



CCAUV/13-10

Report to the CCAUV on

MAPAN Special Issue on "Acoustics Ultrasound and Vibration Metrology for Safety and Health"

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MAPAN-Journal Metrology Society of India

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Special issue on "Acoustics Ultrasound and Vibration Metrology for Safety and Health"

Guest Editors: T. Usuda and T. Kikuchi

Aims and objectives

The measurement needs for acoustics ultrasound and vibration (AUV) are rapidly growing in diverse fields such as machine testing, medical diagnosis, human safety, environmental protection, seismology, etc. Especially, AUV measurements are strongly connected on safety and health issues in modern society, for example, ultrasonic measurement for medical inspection, audiometer calibration, hearing aids, non-destructive inspection using ultrasound, structure testing, on-site vibration measurement for measurement for maintenance, etc.

In this connection, a special issue on "Acoustics Ultrasound and Vibration Metrology for Safety and Health" has been planned. The overall aims of this special issue are to promote discussion among researchers actively working in the AUV measurement fields, especially at National Metrology Institutes (NMIs) and also users in industries and medical fields.





Contents of the special issue Volume 27, Issue 4, December 2012

Article 1.

Title: Minimizing the Effects of Reflections by Using a Virtual Pulse Method, for Free-Field Reciprocity Calibration Author: Hironobu Takahashi, Ryuzo Horiuchi, Affiliation: NMIJ, Japan

Article 2. Title: Sound Pressure Level in an Infant Incubator, Authors: Virat Plangsangmas, Surat Leeudomwong, Panisara Kongthaworn, Affiliation: NIMT, Thailand

Article 3. Title: Developing a Computer Based Audiometer for Hearing Loss Screening Authors: Achmad Suwandi, Denny Hermawanto Affiliation: KIM-LIPI, Indonesia





Article 4.

Title: A Reference Infrasound Source with Low Distortion Based on Laser Pistonphone Technology Authors: Longbiao B. He, Wen He, Junhui H. Qin, Ping Yang, Bo Zhong, Feng Niu Affiliation: NIM, China

Article 5.

Title: Measurement Accuracy of Secondary Standards of Sound Pressure in Comparison to Primary Standards Authors: Naveen Garg, Omkar Sharma Affilication: NPLI, India

Article 6 Title: Wireless Measurement System for Ground-borne Vibration and Vibration Amplifications in Buildings Authors: Yoshihiro Hirao, Sunao Kunimatsu, Takuji Hamamoto Affiliation: Kobayasi Institute of Physical Research (KIPR),Japan





Article 7.

Title: Vibration-Related Disorders Induced by Mining Operations and Standardization of Assessment Process Authors: Sunao Kunimatsu, Khanindra Pathak Affiliation: Geological Survey Japan(GSJ), AIST, Japan

Article 8. Title: Realization of Medical Ultrasound Power Measurement by Radiation Force Balance Method Authors: Shan Cui, Hock Ann Chua, Chee Keong Chan Affiliation: NMC, A@Star, Singapore

Articles are available on the web: http://link.springer.com/journal/12647/27/4/page/1