

UNDER THE PATRONAGE OF HIS EXCELLENCY ENG ESSA AL MAIDOOD
Director-General, Dubai Health Authority; President, UAE Society of Engineers



IEQ INSIGHTS

1ST ANNUAL MIDDLE EAST INDOOR ENVIRONMENTAL QUALITY CONFERENCE



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HEALTH MINISTERS' COUNCIL FOR THE COOPERATION COUNCIL STATES

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12 - 13 May 2013 | Hall 5 & Al Multaqua, Dubai World Trade Centre, UAE

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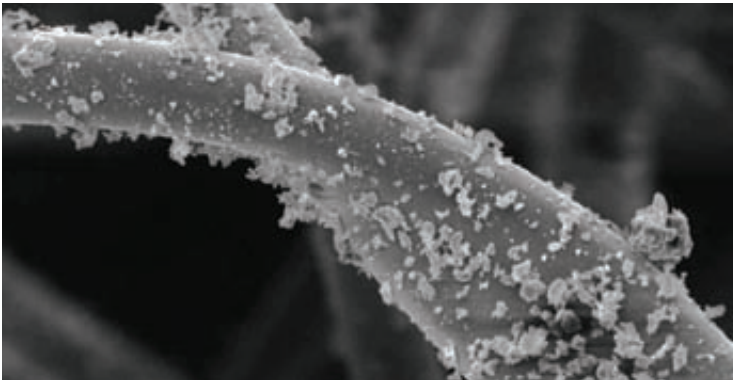
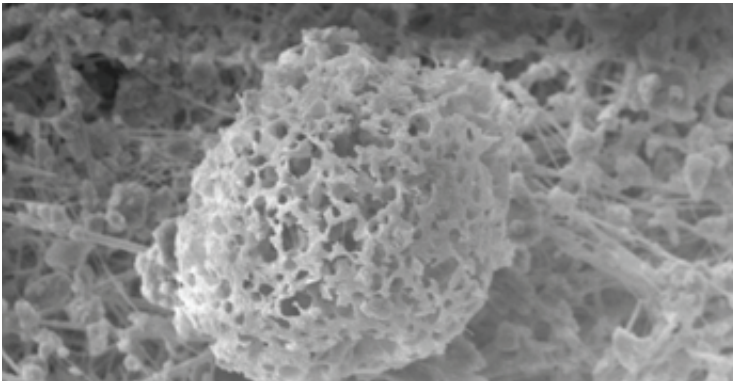
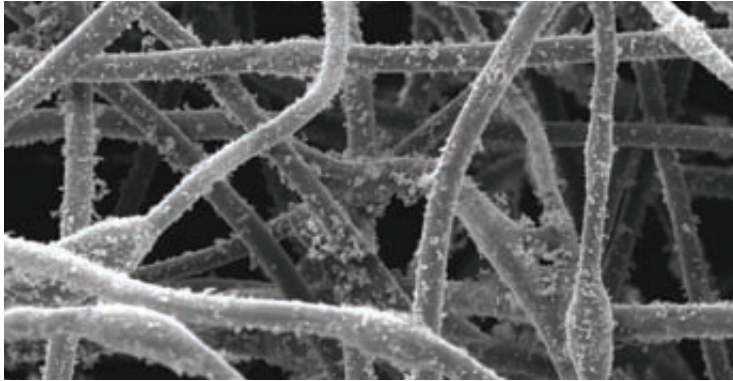
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EVENT OVERVIEW



The 1st Annual Middle East Indoor Environmental Quality Conference (IEQ Insights) will be the first ever focused and dedicated regional meeting platform on IEQ from HVAC and Architecture perspectives. It will be the largest, third-party event in the region. IEQ addresses Indoor Air Quality, Views, Daylight, Occupancy comfort, and health hazards such as VOCs.

The Conference programme has been drafted to mirror a broad public-interest agenda – a healthy and productive Middle East through good IEQ. To that effect, the Conference will seek to highlight policy, technology, design, construction- and operation-related areas that need urgent attention, and to emphasise on current best practices that can act as a benchmark for immediate action.

The Conference will host discussions on a broad range of HVAC aspects that can positively impact IEQ. It will be a meeting place for regulators, affiliated government and quasi-government agencies, manufacturers, suppliers, developers, building owners, consultants, contractors and facilities management staff.

The Conference will create a platform for manufacturers, suppliers and service-providers to listen to Government agencies from across the Middle East, to seek clarification on standards and regulations and, in turn, to advocate the attributes of

their products and services to improve IEQ in the built-area in the region. The event will be as much an opportunity for key policy-makers to better understand the different HVAC aspects that can contribute to good indoor environmental quality, and for developers and consultants to update their knowledge on technological advancements.

The event will also be an opportunity for manufacturers, suppliers and service-providers to display their products and services and, in the case of some technologies, give a live demonstration. With ample opportunities for structured networking (on-site cubicle meetings), manufacturers, suppliers and service-providers can meet face to face with existing and potential clients.

With video presentations, structured networking sessions and fluid interaction opportunities, the Conference will be a representation of the new-look CPI Industry events for 2013.

The Conference is being organised and will be produced by CPI Industry, and has the backing of the Official Publication, *Climate Control Middle East* magazine, which has been tracking the HVACR industry for over seven years. While the magazine covers the industry through print and online platforms, it feels compelled to bring IEQ solutions providers, regulators, developers, building owners, consultants and contractors together for optimum solutions, based on consensus and a deeper understanding of issues.

SPEAKERS so far...



**His Excellency
Eng Essa Al Maidoor**
Director-General
Dubai Health Authority
President
UAE Society of Engineers



Dr Tawfik A M Khoja
Director General Executive
Board, Health Ministers'
Council for Cooperation
Council States



Engr Redha Salman
Director
Public Health and Safety
Department
Dubai Municipality



Ghaleb Abusaa
CEO, The Three
Factors Company
(en³ Solutions)



**Dr Hussain
Abdulrahman**
Director of
Medical Affairs,
Consultant and
Head of ENT
Department
Dubai Hospital



Rajeh Abu Faour
Hiat International



Saeed Alabbar
Director, Alabbar
Energy &
Sustainability
Group



Dr Iyad Al Attar
International Air
Filtration
Consultant



Dr Assem Al-Hajj
Academic Head
SBE/Director of
Studies CMS,
Institute for
Building and
Urban Design,
School of the
Built Environment,
Heriot-Watt
University Dubai
Campus



Eman Al Madani
Corporate Social
Responsibility
(CSR) Executive
Dubai Chamber
of Commerce and
Industry



**Ismail Al
Marzouqi**
Facilities Manager
Command &
Control Center /
District Cooling
Plant, Al-Futtaim
Group Real Estate
LLC



**Eng Ali Uthman
Al-Najim**
Deputy Chairman /
Founding Member
Saudi Green
Building Council
(SGBC)



**Abolghasem
Alavinegad**
Director of
Campus Services,
American
University of
Kuwait



**Kandasamy
Anbalagan**
Managing
Partner Ploed
Engineering
Consultants



Tawfiq Attari
Global Sales and
Technical Director
DuctSox-MENA



Stephanie Ayers
Marketing
Manager Evonik
Industries



Reniel Barroso
Project Manager
Engineering &
Energy, Green
Technologies



George Barbari
CEO, DC Pro
Engineering



Sarfraz Dairkee
General Manager
Corporate
Development &
Engineering
M.A.H.Y. Khoory
& Company



James Day
Managing Director
Smashing Cleaning
Services



**Sebastian
Foerster**
Business
Development
Manager
REHAU FZE
Middle East



Ahmed Hussein
Director
Facilities
Operation
Department, du;
Member of the
Board, MEFMA



Farhan Juratli
Project Manager
District Cooling
Nakheel PJSC



George Kenich
Head
Infrastructure
& MEP, ALDAR
Properties PJSC



Bobby Krishna
Principal Food
Studies and
Surveys Officer
Food Control
Department
Dubai
Municipality



Anil Nair
Regional Quality
Head, Mondelez
International
(formerly Kraft
Foods)



**Christopher
Rajamani**
Technical and
Business
Development
Manager, Al
Hoty Stanger
Laboratories



**Daxita
Rajcoomar**
HSE Compliance
Manager, Human
Resources &
Shared Services,
du



**Dr M
Ramaswamy**
Technical Expert
Royal Court
Affairs Palace,
Muscat,
Sultanate of
Oman



**Mario
Seneviratne**
FIMechE, PEng,
LEED Fellow,
USGBC LEED
Faculty™ | LEED
AP (BD+C),
MIEEE, MASHRAE
Director, Green
Technologies



Nabil Siyam
Civil Engineering
Division
Department
of Planning &
Development,
Ports, Customs
& Free Zone
Corporation,
Government of
Dubai (Trakhees)



Paul Schwarz
President
Middle East
Acoustic
Engineering
Society



Gordon P Sharp
Founder and
Chairman
Aircuity, Inc



Philip Whitaker
Regional President
Camfil Farr Middle
East

PROGRAMME DAY 1

Conference Chair for Day 1: Mario Seneviratne, FIMechE, PEng, LEED Fellow, USGBC LEED Faculty™ | LEED AP (BD+C), MIEEE, MASHRAE, Director, [Green Technologies](#)
Technical Advisor: Ghaleb Abusaa, CEO, [The Three Factors Company \(en³ Solutions\)](#)

8am **REGISTRATION, COFFEE**

8.45am **INAUGURATION AND KEYNOTE ADDRESS BY THE CHIEF GUEST**

Key factors governing Public Health with relation to the quality of indoor air; the critical need for preventive health measures and the correlation with social well-being and with increasing the nation's GDP. A focus on Environmental and Occupational Health from an IEQ perspective.

His Excellency Eng Essa Al Maidoor, Director-General [Dubai Health Authority](#); President, [UAE Society of Engineers](#)

9.15am **PLENARY ADDRESS**

Sustainable Healthcare Infrastructure with emphasis on indoor environment quality

Dr Tawfik A M Khoja, Director General Executive Board [Health Ministers' Council for Cooperation Council States](#)

9.45am **SPECIAL ADDRESS**

Key measures taken by Dubai Municipality in enforcing IEQ across built-environments in the Emirate; performance indicators, efforts and achievements

Engr Redha Salman, Director, Public Health and Safety Department, [Dubai Municipality](#)

10.15am **PLENARY DISCUSSION: IEQ in Commercial Buildings**

The tangible benefits of good IEQ in commercial buildings resulting from key HVAC initiatives in new construction and retrofit efforts in existing facilities

- **Eman Al Madani**, CSR Executive, [Dubai Chamber of Commerce and Industry](#)
- **Ismail Al Marzouqi**, Facilities Manager Command & Control Center / District Cooling Plant, [Al-Futtaim Group Real Estate LLC](#)

- **Abolghasem Alavinegad**, Director of Campus Services, [American University of Kuwait](#)
- **Kandasamy Anbalagan**, Managing Partner, [Prolead Engineering Consultants](#)
- **Farhan Juratli**, Project Manager, [District Cooling, Nakheel PJSC](#)
- **George Kenich**, Head, Infrastructure & MEP, [ALDAR Properties](#)
- **Daxita Rajcoomar**, HSE Compliance Manager, Human Resources & Shared Services, [du](#)

11am **COFFEE, NETWORKING**

11.15am **INDUSTRY INSIDER'S ADDRESS**

The critical importance of Filter performance. Update on EN779-2012 and the impact on Indoor Air Quality design
Philip Whitaker, Regional President, [Camfil Farr Middle East](#)

11.45am **PANEL DISCUSSION**

Proven specifications for air-side systems

Participants:

- **Dr Iyad Al Attar**, [International Air Filtration Consultant](#)
- **Saeed Alabbar**, Director, [Alabbar Energy & Sustainability Group](#)
- **Eng Ali Uthman Al-Najim**, Deputy Chairman / Founding Member, [Saudi Green Building Council \(SGBC\)](#)
- **Sarfraz H Dairkee**, General Manager, [Corporate Development & Engineering, M.A.H.Y. Khoory & Company](#)
- **Engr Adil El Basier**, [Avenues Mall, Kuwait](#)
- **Philip Whitaker**, Regional President, [Camfil Farr Middle East](#)

PROGRAMME DAY 1

- 12.30pm **PRESENTATION**
The health risks posed by indoor air pollution in the GCC. A close look at emissions of formaldehyde and other chemicals from building materials, management of asbestos-containing building materials, elimination of environmental tobacco smoke. Applying the right tools and strategies to measure IAQ as a first step to applying remedial measures.
Rajeh Abu Faour, Hiat International
- 1pm **PRESENTATION**
Is fabric ducting an answer? If so, is it suitable for all applications?
Tawfiq Attari, Global Sales and Technical Director
DuctSox-MENA
- 1.30pm **PRESENTATION**
Designing quiet, healthy ductwork
Stephanie Ayers, Marketing Manager, Evonik Industries
- 2pm **LUNCH, HONOURING OF SPONSORS**
- 3pm **PRESENTATION**
Dangers in the air and strategies to counter them: A look at mould remediation, duct cleaning and maintenance
James Day, Managing Director, Smashing Cleaning Services LLC

SESSION: HEALTHCARE & IEQ

- 3.30pm **PRESENTATION**
Air Handling Units (AHUs) in healthcare
Understanding UV retrofits and their efficacy
Sanjeev Sachdeva, Managing Director, GESS
- 4pm **PANEL DISCUSSION: IAQ markers that ensure better IEQ in healthcare facilities**
■ Challenges and constraints in establishing and maintaining a fail-safe IEQ regimen.

- Identifying possible biological and chemical contaminants in the sterilisation facilities, autopsy rooms, burns-patient treatment rooms, operation theatres, intensive-care units, neonatal-care units, soiled laundry rooms and outpatient areas. The role of control systems in keeping the contaminants in one area of a building from entering another, ventilation strategies, and the maintaining of air-pressure relationships.
- Humidity control
- The importance of a tight envelope to prevent uncontrolled outdoor air from being drawn into patient spaces
- Moisture control and preventing condensation in order to thwart dangerous microbial and infection-control issues

Participants:

- **Dr Hussain Abdulrahman**, Director of Medical Affairs, Consultant and Head of ENT Department, Dubai Hospital
- **Dr M Ramaswamy**, Technical Expert, Royal Court Affairs Palace, Muscat, Sultanate of Oman
- **Gordon P Sharp**, Founder and Chairman, Aircuity, Inc; Member, ASHRAE Standing Standard Project Committee SSPC 170 (Ventilation of Health Care Facilities); Member, ASHRAE Technical Committee 9.10 (Labs); Voting Member, ASHRAE Technical Committee 9.11

4.30pm **COFFEE, NETWORKING**

4.45pm **PRESENTATION**
Thermal comfort and hygienic advantages of radiant cooling systems
Sebastian Foerster, Business Development Manager, REHAU FZE Middle East

5.15pm **SPECIAL VIDEO SCREENING: Air filtration**

5.30pm **CLOSING REMARKS**

PROGRAMME DAY 2

Conference Chair for Day 2: George Kenich, Head, Infrastructure & MEP, ALDAR Properties PJSC

Technical Advisor: Ghaleb Abusaa, CEO, The Three Factors Company (en³ Solutions)

8am	REGISTRATION, COFFEE
8.45am	PRESENTATION The role of civil engineering in IEQ Highlighting key instances. The need for greater collaboration between civil and MEP works in ensuring perfect fit for HVAC equipment and components. RACs, filtration equipment, etc. Nabil Siyam , Civil Engineering Division Department of Planning & Development, Ports, Customs & Free Zone Corporation, Government of Dubai (Trakhees)
9.15am	PRESENTATION Air filtration and IEQ Particulate matter from outdoor pollution: Understanding particle characteristics, filter design and selection Dr Iyad Al Attar , International Filtration Consultant
9.45am	PRESENTATION Healthy and savvy ventilation Profiling the activities in the build-environment and arriving at the minimum number of air changes or ventilation rates required for good IEQ and, at the same time, ensuring that energy consumption is at a minimum. Regional standards and regulations governing this. Elaborating on the current and emerging technologies in ventilation and energy recovery George Berbari , CEO, DC PRO Engineering
10.15am	PRESENTATION VOCs in the built-environment (paints, adhesives, sealants, toners) A close look at HVAC-related mitigation strategies, hand-in-hand with energy-efficiency initiatives
10.45am	COFFEE, NETWORKING

SESSION: EDUCATION & IEQ

11am	PRESENTATION IEQ in local schools, nurseries and daycare centres <ul style="list-style-type: none">■ Fugitive pollutants/allergens affecting children■ Modes of ingress into existing systems■ The role of stakeholders, namely contractors, consultants, government, school managements, parents, FM service providers■ Monitoring by a third-party accredited laboratory■ Responsible integrated management approach by all stakeholders Christopher Rajamani , Technical and Business Development Manager, Al Hoty Stanger Laboratories
11.30am	PRESENTATION The impact of enhancing indoor air quality on occupants' productivity: A case study on a business school in the UAE Dr Assem Al-Hajj , Academic Head SBE/Director of Studies CMS, Institute for Building and Urban Design, School of the Built Environment, Heriot-Watt University Dubai Campus
Noon	PRESENTATION Acoustics and vibration <ul style="list-style-type: none">■ Awareness among developers and owners and the importance given to the two factors■ Selection of equipment and the optimising of design■ Considering factors, such as air velocity in the duct and design, layout, sharp edges, curving and turbulence■ Looking at advances in acoustic lining, silencers and isolators Paul Schwarz , President, Middle East Acoustic Engineering Society

PROGRAMME DAY 2

SESSION: LEED-ERSHIP IN IEQ

- 12.30pm **PRESENTATION (CASE-STUDY)**
IEQ enhancements in the first LEED-Certified Existing Building in the Arab World: Learnings from Dubai Chamber
Learnings from Dubai Chamber
- What aspects affect IEQ at Dubai Chamber?
 - How is the Chamber addressing IEQ issues?
 - What are the results and key learnings so far?
- Eman Al Madani**, CSR Executive
Dubai Chamber of Commerce and Industry
- 1pm **PRESENTATION**
LEED aspects of IAQ and the associated calculations
Reniel Barroso, Project Manager, [Engineering & Energy, Green Technologies](#)
- 1.30pm **LUNCH**
- 2.30pm **PRESENTATION**
The FM perspective on IEQ
Ahmed Hussein, Director, Facilities Operation Department, [du](#); Member of the Board, [MEFMA](#)
- 3pm **PRESENTATION**
An ASHRAE perspective on IEQ: An exposition on latest developments
Gordon P Sharp, Founder and Chairman, [Aircuity, Inc](#); Member, [ASHRAE Standing Standard Project Committee SSPC 170 \(Ventilation of Health Care Facilities\)](#); Member, [ASHRAE Technical Committee 9.10 \(Labs\)](#); Voting Member, [ASHRAE Technical Committee 9.11](#)

- 3.30pm **PANEL DISCUSSION**
IEQ and food safety
Participants:
- **James Day**, Managing Director, [Smashing Cleaning Services](#)
 - **Bobby Krishna**, Principal Food Studies and Surveys Officer, Food Control Department, [Dubai Municipality](#)
 - **Anil Nair**, Regional Quality Head, [Mondelēz International \(formerly Kraft Foods\)](#)
 - **Steve Pakenham-Walsh**, [Seventeen FZE](#)
- 4pm **PRESENTATION**
- 4.30pm **COFFEE, NETWORKING**
- 5pm **PRESENTATION**
- 5.30pm **CLOSING REMARKS**