We are looking for a doctorale candidate who shares our interest in understanding

'*Mechanisms of root system adaptation to hypoxic stress in Arabidopsis*'

Funding: The project is funded for 3 years by the Deutsche Forschungsgemeinschaft (TV-L E 13 65%) .

Background

Plants are frequently flooded, resulting in oxygen shortage and consequently reduced mitochondrial ATP production which impacts plant growth and reduces crop productivity. Soil water logging and flooding affect, in particular, roots. Previous studies revealed that the root system adapts to hypoxic conditions in various ways including formation of adventitious roots, primary root bending as an escape response, and altered lateral root development. In Arabidopsis, root adaptations to hypoxia are mediated by group VII AP2/ERF transcription factors. The PhD project aims to understand the molecular mechanisms underlying ERFVII-mediated root system adaptation using molecular-genetic, cell biological, and physiological approaches.

Qualifications

The successful candidate will

- have an excellent master degree in biology, biochemistry or related majors
- have experience in plant physiology, molecular and/or cell biology
- have a strong interest in working in plant science
- be a strong team player
- be able to communicate in English

Candidate selection will be based on the written application, CV, and an interview.

For more information, please contact

Prof. Dr. Margret Sauter
Plant Developmental Biology & Plant Physiology
University of Kiel
http://www.sauter.botanik.uni-kiel.de/
email: msauter@bot.uni-kiel.de

Please apply by email submitting a single PDF document in English or German containing a detailed CV, a brief summary of previous research projects, and the names of two potential referees by January 7th 2019.