PhD student in the field of plasma-based methane decomposition

Materials science and technology are our passion. With our cutting-edge research, Empa's around 1'100 employees make essential contributions to the well-being of society for a future worth living. Empa is a research institution of the ETH Domain.

Within the framework of an industrial project aimed at the plasma-pyrolytic production of hydrogen with negative CO_2 emissions, the Automotive Powertrain Technology Laboratory offers a PhD position.

Your tasks:

- Planning, execution and evaluation of scientific investigations in the field of plasma-based methane decomposition.
- Fundamental investigation of relevant processes in methane-containing (low pressure) plasma.
- Modeling of the plasma, the chemical reactions and the interactions with the flow field.
- Optimization of the process regarding efficiency and structure of the produced solid carbon.
- Scientific publications in journals and at conferences.
- Supervision of students.

Your profile:

- University Master's degree in process engineering, chemical engineering, mechanical engineering materials science or similar; admission to doctoral studies at ETH Zurich
- Good technical knowledge and/or high interest in scientific work in the areas indicated above, including simulation.
- Interest in working in interdisciplinary teams.
- Good knowledge of the English language.

Our offer:

- Interesting and responsible tasks in the field of applied research.
- Development opportunities in an economically and socially important field.
- Contacts to international partners, customers and suppliers.
- Attractive working conditions of the ETH Domain.

For more information about the position, please contact Dr. Panayotis Dimopoulos Eggenschwiler (panayotis.dimopoulos@empa.ch; Tel. +41 58 765 43 37) and visit our website, www.empa.ch.

We look forward to receiving your online application including a letter of motivation, curriculum vitae, diplomas with references and contact details of two references. Please upload the requested documents via our website. Applications sent by e-mail will not be considered.