Open position – *Mechanics*

Simulation and Sensors

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

Your task will be to create a digital twin of the vehicle to determine critical loads. To do this, you will carry out static and vehicle dynamics simulations in order to develop the lightest and safest possible vehicle with your department. To successfully complete these tasks, you will work intensively with Siemens Simcenter, Adams or Matlab Simulink. You will carry out various measurements with acceleration and rotation sensors on the new and most recently built solar car in order to validate your simulations. Your tasks will also include the development of new measurement systems for the future vehicles.

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 Siemens Simcenter, Adams or Matlab Simulink are an advantage

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 Siemens Simcenter, Adams or Matlab Simulink 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

Apply now!

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