

DISTINGUISHED SCHOLAR SEMINAR

Alpine Hydrogeology: The Critical Role of Groundwater in Sourcing the Headwaters of the World

Masaki Hyashi, Ph.D.

[2018 Henry Darcy Distinguished Lecturer in Groundwater Sciences](#)

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Dr. Hyashi's research interests are physical processes in the hydrologic cycle, primarily connections among groundwater, surface water, and atmospheric moisture in various environments ranging from the prairies to mountains. His research combines detailed field observation and experiments with mathematical analysis. Topics of current research are alpine hydrology, permafrost, frozen soil, prairie hydrology and hot springs.

LECTURE ABSTRACT: Nearly half of the world's population relies on rivers originating in high mountains for water supply. Source areas of mountain streams were once thought to have minimum capacity to store groundwater. A new understanding of alpine hydrogeology is revealing that alpine basins have aquifers that temporarily store rain and meltwater from snow and glaciers. Gradual release of water from these aquifers sustains streamflow and is important for downstream water supply and aquatic habitats. Due to rugged terrain, alpine hydrogeologists rely on creative methods to investigate groundwater. This lecture will demonstrate how we gain insights into groundwater in challenging environments and develop a conceptual understanding of hydrological systems. These ideas and approaches apply in a variety of environments where hydrogeologists are faced with challenging conditions.

Tuesday, February 20 2:30 – 3:30 PM Reitz Union Chamber (ground floor)

For additional details, contact Carol Lippincott at the UF Water Institute (calippincott@ufl.edu).