

Open position – Electrical Engineering

Solar Cells

YOUR DEPARTMENT

The electrical engineering department brings the vehicle to life. Its main area of responsibility includes the design, manufacture and integration of the electrical systems required to operate the vehicle. This includes the implementation of efficient solar cells, the integration of batteries, the powertrain and the control electronics. Reliability and energy efficiency have the highest priority to ensure smooth running of the races.

YOUR TASK

Your tasks will include:

- The creation of electrical irradiation simulations of the race conditions in Australia
- The mechanical planning and design of the solar generator
- Optimising the interconnection of all cells in modules
- The selection and design of the Maximum Power Point Trackers (MPPT)
- The manufacturing process of the complete solar generator
- The draft and design of the circuit boards to connect the systems: solar cells, battery and board computer

WHAT YOU BRING TO THE TEAM

- Enthusiasm for the project!
- Student in electrical engineering or a similar field of study
- Prior experience with MatLab is desirable
- High level of commitment and motivation
- Taking responsibility and working independently

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 MatLab within the framework 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



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