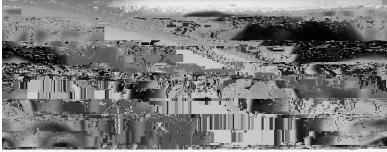


GEOGRAPHY AND PLANNING SEMINAR SERIES



DR. HUY DANG

Trent University

Wednesday, September 18, 2024

3:30 PM to 5:30 PM

Miller Hall Room 201

SUSTAINABILITY AT A TIPPING POINT: A BIOGEOCHEMICAL PERSPECTIVE ON WATER AND NATURAL RESOURCE MANAGEMENT

ABSTRACT: Tipping points are crucial thresholds in climate and socio-environmental systems. Once crossed, a system would expect significant and irreversible changes, transforming it into a fundamentally different state. A stark example is the alarming retreat of the Mekong Delta, driven by climate change and unsustainable human activities along its riverbanks and delta regions in recent decades. This trajectory threatens to submerge a landscape that has taken millennia to evolve, impacting millions of inhabitants and jeopardizing a key economic hub.

A green transition is, therefore, much needed to slow the climate crisis, for which critical minerals play a crucial role, particularly in key sectors such as renewable energy and electric vehicles. However, the skyrocketing global demand for these natural resources and the lack of environmental guidelines and regulations can be the primary challenges against sustainable development goals, given that the extraction of critical minerals, e.g. rare earth elements, is often associated with severe environmental impacts.

Through our research activities conducted in Canada, France, and Vietnam, this seminar explores the sustainabil-