



For the latest updates to the program refer to the online version at http://internationalnetworking.iu.edu/initiatives/LMI/LMI_NSF_Proposed_Agenda.html

Monday, August 18, 2014 - Hoa Binh Hotel Ballroom on ground floor

Joint Plenary Session with all Participants

- 8:00-8:30 Registration desk open in lobby outside of Hoa Binh Ballroom
- 8:30-8:40 Introductions of dignitaries
- 8:40-9:00 Workshop opening ceremony (Vietnam Partners)
- 9:00-9:30 Workshop Goals: Jennifer Schopf, Indiana University and Dale Smith, University of Oregon, USA
- 9:30-10:30 Plenary Talk: Infrastructure and policy for research and education: Assoc. Prof. Dr Pham Van Cu, Dr Bui Quang Hung, Vietnam National University, Vietnam
- 10:30-11:00 Tea Break
- 11:00-12:00 Panel: Importance and role of NRENs in supporting science
Moderator: Jennifer Schopf, Indiana University, USA
Dale Smith, University of Oregon/NSRC, USA
Dr Nguyen Hong Van, NASATI/VinaREN
BK Kim, TEIN*CC, Korea
Chalermpol Charnsripinyo, NECTEC/ThaiREN, Thailand
- 12:00-13:30 Lunch
- 13:30-14:30 Science Plenary – “Science, Technology, and Policy Rising to the Challenge of Food Security” – Brian Wee of US National Ecological Observatory Network (NEON), USA
- 14:30-15:00 Tea Break (note: per diem available for participants from Lower Mekong Countries)
- 15:00-17:00 Lightning talks (6 minutes each talk)
Participants will prepare a short talk about what their water-related research interests are, what are the challenges/barriers to that research, and what do you hope to get out of this event.

- 18:00: European Union co-funded Dinner with TEIN as the sponsor.
Buses will depart Hoa Binh Hotel at 18:00. Dinner will be at Su Buffet, 64 Nguyen Du, Hanoi

Tuesday, August 19, 2014 – Room 407 at NASATI Office Building

8:00-8:30 Per diem available for participants from Lower Mekong Countries

8:30-10:00 **Panel:** Big Science Challenges related to Monitoring and Understanding the Surface and Ground Water Systems (including cyberinfrastructure challenges).

Moderator: Daroonwan Kamthonkiat, Thammasart University, Thailand

Tracy Collier, Puget Sound Partnership, USA

Bernhard Peucker-Ehrenbrink, Woods Hole Institute/Global Rivers, USA

Chris Elvidge, National Oceanic and Atmospheric Administration (NOAA), USA

10:00-10:30 Tea Break (note: per diem available for participants from Lower Mekong Countries)

10:30-17:00 Two separate tracks:

Network Engineer Track, room 612

10:30-12:30 Campus Network Best Practices

12:30-13:30 Lunch

13:30-17:00 Layer 2 lectures

Science Track: Monitoring and Understanding the Surface and Ground Water Systems, room 407

10:30-11:30 A global look at satellite data and monitoring: Chris Elvidge, NOAA, USA

11:30-12:30 NASA/SERVIR: Satellite-based Earth observation and science applications for emerging regions: Ashutosh Limaye, National Aeronautics and Space Administration (NASA), USA

12:30-13:30 Lunch

13:30-14:30 Metadata and data standards (WMO/WIS, etc). Include discussion about how can data be shared openly in collaborative fashion. Looking at modern best practices for water data: Ilya Zaslavski, University of California San Diego (UCSD), USA

14:30-15:00 Survey of the importance of sensor networks and trying to find out what is happening in individual countries. What exists for sensor networks, data repositories, and data sharing: Dr Surajate Aroonnet, Hydro Agro Informatics Institute (HAI), Thailand

15:00-15:30 Tea Break

15:30-16:15 Hydro and Agro Informatics Institute (Thailand) collaboration with Laos on monitoring: Mrs Khamnhong Sichanthavong, Deputy Director General, Department of Technology and Innovation, Ministry of Science and Technology, Laos.

16:15-17:00 Collaboration between the Vietnam National University - Ho Chi Minh city, CUAHSI and UCSD on hydrologic data management in Southern Vietnam: Dr Nguyen Hong Quan, Vietnam National University and Ilya Zaslavsky, UCSD

18:00-20:00 Poster Session sponsored by Internet2 at Hoa Binh Hotel in ground floor ballroom

Wednesday, August 20, 2014 - Room 407 at NASATI Office Building

8:00-8:30 Per diem available for participants from Lower Mekong Countries

8:30-10:00 **Panel:** Big Science Challenges: How to use water data to produce knowledge (including cyberinfrastructure challenges).

Moderator: Phil Papadopoulos, University of California San Diego (UCSD)

Jon Pollak, Consortium of Universities for the Advancement of Hydrological Science Inc (CUASHI)

Ashutosh Limaye, National Aeronautics and Space Administration (NASA)/SERVIR, USA

10:00-10:30 Tea Break (note: per diem available for participants from Lower Mekong Countries)

10:30-17:00 Two separate tracks:

Network Engineer Track, room 612

10:30-12:30 Layer 2 hands-on labs

12:30-13:30 Lunch

13:30-17:00 Layer 3 lectures

Science Track: How to use water data to produce knowledge for water security, room 407

10:30-11:30 PRAGMA virtual data and compute resource sharing: Phil Papadopoulos, UCSD, USA

11:30-12:30 Earth Cube introduction, discussion of what data sets exist, what open source tools exist: Don Middleton, US National Center for Atmospheric Research (NCAR), USA

12:30-13:30 Lunch

13:30-15:00 Demonstration of Projects

Jon Pollak, CUASHI: demonstration of tools for sharing water data
Ilya Zaslavsky, UCSD: EarthCube CINERGI: Community Inventory of Earthcube Resources for Geoscience Interoperability

Chris Elvidge, NOAA: Nightly global mosaic (VIIRS) 10 minutes

Jo Brianne Brions, Nationwide Operational Assessment of Hazards (NOAH), Philippines (tentative)

Ashutosh Limaye, NASA/SERVIR, USA

Van Pham Dang Tri, Can Tho University, Vietnam

15:00-15:30 Tea Break

15:30-17:00 Break out groups based in clusters identified during Monday Lightning Talks. Determine ways forward for fostering science collaboration (common interests, what are the challenges). Rooms 407, 201, and 202.

Break out session organizers: Bernhard Peucker-Ehrenbrink (Woods Hole Institute/Global Rivers), Jon Pollak (CUASHI) and Brian Wee (NEON)

Thursday, August 21, 2014 - Room 407 at NASATI Office Building

8:00-8:30 Per diem available for participants from Lower Mekong Countries

8:30-10:00 **Panel:** Big Challenge: Visualization and communication of derived knowledge to policy makers at different levels (including cyberinfrastructure challenges)

Moderator: Chris Elvidge, NOAA, USA

Brian Wee, NEON, USA

Ilya Zaslavsky, UCSD, USA

Nguyen Hieu Trung, CanTho University, Vietnam

10:00-10:30 Tea Break (note: per diem available for participants from Lower Mekong Countries)

10:30-17:00 Two separate tracks:

Network Engineer Track, room 612

10:30-12:30 Layer 3 hands on labs

12:30-13:30 Lunch

13:30-17:00 Introduction to Network Monitoring and Management

Science Track: Visualization and communications of derived knowledge to policy support at different levels, room 407

Case studies on failures in communications

10:30-11:30 Flooding in Thailand: Veerachai Tanpipat, HAIL, Thailand

11:30-12:30 Storms: Typhoon Haiyan: Ms Jo Brianne Brions, Nationwide Operational Assessment of Hazards (NOAH), Philippines

12:30-13:30 Lunch

14:00-15:00 Communication challenges problem between scientists and policy makers (science/policy interface issues): Lindsay Correa, Delta Stewardship Council and Tracy Collier, Puget Sound Partnership, USA

15:00-15:30 Tea Break

15:30-17:00 Break out session to discuss three dimensions of communications and communications challenges. Rooms 407, 201, and 202. Break out groups:

1) Communications among the Science Communities

- 2) Communications between the Science Communities and Policy/Decision Makers
 - 3) Communications across regions, cultures, and disciplines
- Break out session organizers Tracy Collier (Puget Sound Partnership), Lindsay Correa (Delta Stewardship Council), Brian Wee (NEON)

18:00 NASATI sponsored dinner.

Buses will depart Hoa Binh Hotel at 18:00. Dinner is buffet at Sen Tay Ho at 614 Lac Long Quan, Hanoi

Friday, August 22, 2014 – Hoa Binh Hotel Ballroom on ground floor

8:00-8:30 Per diem available for participants from Lower Mekong Countries

8:30-10:00 Reports from Break Out sessions

10:00-10:30 Tea Break (note: per diem available for participants from Lower Mekong Countries)

10:30-12:30 Discussion of next steps