EUROPEAN SCIENCE FOUNDATION - COST ACTION 633

Particulate Matter: Properties Related to Health Effects

Working Group 3: Sources, Emission, Modeling, Economic Aspects

Chairs: Thomas Kuhlbusch, IUTA e. V., Duisburg, Germany
Markus Amann, IIASA, Laxenburg, Austria

Objectives:

Within the overall objectives of COST 633, the specific objectives of WG 3 are:

1) To provide overview of information available in Europe on modelling of particulate matter (PM) with special emphasis on emission inventories, source apportionment models (SoAp) and integrated assessment models (IAM)
2) To give input to WG1 and WG2 on modelling aspects

Tasks:

1) To compile results related to PM_1, $PM_{2.5}$, PM_{10}, $PM_{2.5-10}$, $N_{0.1}$Emission inventories (incl. SO2, NOx, NH3, VOC)
   - SoAp methods and models (used in EU / generally available)
   - SoAp results
   - existing models in EU and model validation (process studies – model results)
   - modelling results →process studies → SoAp per regions/site types
   - integrated assessment models (IAM)
2) To review and categorize information obtained in Task 1
3) To identify gaps and future research fields
4) To recommend future research

In order to reach the objectives, WG3 is bringing together European experts specialized on modelling the processes acting on particulate matter in the atmosphere as well as on assessment models. The report to be provided by this working group will be coordinated by Thomas Kuhlbusch (emission inventories), Maria del Mar Viana (source apportionment), Anna Miranda (modelling) and Markus Amann (integrated assessment models)