation and Code (Joint with Seismic Engineering)

Constraint Effects on Codes & Standards

SDO Comparison Code

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(2) COMPUTER TECHNOLOGY & BOLTED JOINTS

Design and Analysis of Bolted Flange Joints

Packings and Valves

Leak Tightness and Fugitive Emissions

Assembly of Bolted Joints

Threaded Fasteners

Elevated Temperature Behavior of Bolted Flanged Joints

New and Emerging Methods of Analysis and Applications

Special Application of Bolted Joints

Computational Applications in Fatigue, Fracture and Damage Mechanics

New and Emerging Methods of Analysis and Applications

Special Applications of Bolted Flanged Joints

Lessons learned from Bolted Flange Joint Failures

Computational Topics in Explicit FEA

Computational FEA for Limit Load, Elastic-Plastic Analysis and Creep

Joining of Multi Materials

Innovative Applications of Commercial FEA Software

New and Emerging Flange and Non-Metallic Design Codes

Gasket and Packing Testing

Non-Linear FEA

Threaded Connections for Innovative and Light Weight Materials

Probabilistic and Risk Based Assessment

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(3) DESIGN & ANALYSIS

Design and Analysis of Pressure Vessels, Heat Exchangers, and Components

Design and Analysis of Piping and Components

Fatigue

Inelastic, Nonlinear, and Limit Load Analysis

Small Modular Reactor (SMR) Design

Thermal Stresses and Elevated Temperature Design

Fitness for Service Evaluations

Piping and Equipment Dynamics and Dynamic Response Analysis

Design and Analysis of Bolted Joints

Computational Fluid Dynamics (CFD) in Design and Analysis

Fracture

Risk Informed Design Considering Beyond Design Basis Events

6th International Symposium on Coke Drum Life Cycle Management

Vessel Design Philosophy

Composite Materials and Structures

Special Considerations in the Design and Analysis of Supports, Restraints, and Welded Attachments

Additive Manufactured Pressure Vessel Development

Design and Analysis of Hydrogen Pressure Equipment

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(4) FLUID-STRUCTURE INTERACTION

Thermal Hydraulic Phenomena with Vessels, Piping and Components

Flow Induced Vibration

Structures Under Extreme Loading Conditions

Fluid Structure Interaction Design for Industry

International Symposium on Emerging Technologies for Fluids, Structures and Fluid-Structure Interactions

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(5) HIGH-PRESSURE TECHNOLOGY

Design, Analysis and Life Prediction of High-Pressure Vessels and Equipment

Structures under Extreme Loading Conditions

Design and Analysis of High-Pressure Equipment for Industry

Materials for the High-Pressure Industry

Design and Analysis for High-Pressure Equipment for Oil and Gas Exploration and Production

Design and Analysis of High-Pressure Hydrogen Equipment

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(5) HIGH-PRESSURE TECHNOLOGY

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Design and Analysis of High-Pressure Hydrogen Equipment

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(6) MATERIALS & FABRICATION

Application of Facture Mechanics in Failure Assessment

Materials for Hydrogen Service

Welding Residual Stress and Distortion Simulation and Measurement

European Programs in Structural Integrity

Fitness-For-Service and Failure Assessment

Materials and Technologies for Nuclear Power Plants

Code Fatigue Design Criteria and Environmental Effects

Development of Stress Intensity Factor Solutions

Mechanistic Modelling of Deformation and Fracture

Pipeline Integrity

Small-scale and Miniature Mechanical Testing

Leak before Break

Composite and Non-metallic Systems for Pressure Vessels and Piping

Probabilistic Assessment of Failure

Fatigue and Fracture of Welds and Heat Affected Zones

Creep and Creep-fatigue Interaction

Advanced and Additive Manufacturing and Material Technologies

Rotating Equipment and Pressure Vessel Technology for Renewable Energy

Asian Programs in Structural Integrity

Material Quality and Failure Analysis

In-service Inspection and Monitoring

3D Crack Growth Simulation using FEA

Structural Integrity for Spent Fuel Canisters

Materials and Fabrication for Refining

High Strength Steels for Pressure Vessel and Piping Applications

Collaborative Digital Framework for Asset Lifecycle Management

Emerging Manufacturing and Mitigation Process Simulation

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(7) OPERATIONS, APPLICATIONS & COMPONENTS

Safety, Reliability and Risk Management

Qualification and Testing

Monitoring, Diagnostics & Inspection

Storage and Transportation of Radioactive and other Hazardous Materials

Pumps and Valves

Operations & Maintenance of Pressure Vessels, Heat Exchangers, Piping and Supports

Plant Life Extension: Aging and Life Management

Regulations, Codes, and Standards

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(8) SEISMIC ENGINEERING

Earthquake Resistance and Seismic Margin

Seismic Isolation

Damping and Vibration Control

Resilience and Metamaterials

Structural Dynamics

Seismic Analysis and Design of Piping System

Seismic Evaluation of Systems, Structures and Components

Multi-Hazards and Margins

Advanced Seismic Evaluation and Code

Ratcheting Deformation of Materials and Piping

2022 Technical Program Representatives:

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

Emerging Non-Destructive Evaluation and Prognostic Techniques and Applications

NDE Techniques and Applications for Petrochemical and Power Plant Components

NDE Reliability - Modeling and Experimental Analysis

Predictive Non-destructive Evaluation and Structural Health Monitoring of Complex Materials and Structures

Risk assessment of aging structures\

2022 Technical Program Representatives:

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GUIDELINES FOR AUTHORS:

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

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.

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 or software, and must avoid any commercialism.

The abstract must have the necessary clearance before submittal. Prospective authors should provide information on any clearance problems when the abstract is submitted.

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.

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.

The Program Committee has a stated policy that does not allow for more than three (3) papers per author.

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.

The final day for abstract submittal is November 8, 2021.

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 desired length for any paper is approximately ten (10) pages, fully formatted.

The last day to submit Draft papers to the webtool for Review is January 24, 2022.

Copyright agreement is due no later than April 4, 2022.

Final papers are due no later than April 8, 2022.

Instructions on preparation of manuscripts and presentation materials and all required ASME forms are available at https://pvp.secure-platform.com/a/page/author_resources

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GUIDELINES FOR TECHNICAL PROGRAM REPRESENTATIVES (TPRs, TRACK ORGANIZERS)

Create sessions as soon as possible.

1. Assign Session Chairs and Vice Chairs to your sessions as soon as possible.
2. Assign abstracts/papers to a session. The final day for abstract submittal is November 8, 2021.
3. Notify the authors of papers selected for the Conference by December 1, 2021.
4. Communicate with the authors on a regular basis. The last day to submit draft papers is January 24, 2022.
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:

   Paper reviews – Two (2) independent Reviewers for each paper. No one can be the reviewer for all the papers in his or her Topic(s) or Session(s).

   The Copyright Agreement Form submittal process opens on February 28, 2022, and closes on April 4, 2022.

   Final manuscript submittals are due no later than April 8, 2022.
8. Follow the key dates.
9. 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: ASME PVP 2023 CONFERENCE

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