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Advancement of Optical Methods & Digital Image Correlation in Experimental Mechanics, Volume 2, 2026

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Description:

Advancement of Optical Methods & Digital Image Correlation in Experimental Mechanics, Volume 2 of the Proceedings of the 2026 SEM Annual Conference & Exposition on Experimental and Applied Mechanics, the second volume of five from the Conference, brings together contributions to this important area of research and engineering. The collection presents early findings and case studies on a wide range of optical methods ranging from traditional photoelasticity and interferometry, DIC and DVC techniques, and newer advances in photonics. Included are papers in the following general technical research areas:

- Advancement of Optical Methods in Experimental Mechanics
- Digital Image Correlation Techniques
- Localized Spectrum Analysis for Fracture Studies
- Direct Optical Strain Measurement
- High-Speed Imaging Combined with Thermal Analysis
- Innovations in Full-Field Measurement and Data Fusion Approaches

Keywords: LSA, moisture content, wood, energy release rate Strain Field Measurement, Optical Methods, SHPB DIC, Global method, FEM elements Digital Image Correlation, Thermography, Strain Whole-Space Tabulation Methodï¼Œ3D measurement Î¼CT, Backward DVC, Particle composite Photoelasticity, Digital image correlation