

M.Sc. Thesis Flyer/  
M.Sc. Arbeit Ausschreibung



Chair of  
Soil Ecology

## Comparing Analytical Methods for Lignin / Vergleichen Messmethoden der Lignin

Lignin is a major constituent of woody biomass (~25%) and thus plays a crucial role in carbon cycling in forest ecosystems. Yet extracting lignin even from wood let alone soil is fraught with difficulties stemming from both the heterogeneous structure within and between species, and its varying solubility. Identifying and tracking decomposed lignin byproducts is likewise difficult.



**This thesis would involve comparing several established and potential analytical methods for quantifying and characterizing lignin (and its byproducts) in soil.** Major methods to be compared include CuO-oxidation, Infrared Spectrometry, and UV Spectrometry. Potential candidates ought to be interested in developing laboratory procedures and soil chemical analysis. Extensive laboratory work both here in Freiburg and away (Halle and Müncheberg) will be necessary. *Abschlussarbeiten auf Deutsch sind auch möglich.*

**Projected start date:** Summer-Winter 2016 or 2017 (as early as June)

**If interested, please contact:**

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