



Department of Geography  
The University of Hong Kong  
Pokfulam Road Hong Kong

香港大學地理系  
香港薄扶林道

Head's Office (852) 2859-2835  
General Office (852) 2859-2836  
Executive Officer (852) 2859-7030

Fax (852) 2559-8994



Dr. M.R. Peart BA(Manc); PhD, CertEd(Exon)  
Head of Department

A Seminar\* by

**Dr P. C. Lai**

*Senior Lecturer/Associate Professor*

*Department of Geography, The University of Hong Kong*

on

## **Geographic Information Systems and Transportation**

*Time: 7:00-8:00 p.m., Friday, 13<sup>th</sup> March, 2009*

*Venue: Room 222, Hui Oi Chow Science Building, HKU*

### **About the Speaker**

Dr. P.C. Lai is Senior Lecturer/Associate Professor at the Department of Geography of the University of Hong Kong. She was Associate Dean of the Faculty of Arts in 1998-2003. She is also the Honorary Deputy Director of the Geographical/Land Information System Research Centre of the University. Dr. Lai was affiliated with the Department of Geodetic Science and Surveying of the Ohio State University, USA in 1989-1992 and the Department of Geography of the University of Maryland in College Park, USA in 1983-1989. She specializes in digital cartography and geographic information systems (GIS) and has served as a technical consultant to various public and government agencies in Hong Kong (Education and Manpower Bureau, Centre for Health Protection) and the United States (Maryland Department of Natural Resources, the US Fish and Wildlife Services, the US National Oceanic and Atmospheric Administration), as well as international establishments (Nature Conservancy, Carnegie Endowment for International Peace, World Health Organization). Her current research interests include the use of GIS in public and environmental health, internet applications, transportation, and school geography.

### **Seminar Abstract**

Studies in Geographic Information Systems and Transportation (GIS-T) can be grouped into three categories: GIS-T data representations, GIS-T analysis and modeling, and GIS-T applications. The talk will introduce the most common data representation in the arc-node topological structure, the location referencing system, and the dynamic segmentation process. It will also cover various transport analytical methods and models, including shortest path and routing, spatial interaction models, facility location problems, and land use transportation interaction models. Finally, examples of GIS-T applications in Hong Kong and other countries will be presented.

---

\*The MATPP seminars will also be opened to members of the Chartered Institute of Logistics and Transport in Hong Kong (CILTHK) as continual professional development (CPD) activities. For CILTHK members, please contact the CILTHK Office (2866-6336) for enquiries and registration. For other interested parties, please contact Ms. Carey Lau (Tel: 2241-5722; Email: lauyya@hkucc.hku.hk) for registration.