



香港城市大學
City University
of Hong Kong



IEEE

Department of Electronic Engineering and IEEE LEOS (Hong Kong) Chapter Jointly Present a Seminar on

**Long-wavelength VCSELs and VCSEL Arrays for
High-Speed, High-Power and High Sensitivity**

by

**Dr Werner Hofmann
Walter Schottky Institute,
Germany**

Recent developments on long-wavelength InGaAlAs-InP vertical-cavity surface-emitting lasers (VCSELs) enable various application fields. Designed for applications in gas sensing and for optical interconnects these lasers open novel application concepts. Fabricated monolithically in one or two-dimensional array configuration, these lasers enable scalable bandwidth or high continuous wave (CW) output powers. Covering the wavelength-range from 1.3 to 2.3 μm , application-fields in fiber-telecommunications or tunable diode laser spectroscopy (TDLS) are open. Results obtained include operation at 2.3 μm wavelength with an InP-based interband laser, bandwidth in excess of 11 GHz at 1.55 μm , and 3 W CW output-powers with a VCSEL array. In this talk, the properties and applications of these VCSELs will be reviewed.

Werner Hofmann received the Diploma in electrical engineering from the Technical University of Munich, Germany in 2003. He is currently working towards the Dr.-Ing. Degree on long-wavelength VCSELs at the Walter Schottky Institute, Germany. He was engaged in development of VCSEL manufacturing, VCSEL design and VCSEL applications. He authored and co-authored several journal and conference papers on long-wavelength VCSELs, high-speed VCSELs, VCSEL arrays and their applications.

Date : 25 November 2008 (Tuesday)
Time : 11.00 a.m.. - 12.00 noon
Venue : G6302 (Green Zone)

**** ALL ARE WELCOME ****

For further information please contact Prof. Edwin Y.B. Pun at 2788-8609