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Introduction

Precision is the basis of manufacturing. With the development of science and technology and the improvement of requirements in manufacturing, precision engineering is becoming highly multidisciplinary covering mechanical, electrical, optical, control, and information disciplines. New methods, new technology, and new equipment for measuring are developing faster as well as innovative manufacturing. Micro and nano metrology are becoming practiced, and the requirement of traditional measurements including length, angular, coordination, vibration, and other physics parameters are calling for new technology. With this as the background, we have successfully held eight sessions of the International Symposium on Precision Mechanical Measurement (ISPM). The subject and the major topics included length and angular measurement, coordinate measurement technology, micro-nano metrology and MEMS, sensor technology and application, online automatic measurement and control vibration, stress and thermal measurement, opto-electronic measurement and image processing, measurement signal analysis and processing, precision theory and uncertainty evaluation, quality engineering theory and technology, and so on. The 9th ISPM conference was held 18-21 October in Chongqing, China. More than 150 abstracts were submitted to our conference, and more than 160 registered delegates participated in the conference.