



an Open Access Journal by MDPI

Mitigation Strategies for Airborne Transmission of SARS-CoV-2 Laden Aerosols

Guest Editors:

Dr. Yu Feng

School of Chemical Engineering, Oklahoma State University, Stillwater, OK 74078, USA

Dr. Thierry Marchal

1. Ansys, Canonsburg, PA, USA 2. Avicenna Alliance, 1000 Brussels, Belgium

Dr. Xiaole Chen

School of Energy and Mechanical Engineering, Nanjing Normal University, Nanjing 210046, China

Deadline for manuscript submissions: closed (30 September 2021)



Airborne transmission of the SARS-CoV-2 virus has been identified as the dominant route for spreading, resulting in the COVID-19 pandemic. Multiple research teams have confirmed that SARS-CoV-2 RNA exists in the aerosol samples collected in different indoor environments such as patient rooms, restaurants, auditoriums, and dentistry rooms. Infection controls for the airborne transmission of the SARS-CoV-2 are crucial to minimizing the infection risks for people in the same confined spaces. Therefore, the aim of this Special Issue is to provide recent advances in the development of novel and effective mitigation strategies to reduce the exposure risks to airborne SARS-CoV-2 virus, and hopefully pave the way for more effective control of the spread of COVID-19. Both experimental and numerical studies are acceptable, but quantitative analysis of the mitigation effectiveness of the strategy must be presented. Topics of interest for the Special Issue include but are not limited to:

- Smart flow controls for indoor airborne SARS-CoV-2 virus reduction;
- Air quality control apparatuses for airborne SARS-CoV-2 virus filtration;
- Novel virus elimination devices and their effectiveness.









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