



State-of-Art in Real-Time Air Quality Monitoring through Low-Cost Technologies

Guest Editor:

Dr. Domenico Suriano

ENEA—Italian National Agency for New Technologies, Energy and Environment, Sustainable Development Department, Research Center of Brindisi, SS. 7, Appia, km 706, 72100 Brindisi, Italy

Deadline for manuscript submissions:
closed (1 September 2022)

Message from the Guest Editor

In recent years, the performance of low-cost air quality monitoring Systems (LCAQSs) has been improved through the application of data treatment processes, statistical approaches, and more. Problems affecting gas sensors on which LCAQSs are mainly based are represented by the lack of selectivity, baseline stability, and influence of environmental parameters such as temperature and humidity. This Special Issue is therefore focused on the state-of-the-art featuring the real-time monitoring of air pollutant concentrations performed through low-cost technologies, which potentially enable a more accurate evaluation of personal exposure to air pollutants, thanks to their low cost compared with the traditional real-time monitoring devices. Studies eligible to be published in this Special Issue may concern:

- The review of LCAQS evaluations;
- The review of LCAQSs available on the market or produced in-lab;
- The design and development of LCAQSs;
- Data treatment algorithms for improving on-field air pollutant concentration measurements;
- Design, development, and evaluation of personal monitors for mobile assessment of air pollutant exposure;
- Wireless sensors for air quality monitoring.





an Open Access Journal by MDPI

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!

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, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/atmosphere
atmosphere@mdpi.com
[X@Atmosphere_MDPI](https://twitter.com/Atmosphere_MDPI)