

# IPCOB

International Program on Consensus Building  
合意形成学国際プログラム

Seminar on

Cooperative Water Resources Allocation  
協力的水資源分配

日時: 2008年10月30日(木) 15:00から16:30まで  
会場: 東京工業大学 大岡山キャンパス 西9号館6階607室  
参加費: 無料  
使用言語: 英語

講演者: Dr. Liping Fang

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概要:

The Cooperative Water Allocation Model (CWAM) is presented for modeling equitable and efficient water allocation among competing users in a river basin. CWAM is a large-scale optimization program which is based on concepts from cooperative game theory, economics, and hydrology and is comprised of two main steps: initial water rights allocation and subsequent water and net benefits reallocation. In the first step, initial allocation of water rights to water stakeholders and users is based on existing legal water rights systems or agreements. Within the second step, the net benefits are fairly reallocated to achieve optimal utilization of the water resources using cooperative game theoretic approaches. A large-scale water allocation problem in the South Saskatchewan River Basin located in southern Alberta, Canada, is used as a case study to demonstrate how CWAM can be utilized as a tool for promoting the understanding and cooperation of water users to achieve maximum welfare in a river basin. The presentation is based on joint work with Lizhong Wang and Keith W. Hipel.

講演者略歴:

Dr. Liping Fang is Professor and Chair of Mechanical and Industrial Engineering at Ryerson University, Toronto, Canada. Currently, he is a Visiting Professor in the Research Center for Disaster Reduction Systems, Disaster Prevention Research Institute, Kyoto University, Japan. He has carried out extensive research in industrial engineering, systems engineering, and environmental management for which he received the 2008 Ryerson-Sarwan Sahota Distinguished Scholar Award from Ryerson University and Ryerson's Faculty of Engineering, Architecture and Science Research Excellence Award 2006. He has served as an Associate Editor for various international journals and is a Fellow of the Canadian Society for Mechanical Engineering (CSME:<http://www.csme-scgm.ca/>). He is the Conference Chair for the Canadian Operational Research Society/Institute for Operations Research and the Management Sciences Joint International Meeting, Toronto, Canada, June 14 to 17, 2009 (<http://meetings.informs.org/Toronto09/>). He received the MASc and PhD degrees from the University of Waterloo (<http://www.uwaterloo.ca/>).

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