## ORGAAUZATION

The 5th International Symposium on Karst will be organized by researchers from the Centre of Hydrogeology at the University of Malaga (CEHIUMA) and the Spanish Geological Survey (IGME), in the framework of their "Advanced Hydrogeological Studies" partnership.

## Organizing Commitee

Bartolomé Andreo Navarro (CEHIUMA) Juan Antonio Barberá Fornell (CEHIUMA) Luis Carcavilla Urquí (IGME)
Francisco Carrasco Cantos (CEHIUMA)
Juan José Durán Valsero (IGME)
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Sergio Martos Rosillo (IGME)
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## Scientific Commitee

Bartolomé Andreo (University of Málaga, Spain) Alice Aureli (UNESCO, París)
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Lhoussaine Bouchaou (University of Ibn Zohr, Agadir, Morocco) Francisco Carrasco Cantos (University of Malaga, Spain) Zhang Cheng (Karst Dynamics Laboratory, Guilin, China Yuan Daoxian (Institute of Karst Geology, Guilin, China) Nathalie Doerfliger (BRGM, France)
Wolfgang Dreybrodt (University of Bremen, Germany) Juan José Durán (IGME, Spain)
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Francesco Fiorillo (University of Sannio, Italy)
Stephen Foster (International Association of Hydrogeologists, United Kingdom)
Nico Goldscheider (Karlsruhe Institute of Technology, Germany)
Chris Groves (Western Kentucky University, USA)
Jonh Gunn (University of Birmingham, United Kingdom) Pierre Yves Jeanin (SISKA, Switzerland)
Cao Jianhua (Karst Dynamics Laboratory, Guilin, China) Neven Kresic (AMEC, Washington, USA)
Neno Kukuric (IGRAC, The Netherlands)
James LaMoreaux (P.E. LaMoreaux and Associates, Inc., USA) Barbara Mahler (USGS, USA)
Nicolas Massei (University of Rouen, France)
Jacques Mudry (University of Franche-Comté, France) Severin Pistre (University of Montpellier 2, France) Antonio Pulido Bosch (University of Almeria, Spain) Nataša Ravbar (Karst Research Institute, Slovenia) Moumtaz Razack (University of Poitiers, France) Philippe Renard (University of Neuchâtel, Switzerland) Tadej Slabe (Karst Institute, Postojna, Slovenia) Brian Smith (Barton Springs Conservation District, Austin, Texas) Zoran Stevanovic (University of Belgrade, Serbia) Iñaki Vadillo Pérez (University of Málaga)
William White (Pennsylvania State University, USA) Steve Worthingthon (Worthington Groundwater, Canada) François Zwahlen (University of Neuchâtel, Switzerland)

## Venue min Dates

The Symposium will be held at the Rectorate Building of the University of Málaga (Cervantes Avenue, 2). This historical building is located in the center of the Málaga city (http://www.uma.es/servicio-comunicacion/cms/menu/dondeencontrarnos), at 20 minutes from the Málaga International Airport and 10 minutes from Bus and Train stations.
Other dates of interest in the course of the Symposium's organization are:

- Deadline for receipt of completed manuscripts:
$10^{\text {th }}$ August 2014 25 August 2014
- Deadline for receipt of final manuscript: $10^{\text {th }}$ September 2014


## REGMTRATION

Registration fee: 300 euros
This includes: Attendance, Springer book and Proceedings CD, Coffee tea breaks, welcome reception, intra-symposium field trip and gala dinner.

For registration in the Symposium:
http://cehiuma.uma.es/en/inscrip_sika2014a.asp


## MORE INFORMATMON

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## OVERVIEW OR PRESENTATVON

Karst is the result of climatic and hydrological evolution of soluble rocks (carbonates, evaporates, conglomerates) particularly during the recent geological history of the Earth. The action of water has generated a great range of karstic features that are part of our natural heritage and which on occasion form major tourist attractions. Karst areas often serve as crop land or as substrates for other human activity. One quarter of the world's population uses water of karst aquifers. Karst is highly fragile and the exploitation of its resources or inappropriate land uses gives rise to environmental problems (water pollution, subsidence, flooding, changes in the subterranean environment, etc.).

The specificity of the karst medium is fully accepted at all levels of scientific knowledge, as shown by the existence of specific international journals on karst and specific karst committees in most of the international associations concerned with water. This is the case of the International Association of Hydrogeologists, www.iah.org/karst. In addition, various international conferences are periodically organized in which karst hydrogeology is the main topic. One of them is the International Symposium on Karst (SIKA), organized every four years in Malaga (Spain), of which the 5th edition is scheduled for 14-16 October 2014. In the framework of SIKA, active partnership of IAH - Karst Commission is expected and the main annual meeting of the IGCP 598 project of UNESCO "Environmental Change and Sustainability in Karst Systems" will also be organized.

## OBJEGTIMES

The symposia on karst that have been held periodically in Malaga (Spain) since 1992 are intended to be an international forum for scientific debate on the progress made in research into karst environments. The main objective of the 5th International Symposium on Karst (SIKA 2014) is to discuss and disseminate the latest trends in research into karst media on the basis of the results obtained with different methodologies in various karst areas in the world.


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The following themes are to be addressed in the framework of this Symposium:
Karst Hydrogeology: water resources assessment, groundwater protection.

- Methods to study karst aquifers: hydrodynamic, hydrochemistry, isotopes, dye tracers.
Karst Geomorphology and landscape. Geodiversity and Natural Heritage.
- Mining and Engineering in Karst media: mining and large structures (tunnels, dams, etc.), $\mathrm{CO}_{2}$ storage. - Karst cavities: touristic caves, paleoclimatic and paleohydrological records.


## Communicanlons and Procesomes or THAE ShMPOSMM

According to 1 st circular, the peer-reviewed contributions accepted by Scientific Committee before 15th April 2014 are now in press for edition as Springer book.
Nevertheless additional contributions can be submitted and presented (oral and poster) in the Symposium. Subjects of interest will be experiences, techniques used and results obtained in scientific research on karst. There is no charge to authors for submitted papers. Papers accepted by the Scientific Committee will be made available to participants in an electronic version. A few selected peerreviewed papers will be published as a special issue of the international journal Environmental Earth Sciences

Authors wishing contribute with additional communications to be published as electronic version of the 5th SIKA Proceedings should submit their manuscripts before 10th August 2014. The guidelines for authors can be consulted on the Symposium web page (http://cehiuma.uma.es/en/ sika2014.asp).

Official language of the Symposium will be English. Communications should be given in this language (orally or as posters). However, papers written in French and Spanish will be accepted for publication in electronic version.
The Malaga Academy of Science will give a special award taking into account criteria of quality and other aspects concerning the geographic location of the Symposium.

- Field
- Field trip 3: Evaporite karst areas (Fuente de Piedra and

Archidona wetlands)

## TRANANAG COURSE

After the Symposium (17th October 2014) 7th Edition of
training course on Karst Hydrogeology -HYDROKARST-
After the Symposium (17th October 2014) 7th Edition of
training course on Karst Hydrogeology -HYDROKARSTwill be held (max. 30 people).

## ACCOMODATYON

The hotels available in the city of Málaga are listed on the following web page: http://www.malagaturismo.com/en.
Any inquiry concerning accommodation and travel arrangements can be made through VIAJES HALCÓN, Calle Hilera, 3, 29007 Málaga. Contact: Ignacio Guinamand; halcon634@halcon-viajes.es, phone:+34-952283800.


## EXGUREOONS

During two days before the Symposium (12th and 13th October 2014) a field trip will be organized to Grazalema karst areas in Cádiz province. Besides, an intra-Symposium field trip (15th October) will be organized to visit other karst areas in Malaga province:
Field trip 1: Torcal de Antequera and Alta Cadena
Field trip 2: Nerja Cave and Coastal Karst area.

