



Our Profile

The Chair of Botany and Molecular Genetics (Head: Prof. Björn Usadel) is part of the Institute of Biology 1 at RWTH Aachen University (www.usadellab.org). The research topics of the group are analysis of plant cell walls and their utilization potential, regulation of plant metabolism and associated signalling pathways, and bioinformatics. The project portfolio includes both basic research and applied, interdisciplinary research projects (BioSC NRW, ERS RWTH, BMBF)

The research group of Dr. Alexandra Wormit investigates the effects of abiotic stress on plant metabolism and aims to identify regulatory networks and important signalling pathways. In the field of applied research, the group is interested in the utilization of residual biomass from horticulture for the production of valuable metabolites, for industrial applications.

Your Profile

You hold an excellent master's degree (or equivalent) in biology, biotechnology or bioinformatics. You have very good knowledge of plant metabolism and possess ideally basic molecular biology skills as well as good skills in the spoken and written English language. You are proactive and can work independently. You have good communication and team skills and like to work in an international environment. You are enthusiastic about scientific questions and can develop your own research ideas and concepts. The systematic analysis of problems and questions is one of your strengths. You have the ability to work in a structured and result-oriented way. You also have a great interest in interdisciplinary cooperation with engineers and economists, a strong ability to work with internal and external project partners, high flexibility and a great commitment to your work. Practical experience in LC-MS analytic, measurement of metabolites or next generation sequencing and data analysis is an advantage

Your Job

We are seeking an enthusiastic **PhD candidate (w/m)** for the interdisciplinary project "TaReCa - Tailoring of secondary metabolism in horticultural residuals and cascade utilization for a resource efficient production of valuable bioactive compounds". The aim of the project is the utilization of residual biomass from pepper cultivation for the production of valuable secondary metabolites.

You will develop LC-MS methods to quantify flavonoids from pepper, analyse metabolite profiles, perform RNAseq experiments on stressed pepper plants, including data analysis and verification. Interpretation of results as well as writing of scientific publications also belongs to your tasks.

Our Offer

We offer an exciting research topic in a highly motivated interdisciplinary project team with engineers, economists and horticultural scientists.

Qualified candidates will start in pay grade 13 TV-L (50%) of the German public service pay-scale.

The start of the project is 01.11.2017; the position is limited for 3 years.

The RWTH is certified as a family-friendly university.

At the RWTH Aachen, we want to promote the careers of women and therefore we particularly welcome applications from women. Applications of disabled candidates with suitable qualifications are welcome.

Please send your application by Email (PDF file) until 30.09.2017 to <u>barth@bio1.rwth-aachen.de</u>. Questions regarding the positions can be addressed to Dr. Alexandra Wormit (awormit@bio1.rwth-aachen.de).

The application should include a letter of motivation, your CV and certificates as well as the contact details of 2 references. The destruction of the documents after termination of the process is assured.