

Preface

No present day research and development program is complete without a robust modeling and numerical simulation component. Models and model-based numerical simulations are widely and extensively used to probe complex materials behavior or structure in order to obtain deep insight into basic materials understanding. Multi-physics models are becoming increasingly common with advances in computational sciences and are advancing our basic understanding of materials.

The idea of the Symposium: “Theory, modeling and numerical simulation of multi-physics behavior” organized within the Fall Meeting of the Materials Research Society, Boston November 26-30, 2007 was to provide a focused forum to highlight the theory, models and numerical techniques that have enable multi-physics simulations to be an integral part of research and development programs. The present volume contains 25 selected and refereed papers presented at the Symposium.

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