There are Many Ways to Contribute, Lead, Learn, and Connect - Be a Part of the Latest in VVUQ With ASME

Share best practices among the VVUQ technical community and foster the development of state-of-the-art products and events.

Volunteer for the ASME VVUQ Subcommittees – For a Rewarding Experience. Join today!

Apply consensus-based standards that are the essential resource for verification, validation and uncertainty (VVUQ) quantification in computational modeling and simulation.

ASME VVUQ 10 Verification, Validation, and Uncertainty Quantification in Computational Solid Mechanics
Provides procedures for assessing the correctness and credibility of modeling and simulation in computational solid mechanics.

ASME VVUQ 20 Verification, Validation, and Uncertainty Quantification in Computational Fluid Dynamics and Heat Transfer
Provides procedures for quantifying the accuracy of modeling and simulation in computational fluid dynamics and heat transfer.

ASME VVUQ 30 Verification, Validation, and Uncertainty Quantification in Computational Simulation of Nuclear System Thermal Fluids Behavior
Provides the practices and procedures for verification and validation of software used to calculate nuclear system thermal fluids behavior. The software includes system analysis and computational fluid dynamics, including the coupling of this software.

ASME VVUQ 40 Verification, Validation, and Uncertainty Quantification in Computational Modeling of Medical Devices
Provides procedures to standardize verification and validation for computational modeling of medical devices.

ASME VVUQ 50 Verification, Validation, and Uncertainty Quantification of Computational Modeling for Advanced Manufacturing
To provide procedures for verification, validation, and uncertainty quantification in modeling and computational simulation for advanced manufacturing

ASME VVUQ 60 Verification, Validation, and Uncertainty Quantification of Computational Modeling in Energy Systems
To develop and establish best practice procedures for uncertainty quantification in computational and simulations as applied in non-nuclear energy systems.

ASME VVUQ 70 Verification, Validation, and Uncertainty Quantification of Machine Learning
Coordinate, promote, and foster the development of standards that provide procedures for assessing and quantifying the credibility of machine learning algorithms applied to mechanistic and process modeling.

To learn more, visit: **go.asme.org/ParticipateInStandards**

Resources and Events

ASME Master Classes and Webinars
Learn terminology, concepts, examples and applications in interactive training seminars and webinars given by VVUQ experts.

Journal of Verification, Validation and Uncertainty Quantification (JVVUQ)
Stay up-to-date on discipline-specific applications, and development and assessment of new methodologies for VVUQ.

V&V Symposium Conference Proceedings and Presentations
View conference proceedings

https://www.asme.org/codes-standards/publications-information/verification-validation-uncertainty

ASME V&V Standards

V&V 10–2019, Standard for Verification and Validation in Computational Solid Mechanics

V&V 10.1–2012, An Illustration of the Concepts of Verification and Validation in Computational Solid Mechanics

V&V 20–2009, Standard for Verification and Validation in Computational Fluid Dynamics and Heat Transfer

V&V 40–2018, Assessing Credibility of Computational Modeling through Verification and Validation: Application to Medical Devices

Questions - Contact: Michelle Pagano, Standards & Certification Project Engineer PaganoM@asme.org

The American Society of Mechanical Engineers ® ASME®

ASME
SETTING THE STANDARD