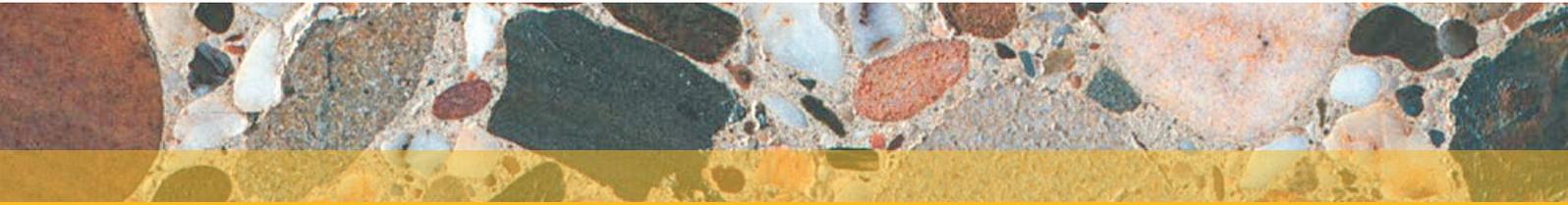




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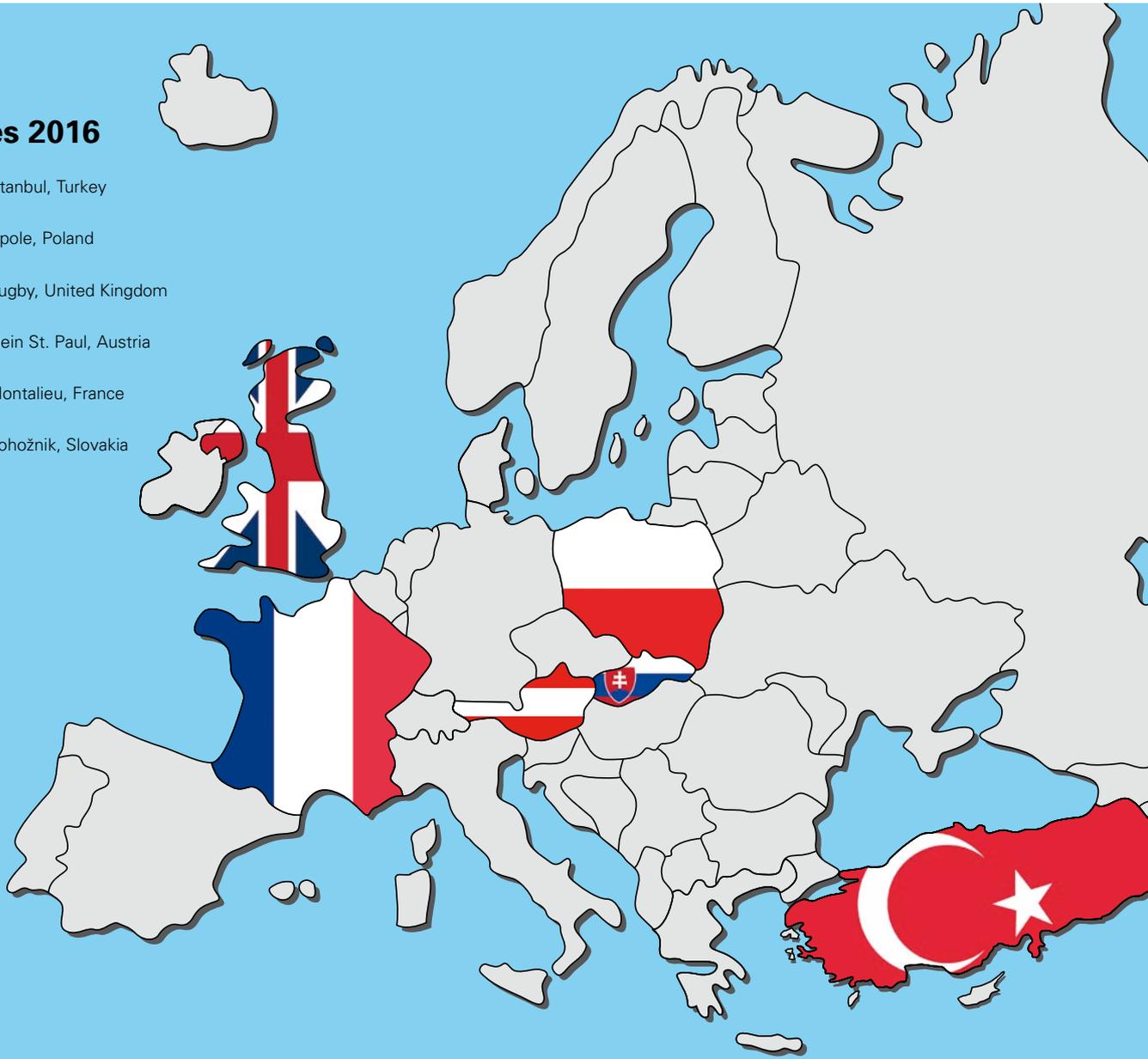


PROGRAMME 2016

Seminars/Workshop

Venues 2016

-  Istanbul, Turkey
-  Opole, Poland
-  Rugby, United Kingdom
-  Klein St. Paul, Austria
-  Montalieu, France
-  Rohožnik, Slovakia



4 Seminars

6 Workshop

7 Registration, Terms & Conditions

European Cement Research Academy

Welcome to the European Cement Research Academy seminar programme for 2016.

This year our venues will be in Austria, France, Poland, Slovakia, Turkey and the United Kingdom.

We are offering five seminars on the following topics:

- Alternative Fuels: Quality Surveillance and Impact on the Production Process
- Emissions Monitoring
- Trends in Concrete Technology
- Secondary Abatement Techniques
- Alternative Fuel Combustion in the Calciner: Pre-combustion Chambers and Gasifiers

and a workshop on the subject of:

- Techniques for Accurate Weighing and Dosing.

All include evening dinner where participants and speakers can exchange views in an informal atmosphere, and the opportunity to visit a cement plant.

For all further information and to register, please visit: www.ecra-online.org.

We look forward to seeing you!

Daniel Gauthier
Chairman of the Technical Advisory Board

Martin Schneider
Managing Director

6–7 April 2016

S16-01 Alternative Fuels: Quality Surveillance and Impact on the Production Process

Objective: *Overview of suitable pre-treatment techniques for different kinds of alternative fuels. Comprehensive quality surveillance and the potential impact of alternative fuels on the production process and the environment will also be examined.*

Target group: *Senior process engineers and experienced chemists dealing with the use of alternative fuels. Practical experience in aspects of quality control would be helpful.*

The environmentally safe and appropriate recovery of alternative materials in the cement manufacturing process is an issue of high importance for the European cement industry. The revision of the European waste legislation will strengthen requirements further, but the necessity to substitute primary materials (fossil fuels) with suitable alternatives will increase. At the same time, the environmentally safe and appropriate operation of the process must be safeguarded. The increase in competition between recycling and energy recovery leads to a situation where suitable alternative materials are not always available on the market. This favours more and more sophisticated pre-treatment technologies for gaining suitable waste fuels from mixed fractions. At the same time, an appropriate quality surveillance system must be applied in order to ensure environmentally friendly cement production, and to limit potential impacts on the production process. The seminar includes a visit to the Akçansa Büyükçekmece cement plant in Turkey.

Presentations:

- Current legal requirements and latest developments in the European waste legislation
- Comprehensive pre-treatment of alternative fuels; Requirements of modern pre-treatment technologies
- Quality surveillance systems for alternative fuels
- Potential impact of alternative fuels on the environment
- Potential impact of alternative fuels on the production process
- Future aspects; Drivers and barriers for using alternative fuels

Venue: Istanbul, Turkey
Nearest airport: Istanbul Ataturk

7–8 June 2016

S16-02 Emissions Monitoring

Objective: *Overview of the latest continuous and periodic measurement techniques, taking into account new European guidelines.*

Target group: *Environmental and process engineers, technicians in measurement technology*

The seminar will give a comprehensive review of the state of the art of continuous measurement techniques in the cement industry. One important aspect and a common theme through all the presentations is the quality assurance requirement of automated measuring systems. The European Standard EN 14181 was revised in 2015 and contains some new important topics concerning the calibration (QAL 2) and functional testing (AST) of continuous measuring devices. Furthermore, the scope of certified measuring devices was specified. Guidance on the selection of suitable CEM systems will be given and examples of ongoing quality assurance will be presented. Changes to the European standardisation and recent developments in periodic measurement techniques will be discussed. The seminar includes a visit to the HeidelbergCement plant in Górzdz, Poland.

Presentations:

- General legal requirements of emission measurement in the European Union
- Suitable application of the revised EN 14181 concerning calibration and surveillance of CEMs
- Selection of appropriate CEM systems; Performance criteria and test procedures
- State of the art in continuous monitoring of dust emissions
- Practical application of features of multi-component CEMs
- Continuous monitoring of mercury emissions
- Ongoing quality assurance (QAL 3): examples
- Current developments in periodic measurement techniques – upcoming changes in European standardisation

Venue: Opole, Poland
Nearest airports: Katowice, Wrocław

21–22 June 2016

S16-03 Trends in Concrete Technology

Objective: For cement manufacturers to offer a market-driven portfolio it is essential to understand current and future customer and market demands. The aim of the seminar is to inform about and discuss current and anticipated developments and trends in the use of cement in concrete.

Target group: R&D staff, sales and marketing staff

The increasingly efficient use of clinker in cement has led to an improvement in the environmental performance of cement and concrete in particular with regard to the global warming potential. How can this approach be pursued further? Where are the technical limitations of this development? What impact does this trend have on the next generations of the European cement standard EN 197 and the European concrete standard EN 206? Where are the opportunities and challenges of performance-related design criteria for concrete? How do these developments and the requirements and needs of the construction industry match? What technical and building regulations elements need to be defined? What influence does the judgment of the European Court against Germany concerning the Construction Products Regulation have? These and other questions will be addressed. The seminar includes a visit to the CEMEX cement plant in Rugby, United Kingdom.

Presentations:

- The European Cement Standard EN 197 today and in the future
- The European Concrete Standard EN 206 today and in the future
 - Concepts for durable concrete
 - Resistance classes
- The European Technical Assessment (ETA) procedure
- Prediction of concrete durability by hydration degree-based characteristic values
- Cements with a low clinker content for “green” concrete structures
- Robust concrete mix design
 - Site-relevant performance characteristics and test methods
 - Principles for robust concrete mixes

Venue: Rugby, United Kingdom
Nearest airport: Birmingham

14–15 September 2016

S16-04 Secondary Abatement Techniques

Objective: An overview of the latest technologies concerning the secondary abatement of airborne emissions (NO_x , NH_3 , Hg , CO , TOG , SO_2) from the clinker burning process with regard to present and future legal requirements.

Target group: Process engineers, plant design engineers, environmental engineers, national and international associations

Legal requirements regarding emissions abatement for cement plants, especially those using alternative fuels and raw materials, challenge the cement industry to constantly improve its high level of environmental protection. Further developments at UN level are expected to have an additional impact on technological developments in the years to come. Participants will be given an overview of currently used state-of-the-art abatement technologies and the latest developments as well as plant reports from operating full-scale installations. Primary (process-integrated) and secondary (end-of-pipe) technologies for relevant emission parameters will be tackled as well as upcoming or potential developments in legal requirements. The seminar includes a visit to the Wietersdorfer & Peggauer cement plant in Klein St. Paul, Austria, which is using a split pre-heater system in pilot operation for the reduction of mercury.

Presentations:

- Overview of present and future environmental legal requirements and their impact on the cement industry
- Reduction of nitrogenous oxides by secondary abatement techniques
- CO and organic emissions in the cement industry: origin, behaviour and abatement measures
- An overview of SO_2 emissions and reduction measures
- Reduction of mercury emissions by operational measures
- Operational experience of mercury abatement with a split pre-heater system

Venue: Klein St. Paul, Austria
Nearest airport: Graz

5–6 October 2016

W16-01

Techniques for Accurate Weighing and Dosing

Objective: *Overview of challenges and solutions for accurate weighing and exact dosing and the application of different weighing and dosing equipment and techniques within the production chain of clinker, cement and other materials.*

Target group: *Technical experts and practitioners*

The weighing and dosing of different materials plays an important role during the production of building materials. Exact dosing is the precondition for stable production and process conditions and high product quality. This 2-day workshop gives an overview of weighing and dosing techniques applied in the building material industry sector. It is also a platform for discussion on practical challenges and solutions related to the exact measuring and dosing of mass flows. The course includes a half-day visit to the VICAT Montalieu cement plant in France. A live demonstration of the checking of a process scale will provide the basis for discussions on best practices, accuracy and the prevention of potential error sources. The workshop will provide practical examples for determining accurate clinker quantities and for assessing the uncertainty of weighing systems with regard to the reporting requirements in the European Emission Trading System (EU ETS).

Presentations:

- Applied weighing and dosing techniques along the cement production process
- Technical challenges and typical error sources
- Best practice for maintenance and calibration; Detection and elimination of errors of process scales
- Practical experiences from regular checks and maintenance
- Plant visit with live scale-check and assessment
- Uncertainty assessment: Basics and evidence for high accuracy in determining mass flows within the framework of the EU ETS

Venue: Montalieu, France
Nearest airport: Lyon Saint-Exupéry

15–16 November 2016

S16-05

Alternative Fuel Combustion in the Calciner: Pre-combustion Chambers and Gasifiers

Objective: *Overview of the newest technologies in alternative fuel combustion in the precalciner with a focus on gasification and pre-combustion.*

Target group: *Process engineers, plant design engineers with experience in process engineering in cement manufacturing, combustion experts*

Today, the design of virtually all new kilns in the cement industry worldwide includes precalcining technology. Precalciners provide particular flexibility, as alternative fuels can be fed at several firing places at different temperature levels. Even lumpy or low calorific fuels can be used when pre-treatment systems such as pre-combustion chambers or gasifiers are applied. The seminar will give an overview of the current state of the art of calciner designs and thermal pre-treatment systems for burning alternative fuels. On the second day the participants will have the opportunity to visit the CRH cement plant in Rohožnik, Slovakia, with alternative fuels combustion.

Presentations:

- Kiln operation with high level use of alternative fuels in the calciner
- NO_x reduction and burnout optimisation in the calciner
- Different concepts for the pre-combustion/gasification of alternative fuels, e.g.
 - Hot spot combustion chamber
 - Hot disk
 - Circulating fluidized bed
 - Step combustor
- Effect of alternative fuel combustion on the refractory in the calciner
- Optimisation of alternative fuel combustion in a calciner based on CFD-simulation

Venue: Rohožnik, Slovakia
Nearest airport: Vienna International, Austria

Registration

Registrations can only be made online via the ECRA website www.ecra-online.org. All current registration deadlines are shown on the website. Participants will receive written confirmation of their registration.

Participation fee

Unless stated otherwise, the participation fee per person for each seminar is 1,350 EUR for participants from ECRA member companies/organizations.

The participation fee includes lectures, handouts, refreshments, lunch, evening dinner and, where necessary, group bus transfers to and from the nearest airport to the venue.

There is a discount of 25 % for each additional participant from the same company address.

Cement associations which are ECRA members may delegate one participant to each event free of charge.

Participants from companies or organizations which are not ECRA members will be charged double.

VAT application:

Invoices issued to recipients in Germany:
The standard German rate of VAT, currently 19 %, will be applied.

Invoices issued to recipients in other EU countries:
VAT will not be applied if the recipient provides a valid VAT registration number (reverse charge rule according to Art. 196, 205 EU-Directive 2006/112).

Invoices issued to recipients in non-EU countries:
VAT will not be applied. A certificate of tax residence is required.

The above-mentioned VAT application rules apply to the participation in ECRA seminars and training courses only.

Hotel accommodation

Hotel accommodation is not included in the participation fee. ECRA will provide hotel recommendations, but participants must book their accommodation with the hotel directly themselves. In the event of the cancellation of a room reservation the terms and conditions of the hotel apply.

Payment

Participants will receive an invoice which is payable immediately upon receipt by bank transfer or cheque. Payment will be accepted in Euros only.

Cancellations

Participation fees will be refunded for cancellations made in writing up to seven days before a seminar/training course takes place. No refund will be made for cancellations received after this date.

ECRA reserves the right to change the seminar programme and agendas and to cancel events in the case of insufficient bookings or in the case of other circumstances beyond its control. If an event is cancelled by ECRA, participants are entitled to a full refund of their participation fee. ECRA is not responsible for any other loss incurred by a participant as the result of the cancellation or amendment of an event by ECRA.

These terms and conditions are governed by German law.

For more information about ECRA and the latest news on all events please visit www.ecra-online.org

Duesseldorf, January 2016

Contact:

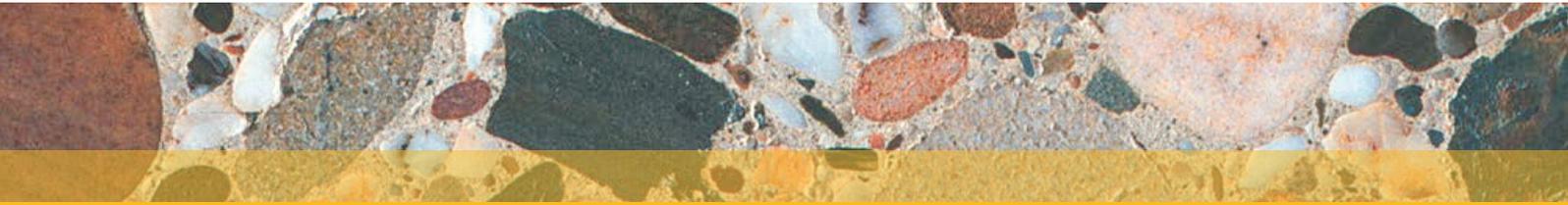
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