

## Summary

Atmospheric particulate matter (PM) is a complex mixture of particles emitted by multiple sources. Positive Matrix Factorization (PMF) is a widely used receptor model to perform PM source apportionment studies, identifying main sources of pollution and estimating their contributions to PM concentrations in ambient air.

International experts on receptor models and their applications to environmental sciences will offer a comprehensive training course on the use of USEPA PMF 5 program.

The course will cover the following topics:

- Input data uncertainty estimates
- Case studies for contrasting types of environment
- Apportionment of PM<sub>x</sub>, Organic matter, road dust, etc.
- Coupling of meteorological and epidemiological data

**The training course is addressed mostly to PMF beginners**

(PhD students, postdoctoral researchers and environmental technicians).



## ORGANIZER



[www.idaea.csic.es/egar](http://www.idaea.csic.es/egar)

In the framework of  
**AIRUSE AfterLIFE Plan**  
<http://airuse.eu/>

### Venue:

Institute of Environmental Assessment and Water Research  
Spanish Research Council (CSIC)  
Jordi Girona 18-26  
08034 Barcelona, Spain  
**Bus: 7, 33, 60; TRAM: P.Reial; Metro L3: P.Reial**

**Registration is limited to the first 40 applications**  
**Fee: 120 Euro**

### Contact:

Elena Martinez  
Tel: +34 93 400 61 46  
[emsqam@idaea.csic.es](mailto:emsqam@idaea.csic.es)

EGAR

Training Course

## *IV Training Course on Positive Matrix Factorization for source apportionment studies*



**8-10<sup>th</sup> October 2019**  
Spanish Research Council (CSIC)  
Barcelona



# IV Training Course on Positive Matrix Factorization for source apportionment studies



## Preliminary Agenda

**8<sup>th</sup> October (09:00: 16:30)**

**Welcome. The experience of IDAEA-CSIC**  
**Xavier Querol**  
Research Professor at IDAEA-CSIC

**The use of PMF for epidemiological data**  
**Xavier Basagaña**  
Researcher at ISGlobal

**The state-of-the-art of Receptor modelling**  
**Philip K. Hopke**  
Professor at University of Rochester Medical  
Center (USA)

**The USEPA PMF 5 software**  
**Fulvio Amato**  
Researcher at IDAEA-CSIC

**Coupling source contribution estimates with meteo data**  
**Marco Pandolfi**  
Researcher at IDAEA-CSIC

**The application of PMF to ACSM/AMS data**  
**Maria Cruz Minguillón**  
Researcher at IDAEA-CSIC

**9<sup>th</sup> October (09:00: 17:30)**  
Training session on USEPA PMF5

**10<sup>th</sup> October (09:00: 14:00)**  
Training session on USEPA PMF5

For technical details, please contact:

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IDAEA-CSIC  
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fulvio.amato@idaea.csic.es

## Registration

Limited to the first 30 applications. Deadline for  
subscription: 30th July 2019  
Subscription fee: 250 euro

Interested parties should send an email to the  
following address :

emsqam@idaea.csic.es

Elena Martinez  
IDAEA-CSIC  
Tel: +34 93 400 61 46

## Venue

IDAEA (Room: Seminari A, ground floor)  
Institute of Environmental Assessment and Water Research  
Spanish Research Council (CSIC)  
Jordi Girona 18-26  
08034 Barcelona, Spain

