

**18th International Conference on
Harmonisation within Atmospheric
Dispersion Modelling
for Regulatory Purposes
9-12 October 2017, Bologna, Italy**



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First Announcement

**18th International Conference on
Harmonisation within Atmospheric
Dispersion Modelling
for Regulatory Purposes**



**Bologna, Italy
9-12 October 2017**

Co-Organized by

**Institute of Atmospheric Sciences and Climate – Italian
National Research Council (CNR-ISAC)**

**Department of Physics and Astronomy – Alma Mater
Studiorum, University of Bologna**

Audience

The 18th International conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (Harmo 18) 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 18th 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/harmo18>

<http://www.harmo18.eu>

Call for abstracts

Short abstracts of maximum 350 words should be submitted by **March 13, 2017** through the link <http://www.harmo.org/harmo18/abstracts> with indication of preference for oral or poster presentation and topic.

Sessions will be organised within the following topics:

- Model evaluation and quality assurance – model validation, model intercomparisons, model uncertainties and model sensitivities.
- Environmental impact assessment: Air pollution management and decision support systems.
- Use of modelling in support of EU air quality directives, including FAIRMODE activities.
- Parametrization of physical processes in mesoscale meteorology relevant for air quality modelling.
- Urban scale and street canyon modelling: Meteorology and air quality.
- Use of modelling in health and exposure assessments
- Inverse dispersion modelling and source identification.
- Modelling air dispersion and exposure to accidental releases.
- Modelling of passive control systems (PCS) including nature-based solutions in dispersion studies
- Mathematical problems in air quality modelling.
- Highlights of past work. Session devoted to reviews and to prominent scientists and 'golden papers' of the past, which have still relevance and should not be forgotten.

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 the abstract submission form).

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. Information on special sessions and exercises will be posted on the conference web site and in the second announcement.

Contact:

harmo18@harmo.org

Important Dates

- Short abstracts (less than 350 words) should be submitted by **March 13, 2017**
- Confirmation for acceptance of contributions will be made by **May 31, 2017**.
- Five-page extended abstracts should be submitted by **September 5, 2017**.
- Conference start: **October 9, 2017**.

Location

The Conference will take place at the Conference Centre in the CNR Research Area Campus in Bologna, via Gobetti 101, **9 – 12 October 2017**.

The Centre is an integral part of the Research Area campus, and is specifically designed for scientific discussion, meetings and conferences. It boasts a high degree of functionality within an attractive and sympathetic academic environment.

The Centre can be easily reached by car, from the main motorways, by plane (CNR is just a 10-minute taxi journey from Bologna airport), or, arriving by train, from the Central Railway Station with bus n.87. Dedicated buses connection between the city centre and the Conference Centre will be available during the conference.

Registration for the conference and hotel options at attractive rates are available through: www.harmo.org/harmo18

Co-Organized by

The Institute of Atmospheric Sciences and Climate (CNR-ISAC, www.isac.cnr.it) aims at an integrated scientific understanding of the atmosphere and its processes, by means of a multidisciplinary approach which combines scientific and technological competences in meteorology, climate, atmospheric dynamics and composition, Earth observations and performs basic research, experimental and modelling work and impact evaluation. ISAC is the largest CNR Institute on atmospheric sciences, structured in 7 Units over the country, 7 permanent observatories, including 2 Global Stations of the Global Atmosphere Watch (GAW) program of the World Meteorological Organization (WMO) and 2 Supersites.

ALMA MATER STUDIORUM - University of Bologna (www.unibo.it) founded in 1088 is known as the oldest University in the western world and with its over 84,000 students, 33 Departments, 11 Schools, 9 Research and Training Centres, 5 Campuses, 207 Degree Programmes, 52 International degree programmes and 48 PhD programmes is one of the largest University in Italy. In particular, the Department of Physics and Astronomy (DIFA) with its Atmospheric Physics Group promotes basic and applied research through observation and modelling of the Earth system. It has a long tradition in numerical modelling in the field of dynamic meteorology, radiative transfer, microphysics studies, air pollution dispersion and urban climate.