

VENUE

EnBW Kraftwerke AG
Heizkraftwerk Altbach / Deizisau
Infocenter
Industriestraße 11
73776 Altbach



REGISTRATION

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

Please state if you wish to attend the guided power plant tour and provide the invoice address!

IFK Universität Stuttgart
Barna Heidel
Pfaffenwaldring 23
D-70569 Stuttgart
phone: +49 711-685 68946
email: devcat@ifk.uni-stuttgart.de
info: <http://devcat.eu-projects.de>

ATTENDANCE

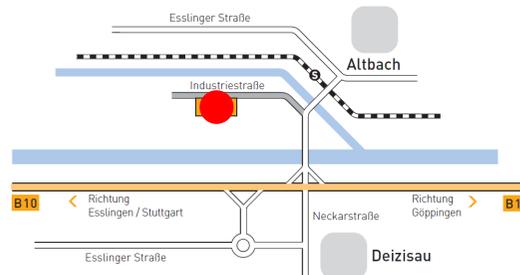
Attendance fee regular / students: € 100,- / € 50,-

It is not possible to accept credit cards or currency at the workshop office. The attendance fee includes the workshop programme, the participation list, coffee and beverages, lunch and the guided power plant tour.

CANCELLATION

Please observe that the registration is binding and cannot be refunded.

DIRECTIONS

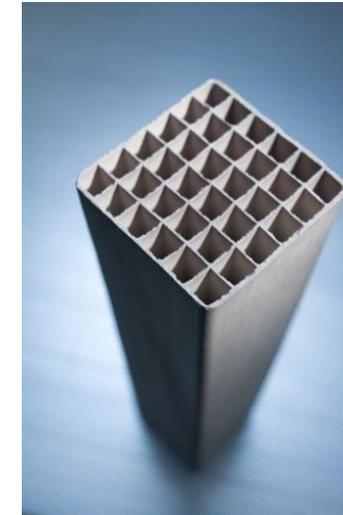


car: B10 towards Esslingen, exit "Deizisau"

train: S1 from Stuttgart main station towards Esslingen, exit at station "Altbach", 10 minutes walk through Heinrich-Mayer-Park



EnBW Power Plant Altbach / Deizisau



University of Stuttgart

WORKSHOP

Development of
High-Performance
High-Dust
SCR-Catalysts

MAY 29, 2013

STUTTGART / GERMANY

THE WORKSHOP “DEVCAT 2013”

The application of SCR-DeNO_x-catalysts is considered as state of the art for efficient NO_x-reduction at power plants. Various studies showed, that the installed SCR-catalysts also enhance the oxidation of elemental mercury (Hg⁰) in the flue gas and thus the mercury retention in wet flue gas desulphurisation or by dry adsorption processes. A major aspect investigated is the interaction of the parallel reactions of NO_x-reduction, Hg⁰-oxidation and SO₂/SO₃-conversion. The minimisation of investment and operating costs, deactivation by bio-fuels or co-combustion and the innovative regeneration of deactivated catalysts are of special interest.

The workshop covers a wide range of SCR-related aspects. The DEVCAT consortium presents major results gained within the project. Combined with the contribution of an external specialist, a strong basis for discussion for all participants of the workshop is created. The workshop is kindly hosted by EnBW Kraftwerke AG and includes a guided power plant tour.

THE DEVCAT PROJECT

The DEVCAT project focuses on the development and operation of high-dust SCR-DeNO_x-catalysts with superior operational and lifetime performance. The consortium consists of power plant operators (EnBW Kraftwerke AG, E.ON New Build & Technology GmbH, ENEL Ingegneria e Ricerca spa) a catalyst manufacturer (IBIDEN Porzellanfabrik Frauenthal GmbH), a process simulation software developer (RECOM Services GmbH), coordinated by the Institute of Combustion and Power Plant Technology, University of Stuttgart (IFK)

PROGRAMME

- 09:00 Registration**
- 10:00 Welcome**
S. Eberle - EnBW Kraftwerke AG, Germany
- 10:15 DEVCAT project overview**
B. Heidel - IFK University of Stuttgart, Germany
- 10:30 Progress in catalyst development from a manufacturers perspective**
A. Hartung - IBIDEN Porzellanfabrik Frauenthal GmbH, Austria
- 10:55 Advanced catalyst performance under full scale conditions**
D. Porbatzki - E.ON New Build & Technology GmbH, Germany
- 11:20 Coffee Break**
- 11:30 High performance 3D-CFD modelling of boiler and SCR reactor**
B. Risio, RECOM Services GmbH, Germany
- 11:55 Investigations of SCR-catalysts in ENELs slip-stream reactor**
M. Di Blasi - ENEL Ingegneria e Ricerca spa, Italy
- 12:20 Lunch**
- 14:00 Study of Hg⁰-oxidation at newly developed SCR-DeNO_x catalysts in lab- and small-scale reactors**
T. Schwämmle - IFK University of Stuttgart, Germany
- 14:25 Advanced regeneration of heavily deactivated SCR-catalysts**
M. Hilber, EnBW Kraftwerke AG, Germany
- 14:50 Coffee Break**
- 15:00 The challenge of existing air pollutant control devices for mercury removal**
M. D. Somoano, Instituto Nacional del Carbón, Spain
- 16:00 Visit of EnBW power plant facilities**
- 17:00 Get-together**

SHORT ABSTRACT OF GUEST SPEAKER

M. D. Somoano, Instituto Nacional del Carbón, Spain
The challenge of existing air pollutant control devices for mercury removal

The problem of mercury emission and capture in the coal combustion process as well as the role that pollution control systems designed for other contaminants (ESP, SCR and FGD) may play in this capture are subject of study around the world. However there are no technologies that can be applied universally at all coal combustion power plants because of differing plant configurations and coal types. Multi-pollutant control devices are desirable, especially in the current time when CO₂ technologies have to be integrated too. The experience of INCAR-CSIC and the results of several projects on mercury control in which INCAR has been involved will be discussed. The impact on by-products, such as fly ash or gypsum, which often have an economic value, will also be taken into consideration.

ACKNOWLEDGEMENT

The DEVCAT project is funded within the Research Fund for Coal and Steel of the European Commission (RFCR-CT-2010-00012).

