

# ASME STANDARDS COMMITTEE ON VERIFICATION AND VALIDATION IN COMPUTATIONAL SOLID MECHANICS

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In the Summer of 1999 the United States Association for Computational Mechanics (USACM) approved the formation of an Specialty Committee on Verification and Validation in Computational Solid Mechanics. The immediate objectives of this Committee were to:

1. Develop verification and validation (V&V) guidelines for computational solid mechanics, similar to those developed by the Computational Fluid Dynamics Committee of the American Institute of Aeronautics and Astronautics (AIAA),
2. Pursue becoming a standards committee under an organization with a standards process accredited by the American National Standards Institute (ANSI).

The USACM Specialty Committee has achieved one of its original objectives: to become an ANSI approved standards committee.

The American Society of Mechanical Engineers (ASME) Council on Codes and Standards, at their meeting of 21 Sep 01, endorsed the V&V Committee's Charter:

*To develop standards for assessing the correctness and credibility  
of modeling and simulation in computational solid mechanics.*

The Committee reports to the ASME Board on Performance Test Codes (PTC) and the Committee's official title is:

*PTC 60 Committee on Verification and Validation in Computational Solid Mechanics*

The ASME web site for the Committee is:

[www.asme.org/cns/departments/performance/public/ptc60/](http://www.asme.org/cns/departments/performance/public/ptc60/)

but the more information about the Committee is currently available from the USACM web site:

[www.usacm.org/vnvcsm/](http://www.usacm.org/vnvcsm/)

This purpose of this presentation is to briefly reviewing the history of the Committee, and highlight its accomplishments. Those interested in verification & validation in computational solid mechanics, will be provided with a sense of who the Committee is and what it intends to accomplish through its work.

The Committee has been developing supporting documents of its envisioned *Guidelines for Verification and Validation in Computational Solid Mechanics*. An overview of the proposed guidelines, and a brief review of selected draft documents, will be provided.

Current information about the Committee's activities are available on the Committee's USACM web site: [www.usacm.org/vnvcsm/](http://www.usacm.org/vnvcsm/). You are also invited to subscribe to the Committee's

email distribution list ([vnvcsm@yahoogroups.com](mailto:vnvcsm@yahoogroups.com)) to be informed of the Committee's activities, and participate in topical V&V discussions.