



## UGPN Interdisciplinary Doctoral Seminar

### Water Management and Security

21-28 July 2013 - São Paulo, Brazil

#### Program (as of July 17, 2013)

Day 1 – July 21 – Sunday – São Paulo, SP	
<b>Airport</b>	Morning - Pick-up at Guarulhos International Airport by Prof. Sergio Pacca Transfer to the hotel
<b>12h00</b>	Check in at the hotel – Howard Johnson Faria Lima Inn, São Paulo
<b>13h45</b>	Group meets at hotel lobby
<b>14h00 – 18h30</b>	Walking tour - Downtown São Paulo
<b>19h00 – 21h30</b>	Dinner at Howard Johnson Faria Lima Inn  Opening conference by Dr. Patrick Thadeu Thomas (Agência Nacional de Águas) - <b>Keynote Speaker</b>
Day 2 – July 22 – Monday – USP campus	
<b>Breakfast</b>	Howard Johnson Faria Lima Inn
<b>08h00</b>	Group meets at hotel lobby, board bus to Escola Politécnica (Poli) – School of Engineering – USP main campus, São Paulo
<b>Morning</b>	<b>Session 1 – Water, economic development, management, and human health</b>
<b>08h30</b>	USP School of Engineering (Poli – Civil, room S19)
<b>08h30 – 08h45</b>	Introductions, information and logistics
<b>08h45 – 10h15</b>	<b>Faculty Presentations</b>
	<i>Water and economic development</i> (Ms. Anícia Aparecida Baptistello Pio – FIESP)
	<i>Water management in the São Paulo Metropolitan Region</i> (Prof. Monica Ferreira do Amaral Porto – USP School of Engineering)
	<i>Endocrine Disruptor Chemicals in Drinking Water and Human Health Effects</i> (Prof. Elaine Maria Frade Costa – USP School of Medicine)
<b>10h15 – 10h45</b>	Break
<b>10h45 – 11h45</b>	<b>Student Presentations – Seminar 1</b>
	Student 1 (NC State) – Ms. Kathy DeBusk: <i>Rainwater Harvesting: Integrating Water Conservation and Stormwater Management</i>

	Student 2 (U. Surrey) – Ms. Rossana Kleeman: <i>Sustainable Phosphorus Recovery from Wastewater</i>
	Student 3 (USP) - Ms. Carolina de Freitas Sampaio: <i>Human health risk quantification for multiple exposure routes to chemical pollutants and carcinogenic potential for adjacent communities of the Pardo river, Brazil.</i>
<b>11h45 – 12h00</b>	Discussion
<b>12h00</b>	Walk to Sweden restaurant on USP main campus
<b>12h10 – 13h30</b>	Lunch at Sweden
<b>13h30</b>	Walk to the International Reference Center on Water Reuse (ICWR)
<b>Afternoon</b>	<b>Session 2 – International Center on Water Reuse - ICWR and Hydraulic Technological Center - HTC</b>
<b>13h40 – 14h40</b>	Visit ICWR and HTC
<b>14h45 – 15h45</b>	<b>Faculty Presentations</b>
	NCSU – <i>Working with Government to establish stormwater design standards</i> – Dr. William “Bill” Hunt
	Surrey – <i>Water, animals and people – risks from zoonotic infections</i> – Dr. Alex Cook
<b>15h45 – 16h00</b>	Break
<b>16h00 – 16h30</b>	USP – <i>Advances in water and wastewater treatment technologies</i> - Prof. José Carlos Mierzwa
<b>16h30 – 17h45</b>	<i>Potable Direct Reuse – The inexorable solution for water supply in years to come</i> - Prof. Ivanildo Hespanhol (ICWR)
<b>17h45</b>	Return to hotel by bus
<b>18h30</b>	Group meets at hotel lobby and walks to Eldorado Shopping Mall
<b>19h00 – 22h00</b>	Dinner at Eldorado Shopping Mall and free time, walk back to the hotel

<b>Day 3 – July 23 – Tuesday – USP, São Paulo, SP</b>	
<b>Breakfast</b>	Howard Johnson Faria Lima Inn
<b>7h30</b>	Check out / Group meets at hotel lobby, board bus with luggage
<b>Morning</b>	<b>Session 3 – Water Governance and Third Sector (NGOs) Participation</b>
<b>08h00 – 12h00</b>	Site visit in Santo André – Aquapolo Water Reuse Facility
<b>13h00 – 14h30</b>	Lunch at the University’s Club – USP main campus
<b>Afternoon</b>	Session at Institute of Astronomy, Geophysics and Atmospheric Sciences (IAG) – Auditório IAG, USP main campus

<b>14h50 – 16h20</b>	<b>Faculty Presentations</b>
	USP - <i>Water governance challenges in Brazil</i> - Prof. Pedro Jacobi
	Surrey - <i>Valuing water: regulatory frameworks for water as a common good</i> – Prof. Rosalind Malcolm
	Surrey - <i>Quantifying the human impact on water resources: Water footprinting</i> - Dr. Jonathan Chenoweth
<b>16h20 – 16h40</b>	Break
<b>16h40 – 17h40</b>	<b>Student Presentations – Seminar 2</b>
	Student 1 (Surrey) – Mr. Michael Rustell – <i>Knowledge extraction and development of a decision support system for conceptual design of sustainable liquid natural gas terminals under risk and uncertainty</i>
	Student 2 (USP) – Mr. Lemilson José Cavalcanti de Almeida – <i>Water rights for growth and development in Brazil: an empirical investigation of efficiency and equity issues</i>
<b>18h00</b>	Departure to São Carlos by bus
<b>19h30</b>	Dinner at Graal on Bandeirantes Highway
<b>21h30</b>	Arrival – Check in at Ibis Hotel, São Carlos, SP

<b>Day 4 - July 24 - Wednesday - São Carlos, SP</b>	
<b>Breakfast</b>	Ibis Hotel, São Carlos
<b>07h45</b>	Board bus to CRHEA
<b>08h30 – 09h00</b>	Visit to Hydrometrics Laboratory – CRHEA Mr. Marcus Vinícius Estigoni
<b>09h00 – 10h45</b>	<b>Faculty Presentations</b>
	NC State – Dr. Ranji Ranjithan: <i>Modeling and Analysis of Water Resources Systems: A Computational Approach for Leak Detection in Water Distribution Networks</i>
	USP – Prof. Mario Mediondo - <i>Participatory Water Resilience Index for Coupling Vulnerability, Impacts and Adaptation Strategies in the Anthropocene: The Steps Forward for USP Interdisciplinary Research Groups on Climate (INCLINE) and Disaster Management(CEPED) to Collaborate with UGPN</i>
<b>10h45 – 11h00</b>	Break
<b>11h00 – 12h00</b>	<b>Student Presentations – Seminar 3</b>
	Student 1 (Surrey) – Mr. Mohammed Al-Aufi: <i>Feasibility of using manipulated osmosis in treating produced water for water infection and EOR applications</i>
	Student 2 (NC State) – Mr. Jason Patskoski: <i>Reducing uncertainty in reservoir</i>

	<i>sizing estimation by combining observed and reconstructed streamflow in Bayesian framework</i>
	Student 3 (USP) – Ms. Neildes de Souza Santana: <i>Characterization and ecotoxicology assessment of micropollutants presents in water reuse</i>
<b>12h00 – 13h30</b>	Lunch at CRHEA
<b>13h30</b>	Meeting with Dr. José G. Tundisi at CRHEA
<b>13h30 – 18h00</b>	Guided tour to Itaqueri Watershed with Dr. Tundisi (Broa Reservoir)
<b>19h00</b>	Pizza dinner at Amicci Restaurant
<b>21h00</b>	Return to hotel by bus

<b>Day 5 – July 25 – Thursday – São Carlos, SP</b>	
<b>Breakfast</b>	Ibis Hotel, São Carlos
<b>07h45</b>	Board bus to Embrapa Instrumentação
<b>Morning</b>	Visit at Embrapa Instrumentação <a href="http://www.cnpdia.embrapa.br/">http://www.cnpdia.embrapa.br/</a>
<b>8h15</b>	Arrival at Embrapa
<b>08h30 – 09h00</b>	<i>Water Resources in Brazil</i> (Prof. José Galizia Tundisi, Sustainable Development Secretary, Municipality of São Carlos)
<b>09h00 – 09h30</b>	<i>Agriculture and Water Resources in Brazil</i> (Dr. Silvio Crestana - Embrapa)
<b>09h30</b>	Break
<b>10h00 – 11h45</b>	Tour around Embrapa facility with discussion about ongoing research
<b>11h45</b>	Board bus to USP Campus I, São Carlos
<b>12h00</b>	Lunch at USP Campus I, São Carlos
<b>14h00 – 14h30</b>	<i>Ongoing Research at the Department of Hydraulics and Sanitation, EESC</i> (Prof. Luisa Fernanda Ribeiro Reis – EESC)
<b>14h30 – 15h00</b>	<i>Adopt a river: engaging people and valuing water resources in three urban areas in Brazil</i> (Dr. Davi Gasparini Fernandes Cunha – USP São Carlos School of Engineering – EESC)
<b>15h00 – 16h00</b>	<b>Student Presentations – Seminar 4</b>
	Student 1 (U. Surrey) – Mr. Michalis Hadjikakou: <i>Water use and economic impact trade-offs and synergies: a case study of the Cyprus tourism sector</i>
	Student 2 (NC State) – Ms. Hana Chmielewski: <i>Satisfying Multiple Objectives in Wastewater Treatment Network Design Using a Diversity Preserving Evolutionary Algorithm</i>

	Student 3 (USP) – Ms. Izabela Major Barbosa: <i>Ultrafiltration Modified Membranes Performance in Submerged Membrane Bioreactors</i>
<b>16h00</b>	Board bus to USP Campus II,, São Carlos
<b>16h15 – 17h30</b>	Visit to Prof. Marcelo Zaiat Laboratory (conducted by Paulo Clairmont)
<b>19h30</b>	Dinner at Churrascaria Tabajara
<b>21h30</b>	Return to hotel by bus

#### Day 6 – July 26 – Friday – São José dos Campos, SP

<b>Breakfast</b>	Ibis Hotel, São Carlos
<b>07h30</b>	Check out and board bus with luggage
<b>8h00</b>	Departure to São José dos Campos
<b>8h00 – 10h00</b>	Trip to National Institute of Space Research (INPE) <a href="http://www.inpe.br/ingles/">http://www.inpe.br/ingles/</a>
<b>10h00</b>	Stop over at Graal on Bandeirantes Highway
<b>10h30 – 12h00</b>	Resume trip to São José dos Campos
<b>Noon</b>	Lunch – INPE
<b>14h00 – 16h00</b>	Tour around INPE facilities – Visitor’s Center and Laboratório de Integração e Testes - LIT
<b>16h00</b>	Bus leaves to Cebimar - São Sebastião
<b>18h30</b>	Arrival at Center for Marine Biology (Cebimar) – São Sebastião
<b>19h30</b>	Pizza dinner at Cebimar
<b>Lodging</b>	Cebimar - São Sebastião, SP

#### Day 7 – July 27 – Saturday – Cebimar, São Sebastião, SP

<b>Breakfast</b>	Cebimar
<b>9h00 - 10h00</b>	Cebimar Presentation by Prof. José Roberto Machado Cunha da Silva
<b>10h00 - 11h45</b>	<b>Student Presentations – Seminar 5</b>
	Student 1 (Surrey) – Mr. Sayed Sadr: <i>Assessing membrane assisted wastewater treatment process in water reused scenarios: a group decision-making framework using fuzzy sets theory</i>
	Student 2 (NC State) – Ms. Laura Merriman: <i>Constructed Stormwater Wetlands: Design, Metrics, Services, &amp; Maintenance</i>
	Student 3 (USP) – Ms. Ana Carolina Daniel Morihana: <i>Synthesis of poly(vinylidene fluoride) and clay nanoparticles ultrafiltration flat sheet membrane</i>

<b>11h45</b>	Board bus to restaurant
<b>12h00</b>	Lunch at Carmella Restaurant
<b>Afternoon</b>	Free time (Ilhabela, SP)
<b>20h00</b>	Group meets at Cebimar, board bus to dinner
<b>20h30</b>	Dinner at Carmella Restaurant
<b>22h00</b>	Return to Cebimar by bus

**Day 8 – July 28 – Sunday – Cebimar, São Sebastião, SP**

<b>Breakfast</b>	Cebimar
	Bus leaves to the Guarulhos International Airport
	Stop over at Frango Assado restaurant on highway
	Participants transported to Guarulhos International Airport Bus proceeds to São Paulo

## Location

Hotel Howard Johnson Faria Lima Inn  
Rua Tavares Cabral, 61 – Pinheiros, São Paulo-SP

Shopping Eldorado  
Av. Rebouças, 3.970 – Pinheiros, São Paulo – SP

Escola Politécnica – prédio da Engenharia Civil  
Av. Prof. Luciano Gualberto, travessa 3 nº 380 - Cidade Universitária, São Paulo-SP

Aquapolo Ambiental  
Avenida Almirante Delamare, 3000 - Santo André-SP

Restaurante Clube da Universidade  
Rua do Matão, 801 - Cidade Universitária, São Paulo-SP

Instituto de Astronomia, Geofísica e Ciências Atmosféricas (IAG)  
Rua do Matão, 1226 - Cidade Universitária, São Paulo-SP

Hotel Ibis São Carlos  
Avenida Passeio dos Ipes, 140 - Parque Faber, São Carlos-SP

CRHEA - Centro de Recursos Hídricos e Ecologia Aplicada  
Rod. Domingos Innocentini, km 13, Itirapina-SP

Pizzaria Amici  
R. Quinze de Novembro, 1289, São Carlos-SP

Embrapa Instrumentação  
Rua XV de de Novembro, 1452 – Centro, São Carlos-SP

Restaurante Universitário Campus I  
Avenida Trabalhador São-carlense, 400, São Carlos-SP

USP São Carlos - Campus II - Engenharia Ambiental  
Av. João Dagnone, 1100 - Campus 2, São Carlos-SP

Churrascaria Tabajara  
Avenida São Carlos , 3677 – Vila Costa do Sol, São Carlos-SP

Instituto Nacional de Pesquisas Espaciais (INPE)  
Avenida dos Astronautas, 1758 – São José dos Campos-SP

CEBIMar – Centro de Biologia Marinha  
Rodovia Manoel Hypólito do Rego, km. 131,5 - Praia do Cabelo Gordo, São Sebastião-SP

Restaurante Carmella  
Rod. Prestes Maia, 641 – Barequeçaba, São Sebastião-SP