Draft Agenda

Water and Environmental Technology (WET) Center

National Science Foundation Industry/University Cooperative Research Center Temple University, University of Arizona, Arizona State University

Industrial Advisory Board (IAB) Annual Meeting

June 6–7, 2011

Location- Centocor (Johnson & Johnson facility) / GBSC building 200 Tournament Drive, Horsham, PA 19044

Sunday – June 5, 2011

Arrival in Philadelphia- Check into hotels

6:00-7:30 PM Informal Meet-and-greet at Joseph Ambler Inn (OPTIONAL)

Monday- June 6, 2011 Centocor (J&J) / GBSC building

Convener - Rominder Suri, Director WET Center-I/UCRC

7:30-8:30 AM Breakfast

8:45-8:50 AM Opening Remarks and Introduction of Participants Rominder Suri, Director WET Center-I/UCRC

8:50-9:05 AM State-of-the Center Report-Temple University

Rominder Suri, Director WET Center

9:05-9:50 AM State-of-the Center Report and Research Progress Summaries - University of Arizona

Ian Pepper, UA Site Director

9:50-10:35 AM State-of-the Center Report and Research Progress Summaries - Arizona State University

Morteza Abbaszadegan, ASU Site Director

10:35-10:55 AM Coffee Break

Project Presentations

I. Treatment Technologies

10:55-11:10 AM Project Report 1: Development of novel adsorbents for the removal of emerging contaminants (ECs) from water and wastewater

Bikash Bhattarai, TU

- **11:10-11:25 AM** Project Report 2: Electro-Sonolytic Destruction of Emerging Contaminants Gangadhar Andaluri, TU
- **11:25-11:40 AM** Project Report 3: Advanced Oxidation Processes for Removal of Emerging Contaminants Tony Singh, TU
- 11:40-11:55 AM Project Report 4: Removal of Emerging Contaminants (ECs) from water and wastewater using Ion Exchange Technologies

 Dan Liu, TU

12:00 AM-1:00 PM Lunch

II. Analytical Methods

1:00-1:20 PM Project Report 5: Evaluation of EPA analytical methods, and development of analytical methods for select emerging contaminants (ECs)

Kate Fenlon, TU

1:20-1:25 PM Project Report 6: Evaluation of a Naphthalene Dosimeter Kate Fenlon, TU

1:25-1:40 PM Project report 7: Bioassays for the determination of estrogen mimics Candice Johnson and Mohan Achary, TU

III. Sustainability and Modeling

1:40-1:55 PM Project report 8: Development of predictive methodologies using quantum chemistry calculations (QCC), quantitative structure-activity and structure-property relationships (QSAR/QSPR) to model EC degradation

Ekaterina Rokhina, TU

1:55-2:10 PM Project report 9: Life Cycle Assessment (LCA) of treatment technologies for emerging contaminants (ECs) removal: evaluation of eco-footprint and enhancement of sustainability Ekaterina Rokhina, TU

2:10- 2:30 PM Sustainability into the complex DoD acquisition system via the use of Life Cycle Impact Assessment Paul Yaroshak, Department of Defense, CMRM Directorate

2:30-2:50 PM Coffee Break

New Proposal Presentations

2:50-3:00 PM Project Proposal 1: Pilot scale treatability testing for removal of ECs from water, Rominder Suri, TU

IV. Environmental Fate

3:00-3:10 PM Project Proposal 2: Environmental fate of nanomaterials, Judy Zhang, TU

3:10-3:20PM Project Proposal 3: Assessing the effects of antiviral drugs and antibiotics on the activated sludge during an influenza pandemic,

Benoit Van Aiken, TU

3:20-3:30 PM Project Proposal 4: Determination of UV dosages for the removal of O₃ from high-purity water, Gangadhar Andaluri, TU

3:30-3:40PM Project Proposal 5: Development of biofilter for the removal of 1,4-dioxane from water, Muruganandham Manickavachagam, TU

3:40-3:50 PM Project Proposal 6: Central Arizona Water Quality Monitoring Project, Paul Westerhoff, ASU

3:50-4:00PM Project Proposal 7: A novel approach for the detection and community characterization of pathogenic viruses in the environment using qPCR and viral metagenomics, Ian Pepper, UA

4:00 -4:10 PM Project Proposal 8: Evaluation of the MicroLan TOXcontrol biomonitoring system for on-line detection of chemical contaminants in source waters,

Ian Pepper, UA

4:10-4:20PM Project Proposal 9:

4:20-4:30 PM Discussion of the organization of the next morning session

5:00-6:00 PM Cocktail Hour and Discussions (Joseph Ambler Inn)

6:00 PM Dinner (Joseph Ambler Inn)

Tuesday-June 7, 2011

8:00-9:00 AM Breakfast (GBSC building)

9:00-10:00 AM Discussion of Research Presentations/Projects; Feedback from L.I.F.E. forms

10:00-11:00 AM Closed session- Industry members, Center Directors and NSF

11:00-11:15AM Closing Remarks. Adjourn

Tuesday PM Tour of Temple WET Center Laboratory Facilities (OPTIONAL)