Virtual Course: DIC 101: Practical Considerations for Good DIC Measurements – What is in the Good Practices Guide

Saturday, September 12, 2020

Course Description
The Good Practices Guide for Digital Image Correlation (GPG) defines the knowledge and skills required to conduct DIC measurements in conjunction with mechanical testing of a planar test piece. The GPG was developed by the International Digital Image Correlation Society (iDICs) and is available at http://idics.org/guide. This course is presented as a partnership between iDICs and SEM. This course will delve into all the topics covered in the GPG in detail, focusing on practical applications of DIC rather than theory or algorithms. It is designed as training for new practitioners of DIC to supplement vendor-based training.

Who Should Attend

Course Outline
- Basic and fundamental 2D and Stereo-DIC concepts
- Design of DIC measurements
- Preparation for DIC measurements
- Camera calibration
- Test execution concepts
- Strain calculations and basic Virtual Strain Gauge size studies
- DIC processing techniques
- DIC reporting requirements

Panel Discussion
The last portion of the course will be a panel discussion to answer any DIC related question. The panel will include the instructors plus added DIC experts with a broad range of experience.

Instructors
Elizabeth Jones
Sandia National Laboratories
Dr. Jones received her PhD in Theoretical and Applied Mechanics at the University of Illinois at Urbana-Champaign. She is currently a senior member of technical staff at Sandia National Laboratories in Albuquerque, NM, where she applies DIC to study deformation of various types of materials under complex loading conditions and develops methods to use DIC data for FE model validation.

Amanda Jones
Sandia National Laboratories
Dr. Jones received her PhD in Theoretical and Applied Mechanics at the University of Illinois at Urbana-Champaign. She is currently a senior member of technical staff at Sandia National Laboratories in Albuquerque, NM, where she applies DIC to material characterization efforts and complex loading conditions/specimen geometries/size scales.

Course Fee
The regular course fee is $350 and the student fee is $175. Course fee includes course handout material.

Cancellation Liability
If the course is cancelled for any reason, the Society for Experimental Mechanics’ liability is limited to the return of the course fees.