The Institute of Crop Science and Resource Conservation of the University of Bonn, Division of Soil Science and Soil Ecology (Prof. Dr. Amelung), invites applications for a position as

**Doctoral candidate (m/f)**

under supervision of Mrs. Dr. Gocke and Mrs. PD Dr. Lehndorff, presumably starting on 1st September 2018. The DFG-funded position is limited in time for 3 years and offers the opportunity to earn a PhD degree. Salary is paid according to TV-L pay group 13 (65%).

We are looking for graduates of the study courses geocology, soil, geo- or agricultural sciences with focus on soil chemistry and/or plant science. The candidate should hold basic knowledge in organic soil chemistry (e.g. biomarker and stable isotope analyses) and in statistical image evaluation.

The subject of the scientific project are carbon and nitrogen dynamics in the soil – plant system and in the rhizosphere, which can be visualized through isotope labeling techniques as well as plant and microbial biomarker analyses. These studies will be performed on a range of spatial and temporal scales, containing field- and greenhouse experiments. The project aims to identify spatio-temporal patterns of rhizosphere biogeochemistry and to elucidate to which extent these patterns are controlled by internal factors (e.g. root age and developmental stage) or by external factors (e.g. plant genotype and soil type). This will give important new insights into carbon fluxes and carbon sequestration in soil.

Tasks of the candidate comprise the participation in the above-mentioned project including the preparation of scientific publications, supervision of bachelor and master theses within the own PhD topic and adjacent fields of research, and the own scientific qualification in terms of a PhD degree.

We expect from the successful candidate above-average engagement in research as well as previous experience or strong interest in the above-mentioned experimental approaches, the ability for self-dependent working, reliability, engagement, capacity for team work, sense of responsibility and high self-motivation as well as good command of English in written and spoken. Moreover, the ideal candidate possesses spatial and temporal flexibility in order to attend regular project-internal meetings in Germany and to participate in international scientific conferences in Europe and North America, and to conduct some of the planned analyses at cooperation partners in Germany and Switzerland.

We are looking forward to receiving your complete application documents including references in German or English language. Please send these documents until 15th July 2018 per email or letter to:

**Dr. Martina Gocke**

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