

Symposium on Measuring Techniques in Turbomachinery

Collection of contributions 2020

Editorial Preface

Turbomachinery plays important role not only in transportation but also in power generation. Despite recent shift of the power generation industry towards renewable sources of energy based on wind and water turbines, large industrial turbomachines especially gas turbines will still remain indispensable for viable energy mix for some time to come. Owing to the accent on sustainability, pressure on increasing efficiency of turbomachines and power to weight ratio of aircraft engines is higher nowadays than ever before. Fundamental to this goal are data measured both on working machines on site and on test rigs in laboratories. Symposium on measuring techniques in Turbomachinery (SMTT) provides platform for sharing experience and ideas of researchers from both industry and academic institutions in acquiring, monitoring, evaluating and analyzing data necessary for successful design and reliable operation of turbomachines.

Main topics are (but not limited to):

- The development of new experimental measurement techniques (optical techniques, heat-transfer measurements, high frequency measurements, MEMS)
- New techniques for monitoring engine operation and performance (high temperature instrumentation, emissions monitoring, measurement of engine deterioration and life, performance measurement)
- The application of new analysis techniques to experimental data (optimization of data analysis, application of new mathematical methods to experiments)

This collection of contributions consists of papers presented at the 25th symposium on Santorini and selected older papers. The 25th SMTT was organized by the University of Thessaloniky and it was held on September 21-22, 2020 on Santorini with possibility of virtual participation.

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