UNITED STATES – JAPAN WORKSHOP ON STANDARDS FOR EMERGING TECHNOLOGIES

Thursday, February 12, 2015
National Institute of Advanced Industrial Science and Technology (AIST)

AGENDA

- Magdalena Navarro, Senior International Program Manager, IAAO, NIST
- Toshiyuki Takatsuji, Deputy Director NMIJ, AIST

9:35 – 9:40 Welcome Message  Chair: T. Takatsuji (NMIJ, NIST)
- Yasukazu Fukuda, Director, International Standardization Division, Industrial Science and Technology Policy and Environmental Bureau, Ministry of Economy, Trade and Industry (METI)

Nanotechnology Standardization (10 minutes each)  Chair: T. Takatsuji (NMIJ, NIST)

9:40-10:00  Thickness
- Yasushi Azuma, Research Scientist, National Metrology Institute of Japan, AIST
  Title: “Development of Prototype Reference Material for XRR Measurement and Alignment”

- Donald Windover, Project Leader, X-Ray Metrology, Ceramics Division, Material Measurement Laboratory, NIST
  Title: “The role of AIST/NMIJ Certified Reference Materials in X-ray reflectometry metrology”

10:00-10:25  Thermal properties  (15 minutes each)  Chair: T. Takatsuji (NMIJ, AIST)
- Takashi Yagi, Senior Research Scientist, NMIJ, AIST
  Title: “Development of certified reference material of thin film for thermal diffusivity”

10:25-10:55  Nano Form and Nano Size  (10 minutes each)  Chair: T. Takatsuji (NMIJ, AIST)
- **Hiroshi Itoh**, Senior Research Scientist, Research Institute of Instrumentation Frontier, AIST  
  **Title:** “AFM probe characterization and nano-roughness measurement”

- **Ndubuisi Orji**, Research Engineer, Semiconductor and Dimensional Metrology Division, Physical Measurement Laboratory (PML)  
  **Title:** “Characterization Methods for Shape and Length Nanoscale Metrology”

- **Satoshi Gonda**, Chief, National Metrology Institute of Japan, AIST  
  **Title:** “Calibration procedure for height sensitivity of an AFM using atomic steps”

10:55-11:15  **Nano carbon**  
Chair: T. Takatsuji (NMIJ, AIST)

- **Toshiya Okazaki**, Group Leader, Nano Carbon Research Center, AIST  
  **Title:** Evaluation of Aggregated States of CNTs by Differential Centrifuge Sedimentation

- **Vivek Prabhu**, Materials Science and Engineering Division, Material Measurement Laboratory, NIST  
  **Title:** "Characterization of multi-walled carbon nanotube local structure by small-angle neutron scattering"

11:15-11:35  **3D Imaging**  
Chair: M. Navarro (IAAO, NIST)

- **Hiroyasu Ujike**, Group Leader, Human Technology Research Institute, AIST  
  **Hiroshi Watanabe**, Senior Research Scientist, Health Research Institute, AIST  
  **Title:** "Effects of 3D display characteristics on visual perception and on Image Safety"

- **John Penczek**, Quantum Electronics and Photonics Division, Physical Measurement Laboratory, NIST  
  **Title:** “3-D Display Optical Metrology”

11:35-12:30  **Lunch at**  
**Bio measure**

12:30-12:50  **DNA**  
Chair: M. Navarro (IAAO, NIST)

- **Yuji Sekiguchi**, Group Leader, Biomedical Research Institute, AIST  
  **Title:** “Synthetic Spike-in Standards for High-throughput DNA/RNA Measurements”

- **Mark Salit**, NIST (Dr. Sekiguchi will present on behalf.)  
  **Title:** “Metrology for Genome-scale Measurements”
12:50-13:10  **Protein**  

Chair: M. Navarro (IAAO, NIST)

- Shinya Honda, Deputy Director, Biomedical Research Institute, AIST,  
  **Title:** “Synthetic protein particles as measurement standards for subvisible aggregates: Progress 2014”

- Wyatt Vreeland, Biomolecular Measurement Division, Material Measurement Laboratory, NIST  
  **Title:** “Molar mass and size measurement of proteins via tandem flow field fractionation-light scattering”

13:10-14:10  **Discussion on the future collaboration**

14:10-14:30  **Closing Remarks**

- Magdalena Navarro, Senior International Program Manager, IAAO, NIST  
- Toshiyuki Takatsuji, Deputy Director NMIJ, AIST

14:30  **Adjourn**

18:00  **Meeting in front of the hotel**

18:30-20:30  **Dinner at BOUZ restaurant in Hamamatsucho, Tokyo**