

## Tentative AGENDA\*

### Symposium on Materials for Renewing and Protecting Critical Infrastructure and Resources

**19-20 June 2017**

National Metal and Materials Technology Center (MTEC), National Science and Technology Development Agency (NSTDA), Thailand Science Park

#### **Monday 19 June 2017**

7.30	Pick-up from Chatrium Hotel Riverside Bangkok
8.40	<b>Greeting and Opening of the Symposium</b>
	Dr. Laurie E. Locascio – President of WMRIF, NIST, USA
8.50	<b>Welcoming remarks</b>
	Dr. Narong Sirilertworakul – Executive Director, NSTDA, Thailand

#### **TECHNICAL SESSION (I) - Materials for innovation in Agriculture, Water and Environmental Management**

9.00	Guang-Way Jang (ITRI, Taiwan) Development of Bio-resourced Chemicals and Materials
9.30	Surapich Loykulnant (MTEC, Thailand) Applications of Bio-Based Polymers for Green Latex Production
10:00	Coffee Break
10.30	In-Hyuck Song (KIMS, Korea) Current Status and Prospects of Ceramic Membrane for Water Treatment
11:00	Michael Stadermann (LLNL, USA) Carbon foams with hierarchical pore structure for capacitive desalination
11:30	Meng-Shun Huang (ITRI, Taiwan) Application of membrane technology for wastewater treatment-membrane distillation
12:00	Lunch Break

\* Changes to the agenda are possible  
As of 24 March 2017

**TECHNICAL SESSION (I) - Materials for innovation in Agriculture, Water and Environmental Management, Cont.**

13:30 Tohru Kawamoto (AIST, Japan)  
Multiscale Design of Gas/Ion Adsorbents With Porous Coordination Polymers

14:00 János Volk (MTA EK MFA, Hungary)  
Piezoelectric Thin Films and Nanowires for Low-Power Sensors and Vibrational Energy Harvesters

14:30 Dong-Ho Kim (KIMS, Korea)  
Nanogap Plasmonic Materials for SERS-based Ultrasensitive Chemical Sensors

15:00 Coffee Break

**TECHNICAL SESSION (II) - Materials for innovation in construction, building resilience, and infrastructure protection**

15:30 Yasusei Yamada (AIST, Japan)  
Chromogenic Materials for Smart Windows

16:00 Sitthisuntorn Supothina (MTEC, Thailand)  
Transparent Superhydrophobic Film for Glass Panel Coating

16:30 Pietro Lura (EMPA, Switzerland)  
Innovative Solutions for Buildings and Infrastructure based on High-Performance Concrete: Increased Volume Stability, Better Fire Resistance and Self-prestressing

17:00 Ksenija Vasilic (BAM, Germany)  
Numerical Modelling of Fresh Self-Compacting Concrete Flow

17:30 Tae-Ho Lee (KIMS, Korea)  
Advanced steels for safety infrastructures

19:00 Dinner by the river

**Tuesday 20 June 2017**

7.20 Pick-up from Chatrium Hotel Riverside Bangkok

**TECHNICAL SESSION (II) - Materials for innovation in construction, building resilience, and infrastructure protection, Cont.**

8:30 Junhua Dong (IMR-CAS, China)  
Study on the galvanic corrosion of ferrite-pearlite steel and its control under an acid environment

9.00 Ekkarut Viyanit (MTEC, Thailand)  
Pitting Corrosion Behavior of Type 304L Stainless Steel Tube under Hydrodynamics of Chloride-containing Solution

9.30 Seiji Kuroda (NIMS, Japan)  
Corrosion Prevention of Steel Structures by Surface Technologies

10:00 Coffee Break

10.30 Nicholas Barbosa (NIST, USA)  
The Materials Science of Infrastructure - Fundamental Science to Implementation and Impact

11:00 Koichi Tsuchiya (NIMS, Japan)  
Materials Technology to Improve Service Life of Infrastructures

11:30 Jason Averill (NIST, USA)  
Community Resilience and Materials Science

12:00 Lunch Break

13:30 Tour of MTEC

16:30 Transport back to Chatrium Hotel Riverside Bangkok