

IW-SMART at M&P2010

International Workshop on Smart Materials and Related Technologies 2010

Saturday, November 27, 2010

(Sunday, November 28, 2010 - Discussion/Collaboration only)

The University of Tokyo (Hongo Campus), Japan

Organized by Active Material Systems (AMS)-TS of JSME M&P Division

Organizers: Hiroshi Asanuma (Chiba Univ.), Yasubumi Furuya (Hirosaki Univ.), Satoshi Kishimoto (National Institute for Materials Science) and Wataru Nakao (Yokohama National Univ.)

Program

Saturday, November 27

9:30-9:35 Opening Hiroshi Asanuma (Chiba University)

Session I (9:35-12:00)

Chairs: Ji Su (NASA Langley Research Center), Satoshi Kishimoto (National Institute for Materials Science)

9:35-10:00 Invited “Development of Smart Mechanical Material Systems”

Hiroshi Asanuma, Tomohiro Suzuki and Shun Sato, Chiba University

10:00-10:35 Keynote “Design Criteria of Curved Laminated Piezoelectric Actuators”

Sontipee Aimmanee, King Mongkut's University of Technology Thonburi, Thailand

10:35-11:10 Keynote “Microstructure and Properties of NiTi Processed by Surface Mechanical Attrition Treatment”

Qingsong Mei, Koichi Tsuchiya and Kaneaki Tsuzaki, National Institute for Materials Science

11:10-11:35 Invited “Novel Shape Memory Actuators”

Hisaaki Tobushi, Kouji Miyamoto, Yasuhiko Nishimura and Kento Mitsui, Aichi Institute of Technology

11:35-12:00 Invited “Intelligent Materials and Its Processing for Advanced Science and Technology”

Yoshitake Nishi, Tokai University

(12:00-13:10 Lunch)

Session II (13:10-14:35)

Chairs: Sontipee Aimmanee (King Mongkut's University of Technology Thonburi), Wataru Nakao (Yokohama National University)

13:10-13:45 Keynote “Special Application of Fiber Optic Sensors Developed During Lares Program”

Antonio Paolozzi, Sapienza University of Rome, Italy

I. Ciufolini, Salento Univ. & INFN Lecce, Italy

C. Paris, Sapienza University of Rome, Italy

P. Perugini, AVIO group, Italy

13:45-14:10 Invited “Cure Monitoring of Polymers and Polymer Based Composites by Optical Fiber Sensors”

Tatsuro Kosaka, Kochi University of Technology

Katsuhiko Osaka and Yoshihiro Sawada, Osaka City University

14:10-14:35 Invited “Fatigue Damage Measurement of Structural Members Using Low Power Wireless Modules”

Manabu Enoki and Takayuki Shiraiwa, The University of Tokyo

(14:35-14:45 Break)

Session III (14:45-17:00)

Chairs: Antonio Paolozzi (Sapienza University of Rome), Qinsong Mei (National Institute for Materials Science)

14:45-15:20 Keynote “Hybrid Electromechanical Systems for High Performance Transducers and Energy Harvesting Devices”

Ji Su, NASA Langley Research Center, USA

15:20-15:45 Invited “Smart Steering by Wire (SBW) System for the Electric Vehicle (EV) Specially Designed in Chill and Snowy Area”

Yasubumi Furuya and Munekatsu Shimada, Hirosaki University

15:45-16:10 Invited “Development of Metallic Cellular Materials with Polymer for Smart Materials”

Satoshi Kishimoto, National Institute for Materials Science

Toru Shimizu, National Institute of Advanced Industrial Science and Technology

16:10-16:35 Invited “Next Generation Self-Healing Ceramics; These Material Designs and Applications”

Wataru Nakao, Yokohama National University

16:35-17:00 Invited “Making of a Jewelry Diamond Ring and a Diamond Metal-Bonded Grinding Wheel”

Yoshimi Watanabe, Nagoya Institute of Technology

17:00-17:30 Discussion/Collaboration and Closing

Chairs: Yasubumi Furuya (Hirosaki University), Ji Su (NASA Langley Research Center)

(18:00-20:00 M&P2010 Banquet (Speakers are invited))

Sunday, November 28

(9:15-15:45 Sessions of M&P2010 on Smart Materials and Structural Systems etc. (in Japanese))

15:45-19:00 Discussion/Collaboration (AMS-TS meeting) and Dinner - Everyone welcomed. Start in the session room and then move to outside campus.