

Geologist to discuss potential of large Pacific Northwest earthquake
Speaker Scott Burns

As the Juan de Fuca tectonic plate of the Pacific Ocean pushes under the North American continent in the Pacific Northwest, the potential grows for a large earthquake and tsunami off the coast of Washington, Oregon and Northern California. Geological Society of America Fellow Dr. Scott Burns will talk about how the region prepares and what it can expect after a large quake during a lecture at 4 p.m. Wednesday, April 11, at California State University, Bakersfield.

Burns' lecture will focus on the hazards of and preparedness for ground shaking, liquefaction, landslides and tsunamis along the area between the Juan de Fuca and North American plates at the Cascadia subduction zone. He will also discuss how the chance of earthquakes affects building codes, emergency preparedness, siting of critical facilities, bridge construction, and transportation corridors in the region.

“His talk is very timely as we just marked the one-year anniversary of the devastating earthquake and tsunami in Japan,” said Dr. Dirk Baron, professor of geological sciences at CSUB. “The Cascadia subduction zone is very similar to the situation in Japan and also has the potential to produce a magnitude 9.0 or greater earthquake. There is now overwhelming evidence that the last one struck in 1700, and it is only a matter of time before the next one happens. An earthquake that size could cause significant damage and loss of life in the Pacific Northwest which is not nearly as well prepared as Japan in terms of building codes and emergency preparedness.”

Dr. Burns is a professor of geology at Portland State University and the 2011-12 Richard H. Jahns Distinguished Lecturer of the Association of Environmental and Engineering Geologists. He has written or co-written two books, more than 80 articles and more than 200 published abstracts. He has researched such topics as landslides, debris flow, radon and earthquake hazard mapping, slope stability, soil development, and terroir – the relationship of geology, soil, climate and wine.