

# **Annual Report 2015**

# Early Career Hydrogeologists' Network (ECHN) of IAH

#### 1. Introduction

The Early Career Hydrogeologists' Network (ECHN) was established during the reorganization of the commissions and working groups of the International Association of Hydrogeologists (IAH) on July 1st, 2011. The ECH Network aims to support hydrogeologists at the start of their professional careers and to promote their involvement in IAH affairs. The ECH Network focuses on information sharing, networking and strengthening the status of early career hydrogeologists within IAH.

#### 2. ECHN STRUCTURE AND ECHN STEERING COMMITTEE

The present structure of the network consists of a Steering Committee (SC), led by a Chairperson and two Co-chairs and Task Teams supported by a group of Advisors as some of the founding members of the network. To ensure active participation of the ECHN steering committee, members are invited to join the committee for one year as part of the task teams. Following this time, members can re-apply if able to continue involvement. Membership of the steering committee should not be automatically renewed to allow for new member involvement, changing priorities of existing members and also reflect that involvement may be task specific or due to geographical location, e.g. assisting in a specific annual IAH congresses organizing committee.

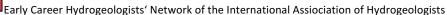
After the IAH Congress held in Rome (September 2015) the ECHN Steering Committee was renewed as follow:

- Rui Hugman (Portugal) and Kelley Swana (South Africa) joined the SC,
- Lindsay McMillan (UK), Matthew Currell (Australia) and Ross Clark (Scotland) decided not to renew their commitment with ECHN SC, although being available to support the network activities,
- Matthys Dippenaar (South Africa) resigned as co-chair and Carlos Maldaner (Canada/Brazil) was asked to take the position.

At December 2015 the ECHN Steering Committee was the following:

ECHN Executive: Re Viviana (ECHN Chair), Gillian Hurding and Carlos Maldaner (ECHN Co-Chairs).

ECHN Task Team Members: Junzhi Wang (China), Raquel Sousa (Portugal), Sebnem Arslan (Turkey), Tirza Contreras (Honduras).







ECHN Advisors: Judith Flügge (Past Director), Mark Cuthbert and Matthys Dippenaar (Past co-chairs).

This amounts to 5 members from Europe, 1 from Asia, 2 from Americas, and 1 from Africa.

All the information about the ECHN-SC are regularly update and available online at <a href="https://echn.iah.org/steering\_committee">https://echn.iah.org/steering\_committee</a>

#### 3. ACTIVITIES

#### **3.1 Meetings of the Steering Committee**

During the reporting period, steering committee meetings were held on February 13<sup>th</sup>, May 27<sup>th</sup>, July 29<sup>th</sup> and 2015 via Skype.

SC also met in September 2015 during the IAH Congress held in Rome. In this occasion a second meeting, open to interested member was also organized in order to welcome potential SC members.

#### **3.2 S**ESSIONS AT CONFERENCES

# 3.2.1. IAH International congress

The 42<sup>nd</sup> IAH Congress held in Rome, Italy, from September 18 – 18, 2015, was a great success for early career hydrogeologists, encouraging their involvement in IAH matters, enabling networking and developing their professional careers. Thanks to the support of the Organizing Committee and IAH Central, the Early Career Hydrogeologists' Network of IAH (ECHN) was able to offer some outstanding events for interested junior hydrogeologists, including a dedicated early career hydrogeologist poster and oral presentation awards, and a thematic social function

Many offers were realized concerning the better promotion of early career hydrogeologists at the congress. These included:

- Attendance to IAH Council meeting by the ECHN director, Viviana Re.
- Highlighting ECHN delegates on congress badges.
- Highlighting ECHs with the ECHN logo in the power point presentation (ECHN logo was made available for download in the conference website) and stickers on poster presentations.
- Affordable accommodation alternatives and tips for visiting Rome were prepared in collaboration with ECHN-Italy made available both on the conference website and ECHN one.







- A thematic session entitled "Tips for writing a knock-out paper Meet the editor of the Hydrogeology Journal. Question time for Early Career Hydrogeologists", organized in collaboration with Hydrogeology Journal. Speaker: Cliff Voss, Executive Editor of the HJ. Chairs: Viviana Re (ECHN Director) and John Chilton (IAH Executive Manager). HJ associated editors also joined the session and actively participated to the discussion. The session was attended by around 80 people.
- The active presence of ECHN SC members at the IAH booth during the whole conference and the organization of the IAH Book Exchange activity together with the IAH Secretariat.
- An annual meeting of the ECHN followed by a social event organized in collaboration with the financial support of IAH-Italy, and attended by more than 100 participants.
- The Coolest Paper Award Celebration during both the IAH and ECHN Annual General Meetings.
- Early Career Oral Presentation and Poster Prizes (organized in collaboration with the Organizing Committee), awarded during the closing ceremony to Clement Duvert (best oral presentation) and Luca Traverso (best poster presentation). The evaluation commission was composed by ECHN-IAH members (Viviana Re and Matthys Dippenaar), IAH-Italy board members (Giovanni Barrocu and Marco Masetti), and council representative (Wendy Timms). IAH-Italy generously provided the winners two travel grants (300 Euros).

All activities have been promoted and documented with pictures on both ECHN social media and website. Information are available at: https://echn.iah.org/iah-2015-congress-rome-italy.

# 3.2.2. Other regional and national Congresses

During 2015 ECHN members attended different regional and national congresses, where both IAH ad ECHN activities were promoted. In addition, ECHN was officially involved in the following initiatives:

- ECHN (represented by Gillian Hurding) was invited to present its initiatives and provide support for the creation of a ECHN-Ireland branch during the IAH Ireland annual conference held in Dublin (20th 22nd April 2015).
- ECHN (represented by Viviana Re) was invited to contribute with an oral presentation to the panel session on "Young professionals workshop: Future water challenges and the Sustainable Development Goals" during the XV World Water Congress (Edinburgh, 25-29 May 2015).





#### 4. EXCHANGE AND DISSEMINATION OF KNOWLEDGE

Since the beginning of ECHN's activities, the LinkedIn group has been used as platform for information sharing and discussion. We post jobs and conferences announcements, we run polls and, during the IAH annual meetings we use it to promote special sessions and events.

The profile of the group is regularly updated by Tirza Contreras and Sebnem Arslan. All SC members contribute posting news and update in the group page. The network supports the information sharing possibilities for early career hydrogeologists, and is providing a support network for members to discuss and develop ideas or schemes at LinkedIn. The network is actively recruiting new members from this platform, supported by the newly established Facebook page (administered by Gillian Hurding) and Twitter account (administered by Viviana Re).

The ECHN website, launched in 2014 (<a href="https://echn.iah.org/">https://echn.iah.org/</a>) is currently administered by Carlos Maldaner and Raquel Sousa. The website is constantly updated with news and pictures to help promote both ECHN and IAH activities at international level.

As part of our commitment with Knowledge exchange, ECHN is an active component of the IAH Working Group on Education Materials. Viviana Re is actively contributing to the working group since its establishment in 2013 and Matthys DIppenaar also joined at end 2014.

# 5. ECHN Branches

The ECHN National Groups allow ECH's to network and share technical information with other hydrogeologists in their own country and/or city. Examples of events include technical presentations, hydrogeological tours or socializing with local/national experts in the field of hydrogeology.

Current National branches are: ECHN-Australia (<a href="http://www.iah.org.au/echn/">http://www.iah.org.au/echn/</a>), ECHN-Italy (<a href="http://www.iahitaly.it/index.php/iah-italia/gruppi-di-lavoro-nazionali/echn-italia">http://www.iahitaly.it/index.php/iah-italia/gruppi-di-lavoro-nazionali/echn-italia</a>), ECHN-South Africa and ECHN-United Kingdom.

All information concerning the creation of new branches worldwide is available on the ECHN website (https://echn.iah.org/echn-national).

#### 6. COOLEST PAPER AWARD

In 2015 the second edition of the coolest paper award was launched (https://echn.iah.org/2014-coolest-paper) with the aim of energizing the early career hydrogeologist community and encourage the discussion of new and existing papers The definition of 'cool' has been deliberatively left open to interpretation to inspire a





wide range of nominations and voting. The competition was divided in two phases. A nomination period where we asked ECH to nominate any hydrogeology paper published (online or in volume) during 2014 in any peer-reviewed journal that inspired with its originality, creativity, thoroughness or any other criteria. In the second phase we asked ECH to vote for the nominated papers. The winner of the competition was announced on the ECHN website and ECHN Linkedin, while the award ceremony took place during the Annual General Meeting. The winner of the competition is Dr. Antonio Hernández-Espriú, Universidad Nacional Autónoma de México (UNAM) with the paper: "The DRASTIC-Sg model: an extension to the DRASTIC approach for mapping groundwater vulnerability in aquifers subject to differential land subsidence, with application to Mexico City" Dr. Hernández-Espriú was invited to present his work at the 2015 IAH International Congress, in Rome, Italy on Friday, September 18th, 2015 (12:15 – 12:30) in the Session S8.7 – Hydrogeological mapping for sustainable management, protection, evaluation and valorization of groundwater resources.

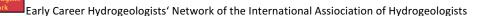
For the realization of the Coolest Paper Award 2014 ECHN-IAH benefited from the support of IAH (offering 3 books from the IAH book series and a free IAH membership for 2015 to the winning author), IAH-Italy (offering the registration fees for the winning author) and UNESCO-IHP (providing financial support for the travel expenditures – airplane ticket- to the winning author to attend the congress in Rome). Besides IGRAC and UNESCO-IHE were also very supportive in the promotion of the competition, helping ECHN to realize some promotional videos.

### 7. COLLABORATIONS WITH OTHER IAH NETWORKS AND SISTERS ASSOCIATIONS

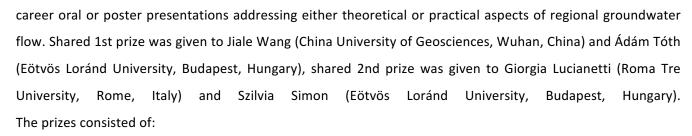
# 7.1. REGIONAL GROUNDWATER FLOW COMMISSION (RGFC)

A competition for the 'Best Research Paper on Regional Groundwater Flow' will be organized by the Regional Groundwater Flow Commission (RGFC) of IAH with the support of IAH Executive and in collaboration with the Early Career Hydrogeologists' Network (ECHN) of IAH at the 42nd IAH Congress, to be held in Rome. Prizes were awarded for the best oral or poster presentations addressing either theoretical or practical aspects of regional groundwater flow. All early career hydrogeologists ("within 10 years of graduation and with a degree in hydrogeology or a related discipline"), including non-members of the IAH could enter the competition by submitting the attached application form and accepted abstract to the IAH Regional Groundwater Flow Commission (regionalgwflow.iah@gmail.com) before 31<sup>st</sup> August 2015.

During the Congress, a panel of experts evaluated the oral and poster presentations based on technical quality, presentation and also relevance of regional groundwater flow. Four prizes were awarded for the best early







- three one-year memberships for 2016 provided by IAH
- additional prizes granted by IAH–RGFC
- announcement of the three best papers at the closing ceremony of IAH 2015.

#### 7.2. IAH-BURDON NETWORK

During the IAH congress in Rome ECHN members met Alan McDonald (Chair of the IAH-Burdon Network) to evaluate the possible establishment of joint initiatives and a close collaboration between the two networks. In view of the current renewal of IAH-Burdon Network it was agreed to foster collaboration and the development of new activities. Based on these premises, ECHN was asked to appoint a member to become the IAH-Burdon Network co-chair. ECHN proposed Viviana Re for this position.

# 7.3. UNESCO-GRAPHIC (GROUNDWATER RESOURCES ASSESSMENT UNDER THE PRESSURES OF HUMANITY AND CLIMATE CHANGE)

ECHN director, Viviana Re, attended the GRAPHIC meeting held in Rome on September 13<sup>th</sup> to present the network and to discuss the possibility of joint initiatives. After her presentation during the meeting it was decided to launch a call for a "thematic group articles" on Hydrogeology Journal targeted to Early Career Research on Groundwater and Climate Change. Practical arrangements for this joint action were initiated after the IAH Congress 2015, with the support of Marc Leblanc and Jason Gourdak (GRAPHIC), Clifford Voss and the HJ team. The "thematic group articles" call will be launched in 2016.





#### 8. Special issue for Environmental Science and Pollution Research

In co-operation with the Early Career Hydrogeologists Network (ECHN) of the International Association of Hydrogeologists (IAH), a special issue of Environmental Science and Pollution Research was launched in 2015. The special issue is aimed at showcasing the valuable, cutting-edge research being carried out by young scholars in earth and environmental sciences. This "Call for Papers" goes out to outstanding research scientists under the age of 38 who are seeking an avenue to publish their graduate and scientific research. The topics of the special issue will cover, but are not limited to: Ecohydrology, Environmental science and engineering, Environmental chemistry, Engineering geology, Geochemistry, Geophysics, Hydrology, Hydrogeology, Hydrogeochemistry, Water environment and environmental change.

Guest Editors: Dr. Peiyue, Li Ph.D., Prof. Ken Howard Ph.D. and Dr. Matthew Currell. Numbers of papers to be published: 15-20. Detailed information at: https://echn.iah.org/call-for-papers.

#### 9. WORLD WATER DAY CELEBRATIONS

In occasion of the World Water Day 2015, ECHN launched a call to engage all ECHs worldwide in the event celebrations. ECHs were asked to contribute to a special website photo gallery showcasing different "Water Moments" highlighting the hydrogeologists in supporting sustainable development. All pictures, together with the call for action were posted in a dedicate section of the ECHN-IAH website (https://echn.iah.org/worldwater-day). Selected pictures were also used for the IAH website and newsletter.

#### 10. MISCELLANEOUS

During 2015, ECHN has contributed several articles to IAH "e-News" and "News and Information" publications.

#### Outlook

During 2016, the following issues will be addressed by ECHN:

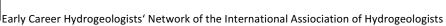
# IAH Congress 2016, Montpellier, France.

For the IAH Congress 2016 the following items will be addressed:

Low-cost ECH accommodation, ECH labeling (in the handbook, on badges, etc.), specific short courses, ECH best presentation prize, ECH co-chairs for technical session, ECH representative in scientific committee, organization of the joint ECHN-HJ joint session, ECHN annual meeting and social event.

Providing support to the activities for the celebration of the 60<sup>th</sup> IAH anniversary.







- Provide support to the development of a mentoring scheme, in close collaboration with IAH
  Secretariat.
- Realization the 3<sup>rd</sup> edition of the coolest paper award.
- Fostering the collaboration with IAH-Burdon Network.
- Realization of the thematic group article on HJ in collaboration with GRAPHIC.

June 18, 2016

Viviana Re

On behalf of ECHN-IAH