

## 第236回 物質循環談話会 2024年10月22日(火)14:40-16:10

理学部大会議室(理学部C棟2階)

Speaker: 林 正貴 博士

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## **TOPIC**

## Alpine hydrogeology: The critical role of groundwater in sourcing the headwaters of the world

Source areas of mountain streams have rugged topography with sparse soil and vegetation covers, and were once considered 'Teflon basins' that have minimum capacity to store groundwater. Over the past two decades, a new understanding of alpine hydrogeology has been emerging based on detailed field observations around the world. Alpine basins actually have important aquifer units that provide temporary storage of rain and melt waters from snowpack and glaciers. Gradual release of water from these aquifers sustains stream flow during dry or cold periods, and is critically important for water supply and aquatic habitats in downstream regions.



## Photo:

The headwater region of the Bow River – the water-supply source for 1.5 million inhabitants of the Calgary region. Periglacial landforms such as moraine, rock glacier, and talus are important alpine aquifers storing groundwater.

Keywords: alpine streams, groundwater, periglacial environment

☆☆☆興味のある方はお気軽に御参加下さい☆☆☆ 物質循環学コース4年生,院生はセミナーの単位(必修)です。

◆ 主催:信州大学 理学部理学科 物質循環学コース

◆ 共催:信州大学 先鋭領域融合研究群 山岳科学研究拠点