



*Welcome to the 20th Saltwater Intrusion Meeting (SWIM)*, affectionately referred to as "SWIM", that has been held on a biennial basis since 1968. SWIMs deal with the ever interesting topic of saline ground water in coastal and inland aquifers and are attended by a multi-disciplinary group of people with a wide variety of expertise including chemistry, engineering, geology, geophysics, mathematics, physics, and management. Traditional topics that are covered include the characterization of saline ground water with chemical and geophysical methods, development and

application of mathematical models, and design of effective management strategies for aquifers containing saline ground water. New topics were added in later years, such as the impact of global climate change and sea level rise on freshwater resources, and submarine ground water discharge. The meetings are very successful in bringing together people who are interested in saline groundwater issues: well-known specialists, water managers and students.

The SWIM was first convened in 1968 by the late Professor Dr. W. Richter, who invited several German, Dutch and Danish colleagues to his institute in Hanover, Germany. Dr. Richter felt that these three countries had similar problems with saline ground water and that an informal dialogue would be mutually beneficial. The first SWIM concluded with a consensus to meet again. The next five meetings were organized by countries surrounding the North Sea (1970, Vogelenzang, The Netherlands; 1972, Copenhagen, Denmark; 1974, Ghent, Belgium; 1977, Medmenham, UK; and 1979, Hanover, Germany). The number of meeting participants has steadily grown over the years. Also the countries of interested participants expanded away from the North Sea. Subsequent meetings were organized in Sweden (Uppsala, 1981) and then Italy (Bari, 1983). After a short return to countries of its originating members (1986, Delft, The Netherlands and 1988, Ghent, Belgium) SWIMs were held in a variety of locations across Europe (1990, Danzig, Poland; 1992, Barcelona, Spain; 1994, Cagliari, Italy; 1996, Malmö, Sweden; 1998, Ghent, Belgium; 2000, Miedziezdroje, Poland; 2002, Delft, The Netherlands; 2004, Cartagena, Spain). The last SWIM was held in 2006 in Cagliari, Italy

While the SWIMs were being held in Europe, a separate group was formed around 2000 by Professors Alex Cheng (USA) and Driss Ouazar (Morocco) to meet the growing worldwide needs for a global conference on salt water intrusion. This group, called Salt Water Intrusion in Coastal Aquifers (SWICA), held its first conference in 2001 in Essaouira, Morocco and a second meeting in 2003 in Merida, Mexico. The third SWICA meeting was held together with the 19th SWIM. This joint SWIM-SWICA conference was held in 2006 in Cagliari, Italy. At this joint meeting, participants decided to combine the best features of both meeting series and to merge under the SWIM name. The meeting style would remain informal and collegial as in SWIM, but the venue would become worldwide as in SWICA. The group decided that subsequent meetings will be alternately held outside and within Europe on a biannual basis. The 2008 meeting is being held here, in Florida, USA. The 2010 meeting will return to Europe.

This proceedings book serves as a permanent reminder of the 20th SWIM. It contains nearly 100 papers submitted by participants and reviewed by the scientific committee. We are grateful to all those that helped with this process. Digital copies of the proceedings book will be made available from the website after the meeting.

This meeting would not be possible without the efforts of numerous individuals. We are particularly indebted to our sponsors for their generous contributions. With their support, we were able to offer an affordable registration fee and help fund travel for students in need of assistance. We thank Rene Price and Gregory Allard for arranging the Everglades field trip and John Doherty and Alyssa Dausman for hosting the PEST Fest. We thank The Naples Beach Hotel & Golf Club for providing exceptional facilities and staffing. We also thank the meeting coordinator, Sharon Borneman, for helping to make the 20th SWIM a huge success.

On behalf of the Organizing Committee, we sincerely hope that you enjoy the 20th SWIM. Without your participation, the SWIM would not be possible.

Conference Co-Organizers,

*Christian Langevin, Luc Lebbe, Mark Bakker, and Clifford Voss*