



International Commission for Ground Water (ICGW)

Annual Report April 2018

Report prepared by Aldo Fiori and Laura Foglia, President and Secretary of ICGW

Vice Presidents: Corinna Abesser, Gunnar Nutzmann, Jichun Wu

<http://iahs.info/Commissions--W-Groups/ICGW-Groundwater.do>

Conferences and sessions

IAHS Assembly – Port Elizabeth 2017

Sessions:

- *Advancements in modeling and characterization of aquifer*. Conveners: Alberto Bellin, Aldo Fiori, Muhterem Demiroglu, Corinna Abesser
- *Methodologies for risk assessment of groundwater contamination*. Conveners: Felipe P.J. de Barros, Antonio Zarlenga, Alraune Zech
- *Innovative ICT tools for water management and science*. Conveners: Laura Foglia, Rudy Rossetto, Mary Hill, Melody Sandells, Berit Arheimer

EGU 2018 – General Assembly, Vienna

- Session: HS8.1.4 *Subsurface flow and solute transport: Concepts, modelling, observations and applications of dispersion, mixing and reactive transport in heterogeneous media*. Convener: Alraune Zech; Co-Conveners: Marco Dentz, Sabine Attinger, Aldo Fiori, Felipe de Barros, Antonio Zarlenga (<http://meetingorganizer.copernicus.org/EGU2018/session/26637>)
- Session: HS5.2 *Water resources - assessment, management, and allocation - in (semi-)arid regions*. Convener: Jan Friesen; Co-Conveners: Ralf Ludwig, Leonor Rodriguez-Sinobas, Laura Foglia (<https://meetingorganizer.copernicus.org/EGU2018/session/26608>)

GQ2019 Liege and collaboration with IAHS

The next Groundwater Quality (GQ) conference will take place in Liege (Belgium). The GQ has always been a trademark conference for ICGW, starting from the 1993 edition in Tallin, Estonia.



Communication is active between ICGW, the GQ2019 organizers and IAHS in order to foster possible interactions and collaborations between IAHS-ICGW and the International Association of Hydrogeologists (IAH).

IUGG General Assembly 2019, Montreal

Proposed Session: *Innovative ICT tools for water management and science.*

Convener: Laura Foglia.

Co-Conveners: Berit Arheimer, Andrea Brookfield, Mary Hill, Rudy Rossetto, Melody Sandells

ICGW is in contact with IAHS to propose a joint session for IUGG 2019.

Unsolved Problems in Hydrology (UPH) Initiative

ICGW has coordinated discussion for the identification of a few unsolved questions related to groundwater, that resulted in the following questions: (website of the UPH Initiative:

<https://www.linkedin.com/groups/13552921>)

- *Why removal of contaminant from groundwater by pump-and-treat does not work?* Posted by Aldo Fiori
- *Why assessing groundwater resources and their variation in space and time is a daunting, though dramatically needed, endeavour?* Posted by Alberto Bellin
- *What are the main processes controlling transport and transformation of contaminants across scales?* Posted by Aldo Fiori
- *Why transport modeling in the subsurface is often inaccurate and fraught with uncertainty?* Posted by Felipe de Barros
- *Where and why is the largest global store of freshwater (groundwater) connected to other parts of the hydrologic cycle?* Posted by Tom Gleeson
- *What controls the source of water to wells?* Posted by Kevin Befus
- *Are some of these “unsolvable” instead of “unsolved”? For some of these, is the real issue how do we proceed given what we will not know (for example for groundwater characterization)?* Posted by Mary Hill

Website

The Commission is still working on the complete revamp of the previous and outdated ICGW website. The data transfer from the University of Alabama website to the official IAHS website is now complete. New sections have been added and some preliminary content has been uploaded, although more work needs to be done. The geographical analysis of the IAHS members who expressed interest in ICGW has also been uploaded in the home page of the Commission. The



work toward a new web platform, which is meant to be a useful reference for groundwater hydrologists, is still in progress.

The ICGW is supporting the effort of the FREEWAT project (www.freewat.eu) in which a new open source, GIS-based tool for water resources management has been developed. During the development of the FREEWAT project, classes have been organized worldwide and the FREEWAT developers are still available for short courses to promote the use of the tool. From the FREEWAT download statistics we noticed a strong interest on the software in Africa and Central and South America and a dedicated page has been developed in the new ICGW website to promote the use of the free software and to encourage other developers to participate in the development of this new promising resource for students, professors, stakeholders, public and private entities.

Get involved!

ICGW continues to enhance scientific and international experiences for its members. Our meetings bring scientists together from throughout the world. ICGW seeks new and more involved members. Strong participation is personally invigorating because the problems of concern are so important to life worldwide.

To join ICGW activities, contact ICGW secretary Dr. Laura Foglia (lfoglia@ucdavis.edu). For additional information, please consult our web site at:

<http://iahs.info/Commissions--W-Groups/ICGW-Groundwater.do>

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