

# **Open position** – *Mechanics*

Motor

#### YOUR DEPARTMENT

The mechanics department connects both the vehicle to the road and the various structural components. The main area of responsibility is the design and manufacture of the components between the tyres and the monocoque and the mechanisms required for the solar car. This includes the design and construction of wheel suspensions, folding mechanisms or the steering system, which have to meet all load cases and are optimised exactly to the available installation space. In doing so, the maxim is followed: "As light as possible, as stable as necessary".

## YOUR TASK

As part of the project, you will develop and manufacture the highly efficient electric motor. Your task will be to redesign and improve the manufacturing process of our magnets and coils. In addition, you will improve the mechanical structure of the motor in terms of its weight and maintainability.

For this you will primarily work with Siemens CAD and with our milling machines.

You will be the interface between the chassis and the electrical engineering department and bring the power of the drivetrain to the road.

## WHAT YOU BRING TO THE TEAM

- Enthusiasm for the project!
- Student in electrical engineering, mechanical engineering or a comparable field of study
- High level of commitment and motivation to get to grips with complex problems
- Initial experience and knowledge with CAD as well as with electrical machines is advantageous

#### WHAT WE OFFER YOU

- Development of one of the most efficient solar cars in the world
- Opportunity to apply your theoretical knowledge in practice and implement your own ideas in an exciting environment
- Use of CAD within the scope of a demanding project
- Contact to potential employers and the development of a professional network (in industry and research)
- THE experience of your studies!

## **APPLICATION**

Please apply exclusively via the application form on our website:

www.sonnenwagen.org/join



Address: Eilfschornsteinstraße 12, 52062 Aachen Email: kontakt@sonnenwagen.org

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