



Exploring the implementation of environmentally-friendly materials in a Formula Student race car

Green Innovation meets performance

Our Project

Formula Electric Belgium is a student-based race team that pushes green innovation to performance. We design and build our own electric race car each year to participate in the international Formula Student competitions. This year, we are looking for pioneers to challenge the status quo and bring our top-notch electric race car to the next level. As a Thesis student, you will have to research, design, prototype and test your systems together with a group of highly motivated, ambitious students. You will work together with our team members and companies to develop new innovations.

Description and objective

The global call for sustainability and environmental protection has led to a growing interest in sustainable innovations in the racing industry. The Formula Electric team, composed of students from KU Leuven, is aware of this trend and would like to contribute to the development of environmentally friendly, biodegradable or recyclable materials for their race car under the motto "Green innovation meets performance." This thesis is about researching how the team can implement these materials and what benefits this could bring to the environment and the performance of the race car.

Goals:

- Exploring the possibilities of using recycled 3D printed materials, including fire retardant materials (in the battery casing), for various parts of the race car.
- Investigating sustainable composite materials for the battery casing and comparing their performance with traditional materials.
- Investigating the possibilities of implementing bio-oils in the gearbox and comparing their performance with traditional oils.
- Determining the overall environmental impact of the race car with these sustainable innovations.

Profile

- Bachelor Engineering Science or Technology
- Interest in the transition to a more sustainable automotive industry
- A professional, mature and entrepreneurial attitude
- A creative out-of-the box mindset

Join our research team!



Mail your contact info and field of interest to recruitment@formulaelectric.be