

PhD student (UNIVERSITÄT BASEL)

Bewerbungsfrist: 15.09.2017

The *Sustainable Land Use Group* at the University of Basel (Prof. Kahmen) seeks a **PhD student in Stable Isotope Physiology**.

Responsibilities

The position is within the ERC project HYDROCARB, which addresses the potential of stable hydrogen isotope ratios ($\delta^2\text{H}$ values) in plant compounds as new proxy for the carbon metabolism in plants. Research suggests that exciting and previously unknown opportunities exist to exploit $\delta^2\text{H}$ values in plant compounds for information on the carbohydrate metabolism of plants. Such an application of $\delta^2\text{H}$ values would be highly relevant for a broad range of biological and biogeochemical disciplines. The goal of HYDROCARB is to perform the experimental work that is now needed to identify the key biochemical and physiological processes that determine the metabolic information that is recorded in the $\delta^2\text{H}$ values of plant organic compounds such as leaf wax lipids, lignin and cellulose. The key objective of the advertised PhD project is to perform experiments with different vascular plant species under controlled environmental conditions to identify the precise biochemical processes with respect to a plants carbohydrate metabolism that shape the $\delta^2\text{H}$ values of different plant compounds.

Requirements

We are looking for a dynamic, reliable and motivated student with M.Sc./Diploma in biology, biochemistry, organic geochemistry or related disciplines. Strong interest in process-oriented research and hands-on experiences with analytical instruments (stable isotope mass spectrometers), biochemistry and analytical chemistry are beneficial. Teamwork within the group and project partners requires spoken and written English language skills.

Additional benefits

The research will be carried out within a 3.5-year project, starting late 2017/early 2018. We offer an interesting position in an international, interdisciplinary research environment in Basel. Salary and social benefits are provided according to University of Basel rules.

Application

Please send your complete application (CV, letter of motivation, contact information of three references) to Mrs. Maura Ellenberger (maura.ellenberger@unibas.ch). Application deadline is **September 15th 2017**. Further information can be obtained from Prof. Kahmen (ansgar.kahmen@unibas.ch).