

CONFERENCE VENUE

Graz University of Technology
Rechbauerstrasse 12
Hauptgebäude, Alte Technik, Foyer
8010 Graz/Austria

CONFERENCE LANGUAGE

English

REGISTRATION

Participants are requested to register online. Please note that the registration is binding. We will confirm your registration by sending the invoice. You will receive your name badges and the list of participants at the conference office before the start of the workshop. Please mention the company's invoice address with all other necessary data.

VGB PowerTech e.V.

Deilbachtal 173

45257 Essen/Germany

Eva Silberer

Phone: +49 201 8128 – 202

E-Mail: vgb-digi-hpp@vgb.org

[Online Registration](#)

SIDE EVENT

On Thursday, 22 April, starting at 4.30 p.m.
Visitation of the Hydraulic Laboratory from the Institute of Hydraulic Engineering and Water Management
Stremayrgasse 10/II
8010 Graz

EVENING EVENT

On Thursday, 22 April, starting at 7.30 p.m., all workshop participants are invited to join the gettogether at the Graz University Rooftop Mensa
Stremayrgasse 16
8010 Graz

ATTENDANCE FEES

Workshop fee non-VGB members € 900.-
Workshop fee VGB members € 600.-
Pensioners, Universities, Public authorities € 300.-

The attendance fees are free of VAT and include the list of participants, the conference presentations (after the conference), coffee breaks and beverages, lunch and the participation in the evening event as well as in the visitation.

It is not possible to accept credit cards or currency at the conference office.

ROUTE DESCRIPTIONS

Route descriptions to the conference venue as well as to the evening event can be downloaded on the [event website](#).

EXHIBITION AND SPONSORSHIP PACKAGES

Take the opportunity to receive more attention for your activities in the Hydropower Sector. The TU Graz offers an excellent location for you at our event. Located on the same floor as the aula, we are providing places for some exhibitions. Every coffee break as well as the lunch will take place around the exhibition places, providing you with optimal conditions for the presentation of your company.

For more information see:

[Sponsoring Packages](#)

CONFERENCE OFFICE

The conference office will be open from 8.30 a.m. on.

Regarding conference procedures please contact

Eva Silberer

Landline: +49 201 8128 - 202

E-Mail: vgb-digi-hpp@vgb.org

PRIVACY POLICY

VGB is committed to protect your privacy. We will only use the information that we collect about you lawfully. We collect information about you to process your order and to provide you with best possible service in the future. The documents will list your name, surname, title, function, company and place of business. Photos and videos from the event will be published in VGB publications as well as in other publications and the internet.

IN COOPERATION WITH



(www.iee.tugraz.at)



(www.verbund.com)



DIGITALIZATION IN HYDROPOWER 2020

Implemented innovative digital measures, products and tools

VGB Expert Event



... is the first address in techno-economic and environmental issues and functions as the collective European platform and the key representative for the hydropower community.

DIGITALIZATION IN HYDROPOWER

Enhanced digital controls can contribute to improving the performance of hydropower fleets, plants and equipment by reducing costs and optimising asset management. Digital control systems can also play a major role in improving decision-making and supporting operations to work more efficiently.

The international VGB expert event will again provide a comprehensive overview of digitalization in hydro power dealing mainly with the results of newly developed and implemented innovative digital measures, products and tools. This may contribute to improving and optimising digital solutions in your own company.

The expert event will bring together experts from leading operator and manufacturer companies as well as related stakeholders to discuss challenges and opportunities for the operation of hydro power fleets accruing from digital transformation.

There will be enough time for detailed bilateral discussions and for answering questions.

EXPERT EVENT PROGRAMME

WEDNESDAY – 22 APRIL 2020

- | | |
|-------|--|
| 10.00 | <p>Welcome and opening of the expert event
Univ.-Prof. Dr H. Bischof, Vice Rector of Graz University of Technology</p> <p>Dr K. H. Gruber; Chairman of VGB's Strategic Forum "Hydro" (VERBUND Hydro Power GmbH)</p> <p>The future of hydropower is digital – Activities in Europe
Dr M. Bachhiesl (VGB PowerTech e.V.)</p> |
| 10.55 | <p>SESSION 1: Innovative tools</p> <p>eDocumentation - a new approach
Dr F. Lippold (Voith Hydro Holding GmbH & Co. KG)</p> <p>Digitization@Uniper hydro - Applications, Experiences & Initiatives
Dr C. Kunze, Dr K. Engels, B. Miller (Uniper Kraftwerke GmbH)</p> |

- | | |
|-------|---|
| | <p>Digital Twins: Making Maintenance Predictive
T. Alberts (ITficient AG)</p> <p>Panel discussion, Q&A session</p> |
| 12.20 | Lunch Break |
| 13.40 | <p>SESSION 2: Advanced data analytics</p> <p>Predictive software for sustainable hydro operations
R. Martini (ABB AG)</p> <p>Cloud data based maintenance and its benefits for optimising performance of hydropower plants
P. Reiter (Seamtec GmbH)</p> <p>Where do I get my data from?
A. Postolov (Rittmeyer AG)</p> <p>Panel Discussion / Q&A session</p> |
| 16.30 | <p>Group 1 Visitation of the Hydraulic Laboratory</p> |
| 17.30 | <p>Group 2 from the Institute of Hydraulic</p> |
| 18.30 | <p>Group 3 Engineering and Water Management</p> |
| 19.30 | <p>GeTogether at the
Graz University Rooftop Mensa</p> |

THURSDAY – 23 APRIL 2020

- | | |
|-------|---|
| 09.00 | <p>SESSION 3: Performance optimisation</p> <p>Digitization of turbine geometries for computational fluid dynamics and other studies achieving the necessary accuracy
L. Sörensen (Scan3D Dienstleistungsgesellschaft mbH)</p> <p>Digital O&M - From monitoring to asset management
Dr E. Parkinson, C. Vecchiato (ANDRITZ Hydro GmbH)</p> <p>Additional value of quality assurance through 3D - Metrology for hydro components
A. Wurm (GEOs3D Geodetic and Industrial Surveying GmbH)</p> <p>Panel Discussion / Q&A session</p> |
|-------|---|

- | | |
|-------|--|
| 10.20 | Coffee Break |
| 10.50 | <p>SESSION 4: Practical applications of predictive maintenance</p> <p>Optimized model predictive control for run-of-river power plants at river Drau in Austria
O. Buchholz (HYDROTEC)</p> <p>Digitalization of hydraulic auxiliary systems in hydropower plants
C. Schneeweis (HYDAC International GmbH)</p> <p>HydroPlan - dynamic non-linear modelling of Hydropower Plants
F. Haller, D. Wimmesberger (DAGOPT Optimization Technologies GmbH), B. Gotthardt (Salzburg AG)</p> <p>Panel Discussion / Q&A session</p> |
| 12.30 | Lunch Break |
| 13.50 | <p>SESSION 5: Environmental performance and geo-information systems</p> <p>Snow Power – Unmanned Aerial Vehicle (UAV) based snow depth measurement using digital photogrammetry supporting snowmelt forecast in alpine regions
Dr S. Frey (Verbund Trading GmbH), MSc C. Katzler (VUM Verfahren Umwelt Management GmbH)</p> <p>Benefits of modern 3D Visualization: 3 Usecases in Salzburg AG Hydro Power Plants
M. Matschl (Salzburg AG), Dr T. Nemetz (Ocean Maps GmbH)</p> <p>Virtual River 4.0 - Quality management and training for HPP and flood protection systems
G. Reichel (GR-Consulting e.U.)</p> <p>Panel Discussion / Q&A session</p> |
| 15.15 | <p>Closing words
Dr K. H. Gruber; Chairman of VGB's Strategic Forum "Hydro" (VERBUND Hydro Power GmbH)</p> |
| 15.30 | Closing |