

# Full-field Optical Methods and Standardization Division, Japanese Society for Experimental Mechanics

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# Current Situation in Japan

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- We informed Stress and Strain Measurement Division in JSNDI of the activity of VAMAS TWA26 . But JSNDI is not interested in the standardization of optical methods.
- Members in JSME-MMD are also unconcern the standardization.
- Almost industries are not interested in the standardization, except the Nuclear Plant Division of Hitachi Co.

# Japanese Society for Experimental Mechanics

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✧ The Japanese Society for Photoelasticity was renamed and **the Japanese Society for Experimental Mechanics (JSEM)** has been established.

President: Prof. Takashi of Aoyama Gakuin University

✧ **The Full-field Optical Methods and Standardization Division** has been established in JSEM.

Chair: Prof. Morimoto of Wakayama University

Secretary: Dr. Yoneyama of Wakayama University

# Activities of JSEM

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- ✧ 2001 JSEM Annual Conference was held on June 28-29 at Aoyama Gakuin University, Tokyo.
- ✧ 2002 JSEM Annual Conference will be held on August 5-6 at Wakayama University, Wakayama
- ✧ Quarterly Journal of JSEM, Vol.2, No.2 is now in press.

# Activities of the Division

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- ✧ Session was organized at 2001 JSEM Annual Conference.
- ✧ Division meeting was held with other divisions (image processing, visualization, hybrid methods, optical methods...) in October, 2001.
- ✧ Special issue on “Current Situation and standardization of Optical Methods” was published in Journal of JSEM Vol.2, No.1.

We aim at the spread of full-field optical methods.

# Contents of the Special Issue

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## *Reviews*

- ◆ Full-field Visualization Measurement in Fluid Mechanics
- ◆ Present Situation of Automatic Photoelastic Experiments
- ◆ Whole Field Measurement of Deformation Distributions Using Speckle Pattern
- ◆ Dynamic and Whole-field Deformation Measurement by DESPI
- ◆ On the Measurement of Stress Intensity Factor  $K_I$  by the Method of Caustics
- ◆ On Standardization of Full-field Optical Methods in Stress and Strain Measurements

## *Original Papers*

- ◆ Thermal Deformation Measurement of Electronic Devices, QFP and MCM, by Moiré Interferometry, and Finite Element Analysis
- ◆ Simultaneous Analysis of Two Phase Components for Moiré Interferometry by Two-directional Integrated Phase-shifting Method
- ◆ Shape Measurement by Phase-shifting Scanning Moire Method Using Digital Micro-mirror Device