

PhD program in carbon and water exchange across land use gradient in the Brazos River Valley

Land cover type and land management decisions alter the fundamental properties of ecosystems, affecting the biogeochemical processes of energy, water, and carbon exchange between the vegetation, soil, and the atmosphere. The significance of these differences on landscape-level exchange rates is well recognized, but projections of dynamic change lack quantitative validation data. This project uses the newly established <u>Texas Water Observatory</u> (T.W.O.) to characterize the carbon pools and fluxes across the land cover gradient in the Brazos River watershed in Texas, and partition the differences to edaphic, hydrological, environmental and management effects.

Applications are invited to study the spatial and temporal dynamics of energy, water and carbon fluxes at the <u>T.W.O. research sites</u>. The ideal candidate will have an MS in ecosystem ecology or a related discipline, experience working with eddy covariance and other flux data or ecosystem models, experience working with large datasets and scientific programming, and personal research vision relevant for the project. The candidate will be able to develop their own research agenda, and add ancillary measurements and modeling experiments. The position will be at the Terrestrial Ecosystem Ecology Lab, but collaboration with the broader T.W.O. team will be expected.

The position may start any time in 2019 (spring, summer or fall semester), pending the availability of and the competitiveness of the candidate for the university fellowships. Review of applications for the spring term will begin on September 15th. If the position remains unfilled, the review for the fall term will begin on November 15th. To apply, please send a cover letter including an outline of proposed research questions, curriculum vitae, copies of academic transcripts, coding and writing examples, names and contact information of three references, and GRE and TOEFL scores (for international applicants) to Dr. Asko Noormets (noormets@tamu.edu). The departmental graduate student acceptance criteria and procedures are outlined at https://essm.tamu.edu/academics/graduate/prospective/. AA/EOE.