



EBERHARD KARLS  
UNIVERSITÄT  
TÜBINGEN



## CSC-Tübingen PhD Scholarship Program

2024 application round: prospective PhD positions at the University of Tübingen

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<b>Faculty:</b>	Faculty of Science
<b>Institute / Section / Subject:</b>	Department of Geosciences & Department of Biology, Group: Geo-Biosphere Interactions
<b>Supervising Professor(s):</b>	Prof. Dr. Michaela Dippold
<b>About the Supervisor(s):</b>	Prof. of Geo-Biosphere Interaction; main disciplines: soil biogeochemistry and molecular microbiology; work in natural and agro-ecosystems; emphasize on isotope applications at the root-soil-microbe continuum: <a href="https://uni-tuebingen.de/de/232301">https://uni-tuebingen.de/de/232301</a>
<b>Specification:</b>	Effect of root residue decomposition of winter cover crops on maize N nutrition
<b>Topic Description:</b>	Cover crops are increasingly used to promote soil C sequestration, but serve also as “highways to the subsoil”, promoting access to subsoil nutrient resources. Winter-hardy versus winter-killed cover crop species are thereby not yet studied regarding their implications for plant nutrition: i) Does the biomass of winter-killed cover crops lose significant amounts of its nutrients by early spring residue mineralization? ii) Do not-yet degraded root residues of winter-hardy cover crops block access to the root channels? The fellow will assess under which conditions these cover crop traits support maize N nutrition best and which potential lies in combination of winter-hardy and winter killed cover crops.
<b>Degree:</b>	Dr. rer. nat.
<b>Required Degrees:</b>	M.Sc. in Resource and/or Environmental Sciences, Geoecology, Agriculture, Plant Biology, Plant Nutrition, or comparable. Expertise with biogeochemical transformations (preferably residue decomposition) and plant nutrition is searched for;
<b>Language Requirements:</b>	English, C1 level
<b>Notes:</b>	