



# Call for Papers

## FILTECH

February 23 – 25, 2021  
Cologne – Germany

The Filtration Event

[www.Filtech.de](http://www.Filtech.de)

# Join the world's largest Filtration Event

Koelnmesse · Cologne · Germany



## Welcome to FILTECH in Cologne

With the FILTECH 2021 to be held in February the City of Cologne will be the Filtration Capital for the academic and commercial world concerned with Filtration & Separation tasks. And the City has a lot more to offer...

Cologne where the cathedral spires tower over Germany's oldest city and its innumerable cultural and historical treasures, world-famous museums and active art scene. Take a trip through 2000 years of history and visit cultural monuments from the Roman Empire to modern times. Built between 1248 and 1880, Cologne Cathedral is regarded as a masterwork of medieval Gothic architecture. It is one of the finest ecclesiastical edifices in the world.

Whether visiting the Romano-Germanic Museum, looking around the Roman Praetorium or taking a walk past the medieval city gates – Cologne's 2,000-year history can be felt everywhere. The Romano-Germanic Museum is, besides its outstanding glass collection, home to the Dionysos mosaic and the famous tomb of Pöblius.

Situated directly on the Rhine and marked by narrow gables and high slated roofs, a district of its own type asserts itself in the Old City of Cologne, the unmistakable, historically appearing character of which stands out immediately.

Cologne is a lively cultural metropolis. Thanks to an extremely active and committed urban scene the city has developed into a creative hotspot.

This is reflected above all in the numerous facets of design, music, art, fashion, festivals, and food. The Cologne Tourist Board illuminates this modern urban lifestyle on the [visit.koeln](http://www.visit.koeln) blog and strengthens its focus on the culinary facets of the cathedral city. You can discover more about [#CulinaryCologne](https://twitter.com/CulinaryCologne) and [#urbanCGN](https://twitter.com/urbanCGN) at [www.visit.koeln](http://www.visit.koeln).

We look forward to welcoming you to Cologne - Germany.







# Join the largest Filtration Event world-wide and ...

## ... present your latest research

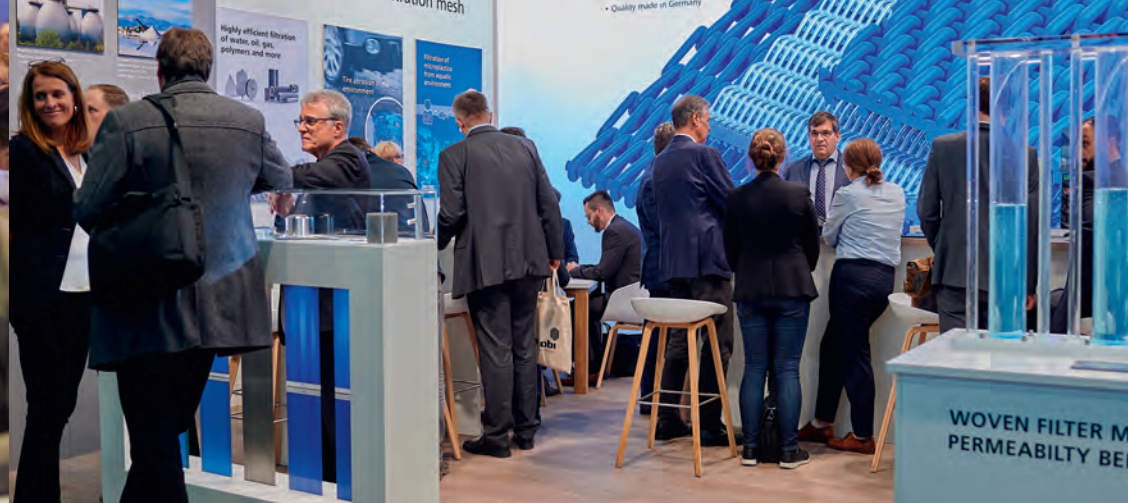
**FILTECH** is the largest and most important filtration event world-wide. The international Conference is a must for everybody concerned with researching, designing, purchasing or selling filtration and separation equipment and services.

Submit your abstract until  
**August 30, 2020**

Full Paper Deadline: December 10, 2020

Present your latest findings at FILTECH 2021 to an international audience and network with filtration experts from all over the world.

**FILTECH 2021 Conference** will feature once again the latest advances and techniques in liquid/solid and gas/particle separation (dust, gas & air filtration). Technology and know-how transfer is a main target.



## The Filtration Event

**FILTECH 2021** will feature 450+ Exhibitors at the Koelnmesse in Cologne. The largest filtration Show world-wide is the globally acknowledged platform and solution provider for all industries covering every market segment.

FILTECH has an established track record in bringing together the technical and commercial sectors to develop global business relationships.

The Show successfully extended its range and presents the most recent innovations in filtration and separation technologies, machinery, particle measurement, analysis & simulationsystems and many more associated industries.





# Presented by leading experts – learn about future ...

## ... trends and perspectives

**FILTECH 2021** Conference will feature more than 200 technical papers, a Plenary Lecture and 4 Keynote Lectures presented by leading experts. Delegates profit from high-level knowledge transfer!

### Plenary Lecture and Keynote Lectures



#### Roaring twenties in air filtration - driving for a cleaner world

Dr.-Ing. Martin Lehman,  
MANN+HUMMEL GmbH / Germany

In medias res: Air filtration is omnipresent for delivering clean air: protecting engine and equipment known as engine filtration, enabling processes and technology known as industrial filtration, providing comfort and indoor air quality known as HVAC filtration. Adding gas adsorption, the domain of cabin air filtration shows up. However, in this talk the focus will be on particle filtration.

Tempora mutantur et nos mutamur in illis. A bit more than twenty years ago, the digital revolution in air filtration started. First realistic simulations of particle collection on single fibers. First time visualization of the 3D microstructure of a fibrous filter. CFD and FEA have become a key tool for designing air intake systems. ...



#### The role of structural and surface properties of depth filter media designed for selected separation processes

Prof. Andrzej Krasinski, Warsaw University of Technology, Faculty of Chemical and Process Engineering / Poland

The presentation covers examples on the enhancement of filtration performance by modification of fibrous media tailored for specific processes. The topic will include an optimization of depth filter for solid filtration and coalescence (both gas-liquid and liquid-liquid), methods for modification of filter structure by deposition or synthesis of particles on the fibers to obtain expected wettability as well as fabrication and testing of antibacterial filters ...



#### Simulation of solid-liquid separation processes: Challenges in modeling and experimental validation

Prof. Sergiy Antonyuk, Technische Universität Kaiserslautern,  
Institute of Particle Process Engineering / Germany

With the rapid increase in computing power, numerical simulation is becoming increasingly important for the prediction and description of solid-liquid separation processes. Numerical studies can improve knowledge of complex separation mechanisms and support the model-based optimization of existing and the development of novel separation processes. The approaches used for the modeling and simulation of solid-liquid flow processes differ in ...



#### Membrane Science and Functional Materials

Prof. Dr. Liang-Yin Chu, Membrane Science and Functional Materials Group –  
Sichuan University / China

Functional membranes are playing paramount roles for sustainable development in myriad aspects such as energy, environments, resources and human health. However, the unalterable pore size and surface property of traditional porous membranes restrict their efficient applications. The performances of traditional functional membranes will be weakened upon the unavoidable membrane fouling, ...



#### Membrane filtration and sustainable development

Prof. Dr. Pierre-Yves Pontalier,  
ENSIACET LCA Laboratoire de Chimie Agro-industrielle / France

Membrane processes are used in a very large number of industrial fields such as the food industry, the chemistry, the pharmaceuticals or the environment. Membrane processes contribute to the protection of the environment as they allow the depollution of industrial and urban effluents. They may also help to limit environmental degradation by integrating new cleaner processes, particularly those related to the biorefinery concept ...





## Conference Registration Fees

<b>Day-Ticket</b>	Early bird € 300	Regular € 395
<b>3-Day-Ticket</b>	Early bird € 630	Regular € 810
<b>Short Courses</b>	Early bird € 480	Regular € 580

Your Participation includes: Proceedings featuring all papers in an abstract book & personalized download-link, Welcome Reception, Lunches & Refreshments, Cologne Public Transport Ticket, Entrance to the Exhibition and Exhibition Catalogue

Early bird rate until November 10, 2020. For speakers the early bird rate applies at any time (all prices incl. German VAT).

Submit your abstract until

**August 30, 2020**

Notice of Acceptance  
September 12, 2020

Deadline Full Papers  
December 10, 2020

## ... your abstract

Your abstract should not exceed 2 pages (incl. tables and figures). Make the title, background, aim, method and main results as concise as possible. Give 4–6 keywords describing the content of your abstract. Start with title, name(s) of author(s), and affiliation(s). Indicate up to 6 authors' names and initials. If more than 6 use "et al.". Give the name/institution where the main work was done. Indicate by (\*) the presenting author.

When you submit your abstract please precise what kind of presentation is preferred:

**20 min presentation**  
or

**5 min presentation**  
in a session room plus presentation in front of the poster in the poster area after the session

Upload your abstract as MS-Word file on the FILTECH 2021 website.

You will receive an e-mail confirmation with your abstract number.

For further details see  
**[www.filtech.de](http://www.filtech.de) → Conference**

**Poster  
Printing  
Service  
incl.**



## Short Courses

February 22, 2021

9:00 am - 6:00 pm

## One day prior to FILTECH 2021 two 1-Day Short Courses will be held:

### Short Course I **Solid/Liquid Separation**

**Dr.-Ing. Harald Anlauf**

Karlsruhe Institute of Technology, Germany, Institute for Mechanical Process Engineering & Applied Mechanics

#### 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 and Apparatus Combinations  
Selection Criteria for Separation Equipment

### Short Course II **Fine Dust Separation**

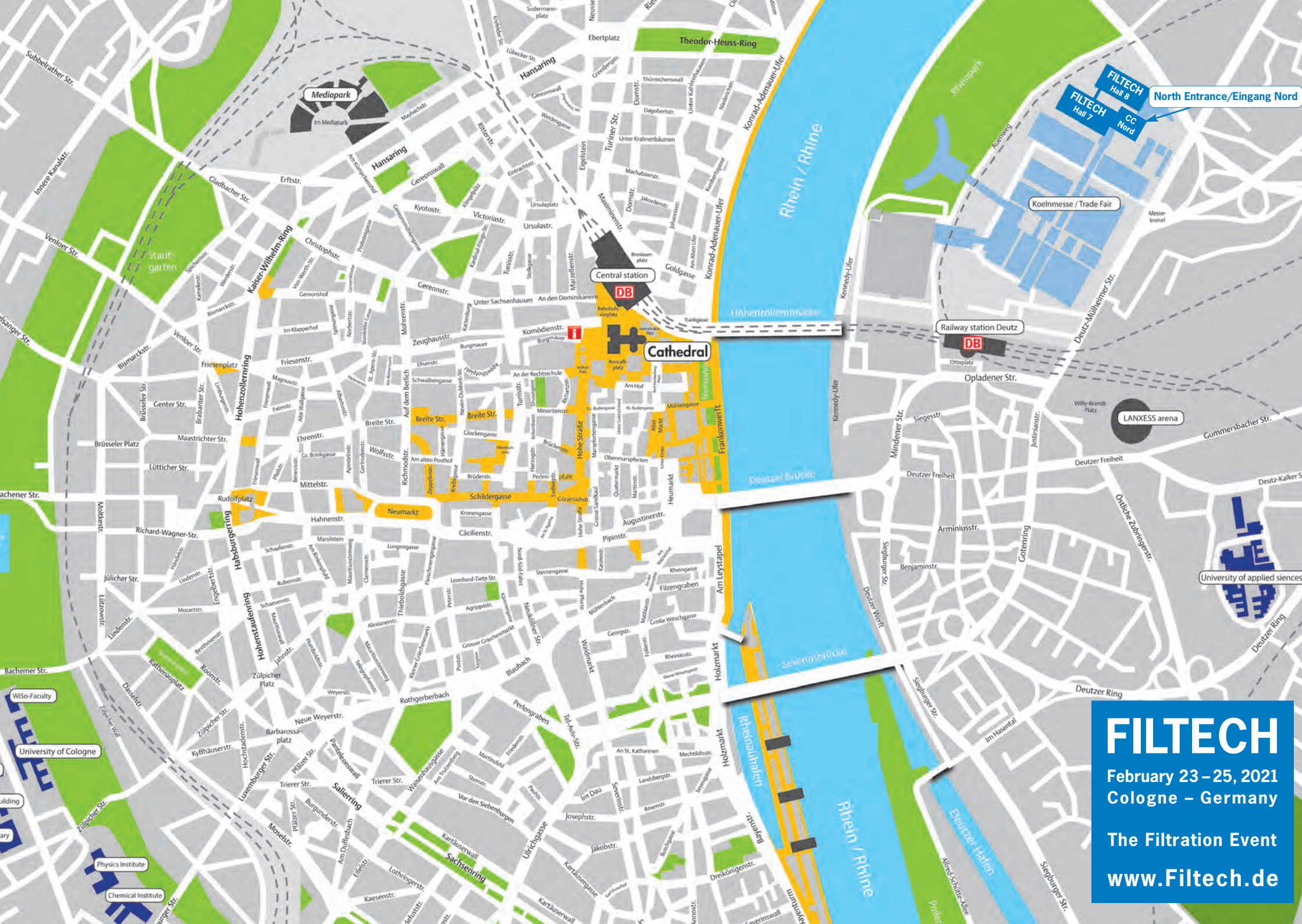
**Prof. Eberhard Schmidt**

University of Wuppertal, Germany, Institute of Particle Technology

#### Topics

Evaluation and 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





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# FILTECH 2021 Conference

## Where Experts meet

### Scientific Committee Chairmen

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

### Scientific Committee

■ Prof. Mônica Lopes Aguiar	São Carlos	Brazil
■ Prof. Sergiy Antonyuk	Kaiserslautern	Germany
■ Dr. Harald Banzhaf	Ludwigsburg	Germany
■ Prof. Liang-Yin Chu	Chengdu	China
■ Prof. Ching-Jung Chuang	Taoyuan	Taiwan
■ Prof. Kyung-Ju Choi	Seoul	Korea
■ Prof. Achim Dittler	Karlsruhe	Germany
■ Prof. Kunihiro Fukui	Hiroshima	Japan
■ Dr. Pascal Ginisty	Foulayronnes	France
■ Prof. Leon Gradon	Warsaw	Poland
■ Prof. Antti Häkkinen	Lappeenranta	Finland
■ Prof. Eiji Iritani	Nagoya	Japan
■ Prof. Chikao Kanaoka	Tsubata	Japan
■ Prof. Gerhard Kasper	Karlsruhe	Germany
■ Dr. Karsten Keller	Milford	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	Chester	UK
■ Dr. Hisao Makino	Yokosuka	Japan
■ Dr. Tuve Mattsson	Gothenburg	Sweden
■ Prof. Gerd Mauschwitz	Vienna	Austria
■ Prof. Arunangshu Mukhopadhyay	Jalandhar	India
■ Prof. Ioannis Nicolaou	Larnaka	Cyprus
■ Prof. Hermann Nirschl	Karlsruhe	Germany
■ Dr. Thomas Peters	Neuss	Germany
■ Prof. Urs Peuker	Freiberg	Germany
■ Prof. Pierre-Yves Pontalier	Toulouse	France
■ Dr. Graham Rideal	Waverton	UK
■ Prof. Sandra Mara Santana Rocha	Espirito Santo	Brazil
■ Prof. Peter Scales	Parkville	Australia
■ Prof. Hans-Joachim Schmid	Paderborn	Germany
■ Dr. Anthony Stickland	Melbourne	Australia
■ Dr. Christine Sun	Clarksville	USA
■ 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