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Eighteenth International Conference on Modelling,
Monitoring and Management of Air Pollution

AIR POLLUTION XVIII

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Preface

This volume contains the peer-reviewed papers accepted for the eighteenth International Conference on Modelling, Monitoring and Management of Air Pollution held on the Greek island of Kos in June 2010. This successful international meeting builds upon the prestigious outcomes of the 17 preceding conferences beginning with Monterrey, Mexico in 1993 and most recently in Tallinn, Estonia in 2009. These meetings have attracted outstanding contributions from leading researchers from around the world. The presented papers are permanently stored in the WIT eLibrary as Transactions of the Wessex Institute (see http://library.witpress.com/). These papers provide an important on-line record of the development of science and policy pertaining to air pollution and they remain permanently available for researchers to access.

Despite the long history of attempts to manage the consequences of air pollution it remains one of the most challenging problems facing the international community. Air pollution is widespread and growing in importance and has clear and known impacts on health and the environment. The human need for transport, manufactured goods and services brings with it often unintended, but none the less real, impacts on the atmospheric environment at scales from the local to the global. Whilst there are good examples of regulatory successes in minimising such impacts the continuing development of the global economy bring new pressures upon the ability of the atmosphere to process pollutants and to safely remove them. Where the natural processing systems of the atmosphere become overloaded and the systems are unable to process inputs to the atmosphere at the rate they are added then pollution results. This brings risks to human health and the environment. The willingness of governments to move quickly to regulate air pollution is often balanced by concerns over the economic impact of such regulation. This frequently results in a lag between the scientific knowledge about the nature, scale and effect of air pollution and the implementation of appropriate, targeted and timely legislation.

Science remains the key to identifying the nature and scale of air pollution impacts and is essential in the formulation of policy relevant information for regulatory decision-making. Continuous improvements in our knowledge of the fundamental science of air pollution and its application are necessary if we are to properly predict, assess and mitigate the air pollution implications of emissions to the atmosphere. Science must also be able to provide the evidence of improvements to air quality that result from implementation of the mitigation measure or the control regulation. The ability to assess and mitigate using the precautionary principle is a challenge that science must grasp and position itself to convince decision makers that uncertainty does not mean inertia. The outcomes of such activities must be peer-reviewed but they must also be translatable into a suitable format to assist policy makers in reaching sustainable decisions and to build public acceptance and understanding of the nature and scale of the air pollution problem.

This important volume brings together contributions from scientist from around the world to present recent work on various aspects of the air pollution phenomena. Notable in each of the eighteen conferences in this series has been the opportunity to foster scientific exchange between participants. New collaborations amongst scientists and between scientists and policy makers or regulators have arisen through contacts made in this series and each meeting has provided a further opportunity for identifying new areas of air pollution science demanding collaborative investigation.

Contributions in this volume address a broad range of urgent scientific and technical developments in our understanding of the fundamental causes of air pollution, the control and management options available to mitigate air pollution and the environmental effects of emitted pollutants. Papers presented at Air Pollution 2010 provide new data or present critical reviews in the field of modelling studies, policy and management studies, global and regional studies, emission, monitoring and measurement studies and impact studies.

The Editors of this book 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 particularly with peer reviewing of the submitted papers.

The Editors
Kos, 2010

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