Integrating science and engineering to solve Karst problems

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Published online: 8 July 2012
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Karst topography impacts ground and surface water resources, waste disposal and management, highways and other transportation facilities, structural foundations and utilities and other infrastructure. An interdisciplinary approach is most useful for a better understanding and resolution of problems in karst areas.

The current issue of the journal *Carbonates and Evaporites* constitutes Part I of a two-part topical series featuring articles based on expanded technical and scientific presentations from the 12th Multidisciplinary Conference on Sinkholes and Engineering and Environmental Impacts of Karst, held January 2011 in St. Louis, MO, USA. The next issue will present Part II, the final portion of this topical series on environmental problems in karst.

These two topical issues of the journal are dedicated to Dr. Barry F. Beck, former member of the Editorial Board for *Carbonates and Evaporites*. Dr. Beck passed away on 28 November 2011, at the age of 67 following an extended illness. Beck also served as the founder of the conference series on which these two current topical issues of the journal are based. The first meeting was held in 1984 when Dr. Beck served as director of the Florida Sinkhole Research Institute. After joining the firm of P.E. LaMoreaux and Associates in 1992, Dr. Beck was able to expand the conference series and broaden its scope.

Dr. Beck obtained his bachelor's degree in geology at Rensselaer Polytechnic Institute under the guidance of

Dr. Gerald M. Freidman, founder of the journal *Carbonates and Evaporites*. Both his Master and Ph.D. degrees in geology were earned by Dr. Beck from Rice University in Houston, TX, USA.

Following graduation, Dr. Beck's experiences in caving led him to Puerto Rico to work for the Department of Natural Resources, where he conducted investigations in tropical karst and developed his keen interest in this specialized terrain. In 2004, the National Speleological Society (NSS) presented Barry with their highest award, Honorary Membership, for his lifetime of contributions and study of speleology and karst.

The focus of the conference series is not only to analyze and study the difficulties of working in karst but also to apply a multi-disciplined approach for a better understanding of the issues and a better resolution of the problems. This direct interaction among professionals of differing backgrounds but of a common purpose is one of the most valuable legacies of Dr. Beck. The next meeting of conference series is scheduled for May 2013 in Carlsbad, NM, USA.

The editorial staff is very grateful for the assistance of James Kaufmann of the Missouri Water Science Center, US Geological Survey, whose labor in preparing these manuscripts was remarkable. In addition, the efforts of the conference committee should be recognized, all of whom work to promote the issues of sinkholes and karst and apply state-of-the-practice science and technologies in their everyday work.

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