

The IEEE IMS Chapter Nanjing/Shanghai/Wuhan Jt. Sections

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The IEEE Nanjing/Shanghai/Wuhan Jt. Sections of the Instrumentation and Measurement Society (IMS) Chapter was established on February 25, 2010. It is the first local IMS chapter formed in China aimed at promoting instrumentation and measurement (I&M) related activities. With the support from the IMS Distinguished Lecture Program, the chapter held its first meeting at Southeast University on March 19, 2010, where IEEE Fellow Kang B. Lee gave a lecture about smart sensor networks and standards.

Since then, the local chapter has organized various activities every year, ranging from a virtual instrument contest for students to topic-specific workshops for faculties. Recently, the most significant activity was the 2014 National Young Scholar Forum on Machinery Fault Diagnosis (Fig. 1) held on May 23. With the financial support from the School of Instrument Science and Engineering, Southeast University and the Jiangsu Instrument & Control Society, more than forty young scholars from over twenty universities and industries took part in this event.

The forum started with an invited talk delivered by Prof. Zhike Peng from Shanghai Jiaotong University. Prof. Peng presented an overview on the theory and methodology of parameterized time-frequency analysis and its application in engineering signal processing, for example, instantaneous rotating speed measurement in rotor systems. The attendees then had an in-depth discussion on machinery fault diagnosis, including problems encountered in basic research on fault diagnosis, directions, and breakthrough potentials of



Fig. 1. The 2014 National Young Scholar Forum on Machinery Fault Diagnosis organized by the IEEE Nanjing/Shanghai/Wuhan Jt. Sections of the IMS Chapter.

fault diagnosis in the future, as well as fault diagnosis technology development and applications. They also recognized the importance of instrumentation on helping improve the effectiveness and efficiency of fault diagnosis. At the end of this forum, Prof. Xuefeng Chen from Xi'an Jiaotong University gave a talk titled "Progress and Challenges on Machinery Operation Safety and Remaining Useful Life Prediction." Through the forum, young scholars had a more clear understanding on machinery fault diagnosis and expressed possible collaboration and even cross-research direction. Prof. Chen also expressed his willingness to create a local IMS chapter in northwest China and is preparing the petition forms that will be submitted in 2015.