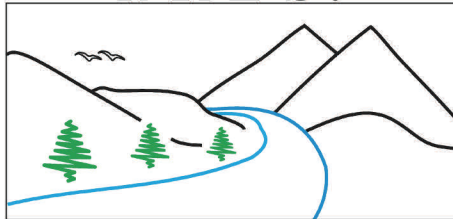


NRESi



"Our environment is our future"

For **Eluminate** information and link to the webcast: http://www.unbc.ca/nres/nresi_webcast.html

RESEARCH COLLOQUIUM SERIES

Olav Lian, PhD

Geography Program,
University of the Fraser Valley



Friday

Nov. 23, 2012

3:30 - 4:30

LECTURE THEATRE

7 - 152

OPTICAL DATING:

HISTORICAL BACKGROUND, BASIC PRINCIPLES, AND ITS APPLICATION TO RESEARCH IN GEOMORPHOLOGY, QUATERNARY GEOLOGY, AND ARCHAEOLOGY

Luminescence dating, which includes thermoluminescence (TL) and optical dating, consists of a collection of numerical-age techniques that are among the most important chronological tools currently used in Quaternary research. In this talk I will review concisely the key basic principles of luminescence dating and its historical developments, from its roots in TL dating of heated minerals to the development of optical dating methods for sunlight-exposed sediments. I will discuss the feasibility of some of the techniques commonly used in optical dating, including multiple-aliquot, single-aliquot, and single-grain procedures, and how they can be applied to solving various problems in environmental science.