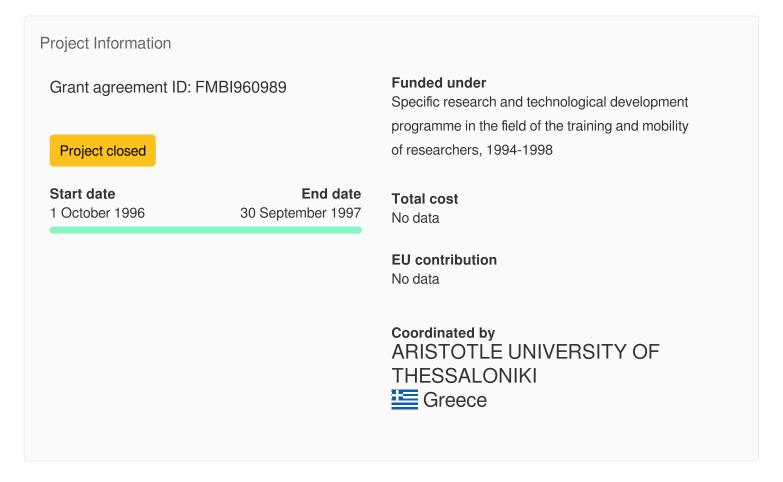
Modelling of pollutant dispersion from sources in complex turbulent flows



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Fact Sheet



Objective

The development of an unsteadyNavier-Stokes computer code is proposed for the study of pollutant dispersion in complex flows. The velocity-vorticity formulation of the equations will be considered and a method which uses vortex particles in an unstructured finite element mesh will be used. Turbulence will be modelled using a

one equation turbulent transport model. Pollutant particles will be released from point or line sources and their trajectories will be computed as a function of time. The resulting flow field will be used as an input to a Lagrangian statistics model for the calculation of the pollutant concentration. The flow around models of structures in the atmospheric boundary layer (buildings, hills etc.) will be computed and the pollutant dispersion will be studied. Comparison with existing experimental data will be performed in order to validate the computational model.

Programme(s)

FP4-TMR - Specific research and technological development programme in the field of the training and mobility of researchers, 1994-1998

Topic(s)

0302 - Post-doctoral research training grants

TI09 - Environmental Engineering

Call for proposal

Data not available

Funding Scheme

RGI - Research grants (individual fellowships)

Coordinator



ARISTOTLE UNIVERSITY OF THESSALONIKI

EU contribution

No data

Total cost

No data

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Participants (1)



Not available



EU contribution

No data

Address



Total cost

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