To strengthen our team, we are looking for a

Doctoral Student in Energy Systems

LMER is a research group of EPFL / Chemical Engineering focusing on the science and technology of renewable energy storage. We are located in the Energypolis Buildings of EPFL Valais/Wallis in Sion. Our research focuses on materials for energy storage, i.e. hydrogen and the synthesis of hydrocarbons. The open PhD position is on the investigation of a pilot plant demonstrating the feasibility of solar energy to synthetic hydrocarbons conversion. The installation is already built and serves as a transition platform for technologies from the laboratory scale to the commercial scale. The student is expected to ensure proper operation of the overall system, evaluation of the performance data and optimization of the pilot plant.

Your Tasks
• Ensure the proper running of the existing installation, optimize the existing devices and possibly suggest the addition of new components to the system
• Investigate the energy flows from renewable source to hydrocarbons under real conditions
• Development of a database comparing the performance of different technologies for the conversion from solar energy to synthetic fuels under real working conditions
• Spread the acquired knowledge in the form of scientific publications and presentations at conferences
• Comply with all requirements from the doctoral school

Your Profile
• You have a MSc degree in energy systems, electrical engineering, mechanical engineering, process engineering or a related field from a top university
• You have a good level of hands-on experience
• You have expertise in several of the following fields: energy systems, photovoltaics, batteries and power electronics, hydrogen production and storage, synthetic hydrocarbons
• You have good programming skills and are familiar with LabView and Matlab or equivalent
• You are ready to work beyond the contract and commit yourself to the global competition in science.
• You are able to handle responsibility and you grow on your challenges and achievements

Our offer
• Modern equipment in a brand new laboratory
• A highly dynamic, modern top-level scientific environment
• Exposure to multi-disciplinary research projects from basic research to applications
• Interesting work conditions and flexibility
• Possibility for collaboration with international partners
• Collaboration with industrial partners and opportunities to market results from the research

Activity rate: 100%

Place of work: EPFL Valais/Wallis, Sion

Start date: immediately or to be defined

Contacts: For complementary information, please contact Prof. Dr. Andreas Zütte per e-mail: lmer@epfl.ch

Sending of applications: We look forward to receiving your offers by email to lmer@epfl.ch with a motivation letter, a curriculum vitae and copies of certificates and references.

To be mentioned in your e-mail subject: Application PhD Position SSDS

LMER, ISIC, SB, EPFL Valais/Wallis • Rue de l’Industrie 17 • 1950 Sion