

# Program of International Symposium on Machine Condition Monitoring and Diagnosis

September 25, 2002 at The University of Tokyo: Room 5 - 51 and 55

10:00-10:10	Opening address Symposium Chairman Takuzo Iwatsubo (Kobe University)
(10:10-11:50)	<i>Diagnosis I</i> Session Chairman: Shozo Kawamura (Kobe University)
10:10-10:50 INVITED	Diagnosis for rotating machines by means of active magnetic bearings Martin Aenis and Rainer Nordmann (Darmstadt University of Technology)
10:50-11:30 INVITED	The practical use of wavelet transforms and their limitations in machine fault diagnosis Peter W. Tse and W. X. Yang (City University of Hong Kong)
11:30-11:50	Accuracy of fault detection in real rotating machinery using model based diagnostic techniques Nicolò Bachschmid and Paolo Pennacchi (Politecnico di Milano)
(13:00-15:00)	<i>Field Experience in Monitoring and Diagnosis</i> Session Chairman: Yukio Ishida (Nagoya University)
13:00-13:40 INVITED	The situation and progress in the field of machine condition monitoring and diagnosis in China Xia Song Bo (Harbin Institute of Technology)
13:40-14:20 INVITED	Power plant machine diagnostics in Europe Nicolò Bachschmid, Paolo Pennacchi and Andrea Vania (Politecnico di Milano)
14:20-14:40	Diagnosis and treatment of rotor system vibration of 300MW turbomachine Li Jianghai, Tang Bi kuang (Institute of Power Machinery Wuhan University), Chen Qiao wei and Wang Jungi (Sanmenxia Huayang Power Generation Co., Ltd.)
14:40-15:00	Multivariate information theory for condition diagnosis of rotating machinery Xinfang Liu (Takada Industries Pte., Ltd.), Toshio Anzai (Kyusyu Institute of Technology), Toshio Toyota (Japan Condition Diagnosis Lab., Inc.) and Fang Feng (Nittetsu Elex Co., Ltd.)
(15:20-16:40)	<i>Diagnosis for Ball Bearing</i> Session Chairman: Tadao Kawai (Nagoya University)
15:20-15:40	Monitoring and diagnosis of rolling element bearing by dynamic strain measurement Hiroshi Kanki (Kobe University), Kiyoshi Matsunaga (New Tech Co., Ltd.) and Shuji Miyazaki (Mitsubishi Chemical Co.)
15:40-16:00	Pattern recognition analysis for ball bearing diagnosis Yasuhisa Sekiguchi and Noritoshi Nakagawa (Hiroshima University)
16:00-16:20	Diagnosis of faulty bearings by emitted sound Masahiro Sunohara, Kazuhiro Shimomura, Kazuo Shibata, and Hidemichi Komura (Rion. Co., Ltd.)
16:20-16:40	Lifetime prediction of rolling element bearings with an accelerometer Makoto Tanaka, Isao Shiromaru, (The Chugoku Electric Power Co., Inc.), Shingo Bouda, Yoji Nagayasu ( <b>SHINKAWA Sensor Technology, Inc.</b> ), Yoshinobu Akamatsu (NTN), and Takuzo Iwatsubo (Kobe University)

September 26, 2002 at The University of Tokyo: Room 5 - 51 and 55

(9:00-10:20)	<i>Analysis I</i> Session Chairman: Yasuro Hori (Gifu University)
9:00-9:40 INVITED	On-line monitoring and multilevel fault diagnosis system for large-scale mill Zhaochang Zheng, Song Shen, and Huibin Li (Tsinghua University)
9:40-10:00	Development of the portable non-contact measurement system of blade vibration using the improved few-probe method Shinya Iizuka, Yasutomo Kaneko, Chiaki Yasuda (Mitsubishi Heavy Industries., Ltd.)
10:00-10:20	Development of ultrasonic vibrometer for vertical pump bearing wear diagnostic system Shigeru Kanemoto, Michio Sato, Shigeo Nakayama, Yukio Watanabe, Koji Higuma (Toshiba Corporation), Katsuhiro Arakawa, and Satoshi Hashimoto (Tokyo Electric Power Company)
(10:40-12:00)	<i>Instrumentation and Measurement</i> Session Chairman: Hiroyuki Matsuda (Chiyoda Co.)
10:40-11:00	Vibration monitoring of turbine blade using image processing Tadao Kawai (Nagoya University), Masami Ito (Matsushita Electric Co., Ltd.), Yoko Sawa (Sharp Co., Ltd.) and Yasuhiro Takano (Toyota Motor Co.)
11:20-11:40	Estimation of location of exciting force inside the power equipment using an inverse problem of vibration Yasuro Hori and Minoru Sasaki (Gifu University)
11:40-12:00	Identification of sound sources based on sound pressure measurement considering observation point importance Yasuhisa Sekiguchi and Noritoshi Nakagawa (Hiroshima University)
(13:00-14:40)	<i>Diagnosis II</i> Session Chairman: Manabu Kotani (Kobe University)
13:00-13:40 INVITED	Condition monitoring by vibration analysis in power plants and production lines Ulrich Sudmersen, Oliver Pietsch, Christian Scheer, Wilfried Reimche and Friedrich-Wilhelm Bach (University of Hannover)
13:40-14:20 INVITED	Maintenance tribology as a tool of machine condition monitoring and diagnosis Toshiaki Wakabayashi (Kagawa University):
14:20-14:40	Condition diagnosis of rotating machinery using parameter waveform of vibration signal Tomoya Niho, Peng Chen (Kyusyu Institute of Technology) and Toshio Toyota (Japan Condition Diagnosis Lab., Inc.)
(15:00-16:20)	<i>Analysis II</i> Session Chairman: Takuzo Iwatsubo (Kobe University)
15:00-15:40 INVITED	Some advances in diagnostics of rotating machinery malfunctions Jerzy T. Sawicki (Cleveland State University)
15:40-16:00	Nonstationary oscillations of a cracked rotor Yukio Ishida, Tsuyoshi Inoue (Nagoya University) and Hideo Kondo (Toyota Motor Co.)
16:00-16:20	Dynamic analysis method and diagnosis method for misalignment state of rotating shaft Akito Tomita, Peng Chen (Kyusyu Institute of Technology) and Toshio Toyota (Japan Condition Diagnosis Lab., Inc.)