



Department of Automatic Control & Systems Engineering  
would like to announce the following seminar:

## **Modelling and Optimization in E-Procurement for Large Enterprise Groups**

***Speaker: Prof. D Wang***  
**Northeastern University, China**

**Wednesday 22nd November 2006  
at 14:10**

**Location: St Georges Mappin Building LT2**

Coffee and Biscuits will be served afterwards.

***Abstract:*** The centralized procurement is an efficient way to save purchasing costs for large enterprise groups. With the fast development of e-commerce, purchasing on internet has become a routine practice for large enterprise groups. This talk is going to discuss several problems associated with modelling and optimization in e-procurement. These include: the web search robot for goods source/suppliers, the keyword spices model and algorithm, the bargaining track chart, and bargaining strategy optimization. The talk will focus on last two problems, and discuss how to use the bargaining track chart to support the negotiation agent of buyers to bargain with sellers. The bargaining track chart is a tool to make bargaining process visible. It maps any bargaining process into a curve from the point (0,1) to the halving line of the first quadrant in Cartesian coordinates. Thus, the seller's information of historical negotiations can be storied in database in the form of a bargaining track. The final deal price can be forecasted and evaluated as the bargaining process is going on. To help buyers in a purchasing negotiation to take right actions in any situation, a Markov process based bargaining strategy optimization model is presented.