

FLUE GAS CLEANING 2019

22 and 23 May 2019
in Graz/Austria



VGB WORKSHOP "FLUE GAS CLEANING 2019"

Graz | Austria

The workshop covers a wide range of flue gas cleaning activities, especially with a view to the activities for meeting the future emission limits, which are defined in the BREF-LCP process.

Therefore, the workshop starts with an overview of the existing and forthcoming new environmental EU legislation.

The recent developments and experiences with SCR and SNCR techniques play a major role too.

In addition plant retrofits and new developments in FGD performance are presented as well as ESP upgrade possibilities.

At the end some information about emission measurement techniques and experiences with flue gas condensation will be given.

**The workshop includes the visit of the
Mur Hydropower Plant Graz.**

PROGRAMME

(Subject to revision)

WEDNESDAY, 22 MAY 2019

- 10:30 **Opening of the conference office / Lunch**
- 11:55 **Welcome**
Andreas Wecker, VGB PowerTech, Essen/Germany
- 12:00 **Setting up the EU legislative framework for thermal generation**
Rémi Bussac, EDF, St. Denis/France,
Hélène Lavray, EURELECTRIC, Brussels/Belgium
- 12:30 **Flue gas treatment: from removal efficiency to energy efficiency**
David Boyer, Jérôme Giralt, LAB SA, Lyon/France
- 13:00 **Hybrid SCNR/SCR Denox System – high dust application at a coal-fired power plant**
Christian Helmreich, Andreas Anderl,
M.A.L. Umwelttechnik Wien, Vienna/Austria
- 13:30 **Coffee Break**
- 14:00 **Operating experience with SCR direct ammonia injection at Alliant Energy Colombia station**
Thomas Gomboc, Paul Petty, Andritz Inc.,
Colombia/USA
- 14:30 **Consideration of the transient aspects of SCR and oxidation catalysts for faster startup emissions compliance**
Chris Bertole, CORMETECH, Durham/USA
- 15:00 **SCR catalyst management and minimizing total cost of ownership of SCR installations**
Xavier Henry, ENGIE Laborelec, Linkebeek/Belgium
- 15:30 **SNCR-application of the TWIN-NOx process in large coal-fired boilers to keep pace with new NOx emission limits**
Bernd von der Heide, Mehldau & Steinfath
Umwelttechnik GmbH, Essen/Germany
- 16:00 **Coffee Break**
- 16:30 **Use of co-benefits from FGD upgrades example: mist eliminator replacement**
Stefan Binkowski, Steinmüller Engineering GmbH,
Gummersbach/Germany

- 17:00 **Execution of first retrofit in Bosnia and Herzegovina: Challenges of performance requirements and project execution**
Bernd Vollmer, Mitsubishi Hitachi Power Systems Europe GmbH, Duisburg/Germany
- 17:30 **Research on alternative construction of perforated shelf**
Mariola Kobylanska-Pawlitz, Jerzy Mazurek, RAFAKO S.A., Racibórz/Poland
- 18:30 **All participants meet in front of the hotel
Dinner at the restaurant Schlossberg**

THURSDAY, 23 MAY 2019

- 08:30 **Todays and future applications of metallic materials in lignite FGD and marine scrubbers**
Volker Wahl, VDM Metals International GmbH, Werdohl, Rolf Streib, Beratungs- u. Ingenieurbüro Dipl.-Ing. Rolf Streib, Bocholt/Germany
- 09:00 **Operating experience of Andritz TurboCDS system at OG&E Sooner station**
Paul Petty, Ralph Lebron, Andritz Inc., Colombia/USA
- 09:30 **Development of the circulating fluidized bed scrubber (CFBS) technology in 1 MW_{th} scale pilot plant**
Mariana Carvalho, Pasi Liimatainen, Vesna Barisic, Sumitomo SHI FW, Varkaus/Finland
- 10:00 **Coffee break**
- 10:30 **Low cost ESP upgrade for BREF compliance**
Mads Kirk Larsen, FLSmidth A/S, Copenhagen/Denmark
- 11:00 **Cost benefit assessment of various flue gas conditioning approaches**
Roger Brandwood, Uniper Technologies Ltd., Ratcliffe-on-Soar/UK
- 11:30 **Coffee break**
- 12:00 **Emissions and emission measurement of SO₂, SO₃ and particulates at modern coal-fired power plants**
Jan Middelkamp, DNV GL, Arnhem/The Netherlands, Marten Kooistra, ENGIE Laborelec, Linkebeek/Belgium
- 12:30 **Flue gas condensation – operating experience**
Folmer Fogh, Ørsted Thermal Power A/S, Fredericia/Denmark
- 13:00 **Lunch Break**
- 14:00 **Visit Mur Hydropower Plant Graz**
- 17:30 **End of the workshop**

PRACTICAL INFORMATION

VENUE

Hotel "Das Weitzer"
Grieskai 12-16
8020 Graz/Austria
Phone: + 43 316 703-604
Fax: + 43 316 703-629

ONLINE REGISTRATION

Participants are requested to register online.
We will confirm the registration by mailing the invoice.
You will receive your ticket at the workshop office.

www.vgb.org/en/COR-event_page-24658.html

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ATTENDANCE

Attendance fee members: € 690.-
Attendance fee non-members: € 890.-

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

The attendance fee includes the workshop programme, the participation list, the documents, coffee and beverages, lunch buffet on 22/23 May 2019.

| **ANDRITZ** invites all participants arriving on 21 May 2019 for dinner in the Restaurant Landhauskeller.

| The companies

- Beratungs- u. Ingenieurbüro Dipl.-Ing. Rolf Streib,
- Lechler GmbH,
- SZS Engineering,
- Steinmüller Engineering GmbH and
- VDM Metals International GmbH

kindly invite the participants of the workshop for dinner on 22 May 2019 in the Restaurant Schlossberg.

| **Hadek Protective Systems B.V.** kindly sponsors a coffee break.

CANCELLATION

The following fees will be charged for the cancellation of the registration:

Up to 14 days before the workshop	50.00 €
Within 14 days before the workshop	100 %

Only written cancellations are accepted!

ACCOMMODATION

Please book your hotel room by using the reservation code:

FGC2019

and by using the following e-mail: reservations@weitzer.com

Special room rate: 142 €, breakfast included

Please book your hotel room by 9 April 2019.

The VGB office regrets being unable to make reservations.

The Workshop includes the Mur hydropower plant Graz visit on Thursday 23 May 2019 (50 visitors only!). Transfer via bus from the hotel and back. (Bus transfer sponsored by ANDRITZ.)

PRIVACY POLICY

Your privacy is important to us. This privacy statement explains which personal data we collect and how we use them. VGB PowerTech e.V. and VGB PowerTech Service GmbH collect data via application form. Data may also be collected by using our services. All data are collected and used according to the applicable data privacy laws. Event documents, including booklets etc. comprise a list of all participants, stating name, surname, title, function, company and place of residence of participants. Photographs and films taken during the event will be used in VGB publications, external media and the internet. As our customer, we will also inform you about our services. This communication by e-mail or post is limited to the framework given by the applicable law. If you disagree that VGB PowerTech e.V. and VGB PowerTech Service GmbH use your data for future communications and marketing purposes, please send an e-mail to info@vgb.org or fax, +49 201 8128-302 or mail, VGB PowerTech, Deilbachtal 173, 45257 Essen. You have also the right of access to the data, stored in respect to your person.

Further information on attendance and data protection incl. General Terms and Conditions:

https://www.vgb.org/en/data_protection_notice.html

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