

Conference Program & Show Info

FILTECH

October 11 – 13, 2016
Cologne – Germany

The Filtration Event
www.Filtech.de

Koelnmesse · Cologne · Germany



FILTECH

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Cologne – Germany

The Filtration Event
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Join the largest
Filtration Event
worldwide

Register to benefit from
top level knowledge and...

... know-how transfer

With the **FILTECH** taking place from 11.-13. October 2016 the City of Cologne in Germany will turn into the place to be for all those involved with filtration and separation and adjacent sectors. **FILTECH 2016** Conference will feature once again the latest advances and techniques in liquid/solid and gas/particle separation (dust, gas & air filtration) in 3 days of in depth exposure. Technology and know-how transfer is a main target.

180 Lectures from 30 Countries

An exciting programme gives a representative cross-section of the different procedures and appliances of separation technology as well as across the industry about the applications, from the preparation of mineral raw materials, the chemistry, environmental technology and water purification down to the pharmacy and biotechnology. The latest results from basic research, innovative equipment-based solutions and procedures will also be presented.

The Filtration Event

FILTECH is the largest and most important special interest event worldwide devoted entirely to Filtration and Separation technology in all industries. The event is a must for all those concerned with researching, purchasing, selling, designing or improving Filtration and Separation equipment and services.

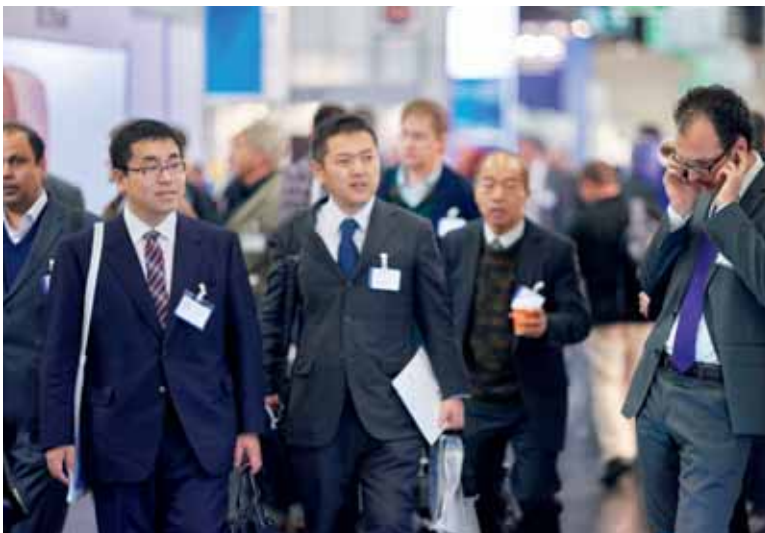
350
Exhibitors

The international Exhibition...

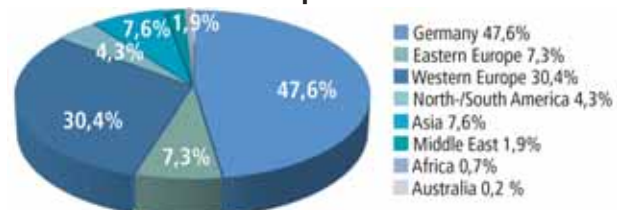
... Platform for your success

FILTECH 2016
+15%
Exhibitors

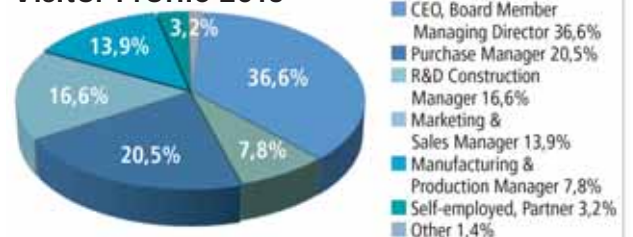
FILTECH is the globally acknowledged platform and solution provider for all industries covering every market segment. This exhibition is a must for all those concerned with designing, purchasing, selling or researching filtration and separation equipment and services. In 2015 more than 32% of all foreign guests came from overseas – in total 76 nations were represented offering exhibitors a unique possibility to generate new business. At **FILTECH 2016** trade visitors will find targeted solutions for their Filtration & Separation tasks whatever market they are in.



International Participation 2015



Visitor Profile 2015



Become an Exhibitor

Your Participation includes:

Free Print Communication Package, incl. free entry in the exhibition catalogue incl. address, contact details, 4c company logo, company/product description and 18 keywords in the product index listing.

Free Online Communication Package, incl. free entry at **FILTECH** website incl. company description (german & english), 4c company logo, pictures, 18 keywords in the product index and 10 keywords in the market index.

Free publication of Exhibitor news/press releases at the **FILTECH** website including pictures.

Get-Together Reception - 11 October 2016

Free Promotion Codes to invite clients/customers

Free Company branded Stickers

Free Conference Registration (for companies presenting a paper only)

Free Company branded Exhibitor Badges



**Pre-Register until
Sept. 30, 2016
and save money**

Register as a Trade Visitor

Opening Hours Exhibition

October 11– 13, 2016

9:00 am - 6:00 pm

Venue: Koelnmesse

Hall 11.1

East Entrance

Deutz-Mülheimer-Str. 35

50679 Cologne

Germany

Your **FILTECH 2016** Visitor Registration includes:

Free copy of the exhibition catalogue & hall plan as well as a free public transport ticket for visitors who pre-register by Sept. 30, 2016.

Registration Fees	Pre-Registration until 30.09.2016	Registration from 01.10.2016
1-Day Visitor Ticket	€ 20.00	€ 40.00
2-Day Visitor Ticket	€ 25.00	€ 45.00
3-Day Visitor Ticket	€ 30.00	€ 50.00

Fees already incl. 19% German VAT

+++ Pre-register for fast track entrance to the exhibition +++

Plan your visit

The tool for Trade Visitors

Make your visit easy and effective by using your **FILTECH planning tool**.

You can easily plan your visit online, check the exhibitors and their hall positions, mark them and print it out for your planning.

www.Filtech.de → [visitor-floor-plan](#)



Short Course I

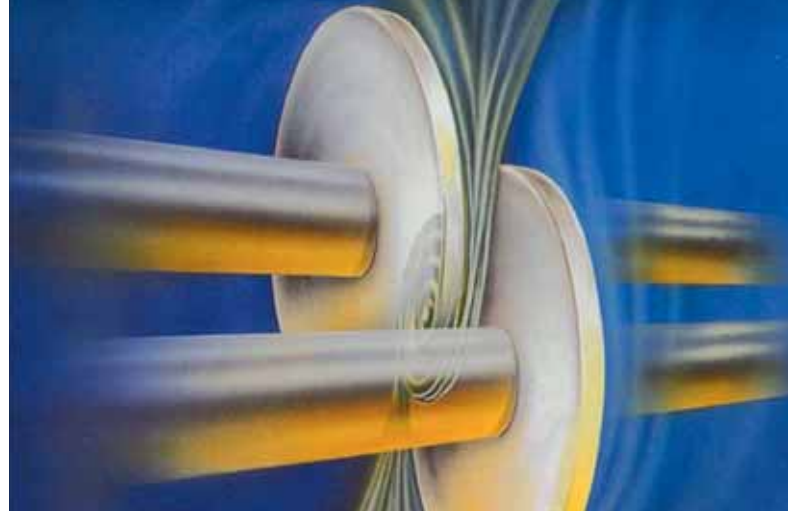
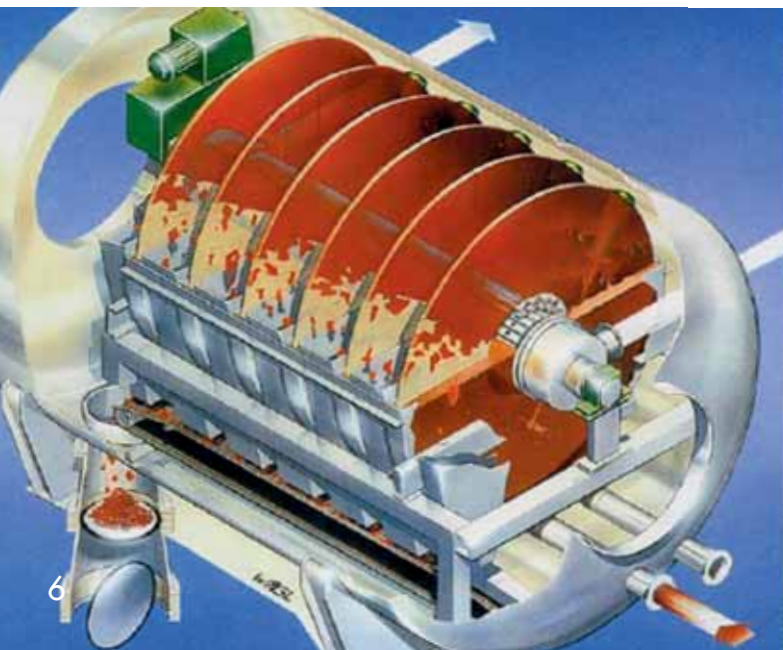
Solid/Liquid Separation

This 1-day Course "Solid/Liquid Separation" is of interest to engineers, scientists, managers and other technical personnel involved in solid-liquid separation in the process and other industries. They will find the course informative, regardless of whether they design, purchase, research or use filtration and separation equipment. Plant engineers, technicians and operators should find the course materials directly applicable, and graduate research students will value the expert introduction to the technologies. It is a comprehensive review of the processes involved in the separation of solids from liquids, which will emphasise practical aspects and present appropriate theoretical information as necessary.



Course Presenter

Dr.-Ing. Harald Anlauf is Academic Director at the Karlsruhe Institute of Technology (KIT), Institute of Mechanical Process Engineering and Mechanics and since 35 years active in the field of solid liquid separation technology. His academic degrees as Chemical Engineer he earned 1980 and 1985 at Karlsruhe University. 1999-2006 he was Chairman of the VDI-GVC working party „Mechanical Liquid Separation“, since 2000 Co-Chairman of the FILTECH Congress Scientific Committee. 2004-2008 he was Chairman of INDEFI and President of the 10th World Filtration Congress 2008 in Leipzig, Germany. He published 170 technical papers, books etc. and is internationally active in giving consultations and lectures.



Topics:

- Characterisation of Particles and Particle Separation**
- Density Separation - Static Thickeners and Solid Bowl Centrifuges**
- Depth, Cross Flow and Cake Filters**
- Filter Media**
- Suspension Pretreatment to Enhance Separation Properties**
- Alternative Separation Solutions & Apparatus Combinations**
- Selection Criteria for Separation Equipment**

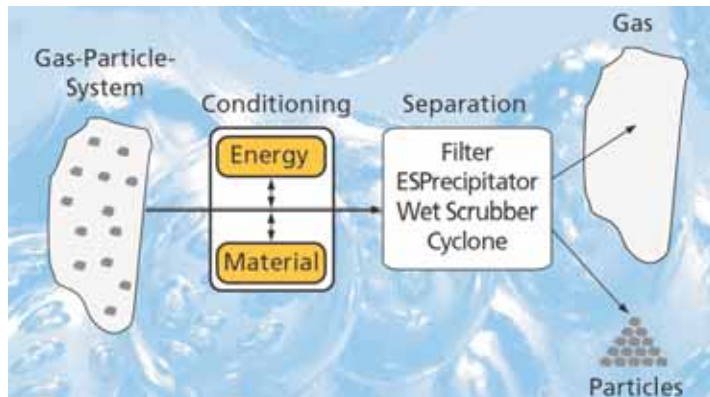
- 8.30 h Welcome Coffee
- 9.00 h **Introduction and Overview**
Systematic survey of separation processes, apparatus examples and separation strategies
- 10.30 h Coffee Break
- 10.45 h **Particle Characterization**
Characterization of single particles, particle collectives and particle separation.
- 11.30 h **Density Separation – Static Thickeners and Solid Bowl Centrifuges**
Separation mechanisms, equipment, mode of operation, application.
- 12.15 h Lunch
- 13.15 h **Depth and Cross Flow Filtration**
Separation mechanisms, equipment, mode of operation, application
- 14.00 h **Cake Filtration – Formation, Washing and Demoisturizing**
Separation mechanisms, consequences for practical use.
- 14.45 h Coffee Break
- 15.00 h **Cake Filters**
Separation mechanisms, equipment, mode of operation, application.
- 15.45 h **Filter Media**
Overview and fields of application, influence of media properties on separation results.
- 16.30 h Coffee Break
- 16.45 h **Suspension Pretreatment to Enhance Separation Properties**
Additional techniques for enhancing solid-liquid separation processes, physiochemical influences on slurry stability, flocculation
- 17.30 h **Apparatus Combinations, Alternative Solutions and Apparatus Selection Criteria**
Strategies for process optimization & selection of suitable separation techniques.

Short Course II

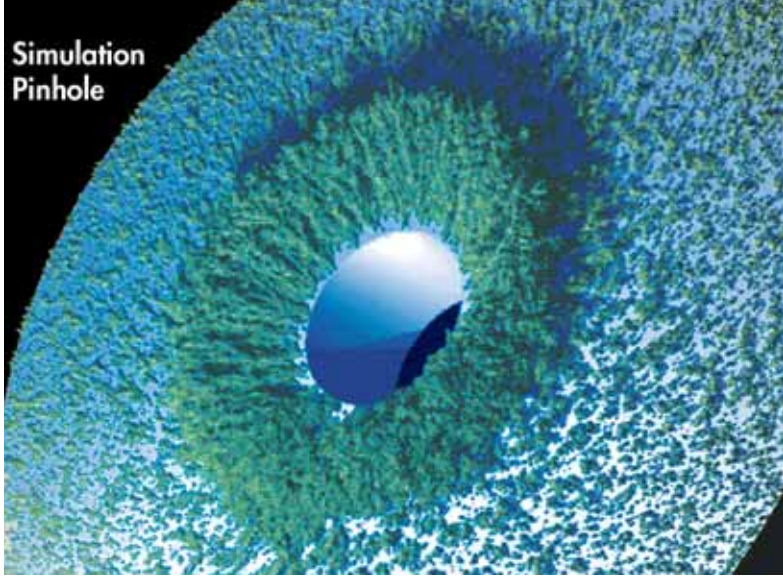
Fine Dust Separation

Monday, October 10, 2016

This 1-day "Fine Dust Separation" Short 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. Topics are:



Simulation
Pinhole



Topics:

Evaluation & Selection of Dust Collection Equipment

Wet Scrubbers

Centrifugal Collectors / Cyclones

Electrical Precipitators

Fibrous Filters / Deep Bed Filters

Raw Gas Characterisation and Conditioning

Fabric Filters / Surface Filters

8.30 h Welcome Coffee

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 Coffee 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 Coffee Break

15.45 h Selection of Dust Collection Equipment

Comparison of the different techniques, strength 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, precoating,...).

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.



Plenary and Keynote Lectures...

... presented by leading experts

FILTECH 2016 Conference features close to 200 technical papers, a Plenary Lecture and 6 Keynote Lectures presented by leading experts. Delegates profit from high-level knowledge transfer and learn about future trends and perspectives!

K1

Keynote Lecture 1
Tuesday, October 11, 2016 13:00 - 14:15 h



Long-term Stability and Energy Efficiency of Filtration Solutions

Dr. Christof Asbach
IUTA - Institut für Energie- und Umwelttechnik
Germany

K4

Keynote Lecture 4
Wednesday, October 12, 2016 09:00 - 10:15 h



On local Cake Properties in Liquid Filtration

Prof. Hans Theliander
Chalmers University
Sweden

K2

Keynote Lecture 2
Tuesday, October 11, 2016 14:45 - 16:00 h



Role of Solid/Liquid Separation Technology in Circular Economy

Prof. Anti Häkkinen
Lappeenranta University
Finland

K5

Keynote Lecture 5
Wednesday, October 12, 2016 10:45 - 12:00 h



Dust Removal in Scrubbers - State of the Art and Challenges

Dr. Damian Pieloth
Technical University Dortmund
Germany

K3

Keynote Lecture 3
Tuesday, October 11, 2016 16:45 - 18:00 h



Approach to Membrane Filtration from the Perspective of Cake and Blocking Filtration Laws

Prof. Eiji Iritani
Nagoya University / Japan

K6

Keynote Lecture 6
Wednesday, October 12, 2016 13:00 - 14:15 h



Particle Size and Shape Analysis for Laboratory and Process Environment

Dr. Wolfgang Witt
Sympatec GmbH
Germany



Scientific Committee Chairmen

Dr. Harald Anlauf - Karlsruhe - Germany
 Prof. Eberhard Schmidt - Wuppertal - Germany

Scientific Committee

Prof. Mônica Lopes Aguiar - São Carlos - Brazil
 Dr. Harald Banzhaf - Ludwigsburg - Germany
 Prof. Kyung-Ju Choi - Korea
 Prof. Dr. Kunihiro Fukui - Hiroshima - Japan
 Prof. Antti Häkkinen - Lappeenranta - Finland
 Prof. Wilhelm Höflinger - Vienna - Austria
 Prof. Kuo-Jen Hwang - Taipei - Taiwan
 Prof. Eiji Iritani - Nagoya - Japan
 Prof. Chikao Kanaoka - Tsubata - Japan
 Prof. Gerhard Kasper - Karlsruhe - Germany
 Dr. Karsten Keller - St. Louis - USA
 Ir. Hermanes Kleizen - Hengelo - Netherlands
 Prof. Gernot Krammer - Graz - Austria
 Dr. Martin Lehmann - Ludwigsburg - Germany
 Prof. Markus Lehner - Leoben - Austria
 Prof. Dietmar Lerche - Berlin - Germany
 Prof. Woon-Fong Wallace Leung - Hong Kong - P.R. China
 Prof. Richard Lydon - Haslingden - UK
 Dr. Hisao Makino - Yokosuka - Japan
 Prof. Gerd Mauschitz - Vienna - Austria
 Prof. Arunangshu Mukhopadhyay - Jalandhar - India
 Prof. Ioannis Nicolaou - Cyprus
 Dr. Thomas Peters - Neuss - Germany
 Prof. Urs Peuker - Freiberg - Germany
 Dr. Graham Rideal - Waverton - UK
 Prof. Siegfried Ripperger - Kaiserslautern - Germany
 Prof. Sandra Mara Santana Rocha - Espirito Santo - Brazil
 Prof. Peter Scales - Parkville - Australia
 Prof. Hans-Joachim Schmid - Paderborn - Germany
 Dr. Anthony Stickland - Melbourne - Australia
 Prof. Hans Theliander - Gothenburg - Sweden
 Prof. Dominique Thomas - Nancy - France
 Prof. Bhaskar N. Thorat - Mumbai - India
 Prof. Paolo Tronville - Torino - Italy
 Prof. Kuo-Lun Tung - Taipei - Taiwan
 Prof. Eugène Vorobiev - Compiègne - France
 Dr. Matthias Waldenmaier - Kaiserslautern - Germany
 Yan-Xi Wang - Shanghai - P.R. China

The flyer lists countries and regions.

PL

Tuesday, October 11, 2016 10:45 - 12:00 h
 Plenary Lecture



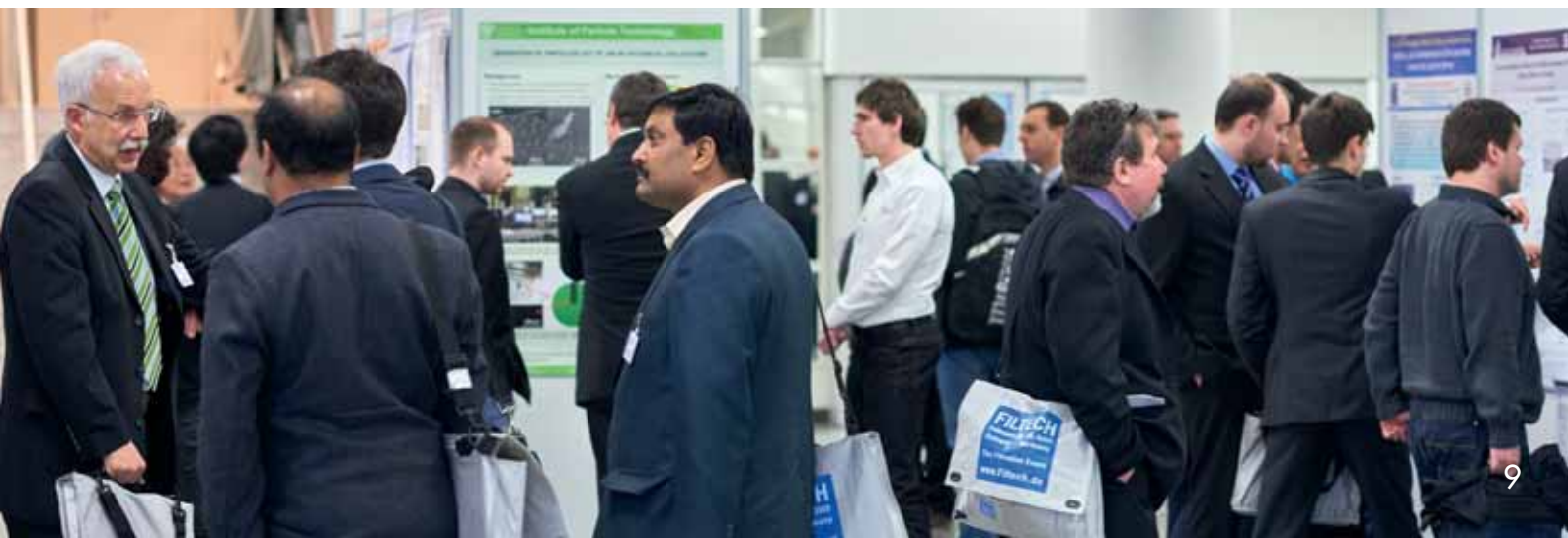
Gas Cleaning with Pulse-Jet Filters: Emission Sources and Dust Abatement Strategies

Prof. Gerhard Kasper
 Karlsruhe Institute of Technology KIT / Germany

Baghouse filters have traditionally been very effective in maintaining low dust emissions from industrial sources. The trend toward tighter and carefully monitored specifications continues however, in order to meet modern ambient air quality standards. Moreover, these standards are particle size specific and based on inhalable and respirable dust concentrations (PM10, PM2.5).

The technology is therefore assessed with regard to options for lowering emission levels, such as tighter filter media, better filter houses, or smarter ways of operating them. Much of the underlying research was done in cooperation with the European Consortium on Filtration Technology in Karlsruhe...

...learn more at **FILTECH 2016**



Session Overview

Tuesday, 11.10.2016

Monday 10.10.2016 09:00-18:00h
Short Course I · Solid/Liquid Separation
Short Course II · Fine Dust Separation

08:30	Registration				
10:15	Opening Session				
10:45 12:00	PL	Plenary Lecture – Prof. Gerhard Kasper, Karlsruhe Institute of Technology, Germany Gas Cleaning with Pulse-Jet Filters: Emission Sources and Dust Abatement Strategies			
Lunch – Fair					
	Room 1A – 1st floor	Room 1B – 1st floor	Room 2 – 2nd floor	Room 4A – 4th floor	Room 4B – 4th floor
13:00 14:15	K1 Keynote Lecture 1 Dr. Christof Asbach	L1 Cake Filtration I	L2 Sedimentation Analysis	G1 Surface Filtration	G2 Flue Gas Cleaning
Coffee Break – Fair					
14:45 16:00	K2 Keynote Lecture 2 Prof. Anti Häkkinen	L3 Cake Filtration II	L4 Decanter and Tube Centrifuges	G3 Mist and Droplet Separation I	G4 Air Filtration I
Coffee Break – Fair					
16:45 18:00	K3 Keynote Lecture 3 Prof Eiji Iritani	L5 Cake Filtration III	L6 New and Improved Filter Media	G5 Mist and Droplet Separation II	G6 Air Filtration II
18:00	Get Together Reception				

Wednesday, 12.10.2016

	Room 1A – 1st floor	Room 1B – 1st floor	Room 4A – 4th floor	Room 4B – 4th floor	
09:00 10:15	K4 Keynote Lecture 4 Prof. Hans Theliander	L7 Cake Filtration IV	G7 Special Filter Media	M1 Microfiltration and Ultrafiltration	
Coffee Break – Fair					
10:45 12:00	K5 Keynote Lecture 5 Dr. Damian Pieloth	L8 Cake Filtration V	G8 Modelling and Simulation I	M2 Ultrafiltration	
Lunch – Fair					
13:00 14:15	K6 Keynote Lecture 5 Dr. Wolfgang Witt	L9 Cake Filtration VI	G9 Modelling and Simulation II	M3 Nanofiltration and Reverse Osmosis	
Coffee Break – Fair					
Short Oral + Poster Presentation					
	Room 1A – 1st floor	Room 1B – 1st floor	Room 2 – 2nd floor	Room 4A – 4th floor	Room 4B – 4th floor
14:45 16:00	L10	L11/F1	G10	G11	M4
16:00 16:45	Poster Presentation	Poster Presentation	Poster Presentation	Poster Presentation	Poster Presentation
16:45 18:00	L12 Depth & Cake Filtration - Numerical Simulation	L13 Filtration Enhancement by Coagulation/Flocculation	G12 Combined Technologies	M5 Fouling and Ceramic Membranes	F2 Filter Media – Quality Control & Pore Size Analysis

Thursday, 13.10.2016

	Room 1A – 1st floor	Room 1B – 1st floor	Room 4A – 4th floor	Room 4B – 4th floor
09:00 10:15	F3 Filter Media – Advanced Manufacturing Methods I	L14 Filtration Enhancement by Electric and Magnetic Fields	L15 Depth Filtration I	M6 Dynamic Cross Flow Techniques
Coffee Break – Fair				
10:45 12:00	F4 Filter Media – Advanced Manufacturing Methods II	L16 Fuel Filtration I – Water Separation	L17 Depth Filtration II	G13 Measurement Techniques
Lunch – Fair				
13:00 14:15	F5 Filter Media – Advanced Manufacturing Methods III	L18 Fuel Filtration II – Water Separation	L19 Depth Filtration III	G14 Filter Testing
Coffee Break – Fair				
14:45 16:00	F6 Filter Media – Numerical Simulation of stressed Filter Elements	L20 Fuel Filtration III – Analysis and Efficiency Testing	L21 Backwashing Filtration, Media Regeneration	G15 Gaseous Compounds Separation
Coffee Break – Fair				

Programme is subject to amendments. Up-to-date Programme is available at www.Filtech.de

The Filtration Event · www.Filtech.de

FILTECH 2016 · Conference Programme

Tuesday, October 11, 2016

08:30-10:15 h Registration

10:15 - 10:45 Opening Session

PL

Plenary Lecture

10:45 room
12:00 1A

Gas cleaning with pulse-jet filters:

Emission sources and dust abatement strategies

Prof. Gerhard Kasper, Karlsruhe Institute of Technology, Germany

K1

Keynote Lecture 1

13:00 room
14:15 1A

Long-term stability and energy efficiency of filtration solutions

Dr. Christof Asbach, IUTA Germany

L1

Cake Filtration I – Characterization of Filterability

13:00 room
14:15 1B

Cake forming filtration - A theory-based approach for correct characterization of the suspension filtrability, I. Nicolaou*, NIKIFOS Ltd., Cyprus

Properties of microbial cell cake under high pressure conditions, N. Katagiri*, Y. Kuwajima, H. Kawahara, E. Iritani, Nagoya University, Japan

Improvement of filtration properties of mine tailings by grinding with a stirred media mill, T. Kinnarinen*, R. Tuunila, A. Häkkinen, Lappeenranta University of Technology, Finland

L2

Sedimentation Analysis

13:00 room
14:15 2

Magnetophoretic velocity determined by space and time-resolved extinction profiles, D. Lerche*, T. Detloff, D. Krause, M. Wolff, LUM GmbH, O. Mykhaylyk, D. Vlaskou, V. Schoemig, T. Jonas, S. Berensmeier, C. Plank, Technical University Munich, Germany

Characterization of solid-liquid separation of flocculated mineral slurries by NIR-transmission and x-ray concentration profiling, T. Sobisch*, D. Kavianpour, D. Lerche, LUM GmbH, Germany

Experimental evaluation of effect of continuous phase rheology on sedimentation behaviour, T. Sobisch*, D. Lerche, LUM GmbH, Germany

G1

Surface Filtration

13:00 room
14:15 4A

Baghouse filtration: Correlation between pulse intensity, filter movement and regeneration by highly time resolved measurements, S. Sobich*, J. Meyer, G. Kasper, Karlsruhe Institute of Technology (KIT), Germany

Influence of an added fraction of hygroscopic salt particles on the operating behavior of surface filters for dust separation, Q. Zhang, University of Wuppertal, Germany

Economic use of cleanable filter, S. Holfeld*, R. Heidenreich, Institute of Air Handling and Refrigeration (ILK), Germany

G2

Flue Gas Cleaning

13:00 room
14:15 4B

Regenerative filtering separators for small wood combustions, T. Laminger*, L. Kromer, S. Kolmanz, G. Mauschwitz, Vienna University of Technology, Austria

Development of a filtration system for the combined separation of ultrafine dust particles and gaseous pollutants from biomass combustion processes, F. Prill*, S. Schiller, H.J. Schmid, University of Paderborn, Germany

TopFrax™ Catalytic ceramic filters: Simultaneous fine dust separation and NOx, CO and VOCs emission abatement, A.Z. Friedberg, F. Castellino, J. Skotte*, Haldor Topsoe A/S, Denmark

K2

Keynote Lecture 2

14:45 room
16:00 1A

Role of solid/liquid separation technology in circular economy
Prof. Anti Häkkinen, Lappeenranta University, Finland

L3

Cake Filtration II – Washing and Multicomponent Separation

14:45 room
16:00 1B

Displacement washing of porous particles, S. Heinisch*, U.A. Peuker, Technical University Bergakademie Freiberg, Germany

Washing with immiscible liquids - Equilibrium, limitations and opportunities, M. Burisch, U.A. Peuker*, Technical University Bergakademie Freiberg, Germany

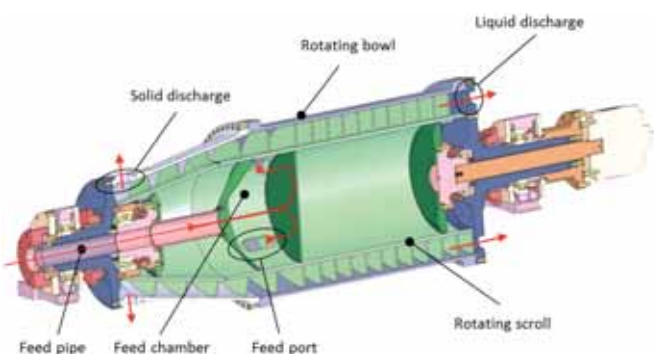
Cake filtration of multi-component-suspensions, S. Kühne*, U.A. Peuker, Technical University Bergakademie Freiberg, Germany

L4

Decanter and Tube Centrifuges

14:45 room
16:00 2

Improved decanter operations by reduced particle fragmentation, M. Kuhn*, M. Reichenbach, S. Weis, A. Siebelitz, Andritz Separation, Germany; J. Grossalber, Andritz AG, Austria



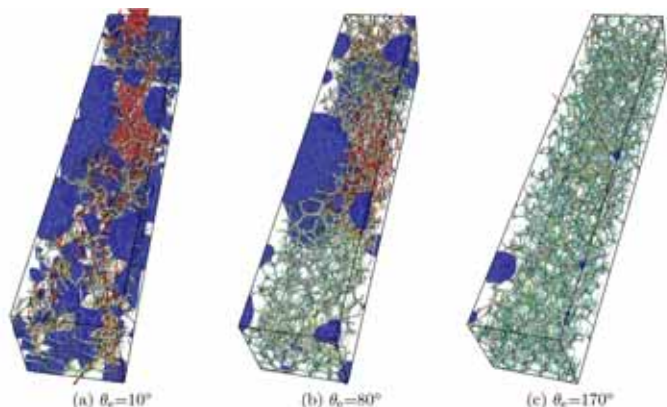
Development of a dynamic process model for the mechanical fluid separation in decanter centrifuges, M. Gleiß*, H. Nirschl, Karlsruhe Institute of Technology (KIT), Germany

An efficient numerical approach for transient simulation of multi-phase flow behavior in centrifuges, S. Hammerich*, H Nirschl, Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany

G3 Mist and Droplet Separation I 14:45 room 4A 16:00

Pressure drop in oil mist filter media: Validation of the jump-and-channel model for a broad range of velocities, H.E. Kolb*, J. Meyer, G. Kasper, Karlsruhe Institute of Technology (KIT), Germany

Effect of contact angle on equilibrium saturation during mist filtration in nonwoven fibrous and foam media, S. Abishek, B.J. Mullins*, A.J.C. King, Curtin University, Australia; G. Kasper, Karlsruhe Institute of Technology (KIT); W. Heikamp, Raschig GmbH, Germany



CFD study of filtration process in moulded filters within a vacuum pump, N. Basha*, F. Hamad, Z. Ali, Teesside University; L. Cochrane, S. Culham, PSI Global Limited, UK

G4 Air Filtration I 14:45 room 4B 16:00

Modern ePTFE membrane based HEPA/ULPA filters for improved energy savings and risk reduction, M. Schmidt*, AAF International, Germany; S. Hayashi, Nippon Muki Co., Ltd., H. Niinuma, Daikin Industries, Japan

What PM level do you have in your indoor environment?, M. Johnson*, T. Carlsson, Mann+Hummel Vokes Air, Sweden

Total cost of ownership of HVAC particulate filters. A manufacturer's perspective, R. Bharadwaj*, N. Nance, M. Osborne, American Air Filtration AAF International, USA

K3 Keynote Lecture 3 16:45 room 1A 18:00

Approach to membrane filtration from the perspective of cake and blocking filtration laws
Prof. Eiji Iritani, Nagoya University, Japan

L5 Cake Filtration III – Washing and Scale-up and Optimization 16:45 room 1B 18:00

Scale-up and optimization of filtration processes: Pressure filter to centrifuge, C. L. Burcham, C. Polster, Eli Lilly and Company, K.P. Girard, Pfizer Inc., USA; N.A. Mitchell*, Process Systems Enterprise (PSE) Ltd, UK

Batch filter centrifuges - A novel approach for scale-up and optimization based on pilot tests, I. Nicolaou, NIKIFOS Ltd., Cyprus

Fast or slow filtering suspensions - A general approach to optimizing constant pressure batch filtration, A.D. Stickland, University of Melbourne, Australia

L6 New and Improved Filter Media 16:45 room 2 18:00

Three dimensional high performance filter cloth - New developments in woven wire filtration media, F. Edelmeier*, F. Meyer, Haver & Boecker, Germany

Filtration with sinter metal, E. Roquette, oilRoq GmbH, Germany

Advantages of nylon spunbond fabrics in glycol contaminated engine oil, J.T. Walker*, E.S. Carter, A.E. Ortega, Cerex Advanced Fabrics Inc., USA

G5 Mist and Droplet Separation II 16:45 room 4A 18:00

Drop entrainment from the surface of oil mist filters: mechanisms, kinetics, and drop spectra, S. Wurster*, H.E. Kolb, J. Meyer, G. Kasper, Karlsruhe Institute of Technology (KIT), Germany

Simulating transport in and entrainment from nonwoven fibrous, knitted, and open-cell foam filters, V. Golkarfard, B.J. Mullins*, A.J.C. King, S. Abishek, Curtin University, Australia; G. Kasper, Karlsruhe Institute of Technology (KIT), W. Heikamp, Raschig GmbH

Influence of filter domain size on simulation of gas-liquid filtration in nonwoven and foam media, S. Abishek*, B.J. Mullins, A.J.C. King, Curtin University, Australia; G. Kasper, Karlsruhe Institute of Technology (KIT); W. Heikamp, Raschig GmbH, Germany

G6 Air Filtration II 16:45 room 4B 18:00

Carbon fibers using drum filters, H. Sauter*, F. Engel, ITG AG, Germany

Nanofibers for air filtration: Delivery, durability, and downstream processing, J. Manasco*, C. Sipes, Elmarco Inc., USA; I. Ponomarev, Elmarco s.r.o., Czech Republic

Performance of various ventilation filtration technologies on characteristic traffic emission aerosol in ultrafine particle size range, S. Saari*, P. Karjalainen, H. Kuuluvainen, T. Rönkkö, Tampere University of Technology; T. Kalliohaka, A. Taipale, VTT Technical Research Centre of Finland, Finland

Wednesday, October 12, 2016

K4 Keynote Lecture 4 09:00 room 1A 10:15

On local cake properties in liquid filtration
Prof. Hans Theliander, Chalmers University, Sweden

L7 Cake Filtration IV – Continuous Vacuum and Pressure Filters 09:00 room 1B 10:15

Cleaning-in-place – Meeting the requirements The BHS-RPF in the pharmaceutical and food industry, T. Ochel*, BHS-Sonthofen GmbH, Germany

Hyperbaric disk filter for high capacity dewatering of hematite and magnetite ore, G. Krammer*, Graz University of Technology; R. Raberger, Andritz AG, Austria

Tailings dewatering with disc filters, J. Hahn*, A. Egger, BOKELA GmbH, Germany

Discover the Future of Filtration & Separation

G7 Special Filter Media

09:00 room
10:15 4A

Innovative filter media made from single-layered bi-component spunbonded nonwovens, R. Taubner*, STFI - Sächsisches Textilforschungsinstitut e.V., Germany

New developments to combine nanofibers and electrostatic charge in air filter media, A. Seeberger*, T. Ertl, M. Abraham, IREMA-FILTER GmbH, Germany

Bag Filters: SSB felt for enhanced spark resistance, E. Galletta, D. de Angelis, L.I. Balzaretto, M. Motta*, A. Pagani, Olivier Mattia, Testori S.p.A., Italy

M1 Microfiltration and Ultrafiltration

09:00 room
10:15 4B

Effect of filtration pressure on hollow fiber microfiltration characteristics of activated sludge, K. Kawasaki*, R. Nagasaki, K. Otsuka, Ehime University, Japan

Constant flux microfiltration with sieves with uniform pores, I. Drijer*, T.X. van de Laar, H. Fadhilatunnur, D. Tzompa Sosa, J.J.W. Sewalt, H. van Valenberg, C.G.P.H. Schroën

Latest filtration technology applied to fluid recovery in the metals industry, D. Hampton*, E. Brownlee, CRS Reprocessing Services, USA

K5 Keynote Lecture 5

10:45 room
12:00 1A

Dust removal in scrubbers - state of the art and challenges
Dr. Damian Pieloth, Technical University Dortmund, Germany

L8 Cake Filtration V – Novel Methods of Consolidation and Deliquoring

10:45 room
12:00 1B

Filter cake compaction by oscillatory shear, S. Illies*, H. Anlauf, H. Nirschl, Karlsruhe Institute of Technology (KIT), Germany

Superposition of compression and shear in filtration, E. Höfgen*, A. D. Stickland, P.J. Scales, R.J. Batterham, University of Melbourne, Australia

Introduction of the new concept dehydrator: Compression blow dehydrator, T. Homma, Tsukishima Kikai Co., Ltd., Germany

G8 Modelling and Simulation I

10:45 room
12:00 4A

Uniflow cyclones compared with standard cyclones, U. Muschelknautz*, MK Engineering, Germany

Numerical simulation of an air extraction system (dirty air domain, filter media and clean air domain) for abrasive dust, E. Dongmo*, N. Frank, Keller Lufttechnik GmbH + Co. KG, Germany

Experimental investigation and 3D simulation of particle deposition at electret filters, A. Hellmann*, K. Schmidt, M. Pitz, S. Antonyuk, University of Kaiserslautern, C. Asbach, S. Schumacher, IUTA, Germany

M2 Ultrafiltration

10:45 room
12:00 4B

A comparison of strategies to optimize inline coagulant dosing for ultrafiltration, R. E. Gissel*, D. Dominiak, W. van de Ven, Grundfos Holding A/S, Denmark

Effect of pre-ozonation and coagulation on membrane fouling control for wastewater reuse, G.-Y. Kim*, M. Kim, C. Lee, J.-H. Kim, H.-S. Kim, Sungkyun Kwan University; W. Chang, Korea District Heating Corp., Korea

Removal of oxy-anions by liquid-phase polymer based retention technique, B.L. Rivas*, J. Sánchez, University of Concepción, Chile

K6 Keynote Lecture 6

13:00 room
14:15 1A

Particle size and shape analysis for laboratory and process environment
Dr. Wolfgang Witt, Sympatec GmbH, Germany

L9 Cake Filtration VI – Novel Continuous Process Concepts

13:00 room
14:15 1B

Separation and dewatering of biological microparticles from low concentrated suspensions by using the energy efficient thin film filtration, Z. Lam*, H. Nirschl, H. Anlauf; Karlsruhe Institute of Technology KIT, Germany

Development of a novel continuous filtration unit for pharmaceutical process development and manufacturing: A case study using paracetamol, S. Ottoboni*, C. Steven, C. J. Price, University of Strathclyde; E. Meehan, AstraZeneca; A. Barton, Alconbury Weston; A. Mitchell, Perceptive Engineering, UK

Investigations on the separating characteristics of different crystalline amino acid systems, L. Löbnitz*, H. Anlauf, H. Nirschl, Karlsruhe Institute of Technology (KIT), Germany

G9 Modelling and Simulation II

13:00 room
14:15 4A

Micro-macroscopic filter modelling based on computational fluid dynamics (CFD), U. Heck*, M. Becker, DHCAE Tools GmbH; N. Riefler, U. Fritsching, Bremen University, Germany

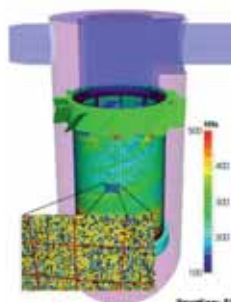


Figure 3 - Macroscopic modelling of a water filter device



Figure 4 - A complete animation is provided on YouTube: <https://youtu.be/LPGNqUPsc0>

Filter media design based on analytics of μ CT scans and simulation of filtration processes, J. Becker, C. Kronsbein, L. Cheng*, R. Westerteiger, A. Wiegmann, Math2Market GmbH, Germany

Numerical simulation of the fluid flow and poroelastic deformation in round pleated filter cartridges, D. Iliev, O. Iliev*, R. Kirsch, Fraunhofer Institute for Industrial Mathematics, Germany

M3 Nanofiltration and Reverse Osmosis

13:00 room
14:15 4B

Decentralized production of potable water based on membrane technology, T. Peters, Membrane Consulting, Germany

Inhibitors for CaCO_3 -scaling in reverse osmosis plants - Influence of suspended matter on membrane clogging, W. Hater, K. Zimmer, J. Schallenberg, Kurita Europe GmbH; J. Jaworski, N. Kruse, G. Braun*, Cologne University of Applied Science, Germany

Production integrated filtration for resource recovery from rinsing waters - A progress towards environmental sustainability, L. Q. T. Nguyen*, M. Engelhart, M. Wagner, P. Cornel, Technical University Darmstadt; Germany; Linclau, P&G, Belgium

L10 Short Oral + Poster Presentation

14:45 room
16:00 1A

Depth Filtration

Industrial waste water treatment with a Fuzzy Filter: A flexible cost- and space-saving solution, K. Gantner, Bosman Watermanagement GmbH, Germany

Microstructured iron hydroxide containing agglomerates for water cleaning processes, A. Gerbeth*, B. Gemende, T. Riedel, N. Pausch, University of Zwickau; M. Leiker, R. Heiduschke, B. Både, P.U.S. Produktions- und Umweltservice GmbH; P. Ay, C. Glaser, F. Logsch, University of Cottbus-Senftenberg, Germany

Robust filtration improves helicopters reliability & safety, K. Suri*, M. Gao, M. Sandford, B. Mouhebaty, PTI Technologies, Inc, USA

Cake Filtration

Gas consumption, solids throughput and residual cake moisture - Re-lation between operating expenses and process results of rotary filters, H. Anlauf*, Karlsruhe Institute of Technology (KIT), Germany

Evaluation of compression and relaxation properties of compressible filter cake, N. Katagiri*, G. Inagaki, E. Iritani, Nagoya University, Japan

Constant pressure expression of power law non-newtonian fluid/solid mixture, M. Iwata*, T. Shimo, T. Tanaka, Osaka Prefecture University, Japan; M.S. Jami, Islamic University Malaysia, Malaysia

High pressure squeezing in the membrane filtration in pilot scale, A. Grosso*, F. Kaswalder, D. Collini, Aqseptence Srl / Diemme® Filtration, Italy

Tuning and understanding mining cake filtration by means of X-rays techniques, F. Kaswalder*, D. Collini, Aqseptence Group S.r.l.; N. Masciocchi, A. Guagliardi, Università dell'Insubria, To.Sca.Lab, Italy

Crystallization and mechanical Dewatering, H. Meldau, Germany

Centrifugal Separation

Study of a Novel Centrifugal Filtration Device, C.-C. Lin, R.-M. Wu*, Tamkang University, Taiwan

L11/F1 Short Oral + Poster Presentation

14:45 room
16:00 1B

Cake Filtration

Insights into dewatering and characterization of waste activated sludge from Indian perspective, S. Jadhav*, S. Haramkar, A. Kamble, B. Thorat, Institute of Chemical Technology Mumbai - India

Slurry Pretreatment - Fractionation and Sorting

Continuous phosphorus recovery by heterogeneous nucleation: Challenges in solid-liquid separation, E. Förster, S. Illies*, H. Anlauf, H. Nirschl, Karlsruhe Institute of Technology (KIT), Germany

Separation of chromite particles from olivine by flotation, L. Turri*, F. Lapique, H. Muhr, University of Lorraine, France; C. Rech, University of Caxias do Sul, Brazil

Depth Filtration - Adsorption

Methylene blue adsorption study in chitin and shrimp shell pre-treated, M.S. Zamprognio, R.F. Vaccari, L. Rodrigues, M.C.R. Tosta, A. P. Meneguelo, S.M.S. Rocha, Federal University of Espirito Santo; E.R. Nucci*, Federal University of São João Del Rei, Brazil

The use of coffee husks as bioadsorbent of oily wastewater, A.S.

Almagro, A.N.F. Mendes, S.M.S. Rocha*, Federal University of Espirito Santo, Brazil

Water Treatment by Electrocoagulation and Aeration

The reuse of electrodes for removing oil in waste water, I.L. Nascimento, E.V.O. Mattedi, E.R. Nucci, A.P. Meneguelo, S.M.S. Rocha*, Federal University of Espirito Santo, Brazil

Filter Media - Functionalization

Novel Short Chain/C6 Fluoroproducts with improved properties, FF. Alemdaroglu*, M. Wagner, O. Friedrichs, Daikin Chemical Europe GmbH, Germany

Filter Media - Pore Size Analysis

Ultrafiltration membranes: Pore structure characterization by liquid-liquid porometry, V. Davey*, K. Gupta, PMI Porous Materials, Inc., USA

The „true“ pore size of textile filter media and its relevance for the filtration process with respect to the interaction with apparatus and suspension, H. Anlauf, Karlsruhe Institute of Technology (KIT), Germany

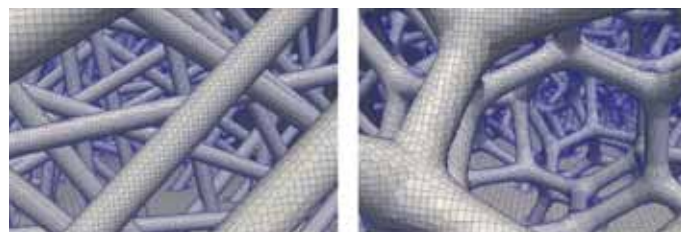
G10 Short Oral + Poster Presentation

14:45 room
16:00 2

Investigation into the operating performance of periodic regenerated surface filters as a function of the filter media structure, J. Schelp*, Q. Zhang, E. Schmidt, University of Wuppertal, Germany

Online pulse jet cleaning of filter bags with venturi and no cleaning nozzle, M. Staben, L. Gamborg*, FLSmidth A/S, Denmark

New flexible test system for cleanable filter media in extreme process conditions- Temperature up to 250°C; rel. Humidity up to 80% (90°C), M. Schmidt, Palas® GmbH, Germany



The new ISO 16890 test Norm for air filters, T. Stoffel, Denco Happel GmbH, Germany

Standardized testing of filter systems regarding their separation efficiency of allergenic particles and airborne germs, J. Merl*, OFI – Austrian Research Institute for Chemistry and Technology, Austria; A. Wiegers, S.Denninger, Daimler AG; K.C. Bergmann, European Centre For Allergy Research Foundation (ECARF); U. Häfner, Freudenberg Filtration Technologies SE & Co. KG, Germany

Generation of a cooling lubricant-aerosol for separation tests, M. Kaul*, E. Schmidt, University of Wuppertal, Germany

Generation of realistic nonwoven and foam filter geometry and mesh for filtration simulations using open-source tools, S. Abishek*, B.J. Mullins, A.J.C. King, Curtin University, Australia; G. Kasper, Karlsruhe Institute of Technology; W. Heikamp, Raschig GmbH, Germany

Representative domain size study on simulated 3D fiber systems, P. Easwaran*, K. Schladitz, Fraunhofer Institute for Industrial Mathematics; F. Hahn, M. Lehmann, Mann+Hummel GmbH; C. Redenbach, University of Kaiserslautern, Germany

Variopleat - Innovative engine air filter design with variable pleat heights,

Discover the Future of Filtration & Separation

P. Hettkamp*, P. Neef, M. Heim, Mann+Hummel GmbH, Germany

G11

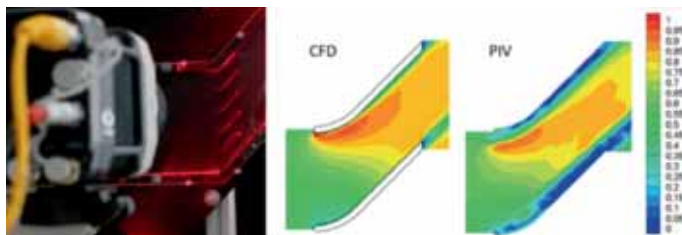
Short Oral + Poster Presentation

14:45 room
16:00 4A

Use of dustiness data to predict concentration and composition of aerosols emitted from bulk material handling, M. Parey*, E. Schmidt, University of Wuppertal, Germany

Simulation to quantify the dustiness of powders, T. Londershausen*, E. Schmidt, University of Wuppertal; M. Hennig, U. Teipel, Technical University of Nuremberg, Germany

Uniflow cyclones - Dedusting at restricted spaces, M. Kraxner*, T. Kofler, M. Pillei, MCI - The Entrepreneurial University, Austria



Optimization of a stairmand cyclone adapted with water sprayers, A.C.M. Alves*, M.L. Aguiar, Federal University of Sao Carlos, Brasil

Separation behavior of a new gas-liquid cross-flow array wet-scrubber, T. Laminger*, W. Höflinger, Vienna University of Technology, Austria; H. Yu, W. Wei, J. Zhu, Sichuan University, China

Improving filtration performance with new fiber finish technology, M. Bergmann*, FiberVisions, Denmark; Z. Lee, FiberVisions, USA

On the gas handling capacity of vertical dust filtration vessels using candles, H.W. Dries*, Advisor Cat-Cracking Technology, Netherlands; A.C. Hoffmann; University of Bergen, Norway

M4

Short Oral + Poster Presentation

14:45 room
16:00 4B

Ozonated water backwash for reducing ceramic membrane fouling in treated wastewater reuse, M. Kim*, G. Kim, J. Kim, H. Kim, Sungkyunkwan University; B. Choi, Lotte Chemical; W. Chang, Korea District Heating Corp., Korea

Membrane technology for efficient diesel-water separation, M. Koudri*, O. Schmitz, T. Kuhmann, M. Ebrahimi, P. Czermak, University of Applied Sciences Mittelhessen; A. Schmidt, DECKMA Hamburg GmbH, Germany

Innovation by integration: GEA FiT - Filter in tank system for pharmaceutical purification W. Herberg, K. Schöneberg*, GEA Group AG, Germany; T. Nielsen, Novo Nordisk, Denmark



Investigating electrostatic repulsive distance of electrically conductive polymer as reverse osmosis membrane for seawater desalination: A

theoretical calculation, C.-M. Chang*, C.-H. Huang, Y.-T. Chiu, Y.-C. Chen, ITRI - Industrial Technology Research Institute, Taiwan

A photocatalytic membrane with WO₃/Cu₂O heterostructure prepared through an atmospheric thermal plasma spray coating method, C.-C. Hu, Y.-F. Lin, Chung Yuan Christian University; J.-M. Lin, K.-L. Tung*, National Taiwan University, Taiwan

L12

Depth and Cake Filtration – Numerical Simulation

16:45 room
18:00 1A

Simulation of aluminium depth filtration, C. Demuth*, E. Werzner, S. Ray, Technical University Bergakademie Freiberg; M.A.A. Mendes, D. Trimis, Karlsruhe Institute of Technology (KIT), Germany

Combined depth and cake filtration coupled to flow simulation, O. Iliev, R. Kirsch, S. Osterroth*, Fraunhofer Institute for Industrial Mathematics ITWM, Germany

Analysis of filter cake formation using computational fluid dynamics - Discrete element method (CFD-DEM) simulation, R. Deshpande*, O. Iliev, Fraunhofer Institute for Industrial Mathematics ITWM; S. Antonyuk, University of Kaiserslautern, Germany

L13

Filtration Enhancement by Coagulation/Flocculation

16:45 room
18:00 1B

Enhancing the filtration rate of new valley phosphate concentrate with organic and inorganic additives: Comparative study, E. A. Abdel-Aal*, Central Metallurgical Research and Development Institute (CMRDI), Egypt

Role of flocculation aid particles in clarification of colloidal suspension using composite dry powdered flocculant, H. Kadooka, R. Fujiwara, T. Miyajima, T. Tanaka, M. Iwata*, Osaka Prefecture University, Japan; M. S. Jami, International Islamic University Malaysia, Malaysia

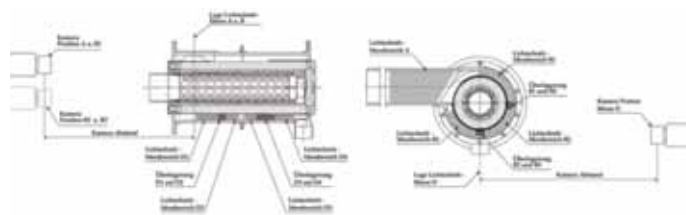
The impact of polymer induced flocculation to the dewatering/filtration results, C. Schröder, aquen aqua-engineering GmbH, Germany

G12

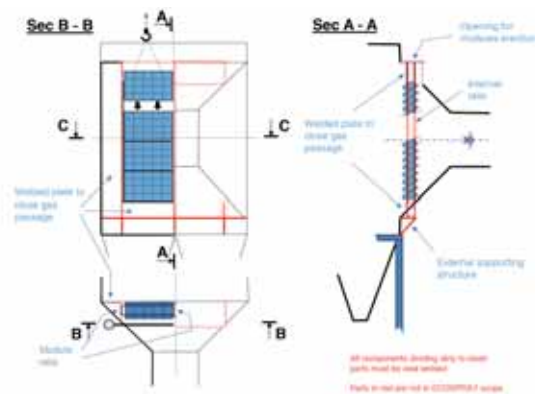
Combined Technologies

16:45 room
18:00 2

Laseroptical evaluation of the primary filtration stage of a two-stage filter system, Ch. Mayerl*, M. Pillei, M. Kraxner, MCI Management Center Innsbruck, Austria; S. Kunze, Mann+Hummel GmbH, Germany



How to upgrade electrostatic precipitators' performance through a significant innovation in the hybrid filter technology, M. Archetti*, G. Ceccherelli, Ecospray Technologies S.R.L, Italy



Enhanced removal efficiency of particles smaller than 2.5 µm by diffusiophoresis and thermophoresis in gas-liquid cross-flow array, Z. Zheng, J. Zhu*, S. Xia, Sichuan University, China; T. Laminger, W. Höflinger, Vienna University of Technology, Austria

M5 Fouling and Ceramic Membranes 16:45 room 18:00 4A

Compressive rheology of biofouling: application to membrane bioreactors, S.J. Skinner*, A.D. Stickland, P.J. Scales, University of Melbourne, Australia

In-situ visualization of flow and fouling layer formation in ceramic hollow fiber membranes by magnetic resonance tomography (MRI), F. Arndt*, S. Schuhmann, G. Guthausen, H. Nirschl, Karlsruhe Institute of Technology (KIT); S. Schütz, MANN+HUMMEL GmbH, Germany

Purification and fractionation of lignosulfonate in thin liquor by ceramic membranes, D. Humpert*, M. Ebrahimi, P. Czermak, University of Applied Sciences Mittelhessen; S. Kerker, P. Geigle, 2CMBlu Projekt AG, Germany

F2 Filter Media – Quality Control and Pore Size Analysis 16:45 room 18:00 4B

Bubble-point test: Testing of filter elements using image processing, J. Lipowsky*, M. Bretschneider, F. Neubauer, U. Palzer, IAB – Institut für Angewandte Bauforschung Weimar gGmbH, Germany

New features of automatic optical inspection systems (AOI) for efficient and cost saving quality control, H. Oerley, Dr. Schenk GmbH, Germany

Enhancing bubble-point testing capabilities on wire meshes by numerical analysis, D. Herper, GKD Gebr. Kufferath AG, Germany

Thursday, October 13, 2016

F3 Filter Media – Advanced Manufacturing Methods I 09:00 room 10:15 1A

Advanced hot-melt adhesive solutions for today's filtration industry. The potential of actual hot-melts and their adequate precision application technologies, presented upon the example of pre-laminating and assembling an automotive filter, G. Schürmann*, ITW Dynatec GmbH, Germany

Future-oriented and economical cutting of filter materials by laser, T. Meyer, eurolaser GmbH, Germany

Continuous welding, simultaneous edge sealing and bonding of pleated filter media, A. Korz, JUKI CENTRAL EUROPE sp. z o.o., Poland

L14 Filtration Enhancement by Electric and Magnetic Fields 09:00 room 10:15 1B

Influence of the particle surface structure on electro assisted filtration of microcellulose, J. Wetterling*, T. Mattsson, H. Theliander, Chalmers University of Technology, Sweden

Electro-osmotic dewatering of sewage sludge: preliminary results, S. Visigalli, P. Gronchi, A. Turolla, A. Brenna, C. Colominas, G. G. Fuentes, R. Canziani*, Politecnico di Milano, Italy

High-gradient magnetic separator in pharmaceutical execution, K. Wolz*, M. Franzreb, M. Ebeler, G. Grim, Andritz KMPT GmbH, Germany

L15 Depth Filtration I 09:00 room 10:15 4A

Fuzzy Filter - A new space saving high-rate filtration technology with compressible filter medium for solid / fluid separation, K. Gantner, Bosman Watermanagement GmbH, Germany

Challenges in discontinuous high rate direct filtration, I. Slavik*, Wahnachtsperrenverband, O. Hoyer, Germany; W. Uhl, Norwegian Institute for Water Research, Norway

Deterministic ratchet using sieve structured obstacles for large-scale separation of particle suspensions, J.P. Dijkshoorn*, R.M. Wagterveld, Wetsus, European Centre of Excellence for Sustainable Water Technology; M.A.I. Schutyser, R.M. Boom, Wageningen University, Netherlands

M6 Dynamic Cross Flow Techniques 09:00 room 10:15 4B

Terminator progressive pressure rotary dynamic crossflow filter for the high quality recovery of filtrate from concentrated lees, M. Pivetta, TMCI Padovan SpA, Italy

The innovative way of mineral oil recovery with the dynamic cross flow filter, G. Grim, Andritz KMPT GmbH, Germany

Continuous thickening of white pigments and fillers with the DYNOL filter, E. Ehrfeld*, U. Hoffner, M. Schiessl, BOKELA GmbH, Germany

F4 Filter Media – Advanced Manufacturing Methods II 10:45 room 12:00 1A

Filter media manufacturing process: conventional or additive manufacturing case study, N. Burns*, M. Burns, D. Travis, L. Geekie, Croft Additive Manufacturing Ltd, UK

R&D activities in the field of sintered nonwoven production - Development of sintered nonwovens, T. Thiem*, M. Jolly, R. Fischer, Norafin Industries (Germany) GmbH, Germany; A. Guyon, V. Bonnefoy, A. Prato, Sintertech Poral SAS, France

Usage of ePTFE to tailor gas/liquid filtration media, K.-J. Choi, Clean & Science Co., Ltd, USA

L16 Fuel Filtration I – Water Separation 10:45 room 12:00 1B

Tailor-made fuel pre and main filter combination for modern diesel engines in the commercial sector, S. Pietschner*, G. Mathy, M. Dorschel, A. Heinen, Hengst SE & Co. KG, Germany

High-efficiency coalescence filters for separation of emulsified water from diesel fuel, A. Krasinski*, A. Kozdron, Warsaw University of Technology, Poland

Influence of diesel additives on the water separation efficiency in diesel water separators, R. Bernewitz*, M. Veit, A. Oraby, L. Wommer, J. Reyinger, H. Banzhaf, Mann+Hummel GmbH, Germany

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L17 Depth Filtration II

10:45 room
12:00 4A

Effect of temperature on adsorption of methyl orange from aqueous solution onto pmma nanofiber, M.A. Zulfikar, A. Bahri, H. Setiyanto*, Institut Teknologi Bandung; M. Natsir, Board of Indonesian Science, Indonesia

Kinetics adsorption of humic acid from aqueous solution onto dual nanofiber, M.A. Zulfikar*, H. Setiyanto, Bandung Institute of Technology, M Natsir, Board of Indonesia Science, Indonesia

Pore-scale modeling of reactive flows for applications in purification and absorption of pollutants, T. Prill, O. Iliev*, K. Neßler, Fraunhofer Institute for Industrial Mathematics ITWM; Z. Lakdawala, DHI-WASY, Germany

G13 Measurement Techniques

10:45 room
12:00 4B

Fractional efficiency detection with regard to PM 10 and PM 2.5, M. Schmidt, Palas® GmbH, Germany

FDS15 - New fine dust sensor from Dr. Födisch Umweltmesstechnik AG® for emission monitoring and air quality management in production plants, H. Födisch*, M. Lehmann, K. Schumacher, Dr. Födisch Umweltmesstechnik AG, Germany

A new user serviceable photometer for automated filter testing, J. Spielvogel*, TSI GmbH, Germany; T. Johnson, J. Johnson, B. Osmondson, TSI Incorporated, USA

F5 Filter Media – Advanced Manufacturing Methods III

13:00 room
14:15 1A

Cross laminated nonwovens for filtration, M. Levillain*, JX Nippon ANCI SAS, France

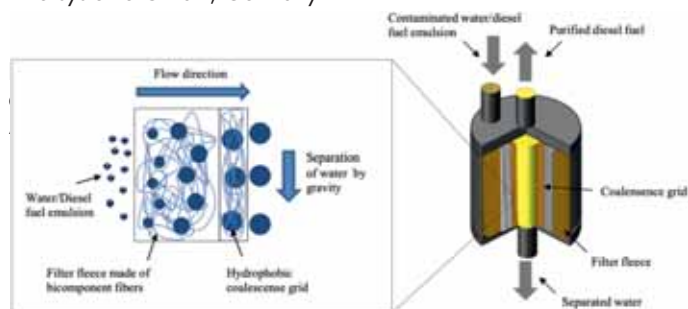
Reicofil®Meltblown - Fine fiber production technologies for future demands, M. Wüschi*, D. Frey, M. Jansen, Reifenhäuser Reicofil GmbH, Germany

Modeling and preparation of nanofiber and composite nanostructures, D. Kimmer*, I. Vincent, L. Lovecká, SPUR a.s. in Zlin; W. Sambaer, M. Zatloukal, Tomas Bata University in Zlin; J. Ondráček, Institute of Chemical Process Fundamentals of the CAS, v. v. i. in Prague; T. Kazda, Brno University of Technology; A. Giurg, University of Chemistry and Technology in Prague; Czech Republic

L18 Fuel Filtration II – Water Separation

13:00 room
14:15 1B

Experimental studies of water-in-diesel emulsions in electric fields, M. Kraut*, P. Kopp, MAHLE Filtersysteme Austria GmbH, R. Woschitz, Graz University, Austria; E.D.L. Böndel, MAHLE Industriefiltration GmbH, P. Ripperger, Kaiserslautern University; B. Renz, MAHLE Filtersysteme GmbH, Germany



Glass free fuel filter for low IFT and biodiesel blends, S. Agarwal, P. Mensonides, R. Jimenez, U. Farooq*, Parker Hannifin Corp., USA

L19 Depth Filtration III

13:00 room
14:15 4A

Adsorptive textiles for urban mining, T. Mayer-Gall*, K. Opwis, S. Gutmann, Deutsches Textilforschungszentrum Nord-West GmbH, Germany

Selective separation of heavy metals using natural Jordanian zeolite, Y. Taamneh*, Jordan University of Science and Technology, Jordan

Composite depth filters for removal of abiotic and biotic objects, E. Sztuk, L. Gradon*, Warsaw University of Technology; J. Skowroski, Institute for Sustainable Technologies, Poland

G14 Filter Testing

13:00 room
14:15 4B

Aerosol generation in accordance to different filtration standards, S. Schütz, M. Schmidt, Palas® GmbH, Germany

Strategy for measuring the collection efficiency of HVAC, HEPA and ULPA filter media and cassettes for nanoparticles down to 5 nm, C. Asbach*, W. Mölter-Siemens, A. M. Todea, IUTA Duisburg; A. Schmitz, F. Schmidt, University Duisburg-Essen, Germany

New test procedure for optimization of bag house filtration by using fast detection systems, R. Heidenreich*, W.-P. Frenzel, S. Blei, A. Böhme, Institute of Air Handling and Refrigeration (ILK), Germany

F6 Filter Media – Numerical Simulation of Stressed Filter Elements

14:45 room
16:00 1A

Modelling the flow transition at the porous fluid interface of pleated filter elements, F. Keller*, D. Riesterer, M. Lehmann, Mann+Hummel GmbH, Germany

Towards the simulation of manufacturing effects on multi-layered filter media, M. Kabel, R. Kirsch*, S. Staub, Fraunhofer Institute for Industrial Mathematics ITWM, Germany

Experimental and numerical study of high density filter textiles to determine permeability and retention properties under tensile stress, S. Rief*, D. Aibibu, T. Kocaman, Ch. Cherif, Fraunhofer Institute for Industrial Mathematics ITWM, Germany

L20 Fuel Filtration III – Analysis and Efficiency Testing

14:45 room
16:00 1B

New on line diesel fuel analysis method (application to water fuel separation efficiency test as per ISO 16332), N. Petillon*, IFTS, M. Jourdain, Metrohm, France

New work item relative to particulate fuel filter efficiency test as per ISO 19612, N. Petillon, IFTS, France

Improvements in implementation of laser diffraction droplet characterization methods for water emulsions in diesel fuels, S. Ward-Smith*, A. Vaisman, A. Blasco, P. Kippax, A. Hall, O. Schmitt, Malvern Instruments Ltd, UK

L21 Backwashing Filtration, Media Regeneration

14:45 room
16:00 4A

Removal of fine-grained and thin filter cakes by a counter-current backwash treatment, P. Morsch*, H. Anlauf, H. Nirschl, Karlsruhe Institute of Technology (KIT), Germany



Development of a test bench for liquid phase filtration case studies: basket and self-cleaning filters, E. Ricco jr.*, F.A. Cunha, P.S. Hashimoto, Apexfil Trade and Industry Ltd.; I.F. Moura, L. Aguiar, Federal University of São Carlos, Brasil

Ability of a filter cloth for cake discharge and backwashing, P. Ginisty, N. Petillon, V. Ederty*, IFTS, France

G15 Gaseous Compounds Separation

14:45 room
16:00 4B

Catalytic functions for nonwoven filtration media, T. Grethe*, B. Karmann, M. Rabe, University of Applied Science Niederrhein; J. Martin, J. Grothe, S. Kaskel, Technical University Dresden, Germany

Separation of rare gases and organic molecules by porous organic cages, L. Chen, M. Liu*, A. I. Cooper, University of Liverpool, United Kingdom

Extraction of green hydrogen at fuel cell quality distributed via natural gas grid, W. Liemberger*, M. Groß, M. Miltner, M. Harasek, Vienna University of Technology; H. Prazak-Reisinger, OMV Refinery & Marketing GmbH, Austria

Please note that the Programme is subject to amendments.

Conference Prices	Early Bird until 28.07.2016	Normal Price from 29.07.2016
3-Day-Congress Ticket	€ 630,-	€ 780,-
1-Day-Congress Ticket	€ 300,-	€ 375,-

Short Course Prices	Early Bird until 28.07.2016	Normal Price from 29.07.2016
Short Course I Solid/Liquid Separation	€ 470,-	€ 560,-
Short Course II Fine Dust Separation	€ 470,-	€ 560,-

07.09.2016

The Conference & Short Course Registration includes

- Lunch/es and Refreshments during breaks
- Entrance to the FILTECH 2016 Exhibition (October 11 – 13, 2016)
- FILTECH 2016 Exhibition Catalogue
- Welcome Reception on October 11, 2016

The Conference registration additionally includes

- Conference Proceedings featuring all papers in an abstract book and full paper versions on USB stick
- Cologne Public Transport Ticket (October 11 – 13, 2016)

The Short Course registration additionally includes

- Extensive Short Course Notes
- Cologne Public Transport Ticket (October 10 – 13, 2016)

Register online: www.filtech.de

FILTECH 2016 will be held again at the venue Koelnmesse in Cologne.

Due to Koelnmesse's central location, which is conveniently situated for all transport links, visitors can quickly reach the exhibition centre by car, train and plane. High-speed ICE trains connect the airports in Frankfurt (FRA), Düsseldorf (DUS), Cologne-Bonn (CGN) directly to the exhibition center via Köln Messe/Deutz station.



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For assistance please contact:

Ms. Astrid Wegner

Koelnmesse Travel & Hotel Service
Phone: +49 (0)221 821 2479
Fax: +49 (0)221 821-3739
E-mail: a.wegner@koelnmesse.de

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