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Preface

Air pollution as well as climate change and their possible effects on the environment, ecosystems and human health, are pressing challenges. Nowadays, it is clear that sustainable societal development cannot remain solely wealth-oriented, but must take into account the present and future environmental issues. However, this approach is possible only if scientifically sound knowledge in all environmental areas becomes available to our societies and decision makers, which requires a firm scientific basis to our understanding of the processes guiding the atmospheric compositions.

It is to address such issues that we aim in the Sino-French Joint Workshop series to establish a long-lasting collaboration and create a network of European and Chinese research centres of excellence in the area of air quality and climate change studies. This aim is at least partly achieved by organizing joint workshops and undertaking joint research activities, which will contribute to: (1)Strengthening and stimulating collaborative research between Chinese and European laboratories by exchange of experiences as well as optimisation of experimental techniques. (2) Enhancing multidisciplinarity in the field of atmospheric chemistry by integrating experimental, theoretical and modelling competence from chemistry, physics, engineering, and meteorology in order to improve our understanding of the atmospheric system. (3) Promoting mutual awareness for the environmental issues addressed by our scientific community.

The network is aimed at filling gaps in our knowledge in different areas which will increase our ability to further understand the atmospheric chemical processes impacting air quality and climate change.

The 5th Sino-French Joint Workshop on Atmospheric Environment held in Xi'an-China (11th – 14th, 2016) was dedicated to Air Quality Improvement and Future Challenges: Sciences, Technologies & Solutions. The workshop attracted more than 120 scientists from different countries engaged in

the field on atmospheric environment. The present special issue gathers 28 peer-reviewed articles representative of the topics dealt with in the workshop. It is a continuation to the already published special issues following the Second Sino-French Workshop on Atmospheric Environment held in December 2010 in Orleans (France) published in the *Journal of Environmental Sciences (JES)* in 2012 (JES, 2012, 24(1)), the Third Sino-French Workshop on Atmospheric Environment, held at Qingdao, China in September, 2012 (JES, Vol. 26 No. 1 2014) and the Fourth Sino-French Workshop was held on December, 2014 at Lyon-France (JES, 2016 Vol. 40 No. 1-2).

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