

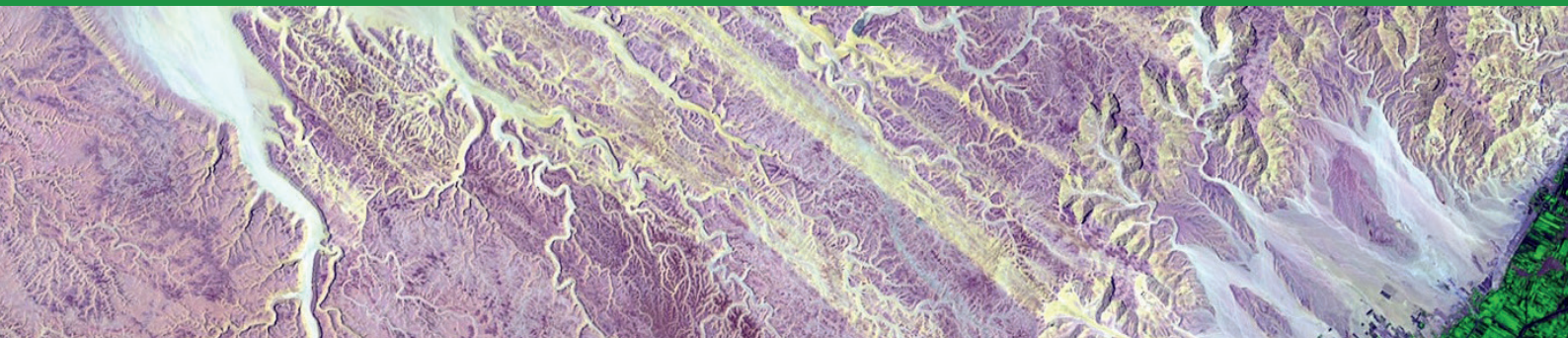


**International  
Science Council**

The global voice for science



# THE ISC AT THE 2023 UN WATER CONFERENCE



## ● WELCOME TO THE INTERNATIONAL SCIENCE COUNCIL (ISC)

You are receiving this welcome pack to get acquainted with some of the key people from the ISC community attending the UN 2023 Water Conference. For any **interview or media queries** with members of the Talent Book, please contact James Waddell (james.waddell@council.science) using the subject line “Media query”.

Take this opportunity to meet some of them in person at the Conference.

## ● ISC VISION: SCIENCE AS A GLOBAL PUBLIC GOOD

The vision of the ISC is of **science as a global public good**. The importance of deliberative scientific understanding to society has never been greater, as humanity grapples with the problems of living sustainably and equitably on planet Earth. It is vital therefore that we safeguard science as a global public good. Its knowledge, data and expertise must be universally accessible and its benefits universally shared.

As a global science organization, we seek to advance this mission by working with our Members and partners at the global level to catalyse and convene scientific expertise, and to advise and influence on issues of major concern to science and society.

You can read more on the ISC’s vision in our paper [Science as a Global Public Good](#).

## ● ISC MISSION: THE GLOBAL VOICE FOR SCIENCE

The mission of the ISC is to act as the global voice for science. As part of that mission, the ISC speaks for the value of all science and evidence-informed decision-making; stimulates and supports international scientific research and scholarship on major issues of global concern; articulates scientific knowledge on such issues in the public domain; promotes the continued and equal advancement of scientific rigour, creativity and relevance in all parts of the world; and defends the free and responsible practice of science.

## ● THE ISC AT THE UN WATER CONFERENCE

The ISC staff at the UN 2023 Water Conference.



**ANNE-SOPHIE STEVANCE**  
*Head of the Global Science Policy Unit  
Senior Science Officer*

Expertise: Political science, Development  
Languages: English, French

Anne-Sophie manages the international science-policy activities related to the Sustainable Development Goals, the post-2015 framework for Disaster Risk Reduction and the new climate agreement. Within these processes, Anne-Sophie coordinates inputs from the international scientific community and supports stronger interface between scientists and policy-makers. Anne-Sophie has also worked on the design and implementation of Future Earth, a new strategic framework for global Earth system research.



**ANTHONY "BUD" ROCK**  
*Senior Advisor*

Expertise: Sustainability, Water and Sanitation, Environment  
Languages: English

Anthony (Bud) Rock currently serves as President and CEO of Grandavenir LLC, an international consultancy to governments and private organizations seeking sustainable approaches to economic growth. Mr. Rock also served as co-founding Principal of Global Water 2020, a foundation-based initiative working to ensure adequate access to water and sanitation for health and security throughout the developing world.

Mr. Rock had a three-decade career in U.S. government service, initially as a physical scientist in the National Oceanic and Atmospheric Administration (NOAA), followed by more than two decades of diplomatic service in the U.S. Department of State. He retired as acting Assistant Secretary of State for oceans, environment, science, technology, and health.



**ANDA POPOVICI**  
*Science Officer*

Expertise: Political science  
Languages: English, Romanian, French

Ana works on the Council's engagement in global policy processes around the Sustainable Development Goals (SDGs), the Sendai Framework for Disaster Risk Reduction and other environmental agreements, mainly done through the Scientific and Technological Community Major Group.

In this role, Anda coordinates inputs from the scientific community into intergovernmental deliberations and fora at the UN with the aim to strengthen the scientific basis of decision-making and governance of sustainable development.



**JAMES WADDELL**  
*Science & Communications Officer*

ISC Contact Point for the Conference

Expertise: Political science, Public Policy, Communications  
Languages: English, French

E-mail: james.waddell@council.science  
WhatsApp: +33 6 34 23 54 05

James shares his time between the communications team and the Council's Global Science Policy Unit which mobilizes scientific and policy expertise in the United Nations and intergovernmental processes. Before joining the unit in 2023, one of his big areas of work has been supporting the ISC COVID-19 Scenarios Project.

He has a rich background in social sciences, public policy and environmental policy. With his passion for these fields, his efforts at the ISC focus on communications and furthering the ISC's work at the United Nations and in global policy processes.

## ● THE ISC EXPERT GROUP ON WATER



### FRANK WINDE

*International Geographical Union (IGU) and lead author of ISC policy brief for the 2023 UN Water Conference*

Expertise: Geography, Mining, Contaminated waters, Water and Sanitation, Impacts of Uranium exposures

**Attending the 2023 UN Water Conference in person**

A Geographer by training, Dr Winde obtained two doctoral degrees at the universities of Halle and Jena in the field of waterborne contaminant transport investigated in central Europe, southern Africa and northern Australia. He worked in South Africa with a focus on mining-related water issues as head of the rewatering research programme of the gold mining industry and later as Professor at North-West University. He has conducted numerous high-level projects on behalf of various Departments of the South African Government including Water and Sanitation, Mineral Resources and Energy and the National Nuclear Regulator as well as in conjunction with UN-Organisations incl. WHO, IARC, IAEA and UNESCO. He is currently working for the state-owned Wismut GmbH that specialises in remediating uranium legacy sites.



### ANTONIO LO PORTO

*National Research Council of Italy - Water Research Institute (CNR-IRSA)*

Expertise:- International Cooperation on water / Water Diplomacy, Water Resources Management, River Basin Management, Watershed modelling, Soil management, Diffuse pollution, Irrigation

**Attending the 2023 UN Water Conference in person**

Antonio Lo Porto is Senior Researcher at the Italian Water Research Institute (IRSA-CNR), in the field of Integrated Water Resources Management and irrigation management and acts as International Liaison Officer in the EU, China, India and USA. He is Leading the Pillar E “Internationalization” of the EU Partnership Water4ALL. He is (Past-)Chair of Euraqua (the network of the public reference Research Institutes on water in 26 EU Member States), Chair of the St. Advisory Board of the Water JPI, member of the Advisory Board of the FACCE JPI (Food, Agriculture and Climate Change), and co-Leader of the Cluster “Water Smart Rural Areas” in Water Europe (previously WssTP, the EU Technology Platform on Water).



### SHABANA KHAN

*Director of the Indian Research Academy and alumna of the Global Young Academy*

Expertise: Disasters geography, Earth and Environmental sciences, Water-related hazards, vulnerability and governance

Dr. Shabana Khan has worked on various water related issues and disasters including water scarcity, drought, and flooding since 2002, and has presented and published several research papers, book chapters, and a policy brief. She has studied both rural and urban areas in developed and developing countries with respect to water related hazards, vulnerabilities, and responses. As a geographer, her research on water has been integrative; she assessed physical, socio-cultural and economic contexts, and has also looked into different theoretical discourses, practical solutions and emerging issues across different sectors and stakeholders.



### STELLA TSANI

*Assistant Professor, Department of Economics, University of Ioannina; Member of the Global Young Academy (GYA)*

Expertise: Economics, Natural resources, renewable hydrocarbons, Water-Energy-Food ecosystem nexus

**Attending the 2023 UN Water Conference in person**

Dr. Stella Tsani has acted as a Body of Knowledge expert, start-up mentor, and trainer for the cross-KIC project of the European Institute of Innovation and Technology (EIT) “Water scarcity in the South”(EIT Food, EIT Manufacturing, EIT Climate, EIT Raw Materials) for the past three years. In 2021, she co-authored a white paper on Innovative solutions to cope with water scarcity and the Review of financial instruments available to startups, scaleups in the water sector. She has participated in high level EU dialogue on nexus issues and policies (Water-Energy-Food-Ecosystems Nexus and Sustainable Development Goals, European Commission). She is also an invited expert member of the foresight group on the Mediterranean basin “MED 2050”, coordinated by Plan Bleu and the UN Environment Program, where she leads work on the Green Deal, marine resources and water management factsheets.

**YUNZHONG JIANG**

*Director of Department of Water Resources Research, China Institute of Water Resources and Hydropower Research (IWHR)*

Expertise: water resource scheduling, water resource informatization, smart water and water resource management

Yunzhong Jiang is currently the Director of the Department of Water Resources, China Institute of Water Resources and Hydropower Research (IWHR), the Secretary General of Global Water Partnership China (GWP China), and the deputy directorial member and the Secretary General of Water Resources Professional Committee of the Chinese Hydraulic Engineering Society (CHES). He was also the Chief Engineer of the National Water Resources Monitoring Capacity Building Project Office under the Ministry of Water Resources (MWR) of China.

**JAN POLCHER**

*Co-chair of the Scientific Steering Group (SSG) of World Climate Research Programme (WCRP) Global Energy and Water Exchanges (GEWEX) program and Director of the French National Centre for Scientific Research (CNRS)*

Expertise: Climate modeling, Climate change

Jan Polcher is Director of Research at Centre National de la Recherche Scientifique (CNRS) and Co-Chair of WCRP's GEWEX Core Project.. His main interest is in climate modeling of the water cycle and in particular the influence of land-surface changes on the mean climate and its variability and prediction of the impact of climate change on land-surface processes.

**JONATHAN TONKIN**

*University of Canterbury. Associate Professor and Rutherford Discovery Fellow*

Expertise: Ecological modelling, Climate change ecology, Freshwater ecology, Biodiversity analysis and synthesis, River management, Flow-ecology linkages, Quantitative community ecology, Ecological forecasting

Jonathan Tonkin is a quantitative freshwater community ecologist. My research is grounded in ecological theory but motivated by a mix of basic curiosity and applied challenges. I seek to solve major challenges in ecology in order to better understand, protect, and manage ecosystems under global change. Although my research is increasingly across multiple disciplines, to date, my major impacts have been towards better understanding and management of freshwater ecosystems. I seek to develop solutions to prepare freshwater ecosystems for an uncertain future, including the development of models to forecast biodiversity responses to changing environmental conditions, and generating solutions for increasing ecosystem resilience under an uncertain future. Recently, I was the key architect and lead author of a collaborative perspective article published in Nature, which outlines a scientific vision for addressing global river conservation and management in a climate-changing world.

**S.J.M.H. (SUZANNE) HULSCHER**

*University of Twente, head of research group Water Engineering & Management*

Expertise: Flood safety, River engineering, Coastal systems

Prof. dr. Suzanne J.M.H. Hulscher is head of the group Water Engineering & Management at the University of Twente, Netherlands. Her areas of expertise and current research topics include flood safety, river engineering and coastal engineering, nature based solutions in river and coastal systems, resilient water systems, low flow in rivers and salt intrusion, and rhythmic bed patterns in rivers and coasts.

After receiving her PhD in 1996 on the topic modelling of bed patterns in coastal seas at WL|Delft Hydraulics and IMAU, Utrecht University, Suzanne Hulscher held several positions within the cluster Civil Engineering & Management at the University of Twente. In 2002, she became chair of Physics of Watersystems. Over the years, she served as PI of many projects on sand waves, coastal dunes and river dunes, often collaborating in a multidisciplinary setting. In particular, between 2014 and 2019 Hulscher chaired the program RiverCare in which 5 universities and 29 non-academic partners collaborated. She (Co-)authored over 163 papers in refereed scientific journals.

**PIET KENABATHO**

*Professor of Hydrology - University of Botswana*

Expertise: Risk assessment in water related projects, Transboundary Water Resources Assessment, Integrated Water Resources Management, Hydrology of Extremes; Surface and Groundwater quality and quantity assessment; Environmental impact assessment

**Attending the 2023 UN Water Conference in person**

Piet Kenabatho holds a Doctor of Philosophy (PhD) in Hydrology and Water Resources from Imperial College London obtained in 2011 and an MSc in Hydrology for Environmental Management from the same university, 2001. He holds a BSc degree in Environmental Science from the University of Botswana in 1999. He is an Environmental Hydrologist, Water Resources scientist with more than 20 years of professional experience in Applied Hydrology, Applied Hydrogeology, Groundwater Assessment and Modelling, Transboundary Water resources Assessment and Evaluation, Integrated Water Resources Management (IWRM), and Climate Change Adaptation, Resilience and Mitigation strategies.

**CHRISTOPHE CUDENNEC**

*Secretary-General of the International Association of Hydrological Sciences (IAHS)*

Expertise: Hydrology, Hydrometeorology, Climate

Professor of hydrology, French National Institute "Institut Agro", Rennes, France active in Research, Education, Capacity development in Hydroclimate, WEFE nexus, Sociohydrology, Compound risks, water security, data-information-knowledge value-chaining with applications in many places across the world. Member of the ISC delegation to UNESCO on the Open Science recommendation. Lead author of the Cudennec, Sud, Boulton Opinion paper on "Governing Open Science" with an ISC perspective. Representing IAHS-IUGG/science community at UNESCO, WMO, UN Water. Particularly involved in water security, water and climate, water decade, SDG6 shaping and monitoring working groups of UN Water. Co-author of chapters of the annual world water development reports over years. Participant to the design of the UN 2023 water conference, and stakeholder consultation, through the ad hoc UN Water mechanism.

**DANIEL OLAGO**

*Director, Institute of Climate Change and Adaptation, University of Nairobi*

Expertise: Environmental, Geological, Earth and Space sciences

Prof. Daniel Olago is a lead expert of the National Environment Management Authority, Kenya; Consultant Hydrogeologist, State Department for Water- Ministry of Environment and Water Resources, Kenya. He is currently the Director, REACH Kenya Programme (ICCA-UoN), Nairobi, Kenya. The "REACH: Improving Water Security for the Poor" is a seven year (2015-2022) programme aimed at improving water security for over five million poor people in Africa and South Asia by delivering world class science that transforms policy and practice. It's a research-into-action (RIA) programme that addresses the interactions between water security risks and poverty reduction across three intersecting dimensions: resource sustainability, inclusive services and sustainable growth.

**EDUARDO PLANOS GUTIERREZ**

*Institute of Meteorology, Senior researcher. President of the National Science Program "Adaptation and Mitigation of Climate Change in Cuba"*

Expertise: Hydrology; Climatology; Climate change; Disaster risk management; climate and environmental studies

Dr Eduardo Planos is graduate degree in Geography in 1979 at the University of Havana; Master in General and Applied Hydrology at Centre for Hydrographic Studies in Madrid, Spain, in 1984 and PhD in Geographical Sciences at the University of Havana in 1999.

For 19 years, worked as specialist and researcher at the National Institute of Hydraulic Resources, 8 years was the head of the National Hydrological Service (1990-1998). Currently, is a Senior Researcher at the Climate Center of the Institute of Meteorology; Chairman of the National Program of Science: Adaptation and Mitigation of the Climate Change. Scientific Adviser for the State Program to confront the Climate Change Impacts. Professor Titular at the University of Havana (Higher Institute of Applied Sciences and the Faculty of Geography). He has worked as a guest professor in the autonomous universities of Chihuahua and Queretaro, in Mexico; in the Buenos Aires University and the Montevideo state university



**SHREYA CHAKRABORTY**  
*Researcher - Climate Change Policy and Adaptation, International Water Management Institute, New Delhi*

Expertise: water security, climate change adaptation and policy, socioecological systems, groundwater governance, and gender-water linkages

With an M.Phil degree in Geography and Regional Development from JNU, New Delhi, and ongoing doctoral research at the University of Cologne in urban and periurban water, I have conducted interdisciplinary evidence-based research in areas of water access, water and climate change policy, socioecological systems, gender-water linkages, groundwater management, and climate change resilience since 2010. My specific research interest lies in integrating the science and the socioeconomics and politics of water resources and climate change at levels of theory, methodology and policy. I headed the South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERS), water policy research organisation in Hyderabad as the Executive Director from 2020-2022. I was with the organisation in lead research roles and proposal development since 2017 for several research projects funded by IDRC, UNICEF, ACIAR, International Science Council, DST, ICIMOD Nepal, Dutch Research Council NWO, BMZ, Terres des Hommes, and Transdisciplinary Research Cluster on Sustainability Studies, JNU. I have also carried out monitoring and evaluation of development projects as a consultant with GIZ.



**SUAD SULAIMAN**  
*Sudanese National Academy of Sciences*

Expertise: Environment and Health, Neglected tropical diseases, Water Pollution, Water Borne Diseases

Prof. Suad Sulaiman is a health and environment adviser, member of Sudanese National Academy of Sciences, and Treasurer. She is an expert on water-borne diseases which are very prevalent in Sudan and many other African countries. Prof Suad has extensive expertise in water and sanitation. She is also an expert in water pollution, especially by heavy metals and contamination of surface and ground water by mercury and cyanide during the process of gold-mining.



**HUGO HIDALGO LEÓN**  
*Professor from the School of Physics and Director of the Center for Geophysical Research at the University of Costa Rica. Member of the National Academy of Sciences of Costa Rica*

Expertise: Climate variability, Hydrology, Climate change

Hugo Hidalgo Leon is a professor from the School of Physics and Director of the Center for Geophysical Research at the University of Costa Rica. Dr. Hidalgo has a Licenciatura degree from the University of Costa Rica and M.Sc and Ph.D. degrees from the University of California, Los Angeles on Civil and Environmental Engineering focused on water resources. He worked previously for the University of California at the Los Angeles, Berkeley and San Diego campuses after his Ph.D. for 9 years. He is a member of Costa Rican Academy of Sciences and he is a coordinator of the Master of Sciences in Hydrology at the University of Costa Rica. Dr. Hidalgo received the Clodomiro Picado Twilight National Sciences Award in 2018, the highest recognition for sciences in Costa Rica. He also received the 2020 research award on basic sciences from the University of Costa Rica.



**APOSTOLOS APOSTOLOU**  
*Institute for Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences*

Expertise: monitoring of freshwater fish populations; conservation and sustainable use of the biological resources in aquatic ecosystems; management and monitoring of demersal fish populations on the basis of underwater research

Organizing and realization of field and laboratory research; management of scientific and applied research; implementation of the national legislation for nature protection; management of the ichthyological collection of IBER, BAS. Member of the editorial board of Acta Zoologica Bulgarica. Member of the scientific council of IBER, BAS. Expert in various national commissions and councils. Areas of expertise - taxonomic and faunistic ichthyological research; population biochemical-genetic studies; monitoring of freshwater fish populations; conservation and sustainable use of the biological resources in aquatic ecosystems; management and monitoring of demersal fish populations on the basis of underwater research.



**HEATHER O'LEARY**  
*Head of the Council of Scientific Commissions and Chair of the Scientific Commission for Anthropology and Environment of the International Union for Anthropological and Ethnological Sciences (IUAES)*

Expertise: Anthropology, Water politics, gender issues, urbanization, environmental justics

**Attending the 2023 UN Water Conference in person**

Dr. Heather O'Leary's work centers on gender equity, WASH, in South Asia; on political-economic security in aquifers, river basins, and cities (with the Global Water Partnership); and science-technology equity issues in knowledge transfer for water infrastructures. Dr. O'Leary provides crucial early-career and younger generation insights and direction to our annual conference planning activities at IUAES.



**EULOGE KOSSI AGBOSSOU**  
*National Water Institute of the University of Abomey-Calavi / National Water Partnership*

Expertise: agriculture; climate variability; climate change impacts; water, environment and health

The research work undertaken to date by Mr. AGBOSSOU Kossi. Euloge is part of a global and coherent framework on the "Control of the eco-hydrological functioning of watersheds for improved agricultural production and conservation of water and land resources". Thus, its work focuses on the following research areas:

- Erosion, water body filling and water and land resources conservation;
- Agricultural practices and productivity of wetlands and flooded lands;
- Flow dynamics and water quality of aquatic ecosystems;
- Climate variability/change and impacts ;
- Agricultural area dynamics, water control and food crop productivity
- Water, environment and health.



**OVIE AUGUSTINE EDEGBENE**  
*Federal University of Health Sciences, Otuokpo, Nigeria  
 Member of the Global Young Academy*

Expertise: Aquatic science; hydrobiology, fisheries, ecology, biodiversity, socio-ecology.

Dr. Ovie Edegbene is an early-career researcher in applied hydrobiology, fisheries, ecology, biodiversity, and socio-ecology. He is currently involved in developing freshwater biomonitoring tools using aquatic biota taxonomic-and-trait-based approaches with references to specific and combined land use stressors which include urban, urban-agriculture and urban-forestry. He has linked the developed biomonitoring tools to socio-ecological-system (SES) implications in a bid to ameliorate the incessant pollution aquatic environments are faced with. Ovie's first Ph.D was in Water Resource Science, and his second Ph.D in Hydrobiology and Fisheries. Ovie has over 10 years teaching and research experience at University level and has trained and mentored several honours and postgraduate candidates. Ovie is an applied ecologist, predictive ecologist, biodiversity specialist, biostatistician and socio-ecologist.



**PAWEŁ ROWIŃSKI**  
*Polish Academy of Sciences, Vice-President*

Expertise: geophysics, geophysical flows, river hydrodynamics, fluvial hydraulics

Paweł Rowiński holds a degree in mathematics from the University of Warsaw, and doctoral and habilitation degrees in earth sciences with a specialization in geophysics from the Institute of Geophysics, Polish Academy of Sciences. Among others, his research interests include mathematical methods in geophysics, geophysical flows, river hydrodynamics, and fluvial hydraulics. Paweł Rowiński has published more than 170 refereed scientific publications. He serves as Associate Editor for several prominent scientific journals and publications. In 2022 he was elected the Chair of the Europe Division Leadership Team of the International Association for Hydro-Environment Engineering and Research IAHR, he is also a member of the Board of ALLEA - the European Federation of Academies of Sciences and Humanities. Since May 2015, he has served as Vice-President of the Polish Academy of Sciences.





**ISMAIL KOYUNCU**  
*President of Istanbul Technical University and Director of the National Research Center on Membrane Technologies ; Member of Turkish Academy of Sciences*

Expertise: Water reuse, wastewater treatment

Ismail is the president of Istanbul Technical University and Director of the National Research Center on Membrane Technologies. He was awarded The Scientific and Technological Research Council of Turkiye (TUBITAK) Young Scientist Award (2008) and the Economic Cooperation Organization (ECO) International Award 2009 (in the field of Environment). Research areas are water and wastewater treatment and reuse, advanced water treatment technologies, membrane technologies, environmental nanotechnology, environmental effects of nanoparticles, and hydraulics of water and wastewater treatment plants. He has more than 200 journal papers and 300 conference presentations.



**RAMIA AL BAKAIN**  
*The University of Jordan, Department of Chemistry/ Professor of Analytical and Environmental Chemistry*

Expertise: Sustainable Green Technologies for water treatments, Enhance Awareness-behavior's Program of local citizens toward water-agriculture-food security, Build Strategies and policies for water managements

I hold a PhD with honor degree in Analytical Chemistry from La Sorbonne Université- Pierre et Marie Curie (UPMC), Paris - France. I am working now as a professor at the University of Jordan- Amman/ Dep. of Chemistry.

The lack of water, the climate change, the industrial developments and increasing anthropogenic activity have severe impacts on water and on agriculture- food security as well as public health in the Mediterranean and MENA regions, particularly in Jordan that suffers from severe water shrinkage. The emission of harmful substances as toxic heavy metals, organic compounds, solid waste and pharmaceutical residues are released to local municipal wastewater systems, where very low amount of this wastewater have special treatment to reuse it again, which results in serious threats to water-agriculture-food sectors.



**SAMIA BENABBAS KAGHOUCHE**  
*President of the Algerian Academy of Science and Technologies*

Expertise: Water quality, Agriculture, Climate change, Demography

As an architect, urban planner and expert in land use planning, my fields of interest include:

- Sustainability of water resources in the face of water stress and climate change
- Water trade-offs and access conditions (water supply, agriculture and industry);
- Water transfers and urbanization for a sustainable and integrated development;
- Water and the protection and enhancement of ecosystems;
- Issues related to the relationship between demography and excessive coastal development and its impact on the deterioration of ecosystems, particularly marine ecosystems

These reflections on which we work concern the situation of Algeria internally and in relation to the resources that can be mobilized in the Maghreb and in Africa.



**PULANE MSWELA**  
*Secretary General of Botswana Academy of Science*

Expertise: Wastewater quality and implications on horticultural produce; Waste management; Heavy metal remediation; Air quality management

Dr. Pulane Hannah Koosalese-Mswela is an Environmental quality professional who is a microbiologist by training. She holds a PhD in Environmental Science, an MSc. In Applied Microbiology and a BSc. In Biology (Microbiology) and Environmental Science (Environmental Management) from the University of Botswana. She has worked as a Research Scientist specializing in microbiology and Biotechnology.

Currently, her research activities include Environmental quality and pollution Control with special emphasis on water. Interests include Pollution control through bioremediation, the effect of wastewater use on the environment and horticultural produce.

**Attending the 2023 UN Water Conference in person**



**JOAO PORTO DE ALBUQUERQUE**

*Professor in Urban Analytics and Deputy Director of the Urban Big Data Centre, University of Glasgow*

Expertise: Urban Analytics; Sustainable Development; Geographic Information/ GIS; Climate/disaster resilience

Professor Joào Porto de Albuquerque is Professor in Urban Analytics at Urban Studies in the School of Social and Political Sciences at the University of Glasgow and Deputy Director of the Urban Big Data Centre (UBDC), where he leads the theme on “Urban Sustainability and Participation”. Professor Porto de Albuquerque is a geographer and computer scientist with an interdisciplinary background. His research adopts a transdisciplinary approach to participatory urban analytics. This approach is underpinned by the investigation of new methods that bridge critical, participatory and geo-computational methods to include a plurality of voices in urban data analytics, with the goal of enabling transformations to urban sustainability and climate resilience.



**MAHESH W. JAYAWEERA**

*Professor, University of Moratuwa*

Expertise: noise and air pollution, Solid and Hazardous, Waste Management, Sediment, Water and waste water

Dr. Jayaweera is an accomplished academic and researcher in the field of Chemical and Process Engineering. He currently serves as a Senior Lecturer at the Department of Chemical and Process Engineering at the University of Moratuwa, Sri Lanka.

Dr. Jayaweera holds a Bachelor of Science degree in Chemical and Process Engineering from the University of Moratuwa, Sri Lanka. He then went on to earn a Master of Engineering degree in Chemical Engineering from the Asian Institute of Technology in Thailand. He later obtained his Doctor of Philosophy (PhD) in Chemical Engineering from the University of Sheffield in the United Kingdom.



**SHAMEEN JINADASA**

*Professor, Department of Civil Engineering, University of Peradeniya, Peradeniya, Sri Lanka*

Expertise: environmental engineering; sustainable wastewater management technologies

K.B. Shameen N. Jinadasa is a Professor at the Department of Civil Engineering, Faculty of Engineering, University of Peradeniya. His research greatly involves the development of sustainable water and wastewater management technologies, biological wastewater treatment methods for industrial wastewaters, and innovative methodologies in environmental protection, and constructed wetlands for water quality management in tropical regions. He is a member of the Sri Lanka Association for The Advancement of Science. He has established various international research collaborations with China, Norway, Netherlands, Singapore, Japan, and Australia. He is also actively involved with the process, environmental and design advisory in water and wastewater treatment plants.



**MEHMET EMIN AYDIN**

*Necmettin Erbakan University / Faculty Member and Member of the Turkish Academy of Sciences*

Expertise: Sustainable water, pesticide, agriculture

Prof. Dr. AYDIN was appointed as a management board member of the SWINDON (Sustainable Water Management in Developing Countries) Project supported by the German Academic Exchange Service (DAAD) and the Federal Ministry for Economic Cooperation and Development (BMZ) between 2009-2019. The SWINDON Project was a collaboration of 35 partner universities and research centers in 12 different countries on all Continents. Additionally, Prof. Dr. AYDIN is a Full Member of the Turkish Academy of Sciences and Chair of the Environment, Biodiversity and Climate Change Working Group of the Turkish Academy of Sciences.

## ● EXPERTS FROM THE ISC COMMUNITY AT THE CONFERENCE



### **NICO ELEMA**

*Director of the Centre for Collaboration in Africa at Stellenbosch University, South Africa; and Director of PERIPERI U*

Expertise: Disaster risk reduction, water and sanitation, sustainable water management, African higher education, monitoring and evaluation

Dr Elema is the Director of the Centre for Collaboration in Africa (CCA) at Stellenbosch University, South Africa, where he manages a team of internationalisation practitioners to create an enabling environment for Stellenbosch University to partner and engage with various partners across the continent. He is also responsible for the AUDA-NEPAD Southern African Network of Water Centres of Excellence and the PERIPERI U Network of universities focusing on Disaster Risk Reduction. Over the years, he has gained extensive experience in the African higher education sector and has been working with various partners on project implementation, project evaluation and multi-lateral partner programmes that focus on thematic fields which include water and sanitation, Disaster Risk Reduction (DRR) and Science, Technology & Innovation (STI).



### **BAPON FAKHRUDDIN**

*Water Sector Lead, Division of Mitigation and Adaptation, Green Climate Fund, New Zealand;*

Expertise: climate and multi-hazard risk assessment, disaster preparedness, early warning and emergency response; coastal community resilience

Dr Fakhruddin is an expert climate change risk assessor with 20 years' global experience in working on disaster risk and climate resilience projects. This experience is a major advantage in climate change adaptation and mitigation strategy development. His key areas of expertise are climate and multi-hazard risk assessment, disaster preparedness, early warning and emergency response and coastal community resilience. He has designed climate change and disaster response projects more than 30 countries in Asia, Caribbean, Africa and the Pacific. During his career, Dr Fakhruddin helped to design major international multi-hazard early warning systems for floods, cyclone and tsunami to save life and property damage. His most high profile work has been developing multi-hazard warning systems including a tsunami warning system for Indian Ocean countries following the deadliest one in history - the 2004 Boxing Day Tsunami.



### **GENSUO JIA**

*Professor, Institute of Atmospheric Physics, Chinese Academy of Science; member of the ISC working group for the scientific review of the 2023 Global Sustainable Development Report (2023 GSDR)*

Expertise: terrestrial ecology, atmospheric sciences, including multi-scale remote sensing of land surface processes, ecosystem-climate interactions, climate extremes and natural disasters

Gensuo Jia is a professor at the Institute of Atmospheric Physics, Chinese Academy of Sciences (CAS) and the Director of CAS Global Change Research Center for East Asia (START TEA). He serves as chair of science planning committee of CAS Big Earth Data Science Engineering program (CASEarth), coordinating lead author (CLA) of IPCC Special Report on Climate Change and Land (SRCCL), CLA of UNEP Global Environmental Outlook (GEO-6), deputy co-chair of Group on Earth Observation (GEO) climate change working group, and IPBES nexus assessment scoping expert. He has broad research interests in terrestrial ecology and atmospheric sciences, including multi-scale remote sensing of land surface processes, ecosystem-climate interactions, climate extremes and natural disasters, and climate change impacts and adaptation."



### **DETLEF STAMMER**

*Chair of the Joint Scientific Committee (JSC) 2023 of World Climate Research Programme (WCRP); and ISC Fellow*

Expertise: Physical oceanography; climate research; remote sensing; data assimilation; climate modelling

Detlef received a Ph.D. in Physical Oceanography from the Institute of Oceanography, Kiel. In 1993 he took a postdoctoral position at MIT, where he subsequently became Principal Research Scientist. In 1999 he was appointed to a tenured faculty position at Scripps Institut of Oceanography at the University of California, San Diego. Detlef remained in America until 2003, when he returned to Germany to take up a Professorship at the Institut for Oceanography at the University of Hamburg. He is now Professor, Head of Remote Sensing and Assimilation and Director of the Center for Earth System Research and Sustainability at the University of Hamburg, Germany. Detlef's research interests include the role of the ocean in climate variability and sea level change.

**TANNAZ PAK**

*ISC lead from Interpore; and Associate Professor (Research), Energy and Environmental Engineering, Teesside University*

Expertise: Groundwater clean-up, water purification, biochar and pyrolysis, nanotechnology, soil remediation, waste management, sustainable material, and non-destructive testing

Tannaz is an associate Professor in Energy and Environmental engineering. She holds the Chartered Engineer status and is a professional member of the Institute of Materials, Minerals and Mining (CEng MIMMM). She is a fellow of Advance HE (FHEA). Tannaz's research is mainly focused on groundwater clean-up, water purification, biochar and pyrolysis, nanotechnology, soil remediation, waste management, sustainable material, and non-destructive testing. In 2021, Tannaz was selected as one of the Top 50 Women in Engineering by the Women's Engineering Society in the UK.

**ROGER PULWARTY**

*Senior Scientist at National Oceanic and Atmospheric Administration (NOAA) Physical Sciences Division; and Co-chair of the ISC Sendai Framework midterm review (MTR) report*

Expertise: Weather and climate science, climate services, adaptation: vulnerability and practice, disaster risk reduction, decision-making

Dr. Roger S. Pulwarty is the Senior Scientist in the NOAA Physical Sciences Laboratory at the NOAA Office of Oceans and Atmospheric Research in Boulder, Colorado. He was previously the Senior Science Advisor for Climate, and the Director of the National Integrated Drought Information System (NIDIS) in the NOAA Climate Program Office. His over one hundred articles, book chapters, and technical reports, focus on climate science, risk management and information services in the U.S., Latin America and the Caribbean.

Roger is a lead author on the UN Office for Disaster Risk Reduction Global Assessment Reports, the Intergovernmental Panel on Climate Change (IPCC) Special Reports on Water Resources and on Extremes, and convening lead author on the IPCC Working Group II Impacts, Adaptation and Vulnerability, and the US National Climate Assessment. Among other professional committees he has served on the Steering Committee of the Global Climate Observing System, and the White House Task Forces on the Water-Energy-Food Nexus and on Climate and National Security. Roger is a member of the IGU Commission on Climatology and is the U.S. Co-chair for UN Sustainable Development Goal 6 (Water).

**TOM SOO**

*Executive Director of the International Association for Hydro-Environment Engineering and Research (IAHR)*  
Expertise: Meteorology

Expertise: Natural resources sciences, water resources management, science-policy

Tom Soo is a senior executive in water resources management with over 20 years of international experience in leadership, management, institutional development and technical expertise. He was previously Executive Director of the World Water Council and the International Water Resources Association. He also has a background in consulting to international institutions, public authorities, academia, as well as private industry. Tom's focus areas have included water quality; strengthening the link between knowledge generation and policy making; institutional arrangements; building networks between private industry, research and government stakeholders; as well as strategy, policy and technical expertise in the field of water and natural resources. He holds a research masters degree in geography and also has a degree in computer systems engineering. Over the years, Tom has participated in numerous international committees and task forces. He currently chairs the International Advisory Committee of the UNSW Global Water Institute.



**TIANA MAHEFASOA RANDRI-ANALIJAONA**

*Vice Chair Integrated Research on Disaster Risk (IRDR) Scientific Committee*

Expertise: Risk management, economic analysis of natural hazards and of disasters, climate change, social development

Economist with 25 years-professional experiences and former World Bank Climate Adaptation and Disaster Risk Management Economist, specifically in Charge of all economic dimensions of Disaster Risk Management and Reduction activities on behalf of the World Bank, Prof Randrianalijaona Tiana Mahefasoa has been appointed as the Director of the Multidisciplinary Disaster and Risk Management Department (DMGRC) of the University of Antananarivo since April 2009. Presently Director of the Centre of Economic Research and Study for Development (CERED), he focuses his research on social dimensions and sustainable development issues of risk and disaster related problems. He has been one of the founding member of the UNDRR Global Risk Assessment Framework (GRAF) since November 2017 and is one of the Expert group members of this framework.



**JUDIT UNGVARI**

*Co-Lead, Research and Innovation, Future Earth*

Expertise: Ecology, avian biology, tropical conservation and development

Dr. Judit Ungvári is the Research and Innovation Officer at George Mason University's Institute for a Sustainable Earth (ISE) and at the US Global Hub of Future Earth. In this joint position, Dr. Ungvári works to create transdisciplinary research communities for ISE, supports Future Earth's Global Research Projects and Knowledge Action Networks, and develops initiatives that connect ISE faculty, students, and programs with Future Earth events, initiatives, products, and structures. She came to Mason after two years at the National Science Foundation where she was a AAAS Science & Technology Policy Fellow. She was working in the Geosciences directorate on various international and integrative activities facilitating transdisciplinary global change research. Her work encompassed various programs within the Belmont Forum, Future Earth, and the Sustainability Research and Innovation initiatives.



**JOHAN ROCKSTRÖM**

*Director of the Potsdam Institute for Climate Impact Research and Professor at the Institute of Earth and Environmental Science at Potsdam University; Co-Chair, Advisory Committee, Future Earth*

Expertise: Environmental science, global water resources, global sustainability

Johan Rockström is Director of the Potsdam Institute for Climate Impact Research, Professor at the Institute of Earth and Environmental Science at Potsdam University, and Professor in Water Systems and Global Sustainability at Stockholm University. Rockström gained international recognition with the development of the Planetary Boundaries framework, which has since become a standard of sustainability science. He is deeply involved in research activities covering a range of topics related to the Earth System and global sustainability in the Anthropocene, with the overarching research question: "What is the safe operating space for Humanity's future on Earth, and which sustainable transformations that can take us there?" Rockström's research creates considerable impact. For example, he received the prestigious European Research Council (ERC) Advanced Grant, and is ranked as one of the most influential and most-cited scientists in the world by Clarivate Analytics.



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