



# AIR POLLUTION XXII

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## Air Pollution XXII



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## **Preface**

This volume contains the peer-reviewed papers accepted for the Twenty Second International Conference on Modelling, Monitoring and Management of Air Pollution held in Opatija, Croatia in July 2014. This successful international meeting builds upon the prestigious outcomes of the 21 preceding conferences beginning with Monterrey, Mexico in 1993 and most recently in A Coruna, Spain, in 2012 and Siena, Italy, in 2013. These meetings have attracted outstanding contributions from leading researchers from around the world. The peer reviewed papers selected for presentation and included in the Conference Proceedings have been permanently stored in the WIT eLibrary as Transactions of the Wessex Institute (see <http://library.witpress.com>). These collected papers provide an important record of the development of science and policy pertaining to air pollution.

The Modelling, Monitoring and Management of Air Pollution series of conferences has attracted a global audience of academics and air pollution practitioners who through their papers and presentations have contributed to the evolving understanding of the science and policy contexts of air pollution. The conference continues to meet the demands of a discerning conference audience through the quality of the science and policy presented at the meetings, the publication formats and the interesting the conference venues. This series has discussed important air pollution issues at an international, national and local level and by virtue of the international composition of the delegates has brought to the discussion a unique suite of perspectives. The conference findings and conclusions enjoy a wide and rapid dissemination amongst the air pollution science and policy communities.

The conference series has concluded that the management of air pollution is one of the most challenging problems facing the international community. Discussions in the series have explored the wide spread nature of the air pollution phenomena and its impacts on human health and the environment. The conference addresses a wide range of air pollution issues and challenges but a particular strength of the series has been the attention given to regulatory and, more recently, market solutions to air pollution management.

The Modelling, Monitoring and Management of Air Pollution series of conference has consistently acknowledged that science remains the key to identifying the nature and scale of air pollution impacts and reaffirmed that science is essential in the formulation of policy relevant information for regulatory decision-making. The conference series also acknowledged, at a very early stage, that science alone will not improve a polluted atmosphere. The scientific knowledge derived from well designed studies needs to be allied with further technical and economic studies in order to ensure cost effective and efficient mitigation. In turn, the science, technology and economic outcomes are necessary but not sufficient. Increasingly, the conference series has recognised that the outcome of such research need to be contextualised within well formulated communication strategies that help policy makers and citizens to understand and appreciate the risks and rewards arising from air pollution management. Consequently, the series has enjoyed a wide range of high quality presentations that develop the fundamental science of air pollution and an equally impressive range of presentations that places these new developments within the frame of mitigation and management of air pollution. The peer reviewed nature of the conference volumes enables policy makers to confidently use the new findings to formulate sustainable decisions and to build public acceptance and understanding of the nature and scale of the air pollution problem.

This volume brings together contributions from scientists from around the world to present recent work on various aspects of the air pollution phenomena. Notable in each of the first twenty conferences in this series has been the opportunity to foster scientific exchange between participants. This meeting created further opportunities for new collaborations amongst scientists and between scientists and policy makers. Contributions in this twenty second volume continue to address a broad range of urgent scientific and technical developments in our understanding of the cause, consequence and management of air pollution.

The Editors wish to thank the authors for their contributions and to acknowledge the assistance of the eminent members of the International Scientific Advisory Committee with the organisation of the conference and in particular for their support in peer reviewing the submitted papers.

The Editors  
Opatija, Croatia  
2014

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