



**Call for Papers**

**FILTECH**

March 8 – 10, 2022  
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

The Filtration industry provides innovative solutions for current and future challenges. This dynamic industry is of further growing importance and turning into a key industry worldwide. At the FILTECH 2022 Show the latest innovations will be on display and will provide visitors an exclusive overview and insights of the state-of the art science and technologies - no matter what sector they are in. FILTECH will be once again the place to be for all those involved with the filtration and separation sector and adjacent industries. **FILTECH 2022 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. 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.

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](#) blog and strengthens its focus on the culinary facets of the cathedral city. You can discover more about [#CulinaryCologne](#) and [#urbanCGN](#) at [www.visit.koeln](#).

We look forward to welcoming you to Cologne - Germany.







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

## ... present your latest research

The programme will give 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. Most ongoing problems, which play an important role in the current situation will be represented in the programme.

Submit your abstract until  
**September 10, 2021**

Full Paper Deadline: December 15, 2021

Present your latest findings at FILTECH 2022 to an international audience and network with filtration experts from all over the world.

**FILTECH 2022 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 2022** 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 & simulations systems and many more associated industries.





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

## ... trends and perspectives

**FILTECH 2022** 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 ...





# How to submit...

## ... 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 2022](http://www.filtech.de) 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.**



## 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 December 20, 2021. For speakers the early bird rate applies at any time (all prices incl. German VAT).

Submit your abstract until

**September 10, 2021**

Notice of Acceptance upon receipt

Deadline Full Papers December 15, 2021



**Short Courses**

**March 7, 2022**

**9:00 am - 6:00 pm**

**One day prior to FILTECH 2022 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





North Entrance/Eingang Nord

FILTECH Hall 8  
FILTECH Hall 7  
Cc Nord

Koelnmesse / Trade Fair

Railway station Deutz  
DB

LANXESS arena

University of applied sciences

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# FILTECH 2022 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 Giniesty 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 Mauschitz Vienna Austria
- Prof. Arunangshu Mukhopadhyay Jalandhar India
- Prof. Ioannis Nicolaou Larnaca Cyprus
- Prof. Hermann Nirschl Karlsruhe Germany
- Dr. Thomas Peters Neuss Germany
- Prof. Urs Peuker Freiberg Germany
- Prof. Pierre-Yves Pontalier Toulouse France
- 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