

FIRST CIRCULAR

A Karst Waters Institute Symposium on

Carbon and Boundaries in Karst

January 7 to 11, 2013

Carlsbad, New Mexico

Background

There is growing interest in the dynamics of both inorganic and organic carbon in karst systems, and especially in the flux of carbon and nutrients between the surface and subsurface and between different components in the karst subsurface. This symposium is especially timely both because of rapid advances in the field and the importance of carbon sequestration in global climate change. It will highlight recent advances in biology, geology, and hydrology that are helping us understand the dynamics of karst ecosystems, especially with respect to carbon. There will be both invited lectures and contributed posters covering the following topics:

- Fluxes and reservoirs in and through epikarst
- Fluxes and reservoirs in and through the phreatic zone
- Lateral inputs into karst—insurgences
- Lateral outputs in karst—resurgences
- CO₂ storage in karst
- Organic carbon sources and carbon quality in karst
- Large scale models and synthesis

As is the tradition with KWI meetings, the symposium will be aggressively interdisciplinary and international.

Scientific Program

Two distinguished scientists will give plenary lectures that will set the framework for the meeting:

- Dr. Jack Stanford, Director of the Flathead Lake Biological Station in Montana, one of the discoverers of the hyporheic zone, and co-editor of the “bible” of groundwater ecology, aptly titled *Groundwater Ecology*.
- Dr. John L. Wilson, Professor of Hydrology at New Mexico Tech, a leading expert on stream-aquifer interactions and the movement of materials through groundwater.

There will be seven thematic sessions with invited speakers. The program is being developed by the program chair, Dr. Daniel W. Fong and the conveners/chairs for the sessions:

- *The Upper Boundary – Epikarst*, convened by Dr. Tanja Pipan, Karst Research Institute at ZRC-SAZU, Postojna, Slovenia
- *The Lower Boundary – Vadose Phreatic Interactions*, convened by Dr. Franci Gabrovšek, Karst Research Institute at ZRC-SAZU, Postojna, Slovenia
- *Lateral Inputs*, convened by Dr. Kevin Simon, School of Biology and Ecology, University of Maine, Orono, Maine
- *CO₂ in Karst*, convened by Dr. Janet Herman, Department of Environmental Science, University of Virginia, Charlottesville, Virginia
- *Sources and Quality of Organic Carbon*, convened by Dr. Annette Summers Engel, Department of Earth and Planetary Sciences, University of Tennessee, Knoxville, Tennessee
- *Synthesis*, convened by Dr. Daniel W. Fong, Department of Biology, American University, Washington, D.C.

In addition to the invited sessions, there will be two evening poster sessions.

Venue

The meeting will be co-sponsored by and held at the new headquarters of the National Cave and Karst Research Institute (NCKRI). The goals of the National Cave and Karst Research Institute are to:

- Advance cave and karst science by conducting, coordinating, and facilitating research.
- Serve as a repository for and provide analysis and synthesis of speleological (cave related) information.
- Foster partnerships and cooperation in cave and karst research, education, and management programs.
- Promote and conduct cave and karst educational programs.
- Promote national and international cooperative programs that further cave and karst research, education, and stewardship.
- Develop and promote environmentally sound and sustainable cave and karst management practices.

The meeting site is close not only to Carlsbad Caverns National Park but also Guadalupe Mountains National Park, and makes an ideal starting place for a visit to the many parks and features of the desert southwest. Participants will be housed in nearby hotels in Carlsbad.

The nearest major airport is El Paso, Texas, approximately 2.5 hours from Carlsbad. Shuttle buses to and from the El Paso airport will be available on January 6 and 12 for a cost of \$50 one way. Smaller airports are located in Hobbs and Roswell, New Mexico, about 1 hour's drive from Carlsbad. Rental cars are available at all airports. There is an U.S. Immigration and Naturalization checkpoint between El Paso and Carlsbad, so be sure to have identification with you.

Mid-Conference Excursion

On Wednesday, January 9, we will have an all day excursion to Carlsbad Caverns National Park, a World Heritage Site, for a tour of Carlsbad Caverns and either a hike in Slaughter Canyon or a tour of Slaughter Canyon Cave. Carlsbad Caverns National Park is one of three national parks developed around a cave, the other two being Wind Cave and Mammoth Cave. Carlsbad Caverns is specially known for the beauty and extent of its formations, and the large flights of Mexican free-tailed bats that occur in the summer. The park contains excellent examples of southwestern American desert landscape as well.

Post-Conference Excursion

Plans are in the works to offer a post-conference excursion to Grand Canyon National Park, with a return to the El Paso airport on Friday, January 20.

Post-Conference Publication

All participants will be invited to submit a paper, due at the end of the conference, January 11, 2013. The paper must be in accordance with the style requirements of *Acta Carsologica*. Each paper will be limited to 5000 words and 8 tables/figures, without prior arrangement with the editor. Review papers are especially welcome.

All papers will be subject to peer review and submission does not guarantee publication. There will be a two step acceptance procedure. It first must be accepted by the Special Editor (David Culver) and then by the journal editor (Franci Gabrovšek).

The anticipated publication date is October, 2013.

Registration Information

Registration fee for the meeting will be \$500 (\$300 for students), which includes all lunches, a Monday evening reception, a Friday banquet, and the Wednesday excursion to Carlsbad Caverns National Park. Participants will also be provided with the special issue of *Acta Carsologica*. The program and book of abstracts will be made available to participants on a digital memory stick. Additional fees will be charged for

airport transportation and the post-conference excursion. Housing is not included, and information on local motels and rates will be provided in the second circular.

Timetable

June 1, 2012—registration opens

November 1, 2012—abstracts due

December 1, 2012—registration closes