

## Amy Leigh Kaleita

Assistant Professor

211 Davidson Hall  
515-294-5167  
kaleita@iastate.edu  
www.public.iastate.edu/~kaleita

### Education

Ph.D. Agricultural Engineering, 2003  
University of Illinois at Urbana-Champaign  
M.S. Civil Engineering, 1999  
University of Illinois at Urbana-Champaign

B.S. Agricultural Engineering, 1997  
The Pennsylvania State University

### Honors and Awards

Early Achievement in Teaching Award, Iowa  
State University, 2006

Outstanding Early Achievement in Teaching, Iowa  
State University College of Agriculture, 2006

Newcomer of the Year, Iowa Section ASAE, 2005

Teaching Excellence Award, Department of  
Agricultural Engineering, University  
of Illinois, 2003

USDA National Needs Fellowship, 2000-2003

NSF Graduate Fellowship, 1998-2000

### Recent Publications

Kaleita, A.L., L.F. Tian and M.C. Hirschi. 2005.  
Relationship between soil moisture content and  
soil surface reflectance, *Trans. ASAE*, vol. 48(50),  
pp. 1979-1986.

Kaleita, A.L., J.L. Heitman, and S.D. Logsdon.  
2005. Field calibration of the Theta Probe for  
Des Moines Lobe soils, *App. Eng. in Ag.*,  
vol. 21(5), pp. 865-870.

Steward, B. L., R. P. Ewing, D. A. Ashlock,  
A. L. Kaleita, S. M. Shaner. 2004. Range  
operator enabled genetic algorithms for  
hyperspectral analysis. In *Intelligent  
Engineering Systems Through Artificial Neural  
Networks: Smart Engineering Systems Design:  
Neural Networks, Fuzzy Logic, Evolutionary  
Programming, Complex Systems and Artificial  
Life*, Vol. 14. eds. C. H. Dagli, A. L. Buczak,  
D. L. Enke, M. J. Embrechts, and O. Ersoy,  
295-300. New York. ASME Press.

Kumar, P. and A. L. Kaleita. 2003. Assimilation  
of near-surface temperature using extended  
Kalman Filter. *Advances in Water Resources*,  
vol. 26, pp. 79-93.

Kumar, P., and A.L. Kaleita. 2001. Assimilation  
of surface temperature in a land-surface model,  
*Remote Sensing and Hydrology 2000*  
(proceedings of a symposium held at Santa Fe,  
New Mexico, USA, April 2000). IAHS Publ.  
No. 267, pp. 197-202.

Kaleita, A.L. and P. Kumar. 2000. AVHRR  
estimates of surface temperature during SGP97,  
*J. Geophys. Res.*, vol. 105 No. D16, pp. 20,  
791-20,801.



### Teaching

Dr. Kaleita teaches courses in soil and water conservation management and engineering. She is particularly interested in the role of globalization in engineering and technology education, and in enhancing written and verbal communication experiences for students in soil and water conservation.

### Research

Dr. Kaleita's research focuses on information technology for precision conservation. Primary interests are remote sensing, crop and hydrologic modeling, precision farming, and advanced analytical methods for understanding the influence of spatiotemporally variable soil and hydrologic properties.

### Other Professional Interests

Dr. Kaleita is a member of ASABE, IAHS, Alpha Epsilon, and Tau Beta Pi.