

## University of Alaska Fairbanks Research



**Larry Hinzman**, Vice Chancellor for Research

Professor Hinzman's primary research interests involve permafrost hydrology. He has conducted hydrological and meteorological field studies in Arctic Alaska for over 30 years while frequently collaborating on complementary research in the Russian and Canadian Arctic. His work has involved characterizing and quantifying hydrological processes and their inter-dependence with climate and ecosystem dynamics.

Dr. Hinzman is committed to facilitating international partnerships to advance our understanding of the arctic system. He has conducted extensive field research in Alaska and other Arctic countries since the mid-1980s. He provides free and open access to all his data, which include many meteorological and hydrological networks, including uncommon and therefore highly valuable observations of surface radiation, water and energy balances.

Dr. Hinzman's approach to maintaining high quality, completely open and comprehensive environmental data streams (both historical and near-real time) enabled establishment of numerous collaborative programs including the [Freshwater Integration Program](#), [FROSTFIRE](#), [Seward Peninsula ATLAS](#) project and the Kuparuk River hydrologic network. He also led establishment of the [IARC Data Archive](#), which serves as a repository for any arctic data set to help prevent further loss of observations and modeling results.

### Selected Achievements

- Was a member of the US Polar Research Board and now serves as an Ex-Officio member of that board.
- Was U.S. Representative to the International Permafrost Association and a member of the Universities Council on Water Resources.
- Served as co-chair of the U.S. National Science Foundation's study on the Arctic Freshwater Integration and presently serves as chief scientist for the U.S. Department of Energy's Next Generation Ecosystem Experiments (NGEE-Arctic).
- Served on the U.S. SEARCH (Study of Environmental Arctic Change) Observing Change Panel, and the Alaska Governor's Sub-cabinet Economic Activities Technical Working Group.
- Serves on the International Advisory Board for the Korea Polar Research Institute, and for the Canadian Changing Cold Regions Network (CCRN).
- Member of the Scientific Steering Group for WRCP Climate and Cryosphere (CliC) program.
- Advisory Committee Member for the Alaska Center for Energy and the Association of Polar Early Career Scientists (APECS).
- Serves as the US delegate to the International Arctic Science Committee and was recently elected to serve as vice-president of that organization.

# Geophysical Institute

## Peter Webley

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Remote Sensing Volcanology  
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My aim is to provide tools and products for hazard assessment and risk mitigation, including scenario planning for potential hazardous events and real-time applications of dispersion modeling and remote sensing data to decision makers. My research interests include ash cloud modeling, detection of ash clouds in thermal infrared data, real-time monitoring of natural hazards and remote sensing of volcanic processes.

### Current Positions:

Research Associate Professor, Vice President,  
V-ADAPT, Inc., Deputy Director, UAF C-SSHRP

### Present Research Interests:

- remote sensing
- airborne hazards
- dispersion modeling
- web based decision support

### Selected Pubs:

- <http://www.gi.alaska.edu/~pwebley/publications.php>
- <https://scholar.google.com/citations?user=pwebley>
- <https://www.linkedin.com/in/peterwebley/>

### Home Page:

<http://www.gi.alaska.edu/~pwebley>

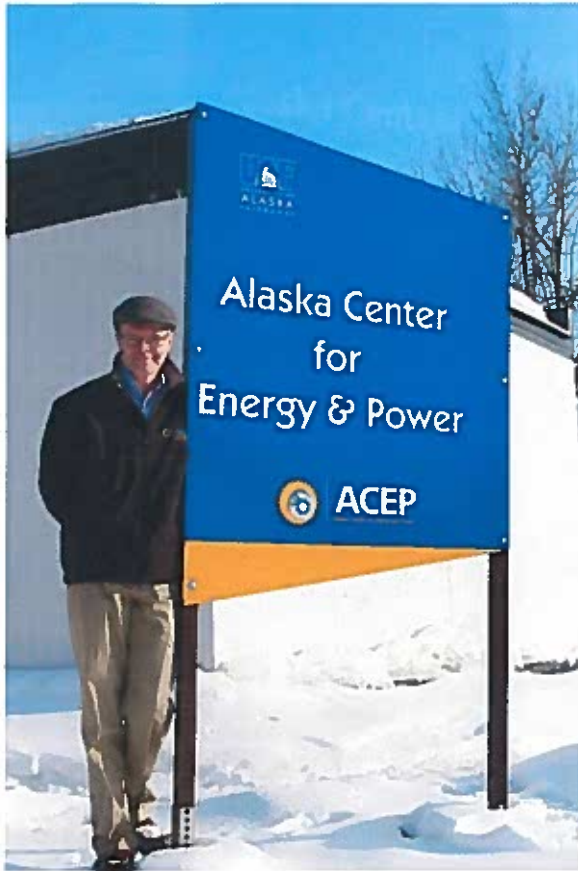
For general information, please contact the Geophysical Institute  
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## **Alaska Center for Energy and Power**

University of Alaska - Fairbanks

ACEP Researcher Spotlight: George Roe, Research Professor



George Roe is a research professor affiliated with the Alaska Center for Energy and Power, within the Institute of Northern Engineering at the University of Alaska Fairbanks. His focus areas include power generation, energy storage (thermal, electrical) and energy management, with emphasis on their relation to the integration of affordable, high reliability remote energy grids and sustainable community development / capacity building. Mr. Roe's experience base includes thirty-five years in engineering and management roles at Boeing, where he worked in research and development efforts for a range of aerospace energy subsystem technologies.

### Professional Preparation:

- MS in Mechanical Engineering at the University of Washington Seattle, WA in 1985
- BS in Mechanical Engineering at the University of Washington Seattle, Washington in 1977
- MA in Christian Leadership Fuller Seminary Seattle, Washington in 2011

Photo: George Roe stands next to the ACEP's UAF department sign adjacent to its ATCO campus at UAF in winter 2014. Courtesy MFrey, ACEP/UAF.

**Office of the Vice Chancellor for Research**

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