# ANUPMA PRAKASH

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#### **PROFESSIONAL PREPARATION**

Lucknow University	Lucknow, India	Geology, Zoology, Botany	B.Sc. 1989
Lucknow University	Lucknow, India	Geology	M.Sc. 1991
Indian Institute of Technology	Roorkee, India	Earth Sciences	Ph.D. 1996
International Inst. for Geoinformation Science and Earth Observation (ITC)	Enschede, Netherlands	Remote Sensing and Modeling of Coal Mine Fires	Postdoctoral Researcher 1996-1998

## **APPOINTMENTS**

- 2012 present Director, College of Natural Science and Mathematics (CNSM) Division of Research, University of Alaska Fairbanks (UAF)
- 2012 present Associate Dean, CNSM, UAF
- 2009 present Professor of Geophysics (Remote Sensing), GI and Department of Geosciences, UAF
- 2002 2009 Associate Professor, GI and Department of Geosciences, UAF
- 1998 2002 Assistant Professor, Department of Earth Systems Analysis, ITC, NL

## PRODUCTS

Five Most Relevant Products (Name underlined when student is the first author)

- <u>Floyd, A.,</u> Prakash, A., Meyer, F., Gens, R., and Liljedahl, A., 2014, Applicability of Synthetic Aperture Radar to Investigate River Ice Breakup on the Kuparuk River, Northern Alaska, Arctic, 67 (4), 462– 471. http://dx.doi.org/10.14430/arctic4426.
- Haselwimmer, C., Prakash, A., and Holdmann, G., 2013, Quantifying the heat flux and outflow rate of hot springs using airborne thermal imagery: case study from Pilgrim Hot Springs, Alaska, *Remote Sensing of Environment*, 136, 37-46.
- Prakash, A., Haselwimmer, C.E., Hampton, D., Kampe, T., Roberts, D.A., Mueller, A., and Bachmann, M., 2013, The University of Alaska Hyperspectral Imaging Laboratory (UA HyLab): building capacity for airborne imaging spectroscopy supporting Alaskan and Arctic science and applications, and HyspIRI preparatory activities. HyspIRI Science and Applications Workshop, October 15-17, Pasadena, CA
- Wirth, L., Rosenberger, A., Prakash, A., Gens, R., Margraf, J., and Hamazaki, T., 2012, A remote sensing/GIS-based approach to identify, monitor, and model spawning habitat for fall chum salmon in a sub-arctic, glacially-fed river, *Transactions of the American Fisheries Society*, 141 (5), 1349-1363.
- Panda, S.K., Prakash, A., Jorgenson, M.T. and Solie, D.N., 2012, Near-surface permafrost distribution mapping using logistic regression and remote sensing in Interior Alaska, GIScience and Remote Sensing, 49 (3), 346-363.

## Five Additional Products

(Complete publication list available at www.gi.alaska.edu/~prakash/personal/publications)

- Stracher G.B, Prakash, A. and Sokol E.V. (Eds.), 2010-2015, Coal and peat fires: A global perspective, 4 Volume Book Series, Elsevier. Vol 1 (2010); Vol 2 (2013); Vol 3 (2014); Vol 4 (2015).
- Trochim, E.D., Jorgenson, T., Prakash A., Kane, D.L, 2015, Geomorphic and biophysical factors affecting water tracks in northern Alaska, *Earth and Space Science* (accepted for publication).
- Starkenburg, D.,P., Fochesatto, G.J., Cristóbal, J., Prakash, A., Gens, R., Iwata, H., Nagano, H., Harazono, Y., Alfieri, J.G., and Kane, D.L., 2015, Temperature regimes and turbulent heat fluxes across a heterogeneous canopy in an Alaskan boreal forest, *Journal of Geophysical Research*:

Atmosphere, 120 (4), 1348–1360.

- Oommen, T., Baise, L.G., Gens, R., Prakash, A., and Gupta R.P., 2013, Documenting earthquake-induced liquefaction using satellite remote sensing image transformations, *Environmental and Engineering Geoscience*, 19 (4), 303–318.
- <u>Green, J.</u>, Kongoli, C., Prakash, A., Sturm, M., Duguay, C., and Li, S., 2012, Quantifying the relationships between lake fraction, snow water equivalent and snow depth, and microwave brightness temperatures in arctic tundra landscapes, *Remote Sensing of Environment*, 127, 329-340.

### SYNERGISTIC ACTIVITIES

- Principal Investigator and Co-Director for Alaska ACE: Alaska's NSF EPSCoR RII-Track1 project.
- Member, Science Working Group for NASA's planned Hyperspectral Infrared Imager (HyspIRI) satellite mission (since early 2007).
- Member, Editorial Board of the International Journal of Applied Earth Observation and Geoinformation (since 2012).
- Established two CalVal field sites in interior Alaska for collecting essential climate variable and for evapotranspiration mapping: <u>www.et.alaska.edu</u>
- Established HyLab, an NSF funded facility that supports airborne and field based hyperspectral data acquisition and analysis for study sites in Alaska: www.hyperspectral.alaska.edu

#### **COLLABORATORS & OTHER AFFILIATIONS**

Collaborators and co-editors in last 48 months (Total 18)

Hower J (UKY)
Jorgenson T (ABR AK)
Kane D (UAF-INE)
Kongoli C (NOAA)
Liljedahl A (UAF-INE)
Margraf J (USGS-C Ext)

Oommen T (MTU) Quattrochi D (NASA MSFC) Romanovsky V (UAF-GI) Rosenberger A (U Missouri) Stracher G (E.Georgia) Watson M (U of Bristol)

#### Graduate and Postdoctoral advisors (Total 2)

Genderen, J. L. van, Ph.D., (Postdoctoral Advisor for A. Prakash), Professor, Dept. Earth Observation Systems, ITC, Enschede, The Netherlands

Gupta, R.P., Ph.D., (Ph.D. advisor for A. Prakash), Professor in Remote Sensing, Dept. Earth Sciences, Indian Institute of Technology Roorkee, India.

Note: M.S. Advisor N/A

#### Thesis Advisor and Postgraduate-Scholar Sponsor (28 grads; 5 postgraduates - Total 33)

*Postgraduates:* Marcel Buchhorn (UAF, current); Robert McNabb (UAF); Jordi Cristobal (UAF); Christian Haselwimmer (Chevron); Chris Wyatt (consultant).

*Graduates:* Christine F. Waigl, Matthew Balazs, Stephanie Meggers, Jacob Rosenthal, Joshua Paul (all UAF, current); Erin Trochim (UAF); Derek Starkenburg (Univ. Michigan); Joshua Miller (BP Alaska); Arbind Chittambakkam (Shell, Houston); Jason Stolarski (Dept. of Fish & Game, Massachusetts); Angie Floyd (UAF): Kate Schaefer (National Geospatial Intelligence Agency); Santosh Panda (UAF); Sudipta Sarkar (Briese Research, Germany); Kristin Papp (BP Alaska); Jeff Green (consultant); Thomas Oommen (Michigan Tech); Antony Berthelote (Salish Kootenai College); Chunqing Wang (unknown); Tilahun Kerse (Geological Survey, Erithrea); Christopher Duku (Mining, Sudan); Simon Njuguna, Ebenezer Agyakwabadu, Santa Gilgonzalez , Mulumebet Yigletu, John Baga Arumba (all unknown); Kenya Nunez Cambra (Geological Surveys, Cuba); Mongontsetseg Baldondarj (Mining, Mongolia).