

## Preface

*Optical Measurements, Modeling, and Metrology* represents one of eight volumes of technical papers presented at the Society for Experimental Mechanics Annual Conference & Exposition on Experimental and Applied Mechanics, held at Uncasville, Connecticut, June 13-16, 2011. The full set of proceedings also includes volumes on Dynamic Behavior of Materials, Mechanics of Biological Systems and Materials, Mechanics of Time-Dependent Materials and Processes in Conventional and Multifunctional Materials; MEMS and Nanotechnology; Experimental and Applied Mechanics, Thermomechanics and Infra-Red Imaging, and Engineering Applications of Residual Stress.

Each collection presents early findings from experimental and computational investigations on an important area within Experimental Mechanics. The papers comprising Optical Measurements, Modeling and, Metrology were taken from the general call for papers as well as sessions organized by: E. Maire, MATEIS-INSA, S. Yoshida, Southeastern Louisiana University and C.A. Sciammarella, Illinois Institute of Technology/Northern Illinois University; R. Rodriguez-Vera, Centro de Investigaciones en Optica A.C.

Among the topics included in this volume are:

3D Imaging Applied to Experimental Mechanics  
Modeling and Numerical Analysis in Optical Methods  
Identification from Full-field Measurements  
Recent Advances in Displacement-Metrology Methods  
Phase Unwrapping, Phase Stepping, and High Speed Camera Calibration  
Dynamic and Quasi Dynamic Measurements  
Digital Image Correlation

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The opinions expressed herein are those of the individual authors and not necessarily those of the Society for Experimental Mechanics, Inc.

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