

2014 International Hydrology Prize and Tison award medalists	1	New co-editor of <i>Hydrological Sciences</i> Journal	6
11th Kovacs Colloquium, Paris, 16-17 June 2014, final programme	3	Fifith STAHY International Workshop	6
The new IUGG Union Working Group on History	4	Evolving Water Resources Systems:	7
National Hydrological Associations - a new network to advance science, practice and capacity	4	Putting Prediction in Ungauged Basins into Practice	7

INTERNATIONAL HYDROLOGY PRIZE MEDALISTS AND TISON AWARDEES

Congratulations to the recipients of the International Prize (Dooge medal and Volker medal) and the Tison award which were awarded at the Dooge-Nash Symposium held 24–25 April in Dublin, Ireland.

The 2014 International Hydrology Prize

The International Hydrology Prize is awarded annually by IAHS, with UNESCO and WMO, to two people who have made an outstanding contribution to hydrological science. Nominations for the Prize are made by National Committees and forwarded to the Secretary General for consideration by the Nomination Committee. The Committee consists of the President and a Vice-President of IAHS and representatives of UNESCO and WMO.

As of 2014, two medals are awarded under the International Hydrology Prize: the Dooge medal and the Volker medal. Both medals are intended to distinguish outstanding achievements by hydrological scientists but with a different focus. The Dooge medal is aimed at fundamental contributions to the science of hydrology, whereas the Volker medal is aimed at outstanding applications of hydrological science for the benefit of society at large.

The **Dooge medal** was presented to Demetris Koutsoyiannis (Greece), and the **Volker medal** was presented to Jun Xia (China).



Ms Blanca Jiménez-Cisneros (*Director, Division of Water Sciences, UNESCO*), *Hubert Savenije and Bruce Stewart (Director, Climate and Water, WMO), present the Dooge medal to Demetris Koutsoyiannis.*



Ms Blanca Jiménez-Cisneros (Director, Division of Water Sciences, UNESCO), Hubert Savenije and Bruce Stewart (Director, Climate and Water, WMO), present the Volker medal to Xia Jun.

The citations and responses by Demetris Koutsoyiannis and Xia Jun are available at: <u>http://iahs.info/About-IAHS/Competition--Events/International-Hydrology-Prize.do</u>

The 2014 Tison Award Paper

The IAHS Tison Award, established in 1982, aims to promote excellence in research by young hydrologists. The Award is granted for an outstanding paper published by IAHS in a period of two years previous to the deadline for nominations. In 2014 it was awarded by Demetris Koutsoyiannis, Co-editor of *Hydrological Sciences Journal (HSJ)*, to David Lavers and David Hannah, co-authors (with Christel Prudhomme) of: *Lavers, D., Prudhomme, C. & Hannah, D.M.*, 2013. European precipitation connections with large-scale mean sea-level pressure (MSLP) fields, published open access in *HSJ* 58(2), 310–327. The paper can be viewed on line free of charge – it is open access. Details and citation available at: http://iahs.info/About-IAHS/Competition--Events/Tison-Award.do



The shared Tison Award is presented. From left: Christophe Cudennec, David Lavers, Hubert Savenije, David Hannah and Demetris Koursoyiannis (photo by Wovencontent)

11th Kovacs Colloquium, Paris, 16-17 June 2014, UNESCO, Paris

HYDROLOGICAL SCIENCES AND WATER SECURITY: PAST, PRESENT

The conveners are G. Young, A. Mishra, S. Demuth and C. Cudennec

This Colloquium is the continuation of a series of biennial international scientific meetings organized jointly by the **International Hydrological Programme** (IHP) of UNESCO and the **International Association of Hydrological Sciences** (IAHS) in the most challenging fields of water resources research. It combines invited papers with a panel discussion and a poster session.



des Nations Unies • pour l'éducation, • la science et la culture

Hydrologique International

The Colloquium addresses the emergence and development of water security concepts over the past decades, the state of present day ideas and opinions, and will look to likely developments in the future. Of particular importance are inclusion of the new IAHS decade of research "Panta Rhei – Change in Hydrology and Society" and its relevance to Water Security. The proceedings will be published as IAHS Publ. 366.

Day 1: Monday 16 June 2014

9.30-11.00 Chair: Mr Siegfried Demuth, UNESCO IHP; Rapporteur: IAHS

Responding to the challenges of Water Security: the Eighth Phase of the IHP 2014–2021 Ms Blanca Jiménez-Cisneros, Director, Division of Water Sciences, UNESCO;

Secretary of the UNESCO International Hydrological Programme (UNESCO IHP)

Panta Rhei, the new science decade of IAHS

Mr Hubert Savenije, President IAHS

Water Security – science and management challenges Mr Howard Wheater, Global Institute for Water Security, Canada.

with Howard wheater, Global Institute for water Security, Canada.

11.30–13.00 Chair: Mr Christophe Cudennec, Secretary General, IAHS; Rapporteur: IHP

Anthropocene Futures and Water Security

Mr Frans Berkhout, Future Earth, France

Hydrological extremes and security

Mr Zbignew Kundzewicz and Mr Piotr Matczak, Institute for Agricultural and Forest Environment, Polish Academy of Sciences, Poznan, Poland, and Potsdam Institute for Climate Impact Research, Potsdam, Germany

New problems and opportunities of oil spill monitoring systems Mr Grigory M. Barenboim *et al.*, Institute of Water Problems of Russian Academy of Sciences, Russia

15.00-16.30 Chair: Mr Anil Mishra, UNESCO IHP; Rapporteur: IAHS

- Water availability, water quality and water governance: the future ahead Mr José Galizia Tundisi *et al.*, Instituto Internacional de Ecologia, Brazil
- Uncertainty in regional impacts of climate change: a growing challenge for water management in the developing world Mr Pradeep Mujumdar, Indian Institute of Science, Bangalore, India
- Integrated water resources management using engineering measures Ms Yan Huang, Water Resources Commission, China

Day 2: Tuesday 17 June 2014

9.00-11.00 Chair: Mr Johannes Cullmann, Chair, Intergovernmental Council of the IHP; Rapporteur: IAHS

Measuring what we manage – the importance of hydrological data to water resources management Mr Bruce Stewart, Climate and Water, WMO, Switzerland.

What part of natural flow can be considered a water resource?

Mr Vazken Andreassian et al., IRSTEA - National Research Institute of Science and Technology for Environment and Agriculture, France.

Water and Energy nexus: findings of the World Water Development Report 2014 Ms Michela Milleto, World Water Assessment Programme, Italy.

Capacity building for hydrological change – using a Blended Learning approach Mr Heribert Nacken, UNESCO Chair in Hydrological Change, RWTH University, Germany.

11.30–12.45 Panel Session, Moderator: Mr Gordon Young, Past President, IAHS

Rapporteur: IHP and IAHS. Panel Speakers:

- Mr António Chambel, International Association of Hydrogeologists
- Mr Roger Falconer, International Association for Hydro-Environment Engineering and Research
- Ms Ania Grobicki, Global Water Partnership
- Ms Blanca Jiménez-Cisneros, UNESCO IHP
- Mr Alberto Montanari, IAHS

THE NEW IUGG UNION WORKING GROUP ON HISTORY

The IUGG Union Working Group on History (WGH) was established in November 2012. Its purpose is to raise the historical consciousness of IUGG Association members and to help preserve IUGG scientific and institutional history.

As one of its main tasks, the WGH will promote historical content in Union and Association scientific sessions and will sponsor stand-alone history sessions at Union General Assemblies, with emphasis placed on the 100th anniversary of the IUGG in 2019. The WGH will encourage publication of historical articles by Association members in relevant journals, in books, and on websites. As a secondary role, the WGH will serve as a consultant to the IUGG and Association leadership on the preservation of institutional and scientific records.

The WGH Executive Committee consists of ten members, one member representing each of the eight IUGG Associations and two professional Historians of Science. The representative of IAHS is dr. Maurits Ertsen from Delft University of Technology. Find out more about him at <u>http://bit.ly/Uefhis</u>.

During the upcoming IUGG-2015 meeting in Prague, the WGH will hold a Union Symposium on "*Revolutions in Earth Sciences: from different spheres to a common globe*". During the past 100 years the vast majority of scientific studies, whether stand-alone or internationally coordinated, were influenced by at least three kinds of revolution: the move from localized data collection to gathering large volumes of data from global networks and their processing by electronic computers; innovations in observational technologies, e.g. from point measurements via moving platforms on ships and aircraft to global networks of polar orbiting and geostationary satellites and the use of robotic instruments; and radically new lines of thought such as, e.g., the global movement of entire continents (plate tectonics), indirectly inferred models of the Earth's internal structure, or the dominant role of atmospheric and ocean eddies in weather and climate. Nine overview presentations will illustrate important milestones in all the scientific spheres.

NATIONAL HYDROLOGICAL ASSOCIATIONS – a new network to advance science, practice and capacity

Over the years, hydrologists in many countries have joined together to form *National Hydrological Associations* (NHAs). On many occasions the *International Association of Hydrological Sciences* (IAHS) has collaborated with many of these and, by the start of the twenty-first century, it had come to realize that much could be gained if these NHAs were to be in contact with each other as well as with IAHS and from this arose the idea of establishing a Network of NHAs:

http://iahs.info/Links/National-and-Regional-Hydrological-Associations/Network-of-National-Hydrological-Associations/

Between 2005 and 2009 discussions with representatives of a number of NHAs showed an interest on their part in establishing such a Network, but it also clarified the need to involve the Associations themselves in any further planning. Accordingly, a First Meeting of NHAs was convened by IAHS in June 2011 at which it was agreed that IAHS should facilitate the establishment of a Network which would have a light structure, aim to promote the development and application of the hydrological sciences by means of collaboration between NHAs and provide an opportunity for them to undertake joint projects if they so wish.

On the basis of these discussions, a Second Meeting of NHAs was organized in conjunction with the Scientific Assembly that was held in Gothenburg, Sweden in July 2013. All present signed an agreement establishing the Network and recognizing the Meeting as its First General Assembly. The Founding Members of the Network are listed below.

Diversity with a common purpose

During the eight years of preparatory discussions one thing became clear, while all NHAs share similar national goals and may have many other features in common, they can be very diverse as regards their origins, formal status and means of operation.

At the start of the nineteenth century, when many of the international geoscience associations were established, there were very few associations supporting the hydrological sciences at national level. The

situation had changed markedly by the close of the twentieth century and there are now many associations promoting the science and practice of hydrology within countries, working with individual hydrologists and, as appropriate, with other national organizations and agencies. Between 2005 and 2010, IAHS compiled a list of Associations which included a total of 59 national and regional bodies. The current version of the IAHS list may be found under "Links" on the IAHS website (http://iahs.info).

Hydrology, both as a science and a practice, has developed within many different contexts at national level and as an aid to meeting a variety of needs. There is therefore a great diversity in NHAs concerned with freshwater both within countries and between countries. Some are an interest group within a national engineering organisation, such as the Hydrology and Water Resources Panel of Engineers Australia, reflecting a history of hydrology as an engineering discipline. Most have links to the technical and engineering aspects of hydrology, while only the Swiss Society for Hydrology and Limnology explicitly combines the hydrological and limnological sciences. There are surprisingly few Associations that serve both hydrological and meteorological interests, with only the Nepalese and Croatian Associations combining both disciplines.

There is often overlap between NHAs and water resource associations, such as those linked to the International Water Resource Association (IWRA) or the World Water Council (WWC). Most water resource associations focus on aspects of the hydrological sciences that relate directly to a resource base, where water is used and managed. Some NHAs, such as that in France, have been established within a governmental context, while others, such as those in Germany and Italy, are the outcome of efforts by individual hydrologists.

Given the wide range of topics covered by hydrology as a science, it is only to be expected that many countries will have more than one NHA: for example one concerned with surface water and another with groundwater. On the one hand, long-standing co-operation in the sciences between neighbouring countries has naturally led in some instances to the establishment of Associations which serve more than one country while, on the other hand, countries with clear internal regional divisions, such as federal states, may have Associations that serve the hydrological community in a particular province or territory.

While the common objective of most NHAs is the promotion of the science and practice of hydrology at national level, professional networking and the dissemination of knowledge and research results are also integral. At a minimum, almost all Associations hold regular meetings and seminars, facilitating both the transfer of knowledge and the opportunity for interaction and conversations between members. Many also hold annual or biannual conferences to bring together a broader membership and publish either technical magazines and journals.

American Institute of Hydrology	Finnish Hydrological Association
Asia Pacific Association of Hydrology and Water	Hydrological Society of Canberra
Resources	Hydrological Society of South Australia Inc.
Asociación Geohidrológica Mexicana	Nederlandse Hydrologische Vereniging
Association of Hydrologists of India	Nigerian Association of Hydrological Sciences
British Hydrological Society	Nordic Association for Hydrology
Canadian Geophysical Union - Hydrology Section	Norwegian Hydrological Council
Canadian Society for Hydrological Sciences	Sociedad Chilena de Ingeniería Hidráulica
Comité National Français de Géodésie et	Società Idrologica Italiana
Géophysique - Sciences Hydrologiques	South African Committee of IAHS
Deutsche Hydrologische Gesellschaft	Schweizerische Gesellschaft für Hydrologie und
European Geophysical Union – Hydrology	Limnologie
Sciences Division	-

Founding Members of the Network

The future of the Network

No formal programme of work has been developed for the Network for its first years of existence. However, the following three topics have been adopted as the principal foci for future activities: (a) promoting the science and practice of hydrology; (b) holding joint symposia on topics of common interest; and

(c) exchanging good practice in the context of working with young people.

It was agreed that the Second General Assembly of the Network will be held in Prague in conjunction with the 26th IUGG General Assembly (22 June to 2 July 2015). The first part of the meeting will be devoted to Network business and the second part to discussion of the three topics listed as (a), (b) and (c) above. Both sessions would be open to all who might wish to attend,

The Founding Members and IAHS itself have great interest in publicizing the Network and are actively seeking new Members. They are open to all requests for information regarding the Network and its activities. Queries should be addressed to Arthur J. Askew at <u>arthuraskewge@bluewin.ch.</u> **Fiona Dyer & Arthur Askew**

NEW CO-EDITOR OF HYDROLOGICAL SCIENCES JOURNAL



Mike Acreman joins **Zbigniew W. Kundzewicz** and **Demetris Koutsoyiannis** as a co-editor of the *Hydrological Sciences Journal* Mike Acreman is science area lead on natural capital at the Centre for Ecology and Hydrology, Wallingford, UK, and visiting Professor at University College London. His work focuses on the flows of ecosystem services from natural assets of the environment. His previous expertise is in environmental flows in rivers and wetland hydrology.

In the UK he is advisor to the Defra, Environment Agency and Natural England, with recent work focusing on defining environmental flows for the Water Framework Directive and hydrological functions of wetlands. He was a lead author on freshwater systems in the UK National Ecosystem Assessment and on the science committees of Natural England and WWF-UK. Internationally he is an advisor to IUCN, the Convention on Wetlands (Ramsar) and the World Bank. He has recently edited Special Issues of *Hydrological Sciences Journal* on Ecosystem Services of Wetlands and

on Environmental Flows. He is currently leading work for the Conventions on Biological Diversity and Wetlands (Ramsar) on the role of ecosystems in the water cycle.

FIFTH STAHY INTERNATIONAL WORKSHOP



The ICSH-IAHS Commission is pleased to announce the fifth Statistics in Hydrology (STAHY) international workshop, to be held in Abu Dhabi, that will focus on statistical methods for hydrological applications

Following the success of the earlier STAHY workshops in Capri (2008), Taormina (2010), Tunis (2012) and Kos (2013), we are looking forward to welcoming members of the statistical hydrology community to present their most recent findings at the workshop.

when: 10–11 November 2014 where: Abu Dhabi, UAE

website: www.stahy2014.org

abstract submission deadline: 5 August 2014



Organized in collaboration with the Taha BMJ Ouarda, Masdar Institute of Science and Technology



Evolving Water Resources Systems: Understanding, Predicting and Managing Water–Society Interactions

Editors: Attilio Castellarin, Serena Ceola, Elena Toth & Alberto Montanari



Proceedings of ICWRS2014, Bologna, Italy, June 2014 A selection of 89 peer-reviewed papers by research groups active in 31 different countries in five continents addressing topics associated with water resources assessment and management in a changing environment, and particularly the two-way interaction between water and society, the focus of the Panta Rhei IAHS research initiative (http://www.iahs.info/pantarhei). Water resources systems, catchment hydrology, eco-hydrology, groundwater hydrology, water security and socio-hydrology are driving scientific areas, which are covered. This collection provides knowledge for advancing our understanding of water–society

interactions, improving integrated water resources systems management and governance, and addressing the water problems for the next generations. IAHS Publ.364 (2014) ISBN 978-1-907161-42-1, 548 + xii pp. £118. Abstracts available at <u>iahs.www.info</u>

PUTTING PREDICTION IN UNGAUGED BASINS INTO PRACTICE



The second book resulting from the IAHS decade of PUB (Prediction in Ungauged Basins) is now published and is available in electronic or printed format from the Canadian Water Resources Association.

Edited by J.W. Pomeroy, C. Spence and P.H. Whitfield

"The PUB decade strongly established hydrology as an integrated Earth science with high societal relevance and it brought much new energy to the hydrological community as a whole:" Hubert Savenije, PUB Chair (and current IAHS Chair) See <u>http://www.cwra.org/en/component/content/article/20-publications/239-cwrabookstore-2</u> to purchase



International Association of Hydrological Sciences Association Internationale des Sciences Hydrologiques

Officers of IAHS	, 2011–2015 (unless indicated otherwise)	Contacting IAHS and the Commissions
President:	H. SAVENIJE, The Netherlands (2013–2017)	Information about all aspects of IAHS is available from the IAHS web site: <u>www.iahs.info</u> or:
Secretary General: Vice-Presidents:	C. CUDENNEC, France D. HUGHES, South Africa L. REN, China T. WAGENER, LIK	Prof. Christophe Cudennec, at <u>cudennec@agrocampus-ouest.fr</u> or IAHS, UMR SAS, Agrocampus Ouest, CS 84215, F-35042 Rennes Cedex, France Registration is free, please register online at the web site or contact:
Co-Editors	Z. W. KUNDZEWICZ, Poland D. KOUTSOYIANNIS, Greece	Mrs Jill Gash, Membership Secretary, IAHS Press, Centre for Ecology and Hydrology, Wallingford, Oxfordshire OX10 8BB, UK iilly@iahs.demon.co.uk