

REGISTRATION SHORT COURSE II

FINE DUST SEPARATION

Date Monday, March 21, 2011 · 9.00 – 18.00 h

Venue Rhein-Main-Halls – Wiesbaden – Germany

The course is of interest to engineers, technicians, scientists, managers, and other personnel involved in gas-solid separation in the process and other industries. They will find the course informative, regardless of whether they design, purchase, research, or use dust separation equipment for product recovery, emission control, air cleaning or process gas cleaning. It is a comprehensive review of the processes involved in the separation of solid or liquid particles from gases, which will emphasise practical aspects and present appropriate theoretical information as necessary.

SCOPE: ■ Evaluation and Selection of Dust Collection Equipment ■ Centrifugal Collectors/Cyclones ■ Fibrous Filter/Deep Bed Filters
■ Fabric Filter/Surface Filters ■ Wet Scrubbers ■ Electrical Precipitators ■ Raw Gas Characterisation and Conditioning

9.00 h **Introduction**

Particulate Matter (PM_x); Dust Separation; Air Cleaning; Overview of the course.

9.15 h **Evaluation of Dust Collection Equipment**

Particle size characterisation, concentration measurement, overall and fractional collection efficiency.

10.00 h **Centrifugal Collectors (Cyclones)**

Mode of operation, basic designs, application, collection efficiency, pressure drop.

10.45 h **Break**

11.00 h **Fibrous Filters (Deep-Bed Filters)**

Mode of operation, basic designs, application, collection efficiency, pressure drop.

11.45 h **Fabric Filters (Surface Filters)**

Mode of operation, basic designs, application, operating characteristics, design calculations.

12.30 h **Questions and answers**

An open-floor question and answer session.

13.00 h **Lunch**

14.00 h **Wet Scrubbers**

Mode of operation, basic designs, design calculations, application, droplet separation.

14.45 h **Electrical Precipitators**

Mode of operation, basic designs, design calculations, application, operating characteristics.

15.30 h **Break**

15.45 h **Selection of Dust Collection Equipment**

Comparison of the different techniques, strengths and weaknesses, fields of application, selection procedure.

16.30 h **Raw Gas Conditioning**

Additional techniques for enhancing dust separation equipment (electrical and acoustic enhancement, additive dosing, precoatting, ...).

17.15 h **Discussion**

An open-floor question and answer session.

Course Presenter

Prof. Dr.-Ing. habil. Eberhard Schmidt is Full Professor for Safety Engineering / Environmental Protection at Wuppertal University. His academic degrees he earned 1991 and 1998 at Karlsruhe University. From 1993 to 1994 he was affiliated with the Joint Research Centre in Ispra/Italy. In the years 1998 and 1999 he was with Degussa company in the department of process engineering / particle technology. He is Co-Chairman of the FILTECH Conference and was Scientific Secretary of 10th World Filtration Congress. He has published more than 100 technical papers, books, patents, etc. and consulted and lectured throughout the world.

Registration information - Short Course II - Dust Separation

Day-Ticket Registration until December 10, 2010 450 Euro
Registration from December 10, 2010 540 Euro
Prices include German VAT
Onsite Registration March 21, 2011 8:00 am - 9:00 am
Date Monday, March 21, 2011
Time 9:00 am - 6:00 pm
Venue Rhein-Main-Halls
Wiesbaden
Germany

The Short-Course registration includes:

- Extensive Course Notes
- Lunch and drinks during breaks
- Free admission to the Exhibition (March 22 – 24, 2011)
- Exhibition Catalogue
- Wiesbaden Tourist + Public Transport Ticket
- FILTECH 2011 Get-Together March 22, 2011

TRAVEL INFORMATION

FILTECH 2011

International Conference and Exhibition for Filtration and Separation Technologies
www.Filtech.de

DATES

Short Courses: 21. March 2011
Exhibition & Conference: 22.–24. March 2011

EVENT VENUE

Rhein-Main-Hallen
Rheinstr. 20
65185 Wiesbaden
www.rhein-main-hallen.de

EXHIBITION OPENING TIMES

Tues-Wed: 9.00 am to 18.00 pm
Thurs: 9.00 am to 17.00 pm

VISITOR ADMISSION PASSES

	pre-registered	onsite
1-Day Visitor ticket	EUR 15.00	EUR 20.00
2-Day Visitor ticket	EUR 20.00	EUR 25.00
3-Day Visitor ticket	EUR 25.00	EUR 30.00

FILTECH Catalogue EUR 15.00

Visitor pre-registration opens in Autumn 2010.

TRAVEL

FILTECH 2011 will be again held in Wiesbaden, Germany. Wiesbaden is easy to reach by whatever means, be it by road, by rail or by plane. The City's proximity to Frankfurt International Airport guarantees easy access especially for international visitors: the largest airport in continental Europe is 30 minutes away by car or by train.

PARTICIPANTS CAN SAVE UP TO 20% ON TRAVEL WITH THE STAR ALLIANCE NETWORK!

TRAVELLING BY PLANE

STAR ALLIANCE

The Star Alliance™ Members Airlines are pleased to be appointed as the **Official Airline Network for FILTECH 2011**. To obtain the Star Alliance™ Conventions Plus discounts, please call the reservation office of a participating Star Alliance Member Airline and quote the convention code:

CONVENTION CODE: LH02S11

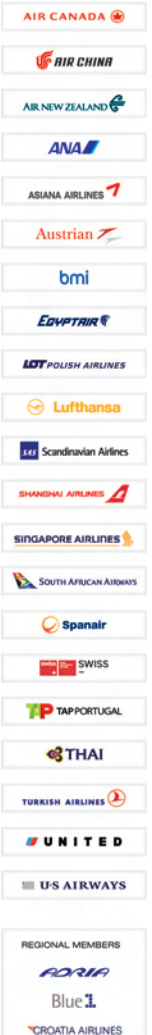
Registered participants plus one accompanying person travelling to the event are automatically granted a discount of up to 20%, depending on fare and class of travel booked. Discounts are offered on published business and economy class fares, excluding website/internet fares, senior and youth fares, group fares and Round the World fares.

Booking office information can be found at:

www.staralliance.com/conventionsplus ->Business Solutions->ConventionsPlus->Delegate Log-In

Participating Airlines for this event are: ANA, Adria Airways, Air Canada, Air China, Asiana Airlines, Austrian Airlines, Croatia Airlines, EgyptAir, LOT Polish Airlines, Lufthansa, SWISS International Air Lines, Scandinavian Airlines, Spanair, TAP Portugal, THAI, Turkish Airlines, US Airways, United, bmi.

Please note: For travel from Japan and New Zealand special fares or discounts are offered by the participating airlines on their own network. When making your travel plans please present confirmation of your registration or proof of attendance.




Wiesbaden is easily accessible via **Frankfurt International Airport (FRA)**, the largest airport in continental Europe located only 28 kilometres away. Passengers do not even have to leave the terminal area to make their connections; they can take the suburban trains or several regional trains directly to Wiesbaden Central Station.

Another small airport is Frankfurt Hahn Airport (HHN). Despite its name, the airport is situated some 120 km west of Frankfurt and some 90 kilometres west of Wiesbaden. Passengers arriving there should be aware that there is no train or tram connection to Wiesbaden. In total it will take approx. 2 hours to get to Wiesbaden Central Station.


FROM FRANKFURT INTERNATIONAL AIRPORT (FRA) TO WIESBADEN (28 km distance):

Fraport AG – Frankfurt International Airport
60547 Frankfurt am Main
Infotelephone: +49 1805 3724636
www.Frankfurt-airport.de

 By train: The Frankfurt International Airport [German: Rhein-Main-Flughafen or Flughafen Frankfurt am Main] is located in Frankfurt am Main, Germany, some 30 kilometres east of Wiesbaden. It is the **largest airport in Germany**, serving as an important hub for international flights from around the world and has two integrated railway stations: The long-distance railway station at the AIRail Terminal, right next to Terminal 1 and a regional railway station for S-Bahn (metropolitan railway), regional and local trains at Terminal 1, Level 1.

We recommend S-Bahn service S8 or S9 for your journey to Wiesbaden Hauptbahnhof (Central Station). These lines depart every 15 to 30 minutes on average from the regional station in Terminal 1, Level 1, at platforms 2 and 3. The journey takes around 30 minutes. Please select tariff zone 65/6500 on the RMV ticket machine for Wiesbaden (RMV: regional public transportation system). There is a fast-selection button for single tickets to Mainz/Wiesbaden, marked 'Einzelfahrt nach Mainz/ Wiesbaden'.

FILTECH 2011 Conference delegates receive a RMV combi-ticket with their registration confirmation, allowing free local public transport from Frankfurt International airport to/in Wiesbaden and back.

 By taxi: A large number of taxis are available at both terminals. A trip to/from the centre of Wiesbaden costs about **EUR 40-45 and takes 20 to 30 minutes**, depending on traffic conditions. If you travel back to Frankfurt Airport by taxi, simply tell the driver the name of your airline. The taxi driver knows his way round and will "automatically" take you to the right terminal, near your check-in desk.

Airport Taxi Transfer

www.flughafentransfer-ebert.de Phone: +49 6123 605874


Car Rental


At Frankfurt International Airport you will find several companies offering car rental services.

FROM FRANKFURT HAHN AIRPORT (HHN) TO WIESBADEN (90 km distance):

Hahn Airport
55483 Hahn-Flughafen
Infotelephone: +49 6543 509200
Terminal Info: +49 6543 509113
www.hahn-airport.de

Frankfurt Hahn Airport [German: Flughafen Frankfurt-Hahn] is an international aviation facility located in central western Germany. Despite its name, the airport is **situated some 120 km west of Frankfurt** and some **90 kilometres west of Wiesbaden**. The airport was originally the Hahn Air Base of the United States Air Force, and was converted to a civil airport after outliving its usefulness as a military base. Although it handles international flights, Hahn airport does not have the word "International" as part of its name - in order to avoid confusion with the more heavily used Frankfurt International Airport. As airport charges to operators are low because of its remote location, Frankfurt-Hahn is very popular with low-cost airlines like Ryanair, which uses it as one of its principal hubs.

 By bus: There are buses (ORN-airport-shuttle) every 1 or 2 hours between Frankfurt Hahn Airport (bus terminal stop 1 in front of the terminal building) and the main railway station in Mainz. The bus journey to Mainz takes 70 minutes. Tickets are available on the bus (The FILTECH public transport ticket is not valid for this bus) From Mainz to Wiesbaden Hauptbahnhof (Central Station) we recommend S-Bahn service S8 (The FILTECH public transport ticket is valid for regional trains from Mainz to Wiesbaden). This line departs every 30 minutes from platform 1a inside the main railway station on street level. The journey takes another 15 minutes. Please select tariff zone 65/6500 on the RMV ticket machine for Wiesbaden. In total it will take at approx. 2 hours (!) to get to Wiesbaden Central Station.

 By taxi: A trip to/from the centre of Wiesbaden costs about **EUR 100 – 145 (!) and takes about 1 hour**.

TRAVEL INFORMATION

TRAVELLING BY TRAIN

The **Central Station** of Wiesbaden is a breakpoint of important Euro- and Intercity connections. Wiesbaden is closely linked to Frankfurt Hbf Main Station through numerous rail connections, a journey of only 35 minutes. Travellers arriving by train have only short walking distances in the City. Pedestrians can easily reach the most important sights and facilities in a few minutes.

From the Central Station to the Rhein-Main-Hallen it is only a 10 minutes walk. You can also take the bus or taxi from outside the main station - a few minutes ride and very frequent service. FILTECH 2011 Conference delegates have a public transport ticket for Wiesbaden and can use buses and trams in Wiesbaden free of charge. The ticket also covers free rides with regional trains from Frankfurt Airport to Wiesbaden Central Station and back.

Railway Travel Centre

Bahnhofplatz 1
65189 Wiesbaden

Opening Hours:

Monday - Friday 6.00 am - 7.30 pm
Saturday 7.00 am - 6.00 pm
Sunday closed

TRAVELLING BY CAR

Wiesbaden is linked to **8 highways** and seven federal roads, and can be reached, e.g., from the north via A5 or A3, from the east via A3/A66, from the south via A5 or A67/A63 and from the west via A60. The Rhein-Main-Halls are located in the City Center.

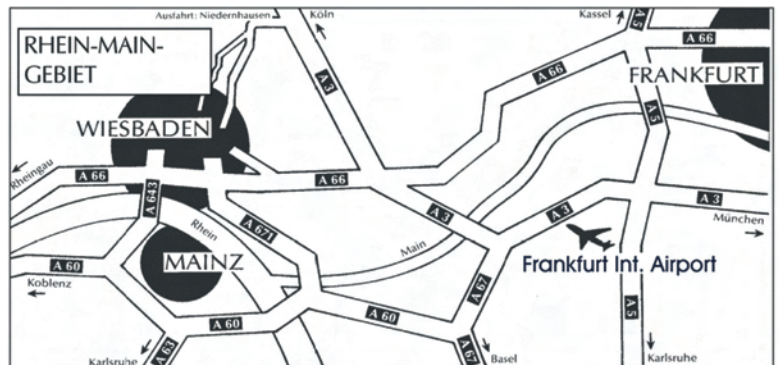
Coming from the Frankfurt Airport (by car)

- Drive in the B43.
- Leave the B43 and drive on the slip road As Kelsterbach on the A3 direction Köln, Wiesbaden, Darmstadt, Mainz, Rüsselsheim.
- Alternate at the Wiesbadener Kreuz on the A66.
- Alternate at the Wiesbaden-Mainzer Straße (5) from the A66 in direction Wiesbaden--Stadtmitte (town center), Wiesbaden-Mainzer Str.
- Now you pass the slip road of Wiesbaden.
- Follow the Mainzer Straße (B263)
- Leave the Mainzer Straße (B263) and turn left into the Gustav-Stresemann-Ring (B54).
- Leave the Gustav-Stresemann-Ring (B54) and drive straight on the Kaiser-Friedrich-Ring (B54).
- Leave the Kaiser-Friedrich-Ring (B54) and turn right into the Bahnhofstraße.
- Leave the Bahnhofstraße and turn left into the Rheinstraße (L3037).
- After 30 km and 24 minutes you reached the Rheinstraße 20 in Wiesbaden.

PARKING

For downtown parking you will find a number of public parking garages; a modern guiding system leads directly to the free parking possibilities. Visitors arriving by car will find a total of 5.106 parking spaces in the 11 parking garages located in downtown Wiesbaden.

The nearest parking place to the Rhein-Main-Hallen is the "Theater"-Parking-Garage which is open 24 hours a day. The next parking place is the "Markt/Rathaus"-Garage 10 minutes walking distance to the Rhein-Main-Hallen. Parking-Fees will be charged.



Parkmöglichkeiten: Achten Sie bei Ihrer Anfahrt auf das **Wiesbadener Parkleitsystem**.
Parking: Look out for the **electronic guiding system** which signposts vacant parking spaces within the city.

**Rhein-Main-Halls/
FILTECH 2011**

PUBLIC TRANSPORT TICKET

FILTECH 2011 Congress delegates receive a "RMV-KongressTicket" together with their registration confirmation. This tickets entitles to free rail travel between Frankfurt International Airport (FRA) Railway Station and Wiesbaden Central Station and return (in suburban/regional trains – S8/S9) plus unlimited free travel on the Wiesbaden public transport bus and regional train services from March 21-24, 2011.

HOTEL RESERVATION

The Wiesbaden Tourist Service will handle your hotel booking quickly and efficiently. The choice of accommodations ranges from the family type guest house to the luxury hotel. You can easily book by returning the hotel reservation form for FILTECH 2011 participants. If you have any queries concerning hotels/accommodation or any other kind of tourist information please contact:

Wiesbaden Marketing GmbH
Postfach 6050
65050 Wiesbaden - Germany
Phone: +49 (0)611 / 1729-777
Fax: +49 (0)611 / 1729-799
E-Mail: charlotte.riefke@wiesbaden-marketing.de or hotel@wiesbaden-marketing.de

If you prefer an individual booking detailed hotel information is also available at www.wiesbaden.de

WIESBADEN TOURIST INFORMATION

Upon your arrival in Wiesbaden, the Wiesbaden Tourist Service Office will be pleased to be at your service for tourist information, sightseeing and onsite hotel reservation. The tourist office is situated right in the City Centre. Easy to find and just a short walking distance from the Rhein-Main-Halls.

Wiesbaden Tourist Service
Marktplatz 6
65183 Wiesbaden – Germany

Opening Hours:

Mon-Fri 10.00 am – 6.00 pm
Sat 9.00 am – 3.00 pm
Sun 11.00 am – 3.00 pm

TAXI SERVICES

www.taxi-444444.de Phone: +49 611 444444
www.taxiwiesbaden.de Phone: +49 611 333333
www.wi-taxi.de Phone: +49 611 7242556

CASH MACHINES

You can conveniently withdraw cash using Maestro and international credit cards just a short distance from the Rhein-Main-Halls. Cash Machines can be found in banks at Bahnhofstraße and Friedrich Ebert Allee/Wilhelmstraße.

SHOPPING & LEISURE

The Rhein-Main-Halls are conveniently situated in the City Centre where you will find specialist stores, department stores, supermarkets, museums and a broad variety of coffee shops, restaurants and of course the Casino Wiesbaden.