

## The Engineering Institute of Canada KY Lo Medal Citation - 2005



## Dr. Jacques Locat— nominated by the Canadian Geotechnical Society

Jacques Locat obtained his Bachelors degree in Geology from the University of Quebec and a Masters in Earth Sciences from the University of Waterloo. Following graduate studies in Rock Mechanics at the University of Albert he was granted a PhD in Geotechnical Engineering at the University of Sherbrooke. He then joined Laval University where he is now Professor of Geological Engineering.

Because Dr.Locat is established as one of the world's leading scientist in the geotechnical field he is often involved internationally as a consultant, invited scientist and/or lecturer at other institutions a/or universities. Dr. Locat has made his greatest mark in the study of soils and materials that comprise the seafloor and the margins of continents. His vision has provided major contributions to better understand submarine slope failures and their consequences, which included tsunamis. The extent therefore of such slope failures can be huge almost beyond comprehension. Tsunamis and submarine sliding endanger seabed structures on continental margins and large area of coastal lowlands, and are therefore of great societal concern. Dr. Locat's energies spent in advancing geoengineering in these coastal margin areas is a major achievement, which has brought the international community together and enhanced our understanding of the interrelated processes that cause such geo hazards.

One example is Professor Locat's involvement in the assessment of the newly found deep-water gas reservoir "Ormen Lange" in Norway. The field is located in on the largest submarine slides known to exist on continently margins. His expertise in soil mechanics, fluid dynamics and geology has helped achieve the safe development of this gas field, a major energy resource for all of Europe.

Dr. Locat has unusual abilities and understanding of the geological processes that create continently margins; in the ecology and behavior that define soils deposited in a marine environment; and the appropriate modeling of mass movement in this environment. He exemplifies this in his teaching, consulting, and in the creation and chairing of major international conference on the subject. Dr. Locat, in fact, convened the first International Symposium on Submarine Mass Movements and Their Consequences, held in France in 2003. He is now planning the second.

Canada is fortunate to have a world leader in the field of continental slope stability. With Canada's vast continental margins we can only be pleased to have Dr. Locat nearby, ladies and gentlemen, as recipient of the K.Y.Lo Medal- the EIC is proud to present,

Madam President - Dr. Jacques Locat

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