Air Quality: Coupling Indoor and Outdoor Environments

Prof. Maarten van Reeuwijk (mvr@ic.ac.uk)

Imperial College London
Future Urban Ventilation Network
Indoor-outdoor interaction is complicated and important

- Indoor sources
- Outdoor sources
- Turbulence and dispersion
- Deposition, resuspension
- Ventilation / HVAC
- User behaviour

- Providing healthier indoor conditions in urban environments needs to reflect the (changing) realities of local contexts, rather than a suboptimal one-size-fits-all solution.
Position paper

• We have assembled a group of stakeholders (modelers, regulators, ventilation suppliers, design consultants, architects) within FUVN Theme 1 to write a position paper that discusses the following
  • PHYSICAL MECHANISMS (sources, transformations, flow, ventilation, user behaviour)
  • STATE OF THE ART (guidelines, modelling)
  • CHALLENGES
  • INNOVATION OPPORTUNITIES

• To be submitted by the end of the year

• Come and talk to us to discuss!