

### vgbe Expert Event

# Innovations in Hydropower Plant Operation and Maintenance

Inspection | Modernization | Research

Event in Salzburg, Austria 27/28 March 2025



## vgbe Expert Event Innovations in Hydropower Plant Operation and Maintenance 2025

Innovative approaches to the operation, maintenance and inspection of hydropower facilities are needed to ensure optimal performance. Poor operation, maintenance and inspection through a lack of investment, inadequate training or outdated approaches, can cause high outage rates, performance losses and increased operating costs. These often lead to lost energy production, reduced revenues and in some cases result in safety and environmental concerns.

Choosing whether to maintain or upgrade hydropower plant components can be difficult. Poor original equipment reliability can force changes, but often a detailed cost-benefit analysis is needed to make decisions. Understanding how others have tackled this process can help ensure success at your plant.

You will learn from experts of leading operators and manufacturer companies about their newest developments and opportunities for maintaining your hydropower fleet. This may help you in decision-making and in finding O&M strategy solutions in your company.

#### **CONFERENCE VENUE**

Messezentrum Salzburg Am Messezentrum 1 5020 Salzburg | Austria

#### **OFFICE AND LANGUAGE**

The office will be open from 09:00 a.m.
The conference language is English.

#### **EVENING EVENT**

On Thursday, 27 March 2025, starting at 17:00 h, all conference participants are invited to a get-together at RENEXPO® INTERHYDRO´s Evening Networking Event.

#### **CONFERENCE TICKET**

Participation	Single ticket	Package ticket
	(1 participant)	(3 participants)
Non-members	€ 600	€ 1,500
vgbe members	€ 500	€ 1,300
Universities, Authorities	€ 250	€ 600

The participation fees include the conference presentations (after the conference), coffee breaks, lunch on the first day, participation in the Evening Networking Event and a two-day ticket to the trade fair RENEXPO® INTERHYDRO.

All participants of the conference are requested to register online and the Austrian VAT will be shown in the invoice.

#### **ONLINE REGISTRATION**

https://register.vgbe.energy/32425/

#### vgbe energy e.V.

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#### **PRIVACY POLICY & GENERAL TERMS**

Detailed information on data protection as well as the general terms and conditions can be found here: i <a href="https://t1p.de/vgbe-vsAGBen">https://t1p.de/vgbe-vsAGBen</a> (external shortlink)

#### **COOPERATION WITH**



Renexpo® Interhydro offers ideal exhibition opportunities.

CET	THURSDAY, 27 MARCH 2025	Lecture 6 Internal costs for reactive power operation in pumped storage plants S. Schüler, Dornier Power and Heat GmbH	
10:00	Welcome and opening of the Expert Event M. Bachhiesl, vgbe energy		
10:30	SESSION 1		Lecture 7
	Lecture 1 Modern oil conditioning in hydropower: Tips for optimized maintenance and service to increase sustainability		Ultra-high sensitivity strain measurements, new diagnostic approach for hydrodynamic and hydrostatic bearings  V. Bouillet, Wormsensing
	C. Schneeweis, T. Lang, HYDAC	16:00	Closing words
	Lecture 2 Valorisation of historical data through digital twins generated by machine learning applied to a 60 MW pump-turbine Y. Jacquat, GradeSens AG	CET	FRIDAY, 28 MARCH 2025
	Lecture 3 Selected practical examples for technical	09:00	Welcome M. Bachhiesl, vgbe energy
	innovations during refurbishment on hydro power plants	09:00	SESSION 3
	A. Skenderi, D. Holzer, KELAG		Lecture 8 Operation values and maintenance
12:00	Lunch break and visit to trade fair		of slip ring systems M. Nathmann, MERSEN Österreich Hittisau Ges.m.b.H.
14:00	SESSION 2		Lecture 9
	Lecture 4 3D laser scanning to capture the geometry of		Next generation hydropower forecasting
	waterways in a hydropower plant as a basis for hydraulic model calculations		capabilities: From numerics to Al D. Lassahn, alitiq GmbH
	L. Sörensen, Scan3D Dienstleistungsgesellschaft mbH		Lecture 10 Essentials of a hydropower plant
	Lecture 5		rehabilitation contract  B. Geisseler, GEISSELER LAW
	An unique machine relieved from harsh vibrations with the magic of		
	electromagnetic forces M. Titzschkau, Kraftwerk Oberhasli AG		Lecture 11 On-site machining and maintenance in hydropower plants S. Wagner, wagner GmbH
		11:00	Closing words and opportunity to visit the trade fair

CET	FRIDAY, 28 MARCH 2025	
11:30	Research Session (Grand Hall) Mario Bachhiesl, vgbe energy	
The research session will delve into the latest research outcomes from European projects. Attendees will gain insights into breakthrough technologies, innovative methodologies, and key findings that are shaping the future of river management, ecology and hydropower.		
By showcasing these research projects, the session aims to provide valuable knowledge to enhance the operation, maintenance, and overall performance of hydropower plants while also reducing environmental impacts.		
Join us to explore how these research outcomes drive progress and foster innovation.		
11:40	Lecture 12 ETIP Hydropower Lee Estrellado, vgbe energy	
11:50	Lecture 13 Hidden Hydro Oscillating Power for Europe (H-HOPE) Eduard Doujak, TU Wien	
12:10	Lecture 14 Life streams Antonella Carosi, University of Perugia, Massimo Lorenzoni, University of Perugia	
12:30	Closing words and opportunity to visit the trade fair	
15:00	End of RENEXPO® INTERHYDRO	

vgbe Technical Competence Center Hydro Power Essen, February 2025 (as of 2025-02-26)