A short introduction to the Young Hydrologic Society

Caroline Aubry-Wake,
Canadian Young Hydrologic Society Executive Committee
Canmore, May 2018
About

▪ A bottom-up initiative to stimulate the interaction and active participation of *young hydrologists* within the hydrological scientific community.

▪ What is a “*young hydrologist*”?

Anybody that thinks that he or she can benefit from and/or contribute to the YHS, that focuses on the *early career (MSc, PhD, Post-Doc) hydrological scientific community*, but is not strictly limited to.
Objectives

- **Facilitate** connections among hydrologists early in their careers
- **Organize** events to enhance the professional development of early-career hydrologists
- **Provide** a central information platform for early-career hydrologists
- **Create** awareness of current and future research topics within hydrology
- **Make** the scientific community more accessible to early-career hydrologists
- **Stimulate** Early Career leadership at relevant organizations
Structure
Board (2016-2017)
Chair: Nilay Dogulu (Middle East Technical University, Ankara)
Co-chair: Wouter Berghuijs (ETH Zürich)
Secretary: Harsh Beria (University of Lausanne)
Member: Andrea Popp (Eawag)

Board (2015-2016)
Chair: Wouter Berghuijs (University of Bristol)
Co-chair: Tim van Emmerik (Delft University of Technology)
Secretary: Nilay Dogulu (Middle East Technical University, Ankara)

Website
Maarten Snoorenburg (Deltares)
Shaun Harrigan (Centre for Ecology & Hydrology)
Marius Florianic (ETH Zürich)

Streams of Thought, Hallway Conversations, Research “Hylights”
Nilay Dogulu (Middle East Technical University, Ankara)
Kevin Roche (Northwestern University)
Wouter Berghuijs (ETH Zürich)
Tim van Emmerik (Delft University of Technology)
Adam Wiestowski (University of Colorado)
Maarten Snoorenburg (Deltares)

EGU session organizers
Hannes Müller (Leibniz Universität Hannover)
Ina Pohle (Bremenburgische Technische Universität Cottbus)
Maarten Snoorenburg (Deltares)
Shaun Harrigan (Centre for Ecology & Hydrology)
Marius Florianic (ETH Zürich)
Wouter Berghuijs (University of Bristol)
Tim van Emmerik (Delft University of Technology)
Nilay Dogulu (Middle East Technical University, Ankara)
Claudia Teutschbein (Upsala University)
Liekke Melsen (Wageningen University)
Wouter Knoben (University of Bristol)
David Wright (University of Adelaide)

AGU HqS committee
Evan Kipnis (Chair) (University of Utah)
Niel Clees (Co-Chair) (University of Wyoming)
Sheila Saia (Cornell University)
Natasha Krell (Princeton University)
Kevin Roche (Northwestern University)
Adam Wiestowski (University of Colorado at Boulder)
Harsh Beria (Indian Institute of Technology at Kharagpur)
Vanessa Garayburo Caruso (University of New Mexico)
Allison Goodwill (University of Illinois at Urbana-Champaign)
Chelsea Morris (Cornell University)
Emily Voytek (Colorado School of Mines)

Canadian Young Hydrologic Society
Nadine Shatilla (McMaster University)
Kelly Biai (McMaster University)
Lauren Somers (McGill University)
Caroline Aubry-Wake (U. Saskatchewan)
Pierrick Lamontagne-Gagné (McGill University)
Sophie Wilkinson (Waterloo)
Cody Ross

Country representatives
Austria – Daniel Klotz
Bangladesh – Shahadat Hossain
Ethiopia – Fasil Teshome Worku
Germany – Hannes Müller, Ina Pohle
Greece – Nikolas Vavlas
Ireland – Shaun Harrigan
Jordan – Mohammad Alqadi
Kenia – Ruth Katui Nguma
Nigeria – Isaac Adeleji, Bethel Ukaez Ugochukwu
Norway – Jonanthan Rizzi
Pakistan – Shabeh ul Hasson
Russia – Georgy Ayel
Senegal – Ansoumana Bodian
Serbia – Nikola Zlatanovic
South Africa – Coli Nzabandzaba
Sudan – Modathir Zaroug
Sweden – Claudia Teutschbein
Switzerland – Andrea Popp, Marius Florianic
Turkey – Nilay Dogulu
First years...

- Establishment 10-2012
- LinkedIn

2013
- Getting in touch with the YHS

2014
- Future of scientific meetings
- Student conference
- Water Pop-ups
- How to write a paper in hydrology
- Meet the expert in hydrology

2015
- Teaching hydrology
- Hydroinformatics

EGU activities
AGU activities
EGU & AGU activities
Past activities since Canadian YHS inception in 2015

*Primary affiliation with CGU-HS*
- 2016: “Challenges and opportunities in Canadian hydrology” workshop (50 ECRs)
- 2017: “Progression of a scientific career in academia” seminar (60 ECRs, ~13% of CGU attendees)

Current activities
- 2018: “Careers in hydrology: Options and insights” workshop and panel discussion (expected 60+ ECRs)
- 2018: “Tips and Tricks for publishing in hydrology” workshop
- GWF Annual Science Meeting (in collaboration with GWF YP group)
- 2018: Inaugural GWF Young Professionals workshop and social events
How to write a paper

Key skill, but rarely taught in university programs.

European Geosciences Union
General Assembly 2017
Vienna | Austria | 23-28 April 2017
EGU.eu

SC24/HS12.2 ECS
How to get your hydrology paper published - dealing with editors, reviews and revisions (co-organized)

Conveners: Ina Pohle O, Wouter Berghuijs O, Nilay Dogulu O, Marius Florancic O, Hannes Muller O,

Wouter Berghuijs
@wberghuijs

How to get your paper published short course at #egu17 by @rosswoodskiwi
@YoungHydrology, yhhs.com

1:16 PM - 24 Apr 2017

8 Retweets 14 Likes

How to write a paper

How to write a scientific paper in Hydrology?

In the last few years, the Hydrological Sciences (HS) Division of the EGU has organised a very successful short course during EGU, titled "How to write (and publish) a scientific paper in hydrology". Each presentation has great tips for hydrology students from layout of your paper, what should go in each section and how the publishing system works from a
Meet the Expert in Hydrology

Great "meet the expert" session on synergy across scales #EGU17 #hydrology @YoungHydrology @reedh20

Meet the Expert in Hydrology: Is research at different spatial scales connected?
Posted on May 3, 2017 by Young Hydrologic Society

A -Streams of Thought- contribution by Wouter Knoben, Shaun Harrigan, David Wright, Wouter Berghuijs

Scaling (i.e. the transfer of knowledge across scales) and scale issues (i.e. the associated problems) are at the heart of most hydrologic puzzles. In the most recent “Meet the Expert in Hydrology” session, organized at the EGU General Assembly 2017 in Vienna, YHS invited three speakers to identify to what degree their research is connected, influenced by, and influencing research at other spatial scales. By evaluating the current state of research and discussing future directions we tried to shed some new light on the question “Is hydrological research at different spatial scales connected?”. This is what we learned...

Hydrological research takes place across extremely different spatial scales (from pore-scale to global). Experimentalists have an understanding of detailed hydrological processes of hillslopes and headwater catchments, model developers generate larger-scale models, and applied scientists are frequently interested in answering one of the most pressing questions in hydrology: “How can we best predict the response of a catchment to climate change?”...
Scientific sessions with a twist

HS1.11  
Learning from hypotheses and failures in hydrology  PICO session

Convener: Hannes Müller Q, Inge Wiekenkamp Q
Co-Convener: Anne Fangmann Q, Georg Houben Q, Ina Pohle Q, Michael Stockinger Q, Lena M. Tallaksen Q, Tim van Emmerik Q, Seth Westra Q

PIcos / Mon, 24 Apr, 15:30–17:00 / PICO spot A

HS1.10  
How my water research made the news  PICO session

Convener: Stefanie Lutz Q
Co-Convener: Andrea Popp Q, Tim van Emmerik Q, Manuel Felipe Rios Gaona Q

PIcos / Wed, 26 Apr, 13:30

HS1.6  
Water Sciences Pop-Ups  PICO Session

Convener: Tim van Emmerik Q
Co-Convener: Shaun Harrigan Q

PICO / Mon, 13 Apr, 10:30–11:08 / PICC

Great turnout at the hypothesis PICO

#EGU17
Short courses and workshops

Quick recap on EGU 2017 Short course on Hydrological Forecasting
Posted on July 14, 2017 by shaunahogan

For the first time at this year’s EGU 2017, HYCEN and the YHS jointly organised a Short course on Hydrological forecasting and...

Hydroinformatics for hydrology: geostatistical modelling
Posted on July 5, 2017 by Young Hydrologics Society

This year’s focus for “Hydroinformatics for hydrology” short course at EGU GA 2017 was geostatistics. Being introduced to the fundamentals of geostatistics, the participants (>60), the room was geostatistical methodology.

András Bárdossy (Univ of Crete)
You can find the lecture here.

An Introduction to C
Geostatistics in R (by post later this month)

Opinion papers in hydrology: Why and how? (short course) at EGU 2017
Posted on May 3, 2017 by benchmark

Using R in Hydrology (short course) at EGU 2017
Posted on May 2, 2017 by shaunahogan

"Using R in hydrology" short course at EGU 2017 was a great success, attracting over 100 participants (in a room with 80 seats, see photo!). We covered a wide range of hydrologically focused applications of the R programming language: reproducible documents with rmarkdown, Using R as a GIS, Hydrological modelling with airGR, as well as Visualisation, Extreme value statistics and Trend analysis of discharge time-series. The slides with all the code and example datasets are available here.
Informal activities

Hydrodrinks was very well attended again this year! #egu17 #hydrology
Similar activities

Separate committees established

YHS core members
Quick recap on EGU 2017 Short course on Hydrological Forecasting

For the first time at this year’s EGU 2017, HEPEX and the YHS jointly organized the course on Hydrological Forecasting. The course was focused on real-time hydrological forecasting and topics covered included:

- Estimating predictive uncertainty (e.g. ensembles & post-processing)
- Reducing predictive uncertainty (e.g. data assimilation)
- Forecast verification (graphical & numeric approaches)
- Risk-based decision making game for operational water management – it’s fun!

~50,000 visits from > 150 countries
Social media presence

- LinkedIn Group
  385 Members

- Facebook Group
  1.6 k Members

- Twitter Page
  1870 Followers
  @YHS
  @CanadianYHS

- Youtube Channel
  34 Subscribers
  37 Videos
  2277 Views
In Summary

- **Idea:** YHS is a catalyst for involvement of early career hydrologists within the scientific community (which already led to big changes within e.g. EGU, AGU, IAHS, CGU)

- **Current status:** YHS runs a sweep of online and offline activities annually reaching ~1500 people offline and ~7500 online.

- **Future:** remain focused on shaping ECS involvement in the scientific community (we’re happy with most current aspects!), but focus on better global coverage.

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Creating Community for Early-Career Geoscientists

Student involvement in geoscience unions: A case study from hydrology

By Wouter R. Berghuijs, Shaun Harrigan, Evan L. Kipling, Nilay Dogulu, Marius Florisencic, Hannes Müller, Ina Pohle, Sheila M. Salo, Frank Sedlar, Maarten Smaorenburg, Claudia Teutschbein, and Tim van Emmerik. 16 December 2015

The American Geophysical Union (AGU) and the European Geosciences Union (EGU) play central roles in nurturing the next generation of geoscientists. Students and young scientists make up about one quarter of the unions’ active memberships | *American Geophysical Union*, 2013.
Join us!

@YHS
@CanadianYHS