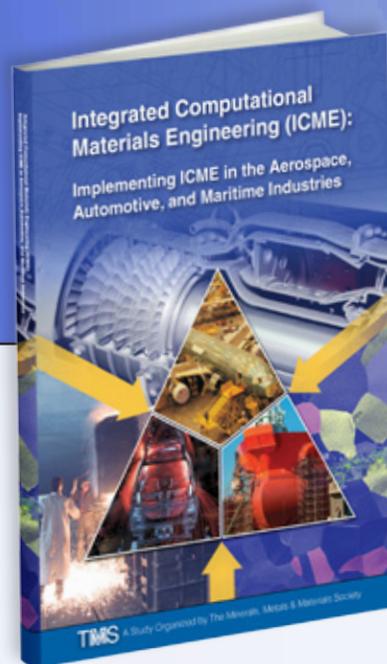


Find Out How to Accelerate the Development of Advanced Materials

Download your free copy of:

Implementing ICME in the Aerospace, Automotive, and Maritime Industries

at www.tms.org/ICMEstudy



Integrated Computational Materials Engineering (ICME): Implementing ICME in the Aerospace, Automotive, and Maritime Industries is the groundbreaking study, organized by TMS, that puts practical guidance at your fingertips for implementing an ICME-Accelerated Product Development Program within three years. This resource compiles the insights, knowledge, and experience of nearly 50 recognized technical experts in ICME and its allied fields, while also building on the broad recommendations of the 2008 U.S. National Academies report that first defined ICME as a new sub-discipline in materials science with enormous power to revolutionize materials-intensive product development cycles.

Report Highlights

- Definition and description of the ***fundamental building blocks needed to implement an ICME-Accelerated Product Development Program within three years*** for the automotive, aerospace, and maritime sectors, but portable to other industries as well.
- ***Frameworks that include flow diagrams and extensive tables*** detailing: necessary actions throughout the product development cycle; entry and exit points of the ICME portions of the cycle; suggestions for computational models and tools to use at various steps; necessary skill sets and personnel; and key decision points.
- ***In-depth recommendations for addressing ICME implementation issues that cut across all industrial sectors.*** These include building a business case for ICME, effectively integrating design into the manufacturing and materials development process, and issues related to verification and validation.
- ***Identification of more than 50 near-term application opportunities*** for implementing ICME in the aerospace, automotive, and maritime industries.

Who Should Read the Report?

The report is useful for a broad variety of stakeholders within and beyond the materials community:

- Professionals and leaders in the aerospace, automotive, and maritime industries.
- Professionals in other materials-intensive industries.
- University professors, researchers, students, and higher-level managers.
- Government scientists and engineers, program officers, and policy makers.

* Sponsored by the U.S. Department of Defense, the U.S. Department of Energy, and the U.S. National Science Foundation, this project also strongly supports the U.S. Materials Genome Initiative's (MGI) goals to accelerate the discovery and deployment of new products and increase global competitiveness.

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