

22nd International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes

10-14 June 2024, Tartu, Estonia



<https://www.ut.ee/>

<http://www.klab.ee>



<https://visittartu.com/>

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First Announcement

22nd International Conference on
Harmonisation within Atmospheric
Dispersion Modelling
for Regulatory Purposes

Tartu, Estonia
10-14 June 2024



Estonian National Museum, the venue of HARMO 22

Co-organized by

University of Tartu
Tartu, Estonia

Estonian Environmental Research Centre
Tallinn, Estonia

Audience

The 22nd International conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (Harmo22) is aimed towards model developers, model users, environmental protection agencies and legislation experts. What distinguishes this conference from many others is its focus on common tools and methodologies.

Focus of the conference

The series of international conferences on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes is concerned with the improvement of “modelling culture” both in Europe and at an international level.

Dispersion modelling is widely used for regulatory purposes, both for permits and for assessments, but there is a lack of sufficient mechanisms to make modelling processes transparent and ensure trust in modelling results.

There are many open questions and aspects of this, such as: Are the models scientifically sound for the purpose they are used? Are the models validated against observations or physical experiments? Are the models properly used by the experts? Are the users familiar with good practices and do they avoid bad practices? Are model developments sufficiently quality assured? Are reference problems established? Is proper exchange of experiences ensured? Work on these questions is needed in order to assess the air quality impacts on society and nature, on human health, biodiversity and climate.

Such issues that are not specific for one particular model, but common to several, are in focus at the 22nd International conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes.

The series of Harmonisation conferences started in 1991 (see www.harmo.org) and is a natural forum for discussing modelling issues related to the European Union air quality directives. European networks such as the FAIRMODE network and COST Actions can use the conference in order to expose their work to a wider audience.

The Harmonisation conferences provide the ground where model users and decision-makers can bring their requirements to the attention of scientists and search together for better regulatory tools and indicators for the diverse impacts of air quality.

Find further details:

<http://www.harmo.org/harmo22>

<https://harmo22.ut.ee>

Call for abstracts

Short abstracts of maximum 350 words should be submitted by **October 29, 2023** through the link

<https://harmo22.ut.ee/programme/abstracts>

with indication of preference for oral or poster presentation and topic.

The **underlying driver** for all sessions is **modelling**, understood in general and wide terms, i.e. as modelling system, that include all components (meteorology, chemistry, dispersion, emissions...) as well as related datasets for evaluation.

Harmonisation of modelling approaches encompasses the following activities (not exhaustive): inter-comparison exercises, common evaluation protocols, shared datasets for model evaluation...

Starting from these two key items, the HARMO Conferences build around ten key topics.

Topics 1 to 6 address harmonisation of modelling approaches in the following fields:

- T1: Approaches to model evaluation and quality assurance
- T2: Regional / long-range scale modelling
- T3: Urban Scale and Street Canyon Modelling
- T4: Health and exposure assessments
- T5: Inverse modelling, source identification and apportionment
- T6: Dispersion modelling and exposure to accidental releases

Topics 7 and 8 focus on the support to the development of regulatory models:

- T7: Air pollution management and decision support systems
- T8: Support to EU legislation on air quality modelling

Topics 9 and 10 are dedicated to new advancements and reviews of “golden papers” of the past.

- T9: Theoretical studies on atmospheric processes for dispersion modelling
- T10: Highlights of past works, which should not be forgotten.

Special Sessions in Harmo22

- SS1: Harmonisation of tools for assessing effects and impacts of energy and climate policies on air quality.
- SS2: Can machine learning approaches be harmonised with dispersion modelling? Can they be used for regulatory purposes?

The basic criteria when selecting papers for oral presentations is how well they fit into the philosophy of developing an improved modelling culture where modellers as well as regulators and users will efficiently use each other's experience. When submitting abstracts authors are requested to motivate how their paper relates to the underlying main theme of the conference: *Harmonisation within modelling* in a broad sense (see abstract submission form).

Special sessions:

Additional special sessions may be arranged on model evaluation exercises and other topics within the scope of the conference.

If you have suggestions for special sessions, please contact the organisers as soon as possible.

Important Dates

Short abstracts (less than 350 words) should be submitted by **October 29, 2023**

Confirmation for acceptance of contributions will be made by **December 20, 2023**.

Five-page extended abstracts should be submitted by **April 30, 2024**.

Conference starts **June 10, 2024**.

Location

The Conference will take place in Estonian National Museum, 10-14 June 2024.

See <https://www.erm.ee/en>

The modern and spacious building of the museum was opened in October 2016. The venue is located at distance of 2.5 km from the centre of Tartu and has city bus connection. In addition the bus transfer will be organised to and from the venue at each conference day.

Several hotels are located in centre of Tartu, at walking distance from the intercity bus station, which has 2.5-hour direct bus connection each half hour with airport of Tallinn.

Registration for the conference and hotel options at attractive rates will be available through: <https://harmo22.ut.ee>

Co-Organized by

The University of Tartu (www.ut.ee) founded in 1632 is the highest-ranking university in Baltic countries (Estonia, Latvia, Lithuania), being among 1.2% of World's best universities. With its 13,600 students (incl. 1100 doctoral students) and 3600 employees (incl. 209 professors) and 31 institutes is University of Tartu the largest in Estonia. More than a half of doctoral degrees in Estonia are defended there. The Institute of Physics includes laboratories of atmospheric physics and environmental physics.

Estonian Environmental Research Centre (www.klab.ee) is a government-owned company for applied environmental chemical and physical research. Estonian Environmental Research Centre (EERC) provides analyses of quality of water, food, fuel etc. to wide range of clients and is responsible for a large part of national environmental monitoring network, including air quality monitoring and modelling.