

What is the Actual Flying Time of Our Hydrogen Fuel Cell Powered Drone/UAV?

Description

Urban air mobility (UAM) vehicles and most drones/UAVs are similar to one specific design, which is shown in the right picture. The drone in the picture is what we have built and ready for flying at ivb. Its power source could be switched between hydrogen PEM fuel cells and li-ion batteries. Although we have the drone ready, we don't exact know how many minutes it could fly on either a full tank of hydrogen or a fully charged battery pack. Your responsibility would be helping us figuring out these numbers. Furthermore, we are currently exploring exciting new project on it as well.

Your responsibilities

- Literature survey on existing field tests and comparisons of similar drones
- Design of series of field tests
- Communicating, conducting field tests, and collecting data
- Test data processing and conclusions drawing
- Documentation of the whole process, and result publishing is also encouraged
- Participation in regional workshops/seminars is also supported

Prerequisites

- Working independently with teamwork mindset
- Basic knowledge of fuel cells and drone flying would be helpful
- Already holding a drone pilot license would be a big gain
- Good knowledge of German or English, both written and spoken

Die TU Braunschweig strebt in allen Bereichen und Positionen an, eine Unterrepräsentanz im Sinne des NGG abzubauen. Daher sind Bewerbungen von Frauen besonders erwünscht und können nach Maßgabe des §11 NGG bevorzugt berücksichtigt werden. Schwerbehinderte werden bei gleicher Eignung bevorzugt. Ein Nachweis ist beizufügen. Zu Zwecken der Durchführung des Bewerbungsverfahrens werden personenbezogene Daten gespeichert.



Starting: Soon in 2024

Contact

Xin Gao, Dr.,
Senior scientist,

Hermann-Blenk-Str. 42
Room: 107

Telefon: +49 531 / 391 66925
Mail: xin.gao@tu-braunschweig.de



- Bachelor Thesis
- theoretical
- Student Thesis
- simulative
- Master Thesis
- experimental