Special Issue

Urban Air Mobility/Advanced Air Mobility Using eVTOL Aircraft

Message from the Guest Editor

Recent developments in electric propulsion and battery technology enable new areas of operation for air vehicles. Quieter operations and shorter mission ranges facilitate air vehicles' urban application. Increasing urbanization and population growth induce a rising transportation demand, and thus, especially during peak-hours, a high willingness-to-pay for further time-efficient mobility alternatives is to be assumed. The recent concept of urban air mobility (UAM), i.e., the utilization of next-generation vertical take-off and landing (VTOL) vehicles or personal air vehicles (PAVs) in urban environments could add additional transport supply into urban settings. Research topics in this Special Issue include:

- eVTOL aircraft design;
- Urban data, demand modeling of UAM/AAM;
- Operating concept and vehicle selection;
- Vertiport modeling and integration;
- Route network and flight scheduling of UAM/AAM;
- Noise Analysis of UAM/AAM;
- Airspace concept and conflict detection of UAM/AAM;
- Cost modeling and energy demand of UAM/AAM.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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