



THE CHINESE UNIVERSITY OF HONG KONG
Department of Physics
COLLOQUIUM

Photonic & Biophotonic MEMS Devices

by

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Date: November 12, 2010 (Friday)

Time: 4:00 - 5:00 p.m.

Place: L2, Science Centre, CUHK

(Light refreshments will be served 20 minutes prior to the colloquium.)

ALL INTERESTED ARE WELCOME

Abstract

Microelectromechanical systems (MEMS) represent a cutting-edge technology to scale down the conventional bulky devices/systems to the micrometer level while enabling many new functions. The MEMS technology is particularly suitable for the photonic and biophotonic devices, whose key features such as the wavelength and feature size are also on the order of micrometer. This talk will cover a series of innovative MEMS devices developed by Dr Zhang with primary focuses on: (1) **Tunable laser sources**, which are the basic building blocks of the fibre networks and bioimaging systems. (2) **Microfluidic biochips**, which aim at early-stage cancer detection by measuring the cells' refractive index. The innovative designs have rendered them superior specifications in comparison to the state of art.