

Demonstration of Air Quality Information Tools

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Are you a beginner to emissions and air quality modelling? Are you interested in brushing up some fundamental linkages between emissions, pollution, and impact analysis?

If yes, then this workshop is for you.

Our goal for the day is to eliminate the fear of numbers and surveys and to demystify models. The lecture materials and tools are designed to provide a foundational understanding of the key equations used in building an emissions inventory, collecting the data needed for models, improving inputs through surveys, and utilizing data from monitoring stations and models. You will also learn how to calculate health impacts and get an exposure to advanced models and how to complicate calculations. All the examples are MS-excel based and all the tools are available @ <https://urbanemissions.info/tools>

This is designed as a one-day show-n-tell event where we cover the following topics from 9AM to 5PM (half-day event is possible with no hands-on time). Sessions will be laced with break times, open discussions, and random surveys.

Session 1	Fundamentals of integrated air quality management Bringing together data <ul style="list-style-type: none">• Demonstration of multiple scenario players, with links to source apportionment results• Demonstration of SIM-air toolbox <i>Followed by hands-on time and discussions</i>
Session 2	Fundamentals on air pollution modelling Demonstration of methods with example calculators <ul style="list-style-type: none">• Interpreting meteorological data• Box-models (forward and inverse modelling)• Input data resources• Linking concentrations to health impact analysis• Advanced systems (showcase only) <i>Followed by hands-on time and discussions</i>
Session 3	Fundamentals on emissions modelling Demonstration of methods with example calculators <ul style="list-style-type: none">• Transport calculators• Non-transport calculators• Input data resources (including emission factors)• Fuel station survey (FuSS) and extensions• Gridding procedures• Emission scenario players <i>Followed by hands-on time and discussions</i>
Session 4	Closing and open discussion