



**The DFG Research Training Group on Urban Water Interfaces (UWI) invites to a
guest lecture by**

Dr. Hamideh Nouri

Senior Research Fellow - Water Engineering and Management

Division of Agronomy, University of Göttingen

Tuesday, 5th November 2019, 10:00 – 11:00 am

TU Berlin, Geoinformation in Environmental Planning Lab, Room EB414a

***Lecture title: Evapotranspiration, water demand and water footprint of urban
green spaces***

Abstract

Newly emerged and still evolving concepts of “greening cities” and “moving toward carbon neutrality” are getting more attention in recent times. This is why the benefits of urban green spaces and their significance in human wellbeing and biodiversity conservation are getting more recognized. Urban green spaces are key elements in maintaining and improving human health and provide a range of other environmental, social, and economic benefits and services. Preserving, restoring and expanding urban green spaces require sustainable management of green and blue water resources to fulfil evapotranspiration (ET) of green plant cover. The heterogeneity of urban green spaces with high variation in their microclimates, plant species, density and height, and impacts of grey infrastructure in the surrounding area build up the complexity of ET estimation. In this talk, three approaches of ET estimation of urban green spaces, including in-situ, observational-based, and remote sensing, will be presented. For the remote sensing method, the effect of the spatial resolution of satellite images on estimating ET of urban greenery will be briefly discussed. Also, the findings of the first study on the green and blue water footprint of urban green spaces will be presented.

About the speaker

Dr. Hamideh Nouri is currently a senior researcher at the University of Göttingen, Germany. Previously, she was a postdoctoral researcher at the University of Twente, the Netherlands working with Prof Arjen Hoekstra, the creator of the concept of water footprint, and his team. Before moving to Europe, Hamideh was a postdoctoral research associate at the University of South Australia (UniSA), and a course coordinator & tutor at the Open University Australia (OUA). She obtained her PhD in Civil Engineering (Water) at UniSA in 2014, focusing on the evapotranspiration estimation of urban green spaces using field-based and remote sensing-based approaches. She received her MSc in Soil and Water Engineering from University Putra Malaysia in 2009 and her BSc in Irrigation Engineering at the Isfahan University of Technology in 2000. In her experience with the industry after her BSc, Hamideh worked as a water engineer and Chair of the Board (COB); this invaluable experience helped her throughout her academic journey.



Dr. Nouri had the great opportunity to work in academia and industry as a research scientist and consultant in different countries, including Germany, the Netherlands, Australia, USA, Japan, Malaysia, China, and Iran. Her career has covered the broad range of water engineering and management in both urban green spaces and agricultural farmlands in different geographical and climate settings using in-situ, modelling and remote sensing techniques. Hamideh run several international workshops about “Globalization of Water Management” and “Water Footprint & Virtual Water” in different countries. She also serves as an Editorial Board member for the journal PLoS ONE.

In the last eight years, Hamideh has developed a strong collaboration with the U.S. Geological Survey (USGS) and the University of Arizona working on the remote sensing of evapotranspiration in the heterogeneous urban landscape; co-hosting several conference sessions on this topic and coauthoring journal papers. Hamideh’s latest researches focus on water scarcity and water productivity/footprint.

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