



Foreword

Special Section on Damping of Shape Memory Alloys, Composites, and Foams

The papers collected in this special issue are the outcome of a workshop held on May 10–11, 2005, at Georgia Tech Lorraine in Metz, France. The workshop brought together 24 participants, 15 from the EU and 9 from the U.S., to share their approach and the current state-of-the-art in the area of damping of advanced materials such as shape-memory alloys (SMA), polymer composites, and foams. A profound understanding of the mechanical properties of these new materials remains a technological barrier that can only be overcome by cross-disciplinary efforts between areas such as constitutive multiscale modeling, micromechanical and phenomenological modeling, experimental characterization, ultrasonics, and vibrations. The workshop was sponsored by the National Science Foundation, the Université Paul Verlaine de Metz, the Georgia Institute of Technology, the Laboratoire de Physique Mécanique des Matériaux CNRS UMR7554, and the Conseil Régional de Lorraine, France.

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