

## *Preface*

These Proceedings contain papers from the lectures and tutorials for the Thirty-Eighth Turbomachinery Symposium, held in Houston, Texas, September 14-17, 2009. The Symposium is sponsored by the Turbomachinery Laboratory, of the Texas Engineering Experiment Station, The Texas A&M University System.

The Turbomachinery Symposium was established as a forum for users and manufacturers of industrial turbomachinery. Because of many overlapping areas of interest, the symposia are directed primarily to commercial users with the utility and petrochemical industries.

The Advisory Committee for the Thirty-Eighth Turbomachinery Symposium and past symposia have had a continuing influence on the content and direction of the symposia. The committee is composed of recognized leaders in the commercial turbomachinery field from users and manufacturers. Based on their experience and knowledge of the field, papers are solicited and selected to address contemporary problems of interest. Their continued assistance is wholeheartedly appreciated.

Essential elements of the symposia that are not entirely covered by this proceedings include eight short courses that preceded the symposium, 16 case studies, 17 discussion groups, and a product exhibit show. The short courses are: Centrifugal Compressors 101, Advanced Reciprocating Compressor Diagnostics and Detailed Pattern Interpretation, Centrifugal Compressors 201, Combined Cycle and Cogeneration Power, An Introduction to Babbitted Bearings as Used in Industrial Turbomachinery, Large Motor and Variable Speed Drive Fundamentals for Mechanical Engineers, Root Cause Failure Analysis in Industrial Turbomachinery, and API 614 (ISO 10438) Fifth Edition.

This symposium includes a “case study” format. Presentations are made of a problem, its resolution, and the lessons learned. All symposium attendees receive a CD-ROM containing copies of the presentations.

The discussion groups are led by engineers with a great deal of experience in the subject areas, and they facilitate discussion from the floor. Attendees actively participate in the discussion groups, and many use this forum to get sound advice from their peers on problems of immediate importance. The discussion groups facilitate a quick transfer of information across industry boundaries.

The product exhibit show has more than 200 companies and features new products, accessories, and analysis tools. This aspect of the symposium has continued to improve over the past several years in the quality and range of products exhibited.

Again, the vigorous support of the Advisory Committee is appreciated. My very considerable thanks are also extended to lecture authors, short course speakers, tutorial leaders, case study presenters, and discussion leaders. Both personally, and on behalf of the Advisory Committee, a special “thank you” is extended to the exhibiting companies and their representatives.

Finally, the efforts of the Turbomachinery Laboratory staff in seeing through the detailed execution of the symposium are greatly appreciated, with particular thanks extended to Stephen Phillips. With regard to this proceedings, my personal thanks is extended to Joanne Burnett for her excellent work in editing, preparation, and organization.

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