



## Facing Air Pollution in Chile and Latin America: Present and Future Challenges

Guest Editors:

**Dr. Manuel A. Leiva-Guzmán**

**Dr. Richard Toro Araya**

**Dr. Zoë Fleming**

**Dr. Lorenzo Massimi**

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submissions:

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### Message from the Guest Editors

In Chile, almost 90% of the population lives in urban areas with poor air quality conditions. In the cities of Santiago, Temuco, Gran Concepción, Rancagua, Osorno and Coyahique, among others, the national air quality standards are consistently exceeded. The poor air quality observed in these cities is mainly due to rapid urban expansion, emissions from domestic heating systems, the growth of the automobile fleet, and industrial sources. Abrupt geographical conditions and meteorology dominated by low ventilation conditions lead to the accumulation of air pollutants. It is estimated that air pollution costs the Chilean health sector at least US 670 million annually, and is associated with as many as 127,000 emergency department visits and more than 4,000 premature deaths per year. The study of air pollution in Chile is an urgent requirement to protect human health and the environment, and to propose sustainable solutions.

The aim of this Special Issue is to advance the knowledge of the past, present and future state of air pollution and air quality in Chile, to propose possible solutions, and to unite the efforts and interests of various groups of researchers.





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## Editor-in-Chief

### Dr. Daniele Contini

Institute of Atmospheric Sciences  
and Climate (ISAC), National  
Research Council (CNR), Str. Prv.  
Lecce-Monteroni km 1.2, 73100  
Lecce, Italy

## Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

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## Contact Us

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Atmosphere Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
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