

Nicole Alkov

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Education

- 2005-present New Mexico Tech, Socorro, New Mexico
M.S. Candidate, Hydrology
Master's Thesis: "Remote Sensing of Fire Effects on Tamarisk Water Use."
- June 2004 University of California, Santa Cruz
B.S. Earth Sciences

Experience

- 2005-present *Research Assistant*, New Mexico Tech, Socorro, NM
Conduct vegetation sampling using the FIREMON protocol, analyze Landsat and MODIS imagery and quantify instantaneous and daily Actual Evapotranspiration from Landsat imagery using the Surface Energy Balance Algorithm for Land (SEBAL) algorithm.
- 2004-2005 *Staff Geologist*, SECOR International Incorporated, Cypress, CA
Logged borehole samples, researched and wrote Quarterly Groundwater Reports and Site Assessment Reports, disposed of hazardous waste, performed Encore soil sampling, and created groundwater contour maps and geological cross sections.
- 2003-2004 *Research Assistant*, UCSC, Santa Cruz, CA
Measured consolidation and permeability properties of shallow marine sediments from offshore Costa Rica. A Senior Thesis project report was published in June of 2004.
- 2003 *Research Assistant*, UCSC, Santa Cruz, CA
Collected and filtered stream samples, measured pH, and titrated samples collected from Wilder Creek and Peasley Gulch, Santa Cruz, CA.
- 2001-2002 *Director of Computer Services*, Marks & Associates, Cypress, CA
Assisted Certified Paleontologist and Geologist Edward Marks. Managed the research databases, edited grants, and compiled research for several projects. Performed clerical and administrative assistance.

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Relevant Courses

Hydrology	Groundwater	Geophysics
Contaminant Hydrology	Evapotranspiration	Soil Mechanics
Surface Water Hydrology	Remote Sensing	Mineralogy
Vadose Zone Hydrology	Flow and Transport	Organic Chemistry

Publications

Alkov, N., Hendrickx, J.H. and Hong, S.H. (2007). "Remote Sensing of Fire Effects on Tamarisk Water Use and River Restoration." American Geophysical Union (AGU). Abstract for the American Geophysical Union Fall Meeting (abstract number 5526).

Alkov, N. and Hendrickx, J.H. (2007). "Remote Sensing of Evapotranspiration and Tamarisk Recovery After Fire Using the SEBAL Energy Balance Algorithm." [Abstract]. In: The New Mexico Water Resources Research Institute (NM WRRRI) Annual Symposium; Socorro, NM; 2007 August 14.

Hendrickx, Jan M. H.; Alkov, Nicole; Hong, Sung-ho; Van Dam, Remke L.; Kleissl, Jan; Shannon, Heather; Meason, John; Borchers, Brian; Harmon, Russell S. (2006) "New Mexico Tech landmine, UXO, IED detection sensor test facility: measurements in real field soils." *Proceedings of The International Society for Optical Engineering (SPIE)*. Volume 6217, pp. 277-289.

Presentations

Alkov, N. (2007, December). "Remote Sensing of Fire Effects on Tamarisk Water Use and River Restoration." Talk presented at the American Geophysical Union (AGU) Fall Meeting, San Francisco, CA.

Alkov, N. (2007, August). "Remote Sensing of Fire Effects on Salt Cedar Water Use." Poster presented at the annual New Mexico Water Resources Research Institute (NMWRRRI) Symposium, Socorro, NM.

Grants and Honors

2005-2007	Energetic Materials Research and Testing Center (EMRTC) Research Grant
2005-2007	Research Assistantship, New Mexico Tech
2004	Research Experiences for Undergraduates (REU) National Science Foundation (NSF) Grant

Professional Memberships

American Geophysical Union

Computer Skills

ERDAS Imagine 9.2, ArcGIS 9.1, ENVI, MODFLOW, MATLAB, Excel, Word, Access, PowerPoint, Dreamweaver 8

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References

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Dr. Andrew Fisher
Professor of Earth and Planetary Sciences
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