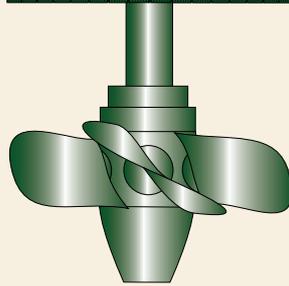




HYDRO 2021



ROLES OF HYDRO IN THE GLOBAL RECOVERY

International Conference and Exhibition
Strasbourg, France ~ Palais de la Musique et des Congrès
25 to 27 October 2021

Organized by:

THE INTERNATIONAL JOURNAL ON
**HYDROPOWER
& DAMS**

Supporting organizations include:



9th FORUM MONDIAL
DE L'EAU/DAKAR 2021



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

Email: hydro2021@hydropower-dams.com • Tel: + 44 20 8773 7244

www.hydropower-dams.com

HYDRO 2021 MISSION AND SCOPE

STRASBOURG AS HOST CITY

Strasbourg is an ideal meeting point for discussions on hydropower, located on the west bank of the Rhine (a river rich with hydropower), which forms the border with Germany, and is very close to the Swiss border. It is the capital of the Grand Est region of France (formerly known as Alsace), and the seat of the European Parliament. More importantly for HYDRO 2021 delegates, it lies in the heart of one of the major hydropower regions of Europe.

The culture, architecture and cuisine reflect a blend of French and German influences.

Canals run through the picturesque centre of town, and there are many historical sites to be visited, as well as fine art museums, and the striking gothic cathedral. Just outside town there is a magnificent landscape of vineyards, where the 'Alsace wine route' begins.



MISSION AND SCOPE

The focus of the conference will be on the impact of hydropower worldwide, and optimizing its ongoing contribution to progress and development, particularly in the post-pandemic recovery period. Major renewable energy policy drivers, such as the AU, IRENA, IEA, the EU and the IFIs have agreed that there will be a need for vast amounts of new hydro and pumped-storage, in the move to achieve a more sustainable future, with a greater share of all renewable energy sources, but especially hydropower.

Key topics to be covered are listed on the page opposite.

The French hydropower and dam industry welcomes the event, and the extensive experience of supporting organizations EDF and CNR, both within France and abroad, will be well reflected in the programme, and on the study tours.



COLLABORATION AND CO-LOCATED EVENTS

Professional associations such as ICOLD and the International Energy Agency, as well as the World Bank, will lead some of the technical sessions.

- Itaipu Binacional is planning to hold its fifth Global Hydropower Operators' Round Table, giving operators of major powerplants an opportunity to exchange experience on operational issues and maintenance.
- A 'Design a small hydropower project in one day' workshop will be held prior to HYDRO 2021. This series of extremely successful workshops, led by Prof David Williams and Gordon Black, of Learning Hydro, UK, and sponsored by Gilkes, have been held at previous HYDRO, ASIA and AFRICA events.

CUTURAL AND TECHNICAL TOURS

Three post-conference **study tours** are being planned, together with EDF and CNR, which will give delegates the opportunity to visit some low-head hydro projects nearby on the Rhine, an important control centre, a hydro scheme under construction, and several high-head pumped-storage plants, as well as run-of-river schemes on the Rhone.

The tours will give the opportunity for delegates to learn about French expertise with upgrading and powerplant extensions, state-of-the-art control, and environmental enhancement. More details of the tours will be announced on our website shortly.

As always, a **local excursion for all**, with lunch, to view some of the most picturesque parts of Strasbourg, will be offered on the day preceding the conference, on 24 October.

Then a three-day **package for accompanying persons** has been organized, which will take in a tour of the European Parliament, the Alsatian Museum, a winery, the picturesque village of Obernai, a chocolate museum, the Haut Koenigsbourg castle, and of course some delicious lunches together.



CONFERENCE TOPICS

Abstracts are now invited on the themes set out below, or related topics. Please note these are not final session topics; those will be determined later when papers have been selected. If you would like to submit an abstract on a relevant topic for the industry which is not listed below, please do so. Please feel free to suggest special sessions or workshops, which can also be considered at this stage, either as part of the programme or as side event.

Future developments

The role of hydro in the post-COVID recovery
Hydropower integrated with other RE systems
Identifying development opportunities
Planning and design, including planning tools
Artificial intelligence and computer learning
The need for flexible grid systems

Transboundary projects

Project structuring and financing
Joint research and planning for cross-border schemes
Responsibilities for safety and hazard risk
Environmental aspects of transboundary projects
Viewpoints from the development banks
Technical issues, including transmission lines

Project financing and structuring

Investment trends and long-term opportunities
Attracting private finance
The shift from BOOT to PPPs
Company, project and country risk management
Concession agreements
Legal, contractual and insurance issues
Valuing full economic benefits and liabilities

Dealing with hazards and risk

Adapting management to address challenge of a pandemic
Experience with climate adaptation strategies
Climate-resilient infrastructure and projects
Challenges of seismicity, landslides, extreme floods and GLOFs
Warning systems, exclusion mapping and evacuation plans

Civil engineering

New approaches to design and construction
Refurbishment and retrofitting of civil works
Materials for dams
Challenging sites (geological conditions, remote access, extreme climate, etc)
Tunnels and underground works

Safety and risk

Dam and hydro plant safety; design aspects and monitoring systems
Cyber security
Learning from incidents and failures
Public safety around water infrastructure
Electronic and physical security of gates and spillways
Gate operation (including hot and cold climatic conditions)

Pumped storage

The role of pumped storage for intermittent energy sources
Technical developments in pumped storage
Ancillary benefits of pumped storage
Innovative pumped-storage projects

Hydraulic and electrical machinery

Research and development
Modelling and testing
Machinery design and safety
Smart systems to improve efficiency
Hydro plant operation
Powerplant monitoring and control
Operation and maintenance
Retrofitting and upgrading
Timely refurbishment

Environmental and social aspects

Strategic integration of environmental, social and governance aspects
Designing environmental mitigation measures
Environmental enhancements during upgrades
Innovative solutions for fish protection and passage
Greenhouse gas emissions accounting
Resettlement programmes
Post-implementation socio-economic assessments
The role of hydro in livelihood improvement/poverty alleviation

Small hydropower

Small hydro potential and benefits
Rural electrification schemes
Innovative small hydro technology
Marine energy: wave and tidal power

Capacity building and training

Capacity building needs, and developing local expertise
Succession planning and opportunities for young professionals
Training programmes
Viewpoints from young engineers

Sedimentation management

Hydraulic research and modelling
Monitoring sedimentation
Sediment removal systems
Design solutions for siltation and erosion
Catchment area management
Young professionals' research in sedimentation

- Please remember that submission of an abstract implies a willingness to attend to present it, and so all relevant permissions should have been sought to present the work. In the very unlikely event that the event should again take place on line, your commitment to present the paper (pre-recorded) should still stand.
- Please also note that in the cases of papers accepted for the originally planned HYDRO 2020 in Strasbourg, which had appeared on the programme but were later withdrawn, will **not** automatically be transferred to HYDRO 2021. In some circumstances, such as a withdrawal of a paper for reasons associated with the project to be described, or delays in research results, etc, it may be possible to arrange for an updated version of the paper originally proposed to be presented. But major priority will be given to new proposals for presentations, which are fully up-to-date, and thus of greatest value to the international participants.
- All abstracts submitted for HYDRO 2021 will be reviewed by two or three members of our International Steering Committee as usual, and authors will be notified of acceptance, or otherwise, in June 2021.

HYDRO 2021 EXHIBITORS

Stands reserved, as of December 2020

Acebron Group, Spain	www.acebrongroup.com	87	Ikon Idea, Romania	www.ikonideea.ro	83
Adams Schweiz AG, Switzerland	www.adams-armaturen.ch	77	IMHP, Spain	www.imhp.es	33
AFRY	www.afry.com	85	Indar, Spain	www.indar.net	68
Alpiq AG, Switzerland	www.alpiq.ch	77	Končar, Croatia	www.koncar.com	73
API Metrology, Germany	www.apimetrology.com	84	Leroy Somer, France	www.leroysoyer.com	134
API SpA Trash Rakes, Italy	www.apispa.net	14	Litostroj Engineering a.s., Czech Republic	www.litostroj-eng.com/en	89
AquaVision Engineering SA, Switzerland	www.aquavision-eng.ch	77	MC-Monitoring SA, Switzerland	www.mc-monitoring.com	126
Arcon, UK	www.arcon-aquapro.com	37	Mechmine, Switzerland	www.mechmine.com/de/	77
Armatury Group, Czech Republic	www.armaturygroup.cz	67	Milsa Trillo Galicia, S.A.	www.milsatrillo.com	105
ATB Riva Calzoni, Italy	www.atbrivacalzoni.com	53	Muhr, Germany	www.muhr.com	17
ATP SpA, Italy	www.atpgroup.it	27	Norwegian Pavilion	www.norwep.com	99
Auma Actuators, Germany	www.auma.com	69	Obermeyer Hydro Inc, USA	www.obermeyerhydro.com	40
Bavarian Pavilion, Germany	www.bayern-international.de	109	Omexom, France	www.omexom.com	42
Bernard & Bonnefond, France	www.bernardbonnefond.com	115	Poolmeccanica Lorenzon Srl, Italy	www.poolmeccanicalorenzon.it	49
Borflex, France	www.borflex.fr	9	Power Vision Engineering SA, Switzerland	www.powervision-eng.ch	77
Braun Maschinenfabrik, Austria	www.braun-tech.com	320	Prof. Dr. Jaberg und Partner GmbH, Austria	www.jabergundpartner.com/en	54
C.I.B. Srl Carpenteria Industriale Bresciana, Italy	www.cibcarpenterie.com	2	Promote Iceland	www.islandsstofa.is	41
Carpi, Switzerland	www.carpitech.com	29	Renesco, Switzerland	www.renesco.com/	13
CG Ganz Generator & Motor, Hungary	www.cgglobal.com	314	Rittmeyer AG, Switzerland	www.rittmeyer.com	77
CKD Blansko, Czech Republic	www.ckdblansko.cz	15	Sadafzar Co. Ltd, Iran	www.sadafzar.ir	34
CMA Hydro, Italy	www.cmahydro.com	21	Sauer Compressors, Germany	www.sauercompressors.com	39
Compagnie Nationale du Rhône (CNR), France	www.cnr.tm.fr	58	Schmiedewerke Gröditz, Germany	www.stahl-groeditz.de	62
Cooperativa Edile Appennino, Italy	www.cea-coop.it	148	Sedicon, Norway	www.sedicon.no	86
Costronic SA, Switzerland	www.costronic.ch	77	Ševčík Hydro s.r.o., Czech Republic	www.sevcik-hydro.cz	22
DLZ Hydrokinetic Turbine & Pump Corporation, USA	www.dlz.com	23	SKF Sealing Solutions, Austria	www.skf.com/seals	50
Dolsar Engineering Inc. Co., Turkey	www.dolsar.com.tr	140	SMI-Drulingen SAS, France	www.smi-drulingen.fr	138
Douce-Hydro, France	www.doucehydro.com	46	Sogéa-Satom, France	www.sogea-satom.com	42
DSD Noell GmbH, Germany	www.dsd-noell.com	18	Sparks Instruments, Switzerland	www.sparksinstruments.com	126
Dyrhoff, UK	www.dyrhoff.co.uk	127	Stahlhandel Gröditz GmbH, Germany	www.stahlportal.com	63
EPFL - Laboratory for Hydraulic Machines, Switzerland	www.epfl.ch	77	STM srl – Sviluppato Tecnologie Meccaniche, Italy	www.stmpotenza.com	8
F. Nencini, Italy	www.nencini.com	11	Stucky Ltd, Switzerland	www.stucky.ch	47
Farab, Iran	www.farab.com	35	Subdron GmbH, Austria	www.subdron.com	129
Federal Mogul Deva GmbH, Germany	www.deva.de	61	Swiss Pavilion		77
Freyssinet, France	www.freyssinet.com	42	Tacquet Industries, France	www.tacquet-industries.fr	5
Glual Hydraulics, Spain	www.glual.com	31	Talleres Aratz, Spain	www.talleresaratz.com	65
Graz University of Technology, Austria	www.tugraz.at	51	TES Vsetin, Czech Republic	www.tes.cz/en/	147
Gometegui Industrial, Spain	www.gometegui.com	25	TIS Service SpA, Italy	www.tisgroup.it	30
GWF Technologies GmbH, Germany	www.gwf.ch	139	Tractebel	www.tractebel-engie.com	306
Heico Group	www.heico-group.com	1	Troyer SpA, Italy	www.troyer.it	24
HES-SO Valais, Switzerland	www.hevs.ch	77	Turbiwatt, France	www.turbiwatt.com	115
HPP (Hydro Power Plant), France	www.hydropowerplant.com/fr	115	Ultraflux S.A., France	www.ultraflux.com	52
Hydac International, Germany	www.hydac.de	45	University of Technology Graz, Austria	www.tugraz.at	51
Hydro Maintenance Service, Switzerland	www.hmservice.biz	141	Verbund Hydro Consulting, Austria	www.verbund.com/en-at	128
Hydro-Construct GesmbH "The rubber dam company", Austria	www.hydroconstruct.at	309	Vinci, France	www.vinci.com	42
Hydrokarst Group, France	www.hydrokarst.fr	133	Vortex Hydra, Italy	www.vortexhydradams.com	70
Hydroplus, France	www.hydroplus.com	42	Wiegert & Bähr Turbinen und Stahlwasserbau GmbH, Germany	www.wb-hydro.de	7
HyFish – University of Innsbruck, Austria	www.hyfish.at	66	WWS Wasserkraft GmbH, Austria	www.wws-wasserkraft.at	301

(Bold font denotes Conference Sponsor)



GamesaElectric

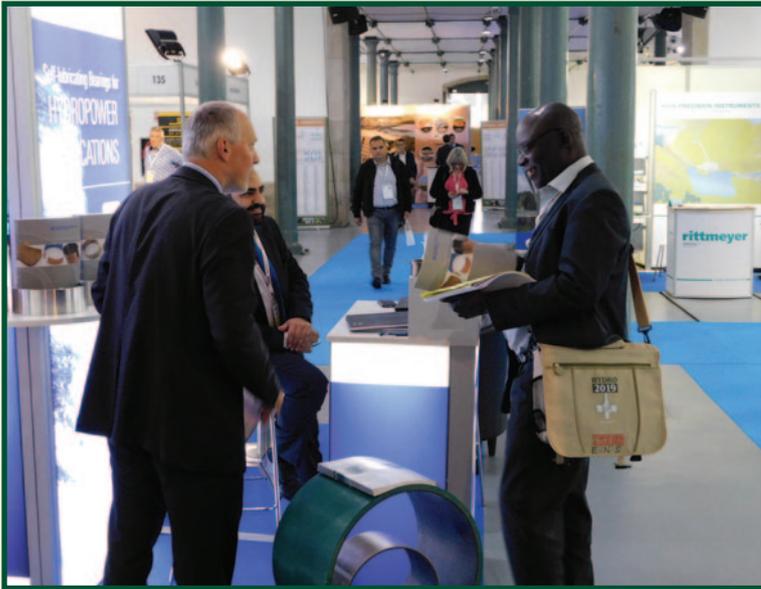


To receive further details of the exhibition and/or sponsorship opportunities, please contact:

Dr Lukas Port, Mrs Maria Loreda or Mrs Melanie Ganz • Tel: +44 20 8773 7250/7251/7252 • Email: sales@hydropower-dams.com
Alternatively, we invite you to book Exhibition space online via our website: www.hydropower-dams.com/hydro-2021/exhibition-plan

HYDRO 2021 EXHIBITION AND SPONSORSHIP

A major element of HYDRO 2021 will be the Technical Exhibition, running for three days alongside the conference (25 to 27 October). The exhibition areas will be the main hubs for business networking between delegates and industry representatives who will be exhibiting their supplies and services. Exhibitors typically comprise consultants, contractors, manufacturers, developers and professional associations.



All lunches and refreshments will be served in the exhibition, with catering points arranged to allow delegates to move around the whole area regularly during the three days. Feedback from previous events indicates that delegates maximize the opportunities to circulate in the exhibition, and that valuable contacts are made, which are maintained after the event. All parts of the conference and exhibition are open to all registered participants.

The exhibition will remain open for a networking reception after the conference sessions end on Tuesday 26 October, to provide extra opportunities for business meetings in an informal atmosphere.

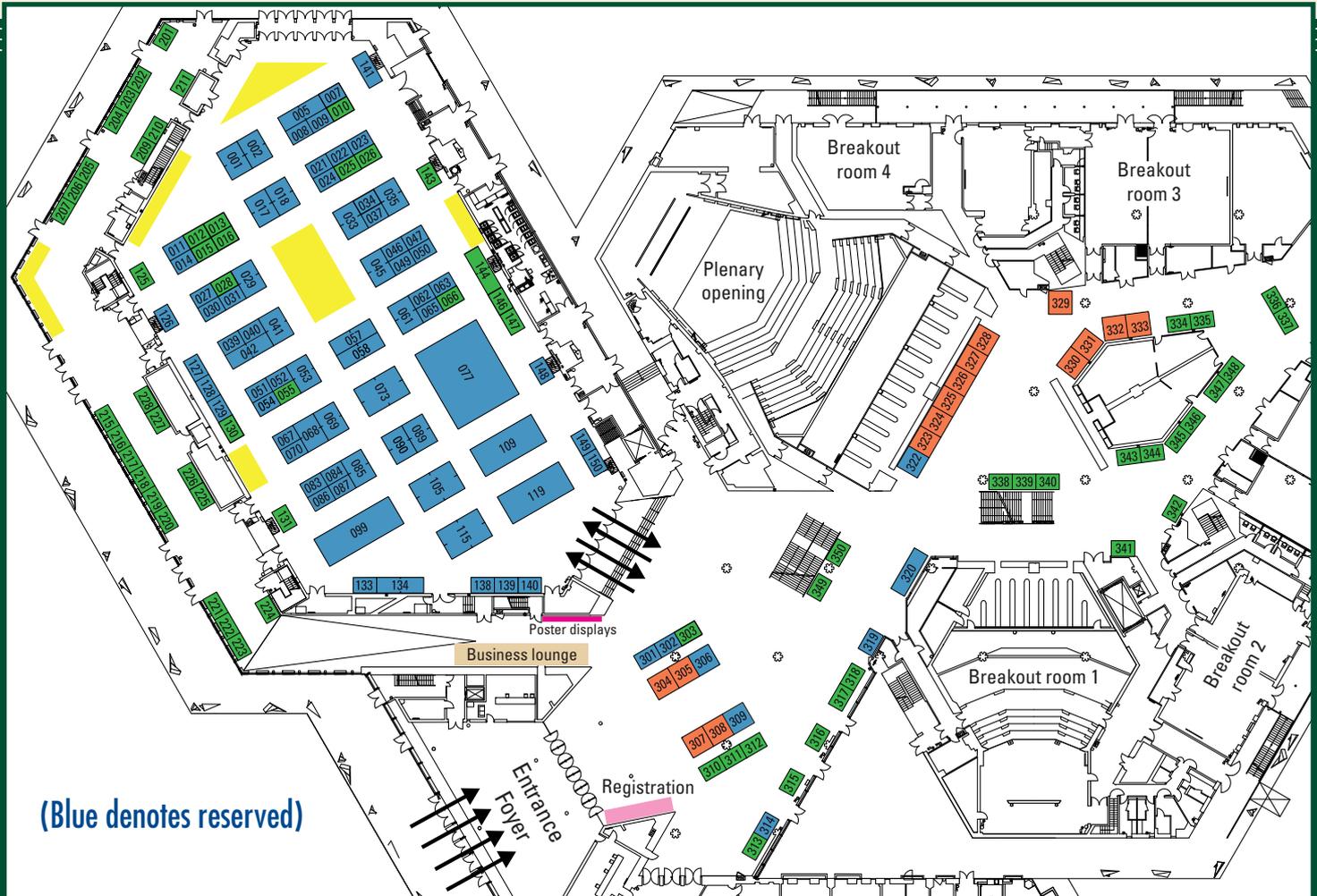
Exhibition space is generally sold in units of 6 m², and multiple units can be combined to create larger displays, including custom-built stands.

Sponsorship packages are available and provide an excellent way of standing out among competitors (such as coffee breaks, lunches, social events and more).

Please contact: sales@hydropower-dams.com
or visit: www.hydropower-dams.com/hydro2021/exhibition-plan

TECHNICAL EXHIBITION PLAN AND PRICING

3 x 2 m (6 m²) = € 3225 3 x 3 m (9 m²) = € 4835 = Catering



SUBMISSION OF ABSTRACTS

Abstracts are invited on the themes listed or related topics. Please email abstracts to: hydro2021@hydropower-dams.com. A short CV of each author (and any co-authors) must be included.

FORMAT REQUIREMENTS

Your abstract should be in Word, up to 800 words long, in English, and should summarize precisely the scope and content of the proposed paper. In the case of any project described, please mention its current status and date of completion. It would be helpful to suggest the topic to which your paper is best suited.

Please incorporate the author's name in the file name of the abstract. It is helpful to send a PDF in addition to the Word file.

ATTENDING THE CONFERENCE

Please note that 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 your availability to attend, before submitting the abstract.

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

If you have had a paper accepted in the past, and did not attend to present it, you may be asked to register before acceptance of your paper for HYDRO 2021 can be confirmed.

Speakers will be eligible for reduced registration fees, which will include meals and social events during the conference. In the case of speakers from the least developed

countries, in some circumstances, we may be able to secure financial support to cover fees, but it is essential that we know this at the time when the abstract is submitted.

The final deadline for receipt of abstracts is **31 March 2021**. However, it is useful to receive submissions as early as possible.

Authors will be notified in June 2021 whether or not their paper has been accepted for presentation (or alternatively for publication only on the USB stick).

Abstracts will generally be reviewed by two or more experts on our International Steering Committee, and you may be asked to modify some aspects of your proposed paper. As this review process takes some time, we urge you to submit abstracts promptly (and if possible, well before the deadline).

Full papers will be required by **4 September 2021**, and format guidelines will be sent to all authors whose papers are accepted.

A PDF and Word document of each final paper will be required.

HYDROPOWER & DAMS SUBSCRIBERS

Personal subscribers to *Hydropower & Dams* journal will be eligible for a reduced registration fee. Therefore, it makes sense to subscribe to the journal now or before registering for the conference, if you do not do so already. A new subscription can be requested now by emailing: subs@hydropower-dams.com or ordered on-line via our website at:

www.hydropower-dams.com/product/journal-subscription

HYDRO 2021 ~ ROLES OF HYDRO IN THE GLOBAL RECOVERY

Palais de la Musique et des Congrès ~ 25-27 October 2021

- I am interested in attending the Conference and Exhibition as a delegate. Please send further details.
- I attach/enclose an abstract for consideration. If it is accepted, I or a colleague will attend the conference to make the presentation.
- I intend to submit an abstract by 31 March 2021 at the latest.
- My organization may wish to participate in the Exhibition. Please send further details.
- I am interested in sponsorship opportunities (coffee breaks, lunches, social events, entertainment, WiFi, etc). Please send details.

Name: Position/Dept:

Organization:

Address:

Country: Email:

Fax: (+ int. code) Tel: (+ int. code)

Proposed paper title topic:

Return to: HYDRO 2021, Aqua~Media International, PO Box 285, Wallington, Surrey SM6 6AN, UK • Email: hydro2021@hydropower-dams.com

You can also register to receive updates on our activities via our website: www.hydropower-dams.com