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Tom Proulx Editor

Experimental Mechanics on Emerging Energy Systems and Materials, Volume 5

Proceedings of the 2010 Annual Conference on Experimental and Applied Mechanics



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Preface

Experimental Mechanics on Emerging Energy Systems and Materials represents one of six tracks of technical papers presented at the Society for Experimental Mechanics Annual Conference & Exposition on Experimental and Applied Mechanics, held at Indianapolis, Indiana, June 7-10, 2010. The full proceedings also include volumes on Dynamic Behavior of Materials, Application of Imaging Techniques, Experimental and Applied Mechanics, along with the 11th International Symposium on MEMS and Nanotechnology, and the Symposium on Time Dependent Constitutive Behavior and Failure/Fracture Processes.

Each collection presents early findings from experimental and computational investigations on an important area within Experimental Mechanics. The current volume on the Role of Experimental Mechanics on Emerging Energy Systems and Materials, includes studies on composite Materials for power generation such as wind power generators, fuel cells technology, materials and durability; solar energy – solar cell materials and technology, alternative forms of energy, and new energy phenomena from nature.

In recent years, energy has become a hot topic in all walks of life, the SEM community is no exception. Steered by the Research Committee, this track brings together researchers and engineers interested in mechanics aspects of energy systems and materials, and provides a forum to facilitate technical interaction and exchange.

We thank the SEM staff and all session organizers for their persistent, devoted efforts as well as the authors, session chairs and presenters in this track who make the ultimate success of the track and the conference.

The Society would like to thank the organizers of the track, Bill Y.J. Chao, *University of South Carolina;* Yu-Ling Lo, *National Cheng-Kung University;* Ashok K. Ghosh, *New Mexico Technology University;* Ron Y. Li, *General Motors Corporation;* David Dillard, *Virginia Polytechnic Institute and State University* for their efforts.

Bethel, Connecticut

Dr. Thomas Proulx Society for Experimental Mechanics, Inc

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