

**Subodh Acharya**  
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### Education

PhD: Soil and Water Science (Minor in Agricultural and Biological Engineering), University of Florida, Gainesville Florida, USA August 2012

**Dissertation:** *Development and Application of New Analytical Expressions for Drainable and Fillable Porosity in Shallow Unconfined Aquifers*

MS: Soil and Water Science, University of Florida, Gainesville Florida, USA August 2008  
Thesis: *Physical Characteristics of a seepage irrigated soil profile in the Tri-County Agricultural Area, Northeast Florida*

BS: Agricultural Sciences, Tribhuvan University, Nepal, July 2005

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### Research Experience

Postdoctoral Research Associate: Ecohydrology Laboratory, School of Forest Resources and Conservation, University of Florida Sep 2012-Present

Postdoctoral Research Associate: Agricultural and Biological Engineering Department: University of Florida Sep 2012-Present

Graduate Research Assistant: Soil and Water Science department, University of Florida 2006-2012

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### Technical Skills

Programming Languages: R, Python, MATLAB, SAS, some FORTRAN

GIS and Geostatistics: ArcGIS, GSlib, GS+, R-geostatistics packages (gstat, geoR),

Statistics: Univariate and multivariate statistics in R and SAS

Others: HYDRUS, SWAT, VS2DI, CHEMFLO, DSSAT crop modeling Suite, etc

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### Refereed Publications

**Acharya, S.,** J. W. Jawitz, and R. S. Mylavarapu. 2012. Analytical expressions for drainable and fillable porosity of phreatic aquifers under vertical fluxes from evapotranspiration and recharge, *Water Resour. Res.*, 48, W11526, doi:10.1029/2012WR012043.

**Acharya, S.,** and R. S. Mylavarapu. 2011. Selected Soil Physical Properties and Implications on Water Management System in Northeast Florida. *Soil Science*, 176: 1-8.

### Publications in Preparation

**Acharya, S.,** R.S. Mylavarapu, and J. W. Jawitz, Estimation of groundwater evapotranspiration from diurnal water table fluctuations: Improvement of a White based method using fillable porosity.

**Acharya, S.,** and R.S. Mylavarapu, Modeling shallow water table dynamics under subsurface irrigation and drainage systems implementing drainable and fillable porosity, *In preparation*

**Acharya, S.,** R. S. Mylavarapu, J. W. Jones, K.T. Morgan, L. Zotarelli, A simple, quasi-steady saturated-unsaturated model of soil moisture dynamics under shallow water table environments, *In preparation*

### **Non-Refereed:Conference Proceedings**

- Acharya, S.**, and R Mylavarapu, 2010. Influence of soil profile characteristics on the efficiency of water management practice in Northeast Florida. 19<sup>th</sup> World Congress of Soil Science, 1-6 August Brisbane, Australia.
- Cornejo, C., R. Mylavarapu, and **S. Acharya**. 2007. Modeling subsurface lateral water movement on top of a shallow hardpan. ASABE paper # 072004. 2007 ASABE Annual International Meeting, Minneapolis, MN, 17-20 June.

### **Presentations and Posters**

- Acharya, S.**, R.S.Mylavarapu, 2012. Modeling Shallow Water Table Dynamics in Unconfined Aquifers using Drainable and Fillable Porosity. National Groundwater Association, Annual Summit, May 6-10, Garden Grove, CA
- Acharya, S.**, R.S. Mylavarapu, and J.W. Jawitz, 2012.Estimation of Evapotranspiration from Diurnal Water Table Fluctuation Using a new Expression for Drainable Porosity. 3rd UF Water Institute Symposium, University of Florida, Gainesville, FL
- Acharya, S.**, R. S. Mylavarapu, J.W. Jawitz, J. W. Jones, L. Zotarelli, K. T. Morgan, and W. G. Harris.2011.Drainable Porosity of Unconfined Aquifers during Evapotranspiration from the Water Table. 12th Annual Soil and Water Science Research Forum, Soil and Water Science Department, University of Florida, Gainesville, FL
- Acharya, S.** and R.S. Mylavarapu. 2011. Modeling Water Table Fluctuations During Subsurface Irrigation and Drainage In Sandy Soils. ASA-CSSA-SSSA International Annual Meetings, Oct 15-19, San Antonio, Texas.
- Acharya. S.** and R.S. Mylavarapu. 2010. Soil Profile Characteristics and Efficiency of Water management Practices in Northeast Florida. Proc. 19th World Soils Congress, Brisbane, Australia, Aug 1-8, p157-160.
- Acharya, S.**, R. S. Mylavarapu, C. M. Hutchinson, and Y. Ouyang. 2008. Subsurface lateral flow of water in subsurface seepage irrigated potato production systems in Northeast Florida. Abstract No. 760-8. ASA-CSSA-SSSA International Annual Meetings, Oct 5-9, Houston, TX.

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### **Awards**

- 2008-2012: Graduate Alumni Fellow: University of Florida
- 2012: Nominee, Outstanding International Graduate Student, Soil and Water Science Department University of Florida, Gainesville Florida, USA
- 1998:2005: Outstanding Student Scholarship, Institute of Agricultural and Animal Sciences, Tribhuvan University, Nepal

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### **Professional Affiliations**

- Member: American Geophysical Union (AGU)
- Member: Agronomic Society of America -Crop Science Society of America- Soil Science Society of America (ASA-CSA-SSSA)
- Member: American Society of Agricultural and Biological Engineers (ASABE)
- Member: National Groundwater Association (NGWA)