ANUPMA PRAKASH

Geophysical Institute, University of Alaska Fairbanks, Fairbanks, AK 99775-7320 Professional website: www.coalfires.net

PROFESSIONAL PREPARATION:

- 1986 to 1989 B.Sc. in Geology, Zoology and Botany from Lucknow University, India.
- 1989 to 1991 M.Sc. in Geology from Lucknow University, India.
- 1992 to 1996 PhD in Earth Sciences from Indian Institute of Technology, Roorkee, India. Thesis title: Remote Sensing GIS based geoenvironmental studies in Jharia coalfield, India, with special reference to coalmine fires.
- 1996 to 1998 Post-Doctoral Researcher at the Applied Geomorphological Survey Division, International Institute for Geoinformation Science and Earth Observation (ITC), Enschede, The Netherlands.

APPOINTMENTS:

- 2009 to --- Professor at the Geophysical Institute and the Department of Geology and Geophysics, University of Alaska Fairbanks, USA.
- 2002 to 2009 Associate professor at the Geophysical Institute and the Department of Geology and Geophysics, University of Alaska Fairbanks, USA.
- 1998 to 2002 Assistant professor at the Department of Earth Systems Analysis, ITC, Enschede, The Netherlands.

RECENT PUBLICATIONS RELATED TO THE PROPOSED PROJECT:

- Woll, C., **Prakash**, A., and Sutton, T., 2011, A case-study of in-stream juvenile salmon habitat classification using decision-based fusion of multispectral aerial images. *International Journal of Image and Data Fusion* (in advanced stage of preparation).
- South, L., Rosenberger, A., **Prakash, A.**, Margraf, J., and Hamazaki, T., 2011, 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* (in review).
- **Prakash, A.**, Schaefer, K., Witte, W.K., Collins, K., Gens R., and Goyette, M., 2011, Remote Sensing GIS Based Investigation of a Boreal Forest Coal Fire. *International Journal of Coal Geology*, 86 (1), 79-86.
- <u>Panda, S.K.</u>, **Prakash, A.**, Solie, D.N., Romanovsky, V.E. and Jorgenson, M.T., 2010, Remote sensing and field-based mapping of permafrost distribution along the Alaska Highway corridor, Interior Alaska. *Permafrost and Periglacial Processes*, 21: 271–281.
- Roon, D., Wipfli, M.S., Wurtz, T.L., and **Prakash, A.**, 2009, Ecological Effects of Introduced European Bird Cherry on Salmonid Food Webs in Anchorage Streams. *Annual Meeting of the American Fisheries Society*.
- Smikrud, K., **Prakash**, A., and Nichols, J., 2008, Decision based fusion for improved fluvial landscape classification using digital aerial photographs and forward looking infrared images. *Photogrammetric Engineering and Remote Sensing*, 74(7), 903-911
- <u>Triebenbach, S.,</u> Rosenberger, A., **Prakash, A.**, Margraf, J., and Chapin, T., 2008, GIS mapping of fish habitat in the Yukon Flats National Wildlife Refuge. *138th Annual Meeting of the American Fisheries Society*, Ottawa, Canada, August 17-21.

Version: April, 2011

- **OTHER SIGNIFICANT PUBLICATIONS:** Complete publication list available at www.gi.alaska.edu/~prakash/personal/publications
- Oommen, T., Misra, D., **Prakash, A.**, Bandopadhyay S., Naidu, S., and Kelley, J.J., 2011, Multiple regressive pattern recognition technique: An adapted approach for improved georesource estimation. *Natural Resources Research*, 20 (1), 11-24.
- Stracher G.B, **Prakash**, **A.** and Sokol E.V. (Eds.), 2010, *Coal and peat fires: A global perspective, Volume 1, Coal-combustion and geology*, Elsevier, 335 p., ISBN-13: 978-0-444-52858-2.
- Wiltse, M., **Prakash**, A., Burns, L., 2009, Image analysis of airborne geophysical data from the Salcha river Pogo area, Alaska. *Canadian Journal of Remote Sensing*, 35(S1), S56-S71.
- Quattrochi, D.A., **Prakash, A.**, Eveva, M., Wright, R., Hall, D.K., Anderson, M., Kustas, W.P., Allen, R.G., Pagano, T., and Coolbaugh, M.F., 2009, Thermal remote sensing: Theory, sensors, and applications. in *Manual of Remote Sensing 1.1: Earth Observing Platforms & Sensors*, volume ed. Mark Jackson, ASPRS, 550 p. ISBN: 1-57083-086-X.
- Smikrud, K. and **Prakash**, **A.**, 2006, Detecting and monitoring large woody debris in a part of the Unuk river, Alaska, using digital aerial photography. *GIScience and Remote Sensing*, 43 (2), 142-154.

SYNERGISTIC ACTIVITIES:

- Reviewer for several international journals (eg. IJRS; IEEE TGRS; PERS; IJCG) and for several funding agencies (eg. NASA; NSF; Volkswagen Stiftung, Germany)
- Member, Science Working Group for NASA's planned Hyperspectral Infrared Imager (HyspIRI) satellite mission (since early 2007).
- Lead several NASA/NSF outreach projects: www.gi.alaska.edu/~prakash/outreach

COLLABORATORS AND OTHER AFFILIATIONS:

Collaborators and co-editors in last 48 months (in alphabetical order): limited listing

Anderson M (USDA); Baise LG (Tufts Univ); Collett T (USGS); Hook S (NASA JPL); Hower J (UKY);

Kane D (UAF-INE) Kelley JJ (UAF-IMS); Margraf J. (USGS-Coop Ext)

Quattrochi D (NASA MSFC) Stracher G (E.Georgia) Underwood T (FWS)

Graduate and Postdoctoral advisors:

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.

<u>Thesis Advisor</u>: (22 – Year of graduation indicated in parenthesis)

Erin Trochim; Jason Stolarski, Santosh Panda, Lila Tauzer, Matthew Balazs, Angie Floyd, Kate Schaefer (current); Sudipta Sarkar, Kristin Papp (2008); Jeff Green (2007); Thomas Oommen (2006); Antony Berthelote (2005); Chunqing Wang, Tilahun Kerse (2002); Christopher Duku, Simon Njuguna, Ebenezer Agyakwabadu, Santa Gilgonzalez, Mulumebet Yigletu, John Baga Arumba (2001); Kenya Nunez Cambra, Mongontsetseg Baldondarj (2000)

Version: April, 2011