



9<sup>th</sup>–10<sup>th</sup>, APRIL 2019 | SHANGRI-LA'S EROS HOTEL | NEW DELHI (INDIA)

## Tuesday 9<sup>th</sup> April 2019

07.30 – 08.30 **Tabletop Exhibition build-up**

08.30 – 18.00 **Registration and tabletop exhibition open at Sangri-la's Eros Hotel**  
Delegates must wear their badge at all times to access the conference, the tabletop exhibition and all networking activities.

### 08.30 – 09.15 WELCOME TEA/COFFEE AND OPENING OF THE TABLETOP EXHIBITION

09.15 – 09.45



### OFFICIAL OPENING - INTRODUCTION AND WELCOME

**Pierre Wiertz**, General Manager, **EDANA** (Belgium)

**Samir Gupta**, Managing Director, **BCH** (India)



### 09.45 – 10.30 NEW DEVELOPMENTS AND TRENDS IN FILTRATION

#### KEYNOTE



- Global filtration market review
- Applications in air and liquid filtration
- Mega industrial trends and key drivers for fast growth
- Emerging technologies and new developments
- Unmet needs, opportunities and trends for future development

**Christine Sun**, President, **Filtration Technologies International**  
(United States)

## SESSION: New Filter Media and Applications – PART 1

### MODERATOR



**Niranjan Kirloskar**, Managing Director, **Fleetguard Filters Private Limited (FFPL)** (India)

10.30 – 11.00

### ADVANTAGES OF MELTBLOWN IN HVAC BAG MEDIA DESIGN ISO 16890



- Important elements of filter media design for HVAC media's in bags
- Various alternatives for HVAC bag media
- Comparisons of glass, nano and synthetic media's
- Meltblown is the best value performer
- Long term benefits of meltblown

**Dhiren Shah**, Managing Director, **AIM Filtertech** (India)

11.00 – 11.30

### ENHANCED AIR FILTRATION MEDIA



- Enhanced air filtration media
- Composites to enhance filtration performance
- Various application areas

**Nagendra Anantharamaiah**, Technology Manager, **Hollingsworth & Vose Company** (India)

11.30 – 12.15

TEA/COFFEE BREAK & VISIT OF THE TABLETOP EXHIBITION

## MODERATOR



**Christoph Stenzel**, VP Sales & Marketing Global Filtration, **Neenah Gessner** (Germany)

12.15 – 12.45



### NOVEL FULL SYNTHETIC PLEATABLE FILTER MEDIA FOR CABIN AIR AND FRESH AIR FILTERS

- Importance of filter support media
- How to improve filtration efficiency maintaining low pressure drop
- Supports with built-in filter capacity layer
- Bi-component nonwoven technology

**Luuk van der Molen**, Product Manager Filtration, **Low & Bonar** (The Netherlands)

12.45 – 13.15



### A HIGH-PERFORMANCE AIR FILTRATION MEDIA

- MELTEX is a highly uniform PP filtration media with a durable electret charge designed to deliver media performance with high filtration efficiency AND low pressure drop
- Up to 99.98% filtration efficiency for grade HEPA 13 (EN 1822) filtration is achievable with this proprietary media
- The high-level filtration media performance at relatively low grammage (compared to the standard meltblown media) is well suited for FFP3 face mask and other air filtration applications
- Compatible with high quality support and media layers to increase processability, tensile strength or deliver added filtration performance such as in Synergex™
- Specially designed products compliant with international norms: EN 1822, EN 149 and US NIOSH P100

**Alberto Callado**, Product Manager - Specialties, **Berry Global** (Spain)

13.15 – 14.45

**LUNCH & VISIT OF THE TABLETOP EXHIBITION**

## MODERATOR



**André Boni**, Global Marketing Director HEPA/ULPA filtration, Hollingsworth & Vose (Belgium)

14.45 – 15.15



### COMPOSITE PLEATABLE GLASS-BACKED MELTBLOWN AIR FILTERS

- Meltblown media is a very effective final efficiency layer; however, it cannot be pleated without a support layer
- JM has created a unique glass-backed pleated meltblown filter
- The low pressure drop, high strength, and low weight of glass mat make it ideal as a pleatable backer
- Producing this material in a single operation would eliminate costly secondary compositing operations

**Heath Himstedt**, Senior Research Engineer, Johns Manville (USA)

15.15 – 15.45



### ISO 16890 AND AIR FILTER MEDIA SELECTION

- ISO 16890, introduces great changes compared to ASHRAE 52.2-2017 and EN779:2012
- Lydall Performance Materials tested fiberglass media flat sheet (more than 50 samples) following ISO 16890 to obtain ePMx efficiencies and correlated with V bank filter element performance made with same microglass media
- Based on this correlation we can recommend LydAir<sup>®</sup> MG fiberglass media in our portfolio which will allow the filter manufacturer to obtain the desired ePMx efficiency on the complete filter element at the lowest pressure drop

**Abhishek Saxena**, Senior Account Manager, Lydall Performance Materials (India)

15.45 – 16.30

TEA/COFFEE BREAK & VISIT OF THE TABLETOP EXHIBITION

## SESSION: Environment

### MODERATOR



**Vishal Shah**, Mechanical or Industrial Engineering, **Thermax Limited- Enviro Division** (India)

16.30 – 17.00



### SUSTAINABLE NEW GENERATION FIBRES FOR NONWOVEN FILTER MEDIA IN DRY GAS FILTRATION FOR HIGH TEMPERATURE APPLICATIONS

- Limitations on high temperature fibres used in the industry
- Problems faced in the industry
- Solutions to the needs of the customer in filter media design

**P. Senthil Rajan**, Senior Manager - Technical & Product Development, **Arvind** (India)

17.00 – 17.30



### AN INNOVATIVE FILTER MEDIA FOR HOT AIR FILTER APPLICATION

- Welstrat<sup>®</sup> filter media made up of special blended synthetic fibre
- Deliver superior performance due to excellent acid, alkali and hydrolysis resistance over 100% polyester felt
- Suitable for mid temperature range applications
- Delivers high permeability and lower mean pore size due to hybrid technology results in superior efficiency and less energy consumption

**Neeraj Shukla**, Assistant Manager - Product Development, **Welspun** (India)

17.30 – 18.00



### FURTHER EXPANDING WETLAID FILTRATION MEDIA PERFORMANCE THROUGH INNOVATION AND ENHANCED PRODUCT TESTING

- The use of synthetic fibre blend on wetlaid filtration assets opens new avenues for high performance filtration media
- The combination of wetlaid media in combination with other substrate in a multilayer construction can deliver unique properties

**Jesse Shim**, Head of PD & TCS Filtration Korea & Industrial Filtration Asia, **Ahlstrom-Munskjö** (Korea)



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19.00 – 22.00

# EDANA and BCH COCKTAIL & DINNER PARTY at the Cafe Lawn



**The ideal opportunity for relaxed  
networking**

In THE SHANGRI-LA'S EROS HOTEL, NEW DELHI

*Business casual dress*

9<sup>th</sup>–10<sup>th</sup>, APRIL 2019 | SHANGRI-LA'S EROS HOTEL | NEW DELHI (INDIA)

## Wednesday 10<sup>th</sup> April 2019

9.00 – 17.00

### Registration and tabletop exhibition open at Sangri-la's Eros Hotel

Delegates must wear their badge at all times to access the conference and all networking activities.

09.00 – 09.30

### WELCOME TEA/COFFEE AND OPENING OF THE TABLETOP EXHIBITION

## SESSION: New Filter Media and Applications – PART 2

### MODERATOR



**Rahul Dharmadhikary**, Engineering Director, **Parker Hannifin** (China)

09.30 – 10.00

### KEYNOTE

## AIR FILTERS FOR GENERAL VENTILATION, EVOLUTION IN MEDIA DESIGN AND ENERGY EFFICIENCY



- HVAC applications & priorities
- Euroventenergy classification
- Evolution of media development: NanoWave

**André Boni**, Global Marketing Director HEPA/ULPA filtration, **Hollingsworth & Vose** (Belgium)

10.00 – 10.30

## CABIN AIR FILTERS - A SAFETY DEVICE



- Environmental conditions
- Effect of pollution on human health
- Historical development of filter technology
- Latest trends in India & abroad
- Achieving success through technology
- Safe-guard yourself while driving

**Ashok Pandey**, Division Head- Automotive, **Freudenberg Filtration Technologies** (India)

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10.30 – 11.00



## CABIN AIR FILTERS – SPECIFIC REQUIREMENTS FOR THE INDIAN MARKET

- Particle filter media – development and trends
- Combi-filter media development – development and trends
- Field tests
- Cabin air filter element solutions for helmets and buses
- Fine dust eater

**Anand Seetharam**, Expert – Cabin Air Filter Elements Global Business and Technical Solutions India, **Mann+Hummel Filter** (India)

11.00 – 11.30



## LONG LIFE FUEL FILTER REQUIREMENTS FOR BSVI

- Protection of harmful particles, helps to prolong the life of vehicle
- Filter change intervals shall be decided by sizing of filter and fleet & field validations
- The presentation will discuss the need & challenges in long life filter requirements for BSVI applications

**R. Ramesh Babu**, Engineering Manager, **Parker Filtration Group** (India)

11.30 – 12.15

TEA/COFFEE AND VISIT OF THE TABLETOP EXHIBITION

## MODERATOR



**Viraj Kadam**, Managing Director, **Donaldson India Filter Systems** (India)

12.15 – 12.45



## FILTRATION SOLUTIONS FOR RESPIRATORY MASK (PPE)

- Background of the need of respiratory mask WWI to 2019
- Global standards: European - American standards and performance requirements, ISO Standards & wearer / customer expectations & requirements
- Raw materials: evolution of meltblown media & future requirements
- India status & action plan - market, standards & regulatory compliances, raw material availability, machinery & equipments

**Mahesh Kudav**, Managing Director, **Venus Safety & Health** (India)



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12.45 – 13.15



## NANO FIBRE MATERIAL FOR HIGH SPEC AIR FILTRATION & LIQUID FILTRATION

- Nano fibre material for high spec air filtration & liquid filtration
- Teijin Frontier has developed a new bag-type filter using NANOFRONT™ high-strength ultra-fine polyester fibre that realizes high-efficiency dust collection, energy savings and long life
- The bag's surface is lined with ultra-fine NANOFRONT™ fibres, which have a diameter of just 700 nm, creating a finely porous structure for the extra-efficient collection of dust and powder.
- NANOFRONT™ also is applied for liquid filtration

**Keiichi Hayashi**, Sales and Marketing for filtration market, **Teijin Frontier** (Japan)

13.15 – 14.45

LUNCH & VISIT OF THE TABLETOP EXHIBITION

## SESSION: Research, Testing and Modelling

### MODERATOR



**Samir Gupta**, Managing Director, **BCH** (India)

14.45 – 15.15



## CHALLENGES FOR SUBMICRON MELTBLOWN: A COMPUTATIONAL STUDY OF THE INHERENT JET INSTABILITIES WITHIN THE NOZZLE AND THE IMPACT ON FILAMENT FORMATION

- Processing issues encountered when processing at higher capillary densities are presented.
- A computational study is presented that provides insight into the turbulence intensity levels in the exit plane of the meltblown nozzle and impact on fibre to fibre interaction.
- One potential solution is discussed demonstrating the impact of using a screen upstream of the meltblown nozzle exit to better control turbulence.

**Bryan Haynes**, Global Nonwovens Research & Engineering, **Kimberly-Clark** (USA)

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15.15 – 15.45



### VARIATIONS IN SPUNMELT APPARATUS/PROCESS AND RESULTANT WEB CHARACTERISTICS

- Review of spunmelt apparatus and processes and the associated web characteristics
- Included are: polymer and polymer ratio variations, post spinning quench and draw methods, die tip hole densities and configurations, laydown and post laydown formation and alteration techniques
- Technology, process review and results described

**Edward McNally**, Sales Director Nonwoven, **Oerlikon Neumag(USA)**

15.45 – 16.15



### PORE SIZE CHARACTERIZATION WITH PMI ONLINE BUBBLE TESTER AND PMI CARTRIDGE POROMETER

- Online bubble point tester for on-site inspection
- Testing of full cartridge pore characteristics possible
- Testing in compliance with ISO and ASTM standards

**Sudhir Sharma**, Country Manager, PMI, Delhi, **Porous Materials (India)**

16.15 – 16.30



### CLOSING REMARKS

**Dr. Jörg Sievert**, Chair of the **EDANA Filtration WG**

16.30 – 17.00 **GOODBYE TEA/COFFEE & FINAL NETWORKING**

## THANKS TO

EDANA and BCH would like to thank the **EDANA Filtration WG** and its experts for their support in the development of the programme.

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Hotel website : [www.shangri-la.com/newdelhi/erosshangrila/](http://www.shangri-la.com/newdelhi/erosshangrila/)  
 There is a separate Hotel booking form for booking your stay for Filtrex India

## REGISTRATION FORM

Conference | Tabletops

PLEASE FILL IN CLEARLY IN CAPITALS

Mr      Ms

First Name ..... Last Name .....

Company .....

Job Title .....

Address .....

Post Code ..... City .....

Country ..... GST No. .... ( For Indian Companies Only)

Direct Phone ..... Mobile .....

Website ..... Email .....

Date      >      >

Please note that we will share the email addresses of delegates in the Participation List for this event with other delegates who have agreed to share their email address

YES, I consent to share my email      NO, I do not consent to share my email

## CONFERENCE DELEGATE FEE

**FEE INCLUDES** one entrance to the Conference and Tabletop Exhibition for both days, 2 lunches, 1 evening cocktail & dinner, coffee breaks and the Filtrex™ India conference papers in digital format.

BCH & EDANA Member: INR 16000 +18% GST      Non-Member: INR 20000 +18% GST

## TABLETOP REGISTRATION FEE

DUE TO LIMITED SPACE, ORDERS ARE RECEIVED ON FIRST COME, FIRST SERVE BASIS

**FEE INCLUDES** the tabletop, one entrance to the Conference and Tabletop Exhibition for both days, 2 lunches, 1 evening cocktail & dinner, coffee breaks and the Filtrex™ conference papers in digital format for one person only.

**6 M<sup>2</sup> TABLETOP** (1 table (2.5 Ft x 6Ft); 2 chairs, 1 dustbin, placard with company name, stand cleaning before the event)

BCH & EDANA Member: INR 100000 +18% GST      Non-Member: INR 130000 +18% GST

**12 M<sup>2</sup> TABLETOP** (2 tables (2.5 Ft x 6Ft); 3 chairs, 1 dustbin, placard with company name, stand cleaning before the event)

BCH & EDANA Member: INR 200000 +18% GST      Non-Member: INR 260000 +18% GST

## METHOD OF PAYMENT (invoice will be issued immediately after reception of the registration forms)

On the receipt of the filled registration form, an invoice will be sent. Payment to be made as per the invoice.

**CANCELLATIONS:** No reimbursement for cancellations after 18<sup>th</sup> March 2019.

By registering for the FILTRES™ India 2019 Conference, you authorise EDANA and BCH to take pictures during the event as well as publish them on their websites. You also authorise EDANA and BCH to use the photographs for non-commercial purposes, as well as any third party to which EDANA and BCH would license the photograph. This authorisation is valid worldwide and granted for the duration of the applicable rights. Additional information can be found on [www.edana.org/photography](http://www.edana.org/photography)

**THE SHANGRI-LA'S EROS HOTEL, NEW DELHI – RESERVATION FORM**  
 19 Ashoka Road, Connaught Place, New Delhi, 110 001, India

**Please reserve a room for the following guest(s) that are cordially invited to participate at the  
 “FILTREX INDIA 2019”**

*Please Complete and return this form by email:*

**Attention:** Sales Manager **Tel:** (011) 41196123 **Mob:** +91 9871396023 (Divya Tokas)

**Email:** [grouppreservations.slnd@shangri-la.com](mailto:grouppreservations.slnd@shangri-la.com) ; [divya.tokas@shangri-la.com](mailto:divya.tokas@shangri-la.com) & copy to [palak@bch.in](mailto:palak@bch.in)

First Name: \_\_\_\_\_ Family Name: \_\_\_\_\_ Title: Mr. Mrs. Ms Dr.

Company Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Permanent Address: \_\_\_\_\_

Mobile No.: \_\_\_\_\_ Email: \_\_\_\_\_

**Please provide your Flight details as below:**

**Hotel Check – In Date** \_\_\_\_\_ **Hotel Check – Out Date** \_\_\_\_\_

**Arrival date:** \_\_\_\_\_ **Airline/Flight No:** \_\_\_\_\_ **Arrival Time:** \_\_\_\_\_.

**Departure date:** \_\_\_\_\_ **Airline/Flight No:** \_\_\_\_\_ **Departure Time:** \_\_\_\_\_.

**Airport Pick up Required** Yes No **Airport Drop Required** Yes No

**Special Room Rate (excluding 28% GST)**

Room Category	Single Occupancy	Double Occupancy
Horizon Club room (option-I):	<input type="radio"/> INR 12000 + taxes	<input type="radio"/> INR 13000 + taxes
Horizon Club room (option-II):	<input type="radio"/> INR 10000 + taxes	<input type="radio"/> INR 11000 + taxes
Deluxe room:	<input type="radio"/> INR 7500 + taxes	<input type="radio"/> INR 8500 + taxes

**Kindly Opt for the Room Type**

Non Smoking Room  Smoking Room (only Deluxe room category)

**Horizon Room Inclusions (with option-I)**

- Complimentary Buffet breakfast at Coffee Shop
- Two way Airport Transfers
- Wi-fi for 24 hours
- Complimentary evening cocktail served with a selection of hors d'oeuvres from 6pm-8pm at Horizon Club Lounge
- Complimentary coffee, tea and soft drinks throughout the day at Horizon Lounge
- Use of meeting room for up to 2 hours once during the stay, subject to availability.
- Complimentary pressing of one suit upon arrival.
- Express check-in & check-out
- Free access to Health Club facilities

**Deluxe Room Inclusions:**

- Complimentary Buffet breakfast at Coffee Shop
- Wi-fi 24 hours
- Free access to Health Club facilities except Spa.
- Family Plan: no additional charge for children under 12 years old when sharing room with parents.
- Mileage credits with 27 international airlines worldwide (members only)
- Invitation to join Shangri-La's frequent guest recognition program.

**Horizon Room Inclusions (with option-II)**

- Complimentary Buffet breakfast at Coffee Shop
- Wi-fi for 24 hours
- Complimentary evening cocktail served with a selection of hors d'oeuvres from 6pm-8pm at Horizon Lounge
- Complimentary coffee, tea and soft drinks throughout the day at Horizon Lounge
- Use of meeting room for up to 2 hours once during the stay, subject to availability.
- Complimentary pressing of one suit upon arrival.
- Express check-in & check-out
- Free access to Health Club facilities

**GUARANTEE POLICY:**

The reservation will be held guaranteed **only** on receipt of a **Credit Card Guarantee** on to which the pre authorization will be taken.

AMEX             Visa             MasterCard

Name of Card Holder: \_\_\_\_\_ Expiry Date: \_\_\_\_\_

Card Numer: \_\_\_\_\_ Signature\_\_\_\_\_

\*If you prefer not to share the credit card details please share with us the complete form. We will share with you the online payment link and also our bank details. Once you process the payment, share with us the transactions details over email. The overall time to process the reservation in such cases will be around 5 working days.

**CHECK-IN & CHECK-OUT TIMINGS:**

1. The check in time at the Hotel: 1400 hours
2. Check out time at the Hotel: 12 NOON
3. For arrivals prior to 1400 hours, the room will be required to be blocked from the previous night and charged accordingly.
4. Check outs later than 12 NOON will be charged for one night's stay.

**CANCELLATION TERMS & CONDITIONS**

<ul style="list-style-type: none"><li>• Any cancellation/ reduction from post <b>March 10<sup>th</sup>, 2019</b> – 100% retention charge will be applicable and the same will be charged on the credit card provided.</li></ul>
<ul style="list-style-type: none"><li>• All the early departures will be charged - 100% retention as per the original reservation will be applicable and the same will be charged on the credit card provided.</li></ul>
<ul style="list-style-type: none"><li>• Any no-show will attract 1 night retention charge on the same credit card provided</li></ul>

Any additional rooms & rates shall be subject to availability.