

Organised by



FILTRE INDIA



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Building on the outstanding success of the 3 previous editions, EDANA and BCH present a high-level conference and unique business opportunities, supporting the growing market for filtration across the Indian subcontinent and Asia.



TOPICS

- Innovative filter media technologies
- Filtration equipment and devices
- Air filtration and Liquid filtration
- Automotive filtration (oil, fuel, engine, cabin)
- Filter testing and standards

ORGANISED BY



TechTex India

FOR MORE INFO CONTACT

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(international registrations)

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

Tuesday 9th 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)

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

SESSION: New filter media and applications – PART 1

MODERATOR



Niranjan Kirloskar, Managing Director, Fleetguard Filters Private (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

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

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

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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® 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

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

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® 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)



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

19.00 – 22.00

EDANA and BCH COCKTAIL & DINNER PARTY

The ideal opportunity for relaxed networking
In THE SHANGRI-LA'S EROS HOTEL, NEW DELHI



Business casual dress

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

Wednesday 10th April 2019

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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

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

KEYNOTE



- HVAC applications & priorities
- Eurovent energy 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)

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

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.