

## Special Issue

# Electric Power Systems and Components for All-Electric Aircraft

### Message from the Guest Editor

The transportation sector generates a remarkable share (the largest share (28%) in the U.S.) of greenhouse gas (GHG) emissions. To achieve net-zero emission, all-electric transportation has been targeted, making all-electric cars, trucks, trains, aircraft, and ships a likely realization. While electric vehicles are close to maturity, the aviation industry is in its infancy regarding electrification for commercial aircraft. Large aircraft, including narrow-body and wide-body aircraft, are responsible for more than 75% of aviation GHG emissions; this is likely to worsen with the historical 4–5% annual growth in air travel. There are two categories of aircraft electrification: more electric aircraft (MEA) and all-electric aircraft (AEA). An MEA simply replaces a subsystem, such as a hydraulically driven actuator, with an electric alternative. On the other hand, an AEA is comprised of electrically driven subsystems, as well as having thrust power fully provided by electrochemical energy units (EEUs).

### Guest Editor

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### Deadline for manuscript submissions

closed (30 September 2024)



## Aerospace

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