

Professor Philippe Gourbesville – Université Côte d’Azur, France

Election statement

Biography



After obtaining a PhD on unsteady free surface flows and hydrological modelling at Louis Paster University, Strasbourg (France), I started my professional life as a hydraulic engineer with a French engineering consulting company and took part in numerous projects in France, in Europe, and in several countries in Asia and Africa. After ten years of engineering, I joined the faculty of Geo Sciences of the University of Nice Sophia Antipolis as an associate professor - and full professor since 2006 - of Hydroinformatics. I served as Dean of the faculty for five years before becoming the President of Polytech Nice -Sophia – University Nice Sophia Antipolis for two consecutive mandates of five years.

In 2004, I coordinated a consortium of 5 European universities, 9 international institutions, 60 water sector industrial actors for establishing the EuroAqua joint M.Sc. on Hydroinformatics and water management. This M.Sc. was the first jointly awarded in Europe under the Erasmus Mundus framework and has received continuous support from the European Commission for two decades. This program has welcomed about 3.500 students from more than 80 nationalities who joined the M.Sc. or attended some of the various regional activities organized by the consortium such as HydroEurope, HydroAsia and HydroLatinAmerica.

With my research team, in addition to numerous projects, I conducted research activities within 16 European Commission projects under FP5, FP6, FP7, Horizon 2020 frameworks as a participant, work package leader, and coordinator. Most of those projects were related to the development of hydraulic and distributed deterministic hydrological modelling systems that could be used to simulate extreme situations, to assess impacts, and to formulate mitigation strategies for resilience improvement. The developed approaches and solutions have been deployed in numerous environments at the international scale and offered numerous Ph.D. opportunities.

In addition to IAHR activities, I am actively engaged with the Société Hydrotechnique de France (SHF – French Hydrotechnic Society) as a management board member, division chair and initiator of the SimHydro biannual conferences since 2010. I also serve in different national and international working/advisory groups and as a legal expert for several major flood events and for numerous hydro-environmental projects. In 2015, I was one of the founders of the Asian Water Council (AWC) promoting innovative solutions for water issues in Asia and I am currently serving as Vice President.

On the editorial side, I published 94 journal papers, 107 conference papers, 59 book chapters and edited 7 books and proceedings. I am currently serving as associate editor for the Journal of Hydroinformatics, Journal of Hydraulic Engineering, River, and as co-editor in chief for La Houille Blanche / Hydrosience Journal. I received several awards from scientific and professional organisations including the “Grand Prix d’Hydrotechnique” award from SHF in 2011. I am currently invited/honorary professor in 16 universities and institutes in Europe and Asia mainly.

IAHR involvement

In 1993 I attended the IAHR congress in Tokyo and joined the association. The event was the first opportunity to meet the hydraulic international community and initiate a professional network that has been continuously expanded since. Over the last three decades, I have been committed to this community. Following the 1993 IAHR congress and the seminar on Hydroinformatics, I attended the first International Conference on Hydroinformatics (HIC) at IHE, Delft, the Netherlands. I took an active part in this emerging field through the joint IAHR-IWA Hydroinformatics committee. In 2006, I led the organizing committee of the 7th HIC in Nice, France. In the following years, I served within the leadership team and am currently the committee's honorary chair. In addition to my commitment to the Hydroinformatics committee and to the development of IAHR by participating in events, promoting initiatives, serving in several committees, and engaging in editorial activities, I took part in the European Division from its very early stage and served within this division. From 2007 to 2011, I served for two terms as a Council member.

Personal statement

IAHR is the place for excellence in hydraulic research since 1935. The association is born in Brussels in 1935 by the willingness of 66 visionary directors of hydraulic laboratories. The initial objective of the new association was to promote international cooperation in hydromechanics and its application to hydraulic engineering. At that time, improving and consolidating knowledge were priorities for supporting the industrial development of hydropower, navigation, and aeronautics. Over the past decades, accompanying the evolution of the hydraulic sector and the demands of modern societies, IAHR has expanded its expertise fields to encompass hydro-environment issues by promoting innovative research and engineering solutions. With this continuous evolution, IAHR has federated and consolidated, through its members' community, a unique and vivid set of expertise and competencies able to deliver the most advanced research results, and at the same time, to take part in most of the major water engineering projects at the worldwide scale.

The recent UN 2023 Water conference has underlined the need to engage without delay massive investments and actions in the water sector to keep the hope to achieve, by 2030, the 17 Sustainable Development Goals (SDGs) and especially the SDG 6 directly related to water. With this event, the international community has recognized and understood the central place of water and the numerous connections existing among the SDGs and especially with those related to food and energy production. Within this context that requests to multiply at least by four the current investments, IAHR has a key role to play and should be seen as a solution provider. All our members are engaged with knowledge production and the development of operational solutions. The association should be the place where those results are shared but also where the transfer to the industry and to the Society should take place. As joining the various international bodies involved in the global water challenges, interactions and synergies with the industrial sector should be a priority for our association.

Today water challenges request to develop a holistic approach that encompasses water uses, hydro environment preservation, and water-related hazards mitigation. Obviously, addressing the complexity of the water-related processes requests to invest within the fundamental knowledge but also revisiting the water management principles and the current engineering practices to build more resilient communities. IAHR is the place for innovation. The association gathers all components for formulating and promoting actively innovative and disruptive solutions that can contribute to answering some of the major challenges we are facing. IAHR should promote actively the innovative solutions of its members and be a voice on major challenges to which water experts can contribute.

Within the context of needed innovation and developments, IAHR should welcome students and young professionals. In addition to exciting research topics where all the emerging methods must be mobilized, the water sector is facing the digitalization challenge that offers numerous opportunities for new approaches and solutions. The demand for water professionals in developing countries is tremendous and local capacity-building institutions are frequently not able to cope with the demand of the operational and economic sectors. As at the initial stage of IAHR, cooperative training courses, workshops, seminars, ... should be offered on-site and online with the objective to consolidate local competencies. In addition to the water-related topics, IAHR should also assist and advise its young members on their professional life strategies including entrepreneurship and start-up development. The inclusive participation of the young professionals is vital for our association and for the future of the hydro-environment research and engineering sector.

Today, I commit to bring my dynamism, experience, and international network to continue the development of IAHR. From the sound foundations built by the past presidents, I intend to work with all members to:

- enhance synergy with industrial water actors;
- promote innovation and interdisciplinary activities federating scholars and practitioners;
- promote IAHR views on major water challenges at the international level;
- promote international collaboration especially towards developing countries;
- welcome young professionals and to engage them widely within the association activities;
- increase significantly IAHR membership especially with young professionals;
- Ensure effective governance and management of IAHR as an inclusive association.