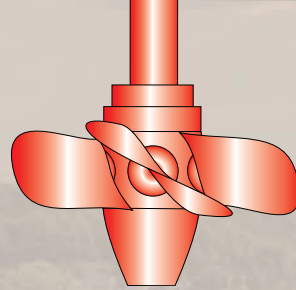


International Conference and Exhibition

HYDRO
2024



HYDRO 2024

Secure technology for turbulent times

Messe Congress Graz (MCG), Austria

18 to 20 November 2024

Organized by:

Supporting organizations include:

THE INTERNATIONAL JOURNAL ON
**HYDROPOWER
& DAMS**

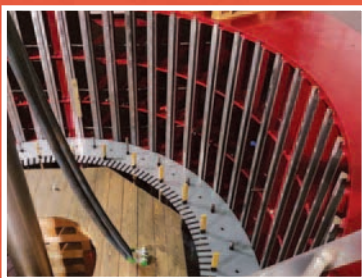
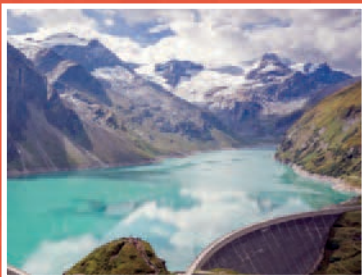
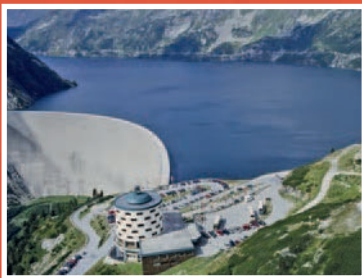
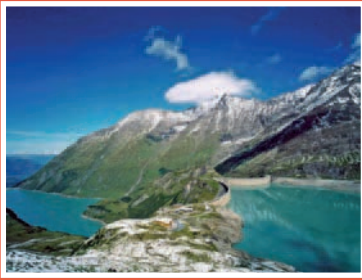


Following previous events in Gmunden (1999), Villach (2005), and Innsbruck (2013) we are delighted to be bringing our next major international hydropower conference back to Austria

Regular updates will be posted on our website and published
in *Hydropower & Dams*

Email: Hydro2024@hydropower-dams.com

www.hydropower-dams.com





HYDRO 2024 RETURNS TO AUSTRIA

Austria has a long hydropower heritage, and more than half (53 per cent) of the country's electricity comes from hydro. There is nearly 15 GW of hydro capacity in operation, and Austria is Europe's most active country for pumped storage, with four new pumped-storage plants under construction, totalling 865 MW, and several more planned, including Kaunertal (1015 MW) in the Tyrol, and Ebensee (170 MW) in Upper Austria.

Construction of small and medium-scale run-of-river schemes is also continuing, and Verbund is currently focusing on upgrading and repowering existing plants, as well as testing new storage technologies.

GRAZ AS HOST CITY

Graz is the capital of Styria, in Austria, and the largest city in the province, which is a green and heavily forested region on the eastern edge of the Alps. It is located in the Graz Basin and surrounded by mountains and hills to the north, east and west.

At the heart of its old town is Hauptplatz, the medieval main square. The narrow surrounding streets blend Renaissance and baroque architecture. A funicular leads up Schlossberg, and the Uhrturm, a centuries-old clock

tower. Across the River Mur, the futuristic Kunsthaus Graz exhibits contemporary art.

It is a vibrant university town. Many experts from the world-renowned TU Graz are frequent contributors to the HYDRO conference programmes each year, and will have much to present this time, including a possible visit to the hydraulic laboratory.

THE EVENT

The conference aims to bring together around 1200 international delegates from at least 75 countries, to discuss all topical aspects of hydropower, dam engineering and pumped-storage development. Speakers will address potential and prospects, new technology, safety and risk, project finance and environmental issues.

Messe Congress Graz (MCG) is a modern, state-of-the-art conference and exhibition centre in the middle of town, with spacious facilities for HYDRO 2024. It is within walking distance of most of the hotels which are being booked for delegates.

A major technical exhibition will, as always, be held alongside the conference, and there will be plenty of networking opportunities for exhibitors

to make contacts with international delegates from all parts of the world. The exhibition plan is on our website, so if you would like to reserve space, please visit:

www.hydropower-dams.com/hydro-2024/exhibition-plan/

as soon as possible to secure your preferred position.

There will be no shortage of both technical and cultural tours, before and after the conference. Technical study tours are planned to follow HYDRO 2024, in partnership with ATCOLD and the major utilities. Details will be announced soon. The social events and accompanying persons' programme will, as always, give an opportunity to experience local culture, cuisine, and sightseeing.

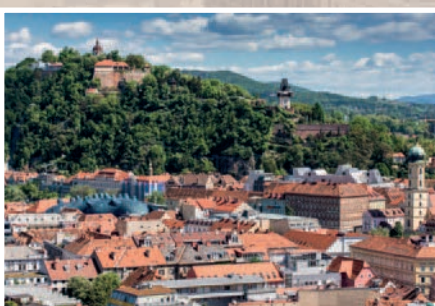
More details will be progressively announced on our website, in our Journal, and through occasional emails.

Meanwhile, for queries about the conference, contact:

hydro2024@hydropower-dams.com

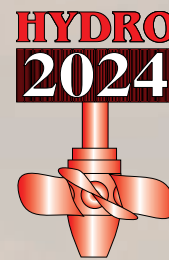
For exhibition queries or sponsorship opportunities, contact:

sales@hydropower-dams.com





HYDRO 2024



Secure technology for turbulent times

*Abstracts are invited on the themes below, and related topics.
(See guidelines for submitting abstracts on the next page)*

Potential and development opportunities

National plans and potential
Policies and targets: Are they always realistic?
New planning tools
Integrated regional development
Opportunities for cross-border trading
Planning cascade developments

Hydro in the energy transition

Hydro in synergy with other renewables
Floating solar PV and dam-mounted PV
Increasing hydropower flexibility
Quantifying the value of hydro's ancillary services
The increasing importance of pumped storage
Success stories and instructive case studies

Project financing and development

Roles of the public and private sectors
Risk allocation and management
Concession arrangements and options
Legal and institutional aspects
Contractual issues
Commercial and economic aspects
Quantifying the value of hydro's ancillary services

Safety and risk

Disaster risk management
Dam safety policies and practice
Enhancing the safety of dams and powerplants
Software systems and cyber security

Technology

Increasing roles for artificial intelligence
BIM for planning, design and operation

Civil construction and automation
Heightening dams
Monitoring and instrumentation
Hydraulic modelling of dams and spillways
Machinery efficiency and turbine technology
Small hydro, rural electrification and marine energy
Transmission and electrical engineering

Operational issues

Optimizing reservoir operation
Operation and maintenance
Enhancing efficiency
Grid stability and dynamic power regulation of units

Climate and hydrology

Hydrology and flood management
GHG emissions: research updates
Climate change and ESG
Adaptation and resilience strategies
Structural mitigation measures

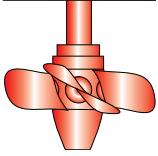
Environmental and social aspects

Fish protection: innovative technology
Impact assessment and mitigation
Residual and cumulative impacts
Stakeholder consultations
Sedimentation management

Social issues and capacity building

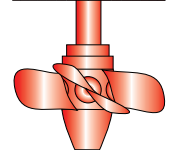
Technical and institutional capacity building
Benefit sharing for local development
Knowledge transfer – on site and through training
Inspiring the next generation of engineers
Appropriate contracts for less developed countries

**HYDRO
2024**



SUBMISSION OF ABSTRACTS

**HYDRO
2024**



Abstracts of up to 500 words, in English, are invited on the themes listed in the centre of this brochure or on related topics. Please email abstracts to the address below by 31 March 2024 at the latest. A short CV of each author/co-author should be included.

Abstracts should summarize precisely the scope and content of the paper proposed. No artwork is required at this stage. In the case of any project described, please mention its current status or date of completion. Please incorporate the author's name in the file name.

Please note: abstracts should only be submitted if the author would be able to attend the conference (or send a representative). Please obtain any necessary clearance and check availability to attend before submitting the abstract. Speakers are eligible for reduced registration fees (about 50 per cent of the full fees).

If the paper is accepted, you will be asked to sign a form confirming willingness to attend; it is essential that we receive this undertaking before allocating time for an oral presentation.

Technical abstracts will generally be reviewed by two or more experts from our International Steering Committee, and authors may be asked to modify some aspects of the proposed paper.

Full papers will be required by Friday 6 September 2024, and format guidelines will be sent to all authors whose papers are accepted. Full papers accepted for the conference will be made available to all HYDRO 2024 delegates.

- ▶▶ I am interested in attending the Conference as a delegate. Please send further details.
- ▶▶ I attach an abstract for consideration. If it is accepted, I (or a co-author or a representative) will attend the conference to present the paper (*NB: Speakers will be eligible for reduced registration fees, which will cover attendance of the whole event, including the technical and social programmes and meals during the conference*).
- ▶▶ My organization may wish to participate in the Exhibition. Please send further details.
- ▶▶ I am interested in sponsorship opportunities. Please send further details.
- ▶▶ I would like to subscribe to *The International Journal on Hydropower & Dams*
(There will be reduced registration fees for subscribers to the journal).

Name: Position/Dept:.....

Company/Organization:

Address:

..... Country:

Email address: Tel: (+int. code):

Return to: HYDRO 2024, Hydropower & Dams, PO Box 285, Wallington, Surrey SM6 6AN, UK

Email: hydro2024@hydropower-dams.com