

# World Groundwater Congress IAH2024 DAVOS Switzerland

Interacting  
Groundwater

8.-13.9.2024

## Welcome Address

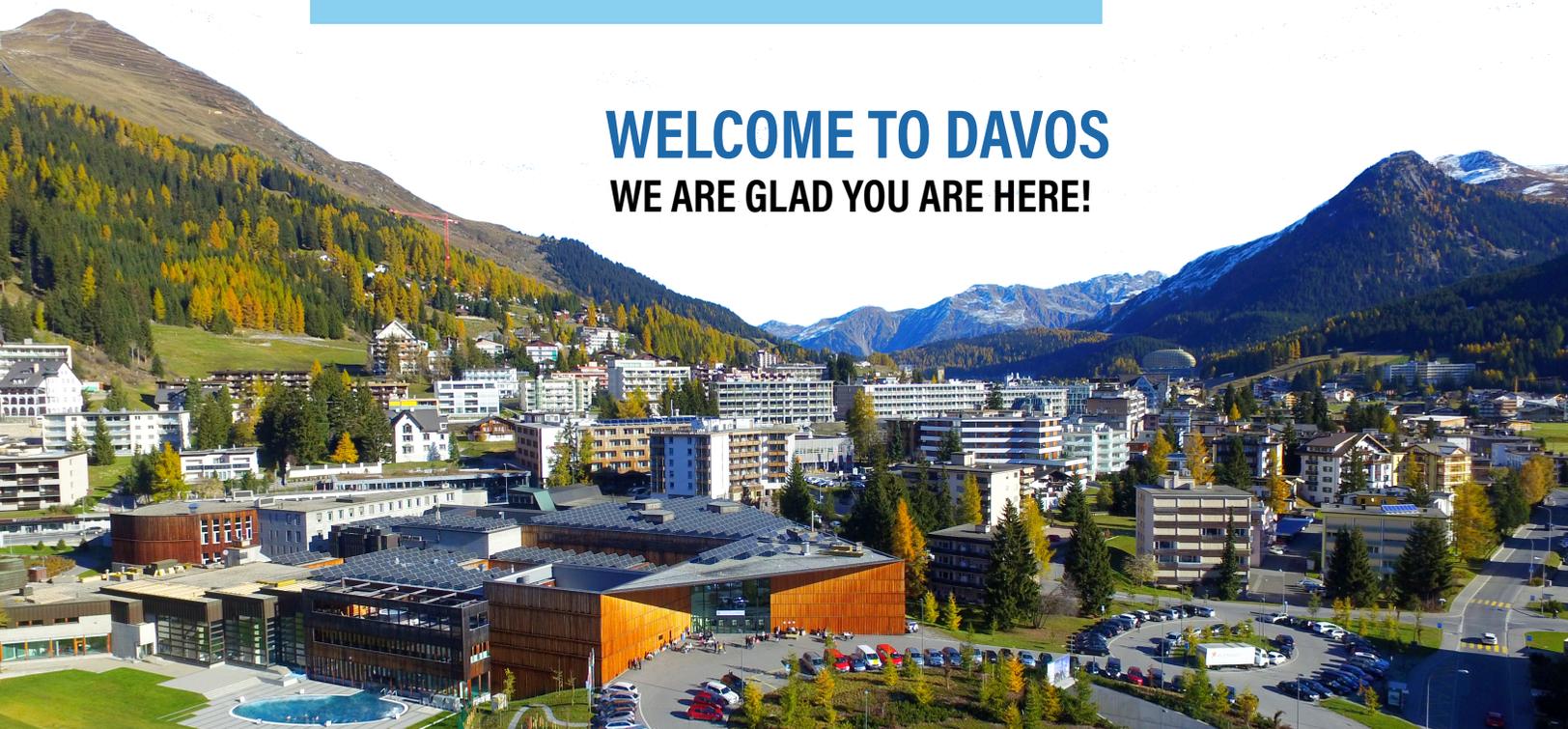
We are delighted to welcome you to Davos for the IAH World Groundwater Congress! This year, we've introduced several exciting additions, such as a call for sessions, engaging panel discussions, and various interactive activities. This congress has been made possible thanks to your invaluable input and encouragement—your support has been crucial in shaping this event. We appreciate your contributions.

As you immerse yourself in the congress, we hope you take full advantage of Davos's stunning scenery and engage in insightful discussions, connect with colleagues and friends, and explore new ideas and perspectives. We hope this congress expands your networks and deepens your understanding of groundwater issues. Enjoy your time in this beautiful setting and make the most of the opportunities throughout the event.

Daniel Hunkeler, Philip Brunner, in the name of the congress organizers

# WELCOME TO DAVOS

## WE ARE GLAD YOU ARE HERE!



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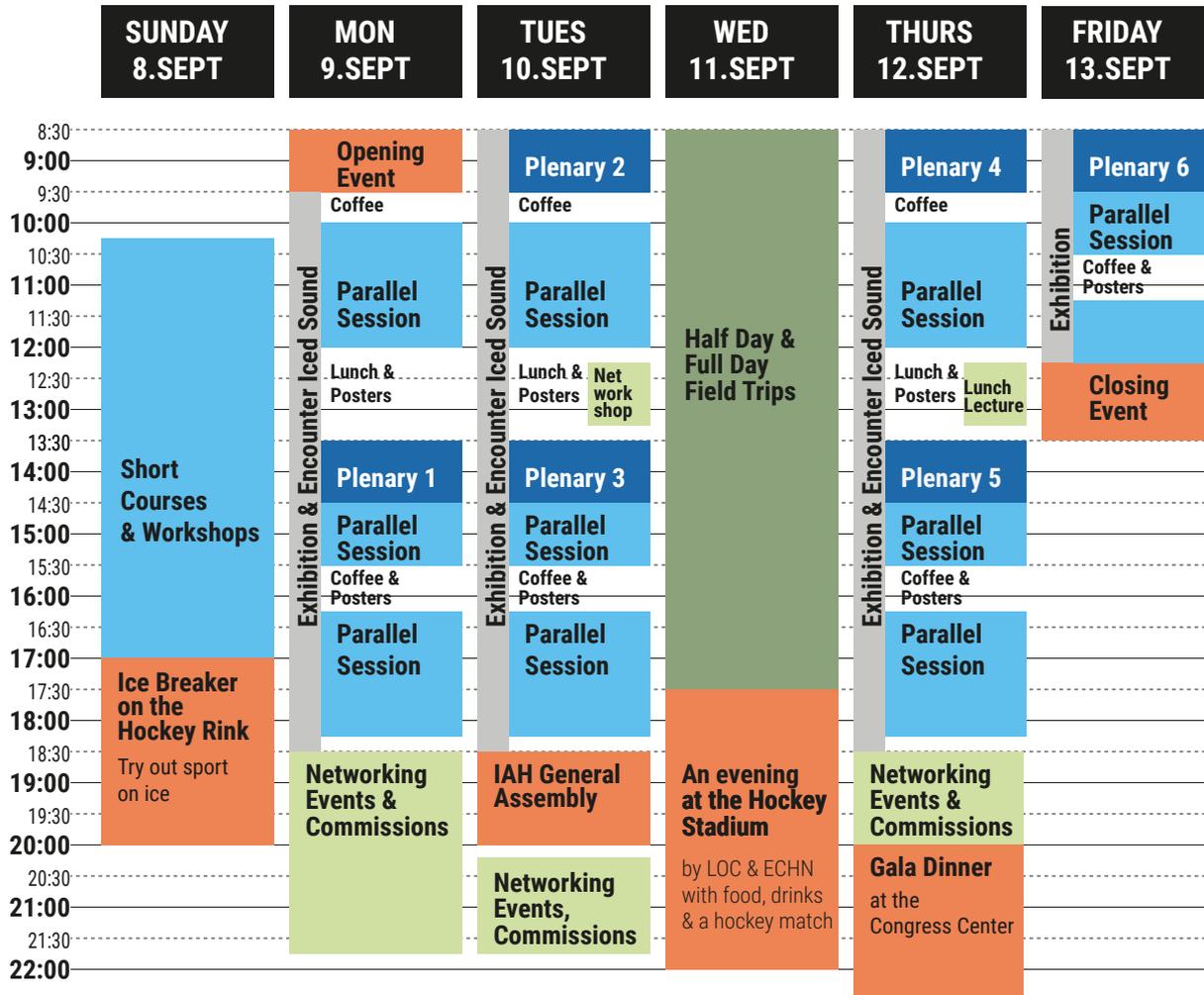


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Thank you for your support!

# Programme Overview



## The IAH2024Davos Plenaries with experts from around the world curated by Philip Brunner and Daniel Hunkeler

### Plenary 1 Mountain Cryosphere and Groundwater

Moderator James Thornton; Mountain Research Initiative; Berne  
Prof. Lauren Somers, Dalhousie University, Halifax, Canada  
Dr. Tobias Jonas, Institute for Snow and Avalanche Research, Davos

### Plenary 2 Future-proofing hydrogeology education

Moderator John Cherry; The Groundwater Project  
Prof. Ty Ferre, University of Arizona, USA  
Prof. Xiaowei Jiang, China University of Geosciences, China  
Dr. Lotti, Francesca; Hydrosymple, Italy  
Dr. Stefanie, Musy; ECHN, University of Basel, Switzerland  
Prof. Philip Brunner, CHYN; University of Neuchâtel, Switzerland  
Dr. Shafick Adams, Water Research Commission, South Africa  
Dr. Paul Bauman, BGC Engineering, Canada  
Dr. Andrea Gigliuto, ERM, Italy

### Plenary 3 Reversing groundwater depletion trends

Moderator Alice Aureli, IAH  
Dr. Hansjörg Seybold; ETH Zürich, Switzerland  
Dr. Donald John MacAllister; BGS, UK  
Prof. Seifu Kebede; University of KwaZulu-Natal, South Africa  
Dr. Karen Villholth; Director of Water Cycle Innovation, UK  
Dr. Jose Luis Martin Bordes; UNESCO  
Dr. Erik Salminen; UNECE  
Dr. Shamy Puri; Managing Director at Sustainable Solutions in Practical Hydrogeology

### Plenary 4 Preserving groundwater quality for future generations

Moderator Peter Grathwohl; Vice-President, University of Tübingen, Germany  
Prof. Juliane Hollender; EAWAG/ETHZ, Switzerland  
Prof. Beth Parker; G360, Guelph, Canada  
Prof. Ilka Wallis; Flinders University, Australia

### Plenary 5 Safeguarding groundwater in a multifunctional subsurface

Moderator Larry Diamond; University of Berne  
Dorien Dinkelman; TNO, Hydrology and Reservoir Engineering, The Netherlands  
Erik Nickel; PTRC Sustainable Energy, Canada  
Michel Meyer; SIG, Head of Geothermal Development, Switzerland

### Plenary 6 The state of groundwater research

Moderator Craig Simmons, Pro Vice-Chancellor, University of Newcastle, Australia  
Prof. Bridget Scanlon; University of Texas, Austin, USA  
Prof. Camille Bouchez; Université de Rennes, France  
Dr. Jared Van Rooyen; ECHN, EAWAG, Switzerland  
Prof. René Therrien; Université de Laval, Canada  
Dr. Sorab Panday; GSI Environmental, USA  
Prof. Rui Ma; China University of Geosciences, Wuhan  
Dr. Alan MacDonald; Head of Hydrogeology, BGS, UK

# Session Overview

	Monday		Tuesday		Thursday		Friday	
Room	10:00-12:00	14:30-15:30	16:15-18:15	10:00-12:00	14:30-15:30	16:15-18:15	10:00-12:00	14:30-15:30
R1	1.05. Alpine hydrogeology	1.08. From basin to global scale		1.01. Volcanic aquifers	1.02. Crystalline aquifers		1.01. Karst hydrogeology	4.10/11. Karst
R2	1.06. Coastal aquifers			2.06. Salinity			1.13. GW-SW Interaction	
R3	2.08. Environmental tracers			1.10. Ecohydrogeology			2.07. Drought impacts	2.05. GW & Flood
R4	2.01. Groundwater and climate change			2.10. 21st century GW quality			2.02. Agriculture & GW quality	2.09. Microplastic
R5	4.01. GW mapping	3.04. Socio-Hydrogeology		3.02. Developing groundwater			4.04. Transboundary aquifers	of arid zones
R6	1.15. Microorg/particles	1.12. Unsaturated zone		3.05. Conjunctive management	4.12. Water stewards		3.01. Self-supply & GDE 6	and reporting
R7	4.07. Sustainable groundwater management			4.05. Managed Aquifer Recharge			2.04. Groundwater and urban development	
R8	3.07. Open data	5.05. Hydrogeophysics		4.09. Nexus	4.02. GW & Int. Management		4.08. Geothermics & GW	thermal waters
R9				3.06. GW Education	5.07. Remote Sensing		4.06. Buffering capacity	& tracer methods
R10	5.02. Flow/Trans mod	5.04. Machine learning		5.09. Inverse model	5.01. Decision-Support modeling		4.03. From data to decision	modeling

## HYDROGEOLOGICAL SYSTEMS AND PROCESSES

- 1.01. Karst hydrogeology: Flow systems and modelling approaches
- 1.02. Hydrogeology of crystalline aquifers
- 1.03. Hydrogeology of volcanic aquifers
- 1.04. Hydrogeology of Arid Environments
- 1.05. Advances in the characterization of alpine cryo-hydrogeological systems
- 1.06. Coastal Groundwater: Advancements, Innovations, and Emerging Technologies
- 1.07. Hydrogeology and Geochemistry of Mineral and Thermal Waters
- 1.08. Basin-scale groundwater flow, heat & mass transport processes
- 1.10. Ecohydrogeology: an emerging discipline
- 1.12. Processes in the Unsaturated Zone
- 1.13. Groundwater-Surface water interaction
- 1.15. Advances in aquifer characterization and protection

## GROUNDWATER IN THE ANTHROPOCENE: CHALLENGES AND SOLUTIONS

- 2.01. Groundwater and Climate Change – Impacts and Opportunities
- 2.02. Drought Impacts on Groundwater Systems: Processes, Assessment and Prediction
- 2.03. Groundwater temperatures in the context of global warming and anthropogenic influences
- 2.04. Groundwater and urban development
- 2.05. Surface Water-Groundwater Interactions and Advanced Flood Monitoring, Modeling, and Forecasting
- 2.06. Aquifers at salinization risks and salinized aquifers: from the risk management to their sustainable
- 2.07. Agricultural impacts on groundwater quality: Advanced diagnosis, measurement and mitigation
- 2.08. Environmental tracers to investigate anthropogenic impacts on groundwater quality
- 2.09. Microplastic in groundwater
- 2.10. Navigating 21st Century Challenges in Groundwater Quality
- 2.11. Per- and polyfluoroalkyl substances (PFAS) in groundwater systems

## GROUNDWATER IN A CHANGING SOCIETY

- 3.01. Self-supply & SDG6: Possibilities and pitfalls of private wells
- 3.02. Developing groundwater for drinking water and sustainable livelihoods for low-income communities
- 3.03. Hydrogeology in humanitarian contexts
- 3.04. People and Groundwater in the Anthropocene
- 3.05. Conjunctive management of water resources: aquifers at the heart of interactions
- 3.06. Current developments and future directions for Groundwater Education
- 3.07. Open data and software for hydrogeologists
- 3.08. Groundwater Monitoring and Reporting: Navigating Challenges and Promoting Collective Action

## SUSTAINABLE GROUNDWATER RESOURCES MANAGEMENT

- 4.01. Groundwater Mapping: methodological developments from the sub-national to continental scale
- 4.02. Groundwater and Integrated Water Resources Management
- 4.03. From Data to Decisions
- 4.04. On effective transboundary groundwater areas for shared aquifer management
- 4.05. Managing aquifer recharge for water resilience
- 4.06. Sustainable groundwater management
- 4.07. Approaches to sustainable groundwater management in a changing world
- 4.08. The Interplay between Geothermal Energy and Groundwater Use in the Energy Transition
- 4.09. Groundwater relevance in the context of water–energy–food nexus
- 4.10. Karst Hydrogeology: Water supply and engineering solutions
- 4.11. Karst Hydrogeology: Water quality, sustainability and ecosystems
- 4.12. Water Stewardship

## EMERGING FIELD AND COMPUTATIONAL METHODS

- 5.01. Applied Modeling for Decision Support in Uncertain and Data-Sparse Environments
- 5.02. Advances in Modeling of Groundwater Flow and Transport of Solutes and Energy at Different Scales
- 5.04. Applying Machine Learning and Big Data to Understand Complex Hydrogeologic Systems
- 5.05. Hydrogeophysics to close subsurface data gaps
- 5.06. Innovative field methods
- 5.07. Remote sensing and hydrogeology
- 5.08. Advances in hydrogeological modelling development and applications
- 5.09. Advances in inverse modeling, data assimilation and uncertainty quantification for hydrogeological

# Monday 9.9.2024 - Quick Guide

## Overview of Events



Start	End	Event Type	Topic	Room
08:30	09:40	Opening Event		Davos Plenary Hall
09:30	19:00	Exhibition	Discover innovative services and products from leading companies	Congress Hall
12:30	13:25	Networks/Commissions	LUNA Working Group	R8 Sanada
12:30	13:15	Networks/Commissions	IAH Groundwater Quality Commission Meeting	R7 Sanada
13:00	13:25	Art Event	Opening of Music of Glaciers Art Exhibition	Congress Entrance
13:30	14:25	<b>Plenary 1:</b>	<b>Mountain Cryosphere and Groundwater</b>	Davos Plenary Hall
17:00	17:45	Focus Event	The emerging discipline of mountain cryo-hydrogeology: Identifying challenges & opportunities for science & practice	R4 Schwarzhorn
18:30	19:30	Networks/Commissions	ECHN Annual General Meeting	R3 Sertig
18:30	20:00	Networks/Commissions	GEWEX Global Groundwater Network Meeting	R4 Schwarzhorn
18:30	20:00	Networks/Commissions	Latin America and Caribbean Hydrogeologists Meeting: Building Networks and Collaborative Work Plans	R5 Seehorn
18:30	20:00	Networks/Commissions	Meeting of the IAH Groundwater and Climate Change Commission	R7 Sanada
19:30	20:00	Networks/Commissions	Meeting of the Regional Groundwater Flow Commission	R6 Wisshorn

## Invited Speakers

Start	End	Name	Presentation Title	Room
10:00	10:15	<b>Christoff Andermann</b>	Invited Speaker: Water storage in the Himalayas	R1 Dischma
10:00	10:15	<b>Akansha Keshariya</b>	Invited Speaker: An integrated approach using Remote Sensing and Hydrogeological data to identify Submarine Groundwater Discharge	R2 Flüela
10:00	10:30	<b>Neus Otero</b>	Invited speaker: Tracing landfill leachates in a karstic aquifer using a multi-isotopic approach	R3 Sertig
10:00	10:15	<b>Hansjoerg Seybold</b>	Invited Speaker: Accelerated Decline of Groundwater Levels in the 21st Century, with few Signs for Recovery	R4 Schwarzhorn
10:00	10:15	<b>Antonio Dematteis</b>	Invited Speaker: Guidelines for Sustainable Water Management in Tunnels: Insights from the IAH GESTAG Working Group	R7 Sanada
10:00	10:15	<b>Arnaud Sterckx</b>	Invited Speaker: Expanding the global groundwater monitoring database	R8 Sanada
10:15	10:30	<b>Mark Bakker</b>	Invited Speaker: How to Understand Groundwater Models: Reproducibility, Transparency, and Simplicity	R8 Sanada
14:30	14:45	<b>Grant Ferguson</b>	Invited Speaker: Fossil Groundwater in the Anthropocene	R1 Dischma
14:30	14:45	<b>Michael Fienen</b>	Invited Speaker: Humans in the Loop: The role of human judgement and physics in machine learning for groundwater	R10 Studio
16:15	16:45	<b>Frederic HUNEAU</b>	Invited Speaker: Multi-isotope Tracing combined with Organic Compounds to Improve Pollution-sources Tracking of Groundwater in coastal regions of the Mediterranean	R3 Sertig
16:15	16:30	<b>Peter van der Keur</b>	Invited Speaker: United Nations Framework Classification for Resources (UNFC). How to extend to Groundwater Resources	R7 Sanada
16:15	16:30	<b>Reed Maxwell</b>	Invited Speaker: Accelerating continental-scale groundwater simulation with a fusion of machine learning, integrated hydrologic models and community platforms	R10 Studio

# Monday 9.9.2024 - Parallel Session Room Schedule

10:00	<b>R1 Dischnia</b> Session 1.05. 10:00 - 12:00 Advances in the characterization of alpine cryo-hydrogeological systems: monitoring, modelling and management solutions	<b>R2 Flüela</b> Session 1.06 - Part A 10:00 - 11:45 Coastal Groundwater: Advances, Innovations, and Emerging Technologies	<b>R3 Sertig</b> Session 2.08 - Part A 10:00 - 11:45 2.08. Environmental tracers to investigate anthropogenic impacts on groundwater quality	<b>R4 Schwarzhorn</b> Session 2.01 - Part A 10:00 - 11:45 2.01. Groundwater and Climate Change - Impacts and Opportunities	<b>R5 Seehorn</b> Session 4.01. 10:00 - 11:45 4.01. Groundwater Mapping: methodological developments from the sub-national to continental scale	<b>R6 Wisshorn</b> Session 1.15. 10:00 - 12:00 1.15. Advances in aquifer characterization and protection: assessment, monitoring and modelling of microorganisms, biocolloids and particles	<b>R7 Sanada</b> Session 4.07 - Part A 10:00 - 11:45 4.07. Approaches to sustainable groundwater management in a changing world	<b>R8 Sanada</b> Session 3.07. 10:00 - 12:00 3.07. Open data and software for hydrogeologists	<b>R9 Forum</b>	<b>R10 Studio</b> Session 5.02. 10:00 - 11:30 5.02. Advances in Modeling of Groundwater Flow and Transport of Solutes and Energy at Different Scales
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14:30	<b>Session 1.08 - Part A</b> 14:30 - 15:30 1.08. Basin-scale groundwater flow, heat & mass transport processes	<b>Session 1.06 - Part B</b> 14:30 - 15:15 1.06. Coastal Groundwater	<b>Session 2.08 - Part B</b> 14:30 - 15:15 2.08. Environmental tracers to investigate anthropogenic impacts on groundwater quality	<b>Session 2.01 - Part B</b> 14:30 - 15:15 2.01. Groundwater and Climate Change - Impacts and Opportunities	<b>Session 3.04 - Part A</b> 14:30 - 15:15 3.04. People and Groundwater in the Anthropocene	<b>Session 1.12 - Part A</b> 14:30 - 15:30 1.12. Processes in the Unsaturated Zone	<b>Session 4.07 - Part B</b> 14:30 - 15:15 4.07. Approaches to sustainable groundwater management	<b>Session 5.05 - Part A</b> 14:30 - 15:15 5.05. Hydrogeophysics to close subsurface data gaps	<b>Session 5.04 - Part A</b> 14:30 - 15:30 5.04. Applying Machine Learning and Big Data to Understand Complex Hydrogeologic Systems	
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16:15	<b>Session 1.08 - Part B</b> 16:15 - 18:15 1.08. Basin-scale groundwater flow, heat & mass transport processes	<b>Session 1.06 - Part C</b> 16:15 - 17:45 1.06. Coastal Groundwater: Advances, Innovations, and Emerging Technologies	<b>Session 2.08 - Part C</b> 16:15 - 17:45 2.08. Environmental tracers to investigate anthropogenic impacts on groundwater quality	<b>Session 2.01 - Part C</b> 16:15 - 17:00 2.01. Groundwater and Climate Change - Impacts and Opportunities	<b>Session 3.04 - Part B</b> 16:15 - 17:00 3.04. People and Groundwater in the Anthropocene	<b>Session 1.12 - Part B</b> 16:15 - 18:15 1.12. Processes in the Unsaturated Zone	<b>Session 4.07 - Part C</b> 16:15 - 17:00 4.07. Approaches to sustainable groundwater management	<b>Session 5.05 - Part B</b> 16:15 - 17:45 5.05. Hydrogeophysics to close subsurface data gaps	<b>Session 5.04 - Part B</b> 16:15 - 18:15 5.04. Applying Machine Learning and Big Data to Understand Complex Hydrogeologic Systems	
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IAH Groundwater Quality Commission Meeting  
12:30 - 13:25

IAH Liaison with UN Activities (LUNA) - working group meeting  
12:30 - 13:15

## Lunch & Posters

Poster presenters are available at their poster

## Plenary in Davos Plenary Hall

Poster presenters are available at their poster

Meeting of the IAH Groundwater and Climate Change Commission  
18:30 - 20:00

Latin America and Caribbean Hydrogeologists Meeting: Building Networks and Collaborative Work Plans  
18:30 - 20:00

GEWEX Global Groundwater Network Meeting  
18:30 - 20:00

ECHN Annual General Meeting  
18:30 - 19:30

Regional Groundwater Flow Commission  
19:30 - 20:00

**Presentation upload in session rooms  
9:30-10:00, 12:00-12:30, 15:30-16:00, come early please!**

# Tuesday 10.9.2024 - Quick Guide

## Overview of Events



Start	End	Event Type	Topic	Room name
08:30	09:40	<b>Plenary 2:</b>	<b>Future-proofing hydrogeology education</b>	Davos Plenary Hall
08:30	19:00	Exhibition	Discover innovative services and products from leading companies	Congress Hall
10:00	12:00	Focus Event	Panel and presentations on conjunctive management of water resources	R6 Wisshorn
12:30	13:15	Network/Commissions	IAH Education and Outreach Working Group	R8 Sanada
12:15	13:15	Networkshop	Registration necessary	R7 Sanada
13:30	14:25	<b>Plenary 3:</b>	<b>Reversing Groundwater Depletion</b>	Davos Plenary Hall
16:15	16:30	Focus Event	Water Stewardship: Methodologies and the role of hydrogeologists	R6 Wisshorn
16:30	18:00	Focus Event	Applicability and benefits of using UN Framework Classification to water/groundwater resources	Davos Plenary Hall
17:30	18:15	Network/Commissions	CAD-CZM Network Meeting	R2 Flüela
18:30	20:00	Network/Commissions	IAH General Assembly	Davos Plenary Hall
20:00	21:00	Network/Commissions	Meeting of National Chapters of the IAH from the West and Central European Region	R6 Wisshorn

## Invited Speakers

Start	End	Name	Presentation Title	Room
10:00	10:15	<b>Robin Dufour</b>	Invited Speaker: Pit dewatering/pore pressure uncertainty analysis of a 3D FEFLOW unstructured groundwater model at geologically complex Antamina mine site in Peru	R10 Studio
14:30	14:45	<b>Gu Oude Essink</b>	Invited Speaker: Navigating groundwater salinity distribution in coastal groundwater (models): insights, challenges, innovations	R2 Flüela
16:15	16:30	<b>Andrea Gigliuto</b>	Innovative sustainable water management using emerging technologies and data-driven digital platforms	R6 Wisshorn

# Tuesday 10.9.2024 - Parallel Session Room Schedule

	R1 Dischma	R2 Flüela	R3 Sertig	R4 Schwarzhorn	R5 Seehorn	R6 Wisshorn	R7 Sanada	R8 Sanada	R9 Forum	R10 Studio
10:00	Session 1.03. 10:00 - 11:45 1.03. Hydrogeology of volcanic aquifers	Session 1.06. - Part D 10:00 - 11:30 1.06. Coastal Groundwater: Advancements, Innovations, and Emerging Technologies	Session 2.08. - Part D 10:00 - 11:30 2.08. Environmental tracers to investigate anthropogenic impacts on groundwater quality	Session 2.10. - Part A 10:00 - 12:00 2.10. Navigating 21st Century Challenges in Groundwater Quality	Session 3.03. 10:00 - 11:45 3.03. Hydrogeology in humanitarian contexts	Session 3.05. - Introduction & Panel 10:00 - 12:00 3.05. Conjunctive management of water resources	Session 4.05. - Part A 10:00 - 12:00 4.05. Managing aquifer recharge for water resilience	Session 4.09. 10:00 - 11:30 4.09. Groundwater relevance in the context of water-energy-food nexus: applications, perspectives and challenges	Session 3.06. 10:00 - 11:30 3.06. Current developments and future directions for Groundwater Education	Session 5.09. 10:00 - 12:00 5.09. Advances in inverse modeling, data assimilation and uncertainty quantification for hydrogeological simulations
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14:30	Session 1.02. - Part A 14:30 - 15:30 1.02. Hydrogeology of crystalline aquifers	Session 2.06. 14:30 - 15:15 2.06. Aquifers at salinization risks and salinized aquifers	Session 1.10. - Part A 14:30 - 15:15 1.10. Ecohydrogeology: an emerging discipline	Session 2.10. - Part B 14:30 - 15:30 2.10. Navigating 21st Century Challenges in Groundwater Quality	Session 3.02. 14:30 - 15:15 3.02. Developing groundwater for drinking water and sustainable	Session 3.05. 14:30 - 15:30 3.05. Conjunctive management of water resources: aquifers at the heart of interactions	Session 4.05. - Part B 14:30 - 15:15 4.05. Managing aquifer recharge for water resilience	Session 4.02. - Part A 14:30 - 15:15 4.02. Groundwater and Integrated Water Resources Management	Session 5.07. - Part A 14:30 - 15:15 5.07. Remote sensing and hydrogeology	Session 5.01. 14:30 - 15:30 5.01. Applied Modeling for Decision Support in Uncertain and Data-Sparse Environments
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16:15	Session 1.02. - Part B 16:15 - 18:15 1.02. Hydrogeology of crystalline aquifers	Session 2.06. 16:15 - 17:30 2.06. Aquifers at salinization risks and salinized aquifers: from the risk management to their sustainable utilization	Session 1.10. - Part B 16:15 - 18:00 1.10. Ecohydrogeology: an emerging discipline	Session 2.10. - Part B 16:15 - 18:15 2.10. Navigating 21st Century Challenges in Groundwater Quality	Session 3.02. 16:15 - 18:15 3.02. Developing groundwater for drinking water and sustainable livelihoods for low-income communities	Focus Event: 4.12. Water Stewardship 16:15 - 17:45 Focus Event	Session 4.05. - Part C 16:15 - 17:00 4.05. Managing aquifer recharge for water resilience	Session 4.02. - Part B 16:15 - 18:00 4.02. Groundwater and Integrated Water Resources Management	Session 5.07. 16:15 - 17:30 5.07. Remote sensing and hydrogeology	Session 5.01. 16:15 - 18:15 5.01. Applied Modeling for Decision Support in Uncertain and Data-Sparse Environments
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Youth Hub Workshop - Developing Groundwater for a sustainable future  
12:15 - 13:00

IAH Education and Outreach Working Group  
12:30 - 13:15

## Lunch & Posters

Poster presenters are available at their poster

## Plenary in Davos Plenary Hall

Poster presenters are available at their poster

Presentation upload in session rooms 9:30-10:00, 12:00-12:30, 15:30-16:00, come early please!

# Thursday 12.9.2024 - Quick Guide

## Overview of Events



Start	End	Event Type	Topic	Room
08:30	09:25	Plenary 4	Preserving Groundwater Quality for Future Generations	Davos Plenary Hall
08:30	19:00	Exhibition	Discover innovative services and products from leading companies	Congress Hall
12:15	13:00	Focus Event	brown bag LUNCH LECTURE - Erik Nickel	R7 Sanada
12:30	13:15	Focus Event	Guided tour of MS2field a mobile HR-LC-MS for micropollutant analysis	Congress Centre Entrance
13:30	14:25	Plenary 5	Safeguarding groundwater in a multifunctional Subsurface	Davos Plenary Hall
14:30	15:30	Focus Event	Sharing Experiences on Mobile Persistent Groundwater Contaminants and Mitigation Approaches	R6 Wisshorn
15:30	16:00	Focus Event	Panel on Groundwater for peace: Transboundary areas for shared aquifer management in Session 4.04.	R5 Seehorn
18:30	19:30	Network/Commissions	IAH National Chapters Meeting	R7 Sanada
19:30	20:00	Social Event	Hydrogeological Apéro: Tasting of water from excursion sites	Entrance Area
20:00	1:00	Social Event	Gala Dinner	Davos Plenary Hall

## Invited Speakers

Start	End	Invited Speaker	Titel	Room name
10:00	10:15	Enrica Zullo	Invited Speakers: Earthquake-related hydrogeological changes of the Sibillini Mts. carbonate hydrostructure: insights from numerical modeling	R1 Dischma
11:00	11:15	Jannes Kordilla	Invited Speaker: Hydraulic and geometric controls on flow and transport dynamics in complex karst networks: A novel computational modeling tool	R1 Dischma
14:30	14:45	John Doherty	Invited Speaker: Numerical Modelling Appropriateness	R10 Studio
16:15	16:30	Peter Bayer	Invited Speaker: Global projection of subsurface climate: Shallow groundwater warming trends caused by climate change	R3 Sertig
16:15	16:30	John Sharp	Invited Speaker: Flow Systems in Arid Trans-Pecos Texas and Management Challenges	R5 Seehorn
16:15	16:30	Benjamin Lopez	Invited Speaker: CIS WG-GW challenges and strategies for improving EU groundwater monitoring and reporting	R6 Wisshorn
18:00	18:15	Stéphane Horel	The Forever Pollution Project: an Inventory of PFAS Contamination across Europe	R6 Wisshorn
16:15	16:30	Dario Tedesco	Invited speaker: Monitoring Active Volcanoes and Water Quality during war time: the case of Mt Nyiragongo volcano and the city of Goma (DR Congo).	R8 Sanada
16:15	16:45	Jodie Ann Miller	Invited speaker: Multi-faceted isotopic approaches to sustainable groundwater management	R9 Forum
16:15	16:30	Hugo Delottier	Invited speaker: A comprehensive data worth analysis of environmental tracers with an improved data space inversion framework	R10 Studio

# Thursday 12.9.2024 - Parallel Session Room Schedule

	R1 Dischma	R2 Fluëla	R3 Sertig	R4 Schwarzhorn	R5 Seeshorn	R6 Wisshorn	R7 Sanada	R8 Sanada	R9 Forum	R10 Studio
10:00	Session 1.01. - Part A 10:00 - 11:45 1.01. Karst hydrogeology: Flow systems and modelling approaches	Session 1.13. - Part A 10:00 - 11:45 1.13. Groundwater-Surface water interaction	Session 2.02. - Part A 10:00 - 12:00 2.02. Drought Impacts on Groundwater Systems: Processes, Assessment and Prediction	Session 2.07. - Part A 10:00 - 12:00 2.07. Agricultural impacts on groundwater quality	Session 4.04. 10:00 - 12:00 4.04. On effective transboundary groundwater areas for shared aquifer management	Session 3.01 10:00 - 12:00 3.01. Self-supply & SDG6: Possibilities and pitfalls of private wells	Session 2.04. - Part A: Climate and land use change/infrastructure 10:00 - 11:30 2.04. Groundwater and urban development	Session 4.08. - Part A 10:00 - 11:45 4.08. The Interplay between Geothermal Energy and Groundwater Use in the Energy Transition	Session 4.06. 10:00 - 11:45 4.06. Sustainable groundwater management: evaluating measures and strategies for enhancing the buffering capacity of groundwater	Session 4.03. - Part A 10:00 - 11:45 4.03. From Data to Decisions
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11:45	1.01. Poster-Pitch	1.13. - Poster Pitch A					2.04. - Poster Pitch A 11:30 - 12:00	4.08. - Poster Pitch	4.06. Poster-Pitch	4.03. - Poster Pitch
12:00	<p style="text-align: center;">Lunch &amp; Posters</p> <p style="text-align: center;">Poster presenters are available at their poster</p> <p style="text-align: center;">Plenary in Davos Plenary Hall</p> <p style="text-align: center;">Poster presenters are available at their poster</p>									
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14:30	Session 4.10. - Part A 14:30 - 15:30 4.10. Karst Hydrogeology: Water supply and engineering solutions	Session 1.13. - Part B 14:30 - 15:15 1.13. Groundwater-Surface water interaction	Session 2.02. 14:30 - 15:15 2.02. Drought Impacts on Groundwater Systems	Session 2.07. - Part B 14:30 - 15:15 2.07. Agricultural impacts on groundwater quality	Session 4.04. 14:30 - 15:30 4.04. On effective transboundary groundwater areas for shared aquifer management	Sharing Experiences on Mobile Persistent Groundwater Contaminants 14:30 - 15:30 Focus Event	Session 2.04. - Part B: Contaminants 14:30 - 15:30 2.04. Groundwater and urban development	Session 4.08. 14:30 - 15:30 4.08. The Interplay between Geothermal Energy and Groundwater Use in the Energy Transition	Session 4.06. 14:30 - 15:30 4.06. Sustainable groundwater management: enhancing the buffering capacity of groundwater	Session 4.03. - Part B 14:30 - 15:30 4.03. From Data to Decisions
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15:30	<p style="text-align: center;">Poster presenters are available at their poster</p>									
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16:45	Session 1.01. - Part B 16:15 - 18:00 1.01. Karst hydrogeology: Flow systems and modelling approaches	Session 1.13. - Part C 16:15 - 18:00 1.13. Groundwater-Surface water interaction	Session 2.03. 16:15 - 18:15 2.03. Groundwater temperatures in the context of global warming and anthropogenic influences - risks and opportunities	Session 2.11. 16:15 - 18:15 2.11. Per- and polyfluoroalkyl substances (PFAS) in groundwater systems - How do they behave and how can we treat them?	Session 1.04. - Part A 16:15 - 18:00 1.04. Hydrogeology of Arid Environments	Session 3.08. 16:15 - 18:15 3.08. Groundwater Monitoring and Reporting: Navigating Challenges and Promoting Collective Action	Session 2.04. - Part C: Drinking Water 16:15 - 18:00 2.04. Groundwater and urban development	Session 1.07. - Part A 16:15 - 18:00 1.07. Hydrogeology and Geochemistry of Mineral and Thermal Waters	Session 5.06. 16:15 - 18:30 5.06. Innovative field methods	Session 5.08. - Part A 16:15 - 18:15 5.08. Advances in hydrogeological modelling applications
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brown bag LUNCH  
LECTURE  
12:15 - 13:00  
Focus Event

IAH National Chapters  
Meeting  
18:30 - 19:30

**Presentation upload in session rooms at  
9:30-10:00, 12:00-12:30, 15:30-16:00, come early please!**



# Floor Map

