



an Open Access Journal by MDPI

# Advances in Air Quality Spatio-Temporal Mapping

Guest Editor:

### Dr. Nima Afshar-Mohajer

Air Quality Scientist, Gradient Corp, Boston, MA 02108, USA

Deadline for manuscript submissions: closed (30 September 2023)

### Message from the Guest Editor

The development of real-time and time-averaged air pollutants concentration maps is a crucial step in identifying hotspot exposure areas and designing control and mitigation plans on sources to reduce the public health risk. However, all concentration maps are subject to uncertainties. Recently, advances in computer techniques to obtain larger dataset, such as those offered by machine learning and artificial intelligence, application of dronebased sensors to facilitate sampling from any terrain, and rapid growth in development of low-cost sensors, to establish denser air-quality monitoring networks have set the stage to visualize reliable spatio-temporal concentration maps. These new tools have reduced both the uncertainty and cost of data acquisition. Therefore, this Special Issue seeks advances in the above-mentioned approaches leading to improved resolution in air-quality concentration mapping or reduction of the computational cost. as well as more accurate estimation of the health end-points, health hazards, and exposure risks.









an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Ilias Kavouras

Environmental, Occupational, and Geospatial Health Sciences, CUNY School of Public Health, New York, NY 10027, USA

### 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!

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases. **Journal Rank:** CiteScore - Q2 (*Environmental Science (miscellaneous)*)

# **Contact Us**

*Atmosphere* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/atmosphere atmosphere@mdpi.com X@Atmosphere\_MDPI