Sleem Ali Kreba

Department of Marine Environmental Sciences Al Asmarya Islamic University

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EDUCATION

Ph.D., Soil and Water Sciences
Department of Plant and Soil Sciences, University of Kentucky (USA) November 2013
M.Sc., Water Resource Engineering
Agricultural and Bioresource Engineering Department, University of Saskatchewan
(Canada) March 2009
B.Sc., Soil and Water Sciences
Soil and Water Sciences Department, University of Omar Almukhtar (Libya)

July 1999

EXPERIENCE

- Jun 1, 2016 Present: Lecturer, Department of Marine Environmental Science, Al Asmarya Islamic University.
- Feb. 15, 2015 Jun. 1, 2016: Instructor, Department of Marine Environmental Science, Al Asmarya Islamic University.
- Aug. 15, 2014 Jan. 15, 20.15: Instructor, Higher Institute of Engineering Technology Zliten.
- Aug. 2009 Nov. 2013: Graduate research assistant (Ph.D.), Department of Plant and Soil Sciences, University of Kentucky.
- Jan. 5 May 15, 2011: Teaching assistant (TA), Fundamentals of Soil Sciences, Department of Plant and Soil Sciences, University of Kentucky.
- Jan. 5 May 15, 2010: Teaching assistant (TA), Fundamentals of Soil Sciences, Department of Plant and Soil Sciences, University of Kentucky.
- Jun. 2008 Feb. 2009: Research assistant (RA), Agricultural chemical transport through soil zone to the groundwater. Agricultural and Bioresource Engineering Department, University of Saskatchewan.
- Aug. 2006 Mar. 2009: Graduate research assistant (M.Sc.), Agricultural and Bioresource Engineering Department, University of Saskatchewan.
- Jan. 5 May 15, 2008: Teaching assistant (TA), Agricultural and Bioresource Engineering Department, University of Saskatchewan.
- Jan. 2000 Sep. 2004: Full time Administrator, Almanara Financial Office, Zliten, Libya.

Academic skills

- Spatial and temporal statistical analysis and interpretation using SGeMS and GS⁺.
- Use of a photoacoustic environmental gas monitor (INNOVA 1412) for measuring greenhouse gas (CO₂ and N₂O) concentrations in the field.
- Use of time domain reflectometry (TDR) and capacitance diviner for measuring soil water content and EC.
- Use of gas chromatography (GC) and O₂ sensors to measure gas concentrations.
- Use of tensiometers with pressure sensors for measuring soil water matric potentials and soil water retention.
- Computer skills and data analysis using SigmaPlot, SPSS, and Microsoft Office.
- Teaching various undergraduate courses related to soil, water, environment, statistics, and biosystem sciences.
- Languages: Arabic and English.

PUBLICATIONS

Peer-reviewed articles

- Kreba, S., M. Coyne, R. McCulley, and O. Wendroth. 2013. Spatial and temporal patterns of carbon dioxide flux in crop and grass land-use systems. *Vadose Zone Journal*. doi:10.2136/vzj2013.01.0005.
- Kreba, S., and C. Maule. 2010. Estimating soil water fluxes with tracers and TDR under controlled laboratory conditions. *Canadian Society of Biosystems Engineering* 52: 1.9-1.17.

Accepted for publication

Kreba, S., O. Wendroth, M. Coyne, and R. Walton. 2017. Soil gas diffusivity, air-filled porosity, and pore continuity: Land use and spatial patterns. *Soil Science Society of America Journal*. doi:10.2136/sssaj2016.10.0344.

Conference papers

- **Kreba, S.** and C. Maule. 2008. Effects of seasonality upon water and solute movement in the unsaturated zone. Canadian Society of Biosystems Engineering (CSBE) Conference. Vancouver BC, Canada. Paper No. 08-166.
- **Kreba, S**. and C. Maule. 2008. The capability of TDR for estimating soil water fluxes using tracer methods. North Central ASABE/CSBE Conference. Winnipeg MB, Canada. Paper No. RRV 08-202.

Others

- Kreba, S.A. 2013. Land-use impact on soil gas and soil water transport properties. Ph.D. Dissertation, University of Kentucky, Lexington KY.
- **Kreba**, **S.A.** 2009. Effect of seasonal water fluctuation upon solute movement within a porous media. M.Sc. Thesis, University of Saskatchewan, Saskatoon SK.

Abstracts and presentations

Kreba, S., O. Wendroth, M. Coyne, and R. McCulley. May 22-24, 2013. Spatial and temporal patterns and associations of CO_2 flux in crop and grass systems. Southern

Regional Group Meeting (S-1048). Lexington, KY, USA.

- **Kreba**, **S**., O. Wendroth, and M. Coyne. 2012. Soil gas diffusivity and air-filled porosity and their spatial patterns in crop and grass systems. ASA-CSSA-SSSA International Meeting. Cincinnati, OH, USA.
- **Kreba, S.**, O. Wendroth, M. Coyne, and R. McCulley. 2012. Spatial and temporal patterns of CO₂ flux in crop and grass systems. ASA-CSSA-SSSA International Meeting. Cincinnati, OH, USA.
- Wendroth, O., S. Kreba, R. McCulley, and M. Coyne. 2012. Space-time field of soil carbon respiration in two land-use systems. Hydropedology Conference. Leipzig, Germany.
- Kreba, S., O. Wendroth, and M. Coyne. 2011. Land use impact on soil structure. ASA-CSSA-SSSA International Meeting. San Antonio, TX, USA.
- **Kreba, S.,** O. Wendroth, R. Walton, and R. McCulley. 2011. Temporal stability of soil water storage, carbon dioxide, and nitrous oxide fluxes. ASA-CSSA-SSSA International Meeting. San Antonio, TX, USA.
- Wendroth, O., **S. Kreba**, and R. McCulley. 2011. Space-time field of CO₂ flux at the land surface. Soil Processes PD Conference. Asheville, NC, USA.
- **Kreba, S.,** O. Wendroth, and M. Coyne. 2011. Estimating impacts of land use and management on soil structure. Kentucky Water Resources Research Institute (KWRRI) Conference. Lexington, KY, USA.

Reviewing activity

I have participated in reviewing manuscripts for publications in peer-reviewed journals and conference proceedings including:

- The Journal of Natural Resources and Life Science Education.
- Agriculture, Ecosystems and Environment Journal.
- The 2nd Conference on Environmental Sciences in Zliten, Libya, 2015.
- The 2016 International Conference on Water Resource and Environment (WRE2016) in Shanghai, China.
- The 2017 International Conference on Water Resource and Environment (WRE2017) in Qingdao, China.

GRANTS AND FELLOWSHPS

- Travel Support Award, Graduate School, University of Kentucky, 2012.
- Travel Support Award, Department of Plant and Soil Sciences, University of Kentucky, 2012.
- Travel Support Award, Graduate School, University of Kentucky, 2011.
- Kentucky Water Resources Research Institute (KWRRI) Student Research Enhancement Award, 2010, \$5000.00

AWARDS AND HONORS

- Delta Epsilon Iota Honor, University of Kentucky, 2012.
- Post-graduate (Ph.D.) Scholarship, Libyan Ministry of Higher Education and Scientific Research (MOESR), 2011.
- Golden Key International Honor, 2010.
- Departmental Scholarship, University of Saskatchewan, 2007.
- Departmental Scholarship, University of Saskatchewan, 2006.
- Post-graduate (M.Sc.) Scholarship, Libyan Ministry of Higher Education and Scientific Research (MOESR), 2003.
- Second Honor and designated as the best student in the graduating class in the Agriculture College, University of Omer Almukhtar, 1999.