

Commission A (Electromagnetic Metrology) Activity Report

August 2008 - March 2009

1. Conferences and Meetings

24th General Assembly of APMP (Asia Pacific Metrology Program) and related meetings were held from November 2 through November 8, 2008 at Jakarta, Indonesia hosted by the KIM-LIPI. Chairs of 6 technical committees and 1 working group of APMP have been elected for the two years term. From Japan, representatives from NMIJ (National Metrology Institute of Japan, AIST), CERI (Chemicals Evaluation and Research Institute, Japan), JEMIC (Japan Electric Meters Inspection Corporation), NICT (National Institute of Information and Communications Technology) participated in the General Assembly.

Before the APMP General Assembly, Asia-Pacific Workshop on Time and Frequency, ATF2008, was held jointly hosted by KIM-LIPI and NICT for three days from October 30 to November 1, 2008. About 50 researchers from 12 countries participated in the workshop and recent research and developments including optical frequency standards, primary frequency standards, methods of precise time and frequency transfer, dissemination and remote calibration methods were discussed. Special session for the optical frequency metrology was organized. In the special session, recent developments of optical lattice clocks were presented from four institutes in 3 countries, and recent results of absolute frequency measurements of clock transition of a trapped calcium ion were presented. Invited presentations were given by Dr. Jiang, BIPM (Bureau International des Poids et Mesures) about the new idea to improve the accurate time transfer strategy by employing redundant transfer links, and by Dr. Holzwarth, Menlo Systems GmbH, about the developments of femtosecond frequency combs including recently developed fiber comb systems. The proceedings of the workshop are being compiled and will be distributed to the participants and other related communities.

2. Future Conferences

18th meeting of the CCTF (Consultive Committee for Time and Frequency) will be held for two days from June 4, 2009, at BIPM in Sevres, France. Before the main

meeting, two satellite meetings will be held as following.

Second meeting of the CCL-CCTF Frequency Standards Working Group (June 2).

Eighth meeting of representatives of laboratories contributing to TAI (June 3).