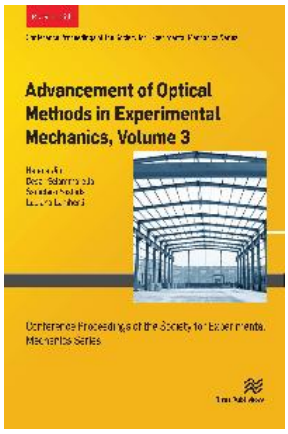
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Advancement of Optical Methods in Experimental Mechanics, Volume 3

Proceedings of the 2013 Annual Conference on Experimental and Applied Mechanics

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Advancement of Optical Methods in Experimental Mechanics: Proceedings of the 2013 Annual Conference on Experimental and Applied Mechanics, the third volume of eight 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 to more recent DIC and DVC techniques, and includes papers in the following general technical research areas:

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- Digital holography and experimental mechanics
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- Surface topology
- Digital image correlation
- Optical methods for MEMS and NEMS
- Three-dimensional imaging and volumetric correlation
- Imaging methods for thermomechanics applications
- 3D volumetric flow measurement
- Appliedphotoelasticity
- Optical residual stress measurement techniques
- Advances in imaging technologies

Keywords: Devices & Fabrication Measurement Challenges Nanoindentation Optical Methods Residual Stress Single Molecule/single Atom Mechanical Testing Size Effects in Metals Tribology