

# SWIM Agenda

**Sunday, June 22, 2008**

6:00pm-8:00pm	Early Bird Social & Poster setup, Registration Open
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**Monday, June 23, 2008**

7:00am-5:00pm	Conference Registration Open
7:30am-8:30am	Morning Refreshments
8:30am-9:00am	Welcome & Announcements - Christian Langevin, Meeting Organizer, and Others
<b>General Session I: Case Studies in Salt Water Intrusion</b>	
9:00am-9:25am	Assessing Well Field Impacts on Water Quality in the Upper Floridan Aquifer in Southwest Florida - <i>Terry Bengtsson</i> (Featured Speaker)
9:25am-9:40am	Modeling of Historical Evolution of Salt Water Distribution in the Phreatic Aquifer in and around the silted up Zwin Estuary Mouth (Flanders, Belgium) - <i>Luc Lebbe</i>
9:40am-9:55am	Assessment of Groundwater Resources by a Seawater Intrusion Mathematical Model in the Rmel Coastal Aquifer (Morocco) - <i>Alex Chang</i>
9:55am-10:10am	Dynamic Groundwater Equilibrium during a Base Level Drop: The Dead Sea Case - <i>Yael Kiro</i>
10:10am-10:40am	Refreshment Break
<b>General Session II: Case Studies in Salt Water Intrusion, continued</b>	
10:40am-10:55am	Simulation of Processes Controlling Migration of Saline Water and Brine above a Flooded Salt Mine in Western New York, USA - <i>Richard Yager</i>
10:55am-11:10am	A Case Study of Finite-Element Numerical Modeling on Salt Water Intrusion for the Ping-Tung Plain - <i>Jing-Yea Yang</i>
11:10am-11:25am	Salt Water Intrusion in the Shallow Aquifers of Venice - <i>Eloisa Di Sipio</i>
11:25am-11:40am	Vulnerability Assessment of Groundwater Aquifer due to the Construction of the City Tunnel in Malmö, Sweden - <i>Kenneth M Persson</i>
11:40am-12:10pm	Cancelled
12:10pm-1:25pm	Lunch in Sunset Terrace
<b>General Session III: Management of Coastal Aquifers</b>	
1:25pm-1:50pm	An Assessment of the Impact of Geologic Heterogeneity on Predictions of Seawater Intrusion in Coastal Aquifers - <i>Whitney Trainor</i> (Featured Speaker)
1:50pm-2:05pm	Artificial Recharge of Fresh Water in the Belgian Coastal Dunes - <i>Alexander Vandenbohede</i>
2:05pm-2:20pm	Management of the Iao and Waihee Aquifer Areas With the Aid of a 3-D Numerical SUTRA Model, Maui, Hawaii - <i>Stephen Gingerich</i>
2:20pm-2:35pm	Pumping of Brackish and Saline Water in Coastal Aquifers: An Effective Tool for Alleviation of Seawater Intrusion - <i>Mohsen Sherif</i>
2:35pm-2:50pm	Managing Seawater Intrusion Using Multiple-depth Monitoring Wells - <i>Wes Danskin</i>
2:50pm-3:05pm	Field Validation of Simulation-Optimization Model for Protecting Excessive Pumping Wells - <i>Namsik Park</i>
3:05pm-3:35pm	Refreshment Break

**Monday, June 23, 2008** (continued)

<b>General Session IV: Variable Density Flow and Transport Modeling</b>	
3:35pm-3:50pm	<b>Benchmarks for Two- and Three-Dimensional Variable-Density Ground-Water Flow Simulators: Analytical Expressions for Unstable Convection</b> - <i>Clifford Voss</i>
3:50pm-4:05pm	<b>Solute Extraction in Variable Density Flow: Shock Wave Driven Transport Compared to Pumping</b> - <i>Shaul Sorek</i>
4:05pm-4:20pm	<b>Use of Image Analysis to Develop New Benchmarking Datasets for Variable Density Flow Scenarios</b> - <i>Rohit Goswami</i>
4:20pm-4:35pm	<b>Modeling of the Potential for Vertically Downward Saltwater Migration from a Dredge Pond</b> - <i>Peter Andersen</i>
4:35pm-4:50pm	<b>Freshwater-Saltwater Mixing Zone in Coastal Aquifers: Biased vs. Reliable Monitoring</b> - <i>Eyal Shalev</i>
4:50pm-5:05pm	<b>Simulation of Coastal Wastewater Injection in Hawaii using SUTRA, and the Value of Compelling Visualizations in Conveying Results to the Non-Specialist Public</b> - <i>Charles D Hunt, Jr.</i>
<b>5:30pm-7:30pm</b>	<b>Welcome Reception on Ocean Lawn</b>

**Tuesday, June 24, 2008**

7:00am-5:00pm	<b>Conference Registration Open</b>
<b>7:30am-8:30am</b>	<b>Morning Refreshments</b>
<b>General Session V: Submarine Groundwater Discharge &amp; Field Studies</b>	
8:30am-8:55am	<b>Analytical Benthic Flux Model Forced by Surface-Water Waves: Application to the South Atlantic Bight, USA</b> - <i>Jeffrey King</i> (Featured Speaker)
8:55am-9:10am	<b>Mechanisms Driving Submarine Groundwater Discharge and Associated Radium Flux: Implications for Use of Radium as a Tracer</b> - <i>Holly Michael</i>
9:10am-9:25am	<b>The Role of Fresh and Saline Submarine Groundwater Discharge in Nutrient Contribution to Coastal Seawater, Dor Bay (Israel)</b> - <i>Yishai Weinstein</i>
9:25am-9:40am	<b>Global Land-Ocean Linkage: Direct Inputs of Water and Associated Nutrients to Coastal Zones via Submarine Groundwater Discharge (SGD)</b> - <i>Hans H. Dürr</i>
9:40am-9:55am	<b>Causes of Borehole Flow and Effects on Vertical Salinity Profiles in Coastal Aquifers</b> - <i>Delwyn Oki</i>
9:55am-10:10am	<b>Characterization of Local Rainwater Lenses in Agricultural Areas with Upward Saline Seepage: Monitoring Results</b> - <i>Perry de Louw</i>
<b>10:10am-10:40am</b>	<b>Refreshment Break</b>

**Tuesday, June 24, 2008** (continued)

<b>General Session VI: Field Studies of Salt Water Intrusion</b>	
10:40am-10:55am	<b>Altered Hydroperiod and Saltwater Intrusion in the Bald Cypress Swamps of the Loxahatchee River</b> - <i>David Kaplan</i>
10:55am-11:10am	Cancelled
11:10am-11:25am	<b>An Investigation of Groundwater Flow on a Coastal Barrier using Multi Electrode Profiling</b> - <i>Søren Erbs Poulsen</i>
11:25am-11:40am	<b>Pumping Test Analyses in an Aquifer with Fresh Water/Salt Water Interface</b> - <i>Liliana Cecan</i>
11:40am-11:55am	<b>Assessing the Extent of Saltwater Intrusion in the Aquifer System of Southern Baldwin County, Alabama</b> - <i>Dorina Murgulet</i>
11:55am-12:10pm	<b>Freshwater Lens Development on Padre Island, Texas</b> - <i>Egon Weber</i>
<b>12:10pm-1:25pm</b>	<b>Lunch in Sunset Terrace</b>
<b>General Session VII: Parameter Estimation</b>	
1:25pm-1:50pm	<b>Incorporating Initial Conditions in the Model Calibration Process</b> - <i>John Doherty</i> (Featured Speaker)
1:50pm-2:05pm	<b>Saltwater Intrusion and Hydraulic Conductivity Estimation in East Baton Rouge Parish, Louisiana</b> - <i>Frank Tsai</i>
2:05pm-2:20pm	<b>General Guidance Concerning Inverse Modeling Techniques and Value of Field Data Types for Seawater Intrusion Simulation</b> - <i>Clifford Voss</i>
2:20pm-2:35pm	<b>Efficient Calibration of Seawater Intrusion Models</b> - <i>Juan José Hidalgo</i>
2:35pm-2:50pm	<b>Calibration of a Density-Dependent Groundwater Flow Model of the Lower West Coast Floridan Aquifer System</b> - <i>Jorge Restrepo</i>
2:50pm-3:05pm	<b>Saltwater/Freshwater Interface Movement in Response to Deep-Well Injection in a Coastal Aquifer</b> - <i>Alyssa Dausman</i>
<b>3:05pm-3:35pm</b>	<b>Refreshment Break</b>
<b>General Session VIII: Geochemistry</b>	
3:35pm-4:00pm	<b>Chemical and Isotopic Evidence for Seawater Intrusion – Examples from the Coastal Aquifers of the Mediterranean and the Dead Sea</b> - <i>Yoseph Yechieli</i> (Featured Speaker)
4:00pm-4:15pm	<b>Base Exchange Indices as Indicators of Salinization or Freshening of (Coastal) Aquifers</b> - <i>Pieter Jan Stuyfzand</i>
4:15pm-4:30pm	<b>Use of Geochemical Tools to Study Groundwater Salinization in Volcanic Islands: a Case Study in the Porto Santo (Portugal) and Santiago (Cape Verde) Islands</b> - <i>Maria Teresa Condesso de Melo</i>
4:30pm-4:45pm	<b>Geochemistry of Phosphorus in a Carbonate Aquifer Affected by Seawater Intrusion</b> - <i>Rene Price</i>
4:45pm-5:00pm	<b>Time Scale of Water-Rock Interaction Processes in the Fresh-Saline Water Interface of Coastal Aquifers</b> - <i>Amos Russak</i>
5:00pm-5:15pm	<b>Utilizing Stable Isotopes (<sup>2</sup>H, <sup>18</sup>O) to Better Identify Different Water Types of the Floridan Aquifer System in Southwest Florida</b> - <i>Ed Rectenwald</i>
<b>5:30pm-7:00pm</b>	<b>Poster Presentations &amp; Social</b>

**Wednesday, June 25, 2008**

8:00am-5:00pm	<b>Optional Field Trip</b>
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## **Thursday, June 26, 2008**

7:00am-5:00pm	<b>Conference Registration Open</b>
7:30am-8:30am	<b>Morning Refreshments</b>
<b>General Session IX: Variable Density Flow &amp; Transport Modeling</b>	
8:30am-8:55am	<b>Variable Density Flow and Transport in Tsunami Impacted Coastal Aquifers: Laboratory Investigations in Homogeneous Saturated Porous Media - Meththika Vithanage (Featured Speaker)</b>
8:55am-9:10am	<b>The Delayed Effects of Variable Density Flow on Flow and Heads in Fresh Groundwater - Frans Schaars</b>
9:10am-9:25am	<b>Experimental Mapping of the Saltwater/Freshwater Mixing Zone - Elena Abarca</b>
9:25am-9:40am	<b>Virginia Ground Water Withdrawal Permitting Program – Modeling for Resource Management - Roberta Patton</b>
9:40am-9:55am	<b>A Saltwater Upconing Model to Evaluate Wellfield Feasibility - Gregory Council</b>
9:55am-10:10am	<b>Dispersive Behavior of the Mixing Zone between a Shallow Freshwater Lens and Upward Seeping Saline Groundwater - Sara Eeman</b>
10:10am-10:40am	<b>Refreshment Break</b>
<b>General Session X: Impacts of Increased Water Demand, Optimization Modeling, &amp; Case Studies</b>	
10:40am-10:55am	<b>Brackish Groundwater as a New Resource for Drinking Water, Specific Consequences of Density Dependent Flow, and Positive Environmental Consequences - Theo Olsthoorn</b>
10:55am-11:10am	<b>Analytical Method for Preliminary Management of Pumping and Injection in Coastal Areas - Namsik Park</b>
11:10am-11:25am	<b>Compositional Change of Groundwater Chemistry in the Shallow Aquifer of Small Tropical Island Due to Seawater Intrusion - Ahmad Zaharin Aris</b>
11:25am-11:40am	<b>The Use of Mapping the Salinity Distribution Using Geophysics on the Island of Terschelling for Groundwater Model Calibration - Arjen Kok</b>
11:40am-11:55am	<b>Verifying the Use of Specific Conductance as a Surrogate for Chloride in Seawater Matrices - Robert Mooney</b>
12:10pm-1:25pm	<b>Lunch in Sunset Terrace</b>
<b>General Session XI: Management of Coastal Aquifers</b>	
1:25pm-1:40pm	<b>Salt Water Intrusion Modeling in the Flemish Coastal Plain based on a Hydrogeological Database - Dieter Vandeveldde</b>
1:40pm-1:55pm	<b>Management of Coastal Aquifers -- The Case of a Peninsula -- State of Qatar - Nauman Rashid</b>
1:55pm-2:10pm	<b>Evaluating Safe Yield for Supply Wells in an Aquifer with Fresh Water / Salt Water Interface - Gregory Nelson</b>
2:10pm-2:25pm	<b>Saltwater Intrusion Monitoring in the Biscayne Aquifer near Florida City, Miami-Dade County, Florida: 1996-2007 - Christopher Peters</b>
2:25pm-2:40pm	<b>Dynamics of Negative Hydraulic Barriers to Prevent Seawater Intrusion - Maria Pool</b>
2:40pm-2:55pm	<b>Alternative Approaches for Water Extraction in Areas Subject to Saltwater Upconing - David Tarbox</b>
3:05pm-3:35pm	<b>Refreshment Break</b>
3:35pm-4:00pm	<b>Seawater Intrusion in Australia - A National Perspective of Future Challenges - Adrian Werner (Featured Speaker)</b>

**Thursday, June 26, 2008** (continued)

4:05pm-6:00pm	<b>Planning for 2010 &amp; 2012 SWIMs</b>
6:00pm-7:00pm	Dinner on Own
<b>7:00pm-9:00pm</b>	<b>PEST Fest*</b>

**Friday, June 27, 2008**

7:00am-12Noon	<b>Conference Registration Open</b>
<b>7:30am-8:30am</b>	<b>Morning Refreshments</b>
<b>General Session XII: Variable Density Flow &amp; Transport Modeling</b>	
8:30am-8:55am	<b>Salinization by Free Convection in Heterogeneous Aquifers: Results from a Numerical Modeling Study</b> - <i>Vincent Post</i> (Featured Speaker)
8:55am-9:10am	<b>An Assessment Tool for Aquifer Storage and Recovery in Stratified Coastal Aquifers</b> - <i>Mark Bakker</i>
9:10am-9:25am	<b>Tidal Effects on Transient Dispersion of Simulated Contaminant Concentrations in Coastal Aquifers</b> - <i>Ivana La Licata</i>
9:25am-9:40am	<b>The Influence of Three-Dimensional Dune Topography on Salt Water Intrusion in Marina Romea, Italy: A Numerical Modeling Study Using LIDAR data</b> - <i>Pauline Mollema</i>
9:40am-9:55am	<b>Simulations of the Dynamics of Surface Water-Groundwater Interactions in a Coastal Environment During a 25-Year/72-Hour Storm</b> - <i>William Hutchings</i>
9:55am-10:10am	<b>Numerical Modeling of a Salinity Intrusion Barrier: Saltwater Intrusion Prevention System</b> - <i>Charles Tate</i>
<b>10:10am-10:40am</b>	<b>Refreshment Break</b>
<b>General Session XIII: Effects of Sea Level Rise &amp; Climate Change &amp; Geophysics</b>	
10:40am-10:55am	<b>Impacts of Climate Change on the Coastal Groundwater Systems in The Netherlands</b> - <i>Gualbert Oude Essink</i>
10:55am-11:10am	<b>Climate Change Impact in a Shallow Coastal Mediterranean Aquifer, at Saïdia, Morocco</b> - <i>Júlio Carneiro</i>
11:10am-11:25am	An Investigation into Control of Saltwater Intrusion Considering the Effects of Climate Change and Sea Level Rise - <i>Hany Abd-Elhamid</i>
11:25am-11:40am	<b>Time Domain Electromagnetic Induction and High Resolution Electric Resistivity Soundings to Map Salt Water Intrusion in Coastal Sandy Aquifers, Los Angeles County, California</b> - <i>Ted Johnson</i>
11:40am-11:55am	<b>Large-scale Geoelectrical Measurements to Investigate a Buried Valley and its Interaction to Deep Saltwater Intrusion</b> - <i>Joern Schuenemann</i>
11:55am-12:10pm	<b>Evolution of the Marine Intrusion Using Geophysical Methods after 25 Years in the Motril-Salobreña Aquifer (Southern Spain)</b> - <i>Carlos Duque</i>
12:10pm	<b>Wrap up Conference - Meeting Organizer</b>
<b>12:10pm-1:25pm</b>	<b>Lunch in Sunset Terrace</b>