

Invited Presentation

by Dr. Xiaoyan Ji from Luleå University of Technology, Luleå, Sweden

Time: 9:30-11:00am, Tuesday, Dec. 21, 2010

Place: Meeting Room 308 in Process Building

Title

Part 1. The introduction of Swedish research and education -- case of division of energy engineering, LTU

Part 2. The introduction of SAFT and its application in aqueous electrolyte solutions and ionic liquids.

Abstract

Sweden is famous for welfare, but what about the research and education there and what about the life in Sweden as an exchange student or employee at a University? An introductory presentation of the research and education at the Luleå University of Technology, the northernmost university of technology in Scandinavia, will be given, and the research from funding to project in the division of energy engineering will be introduced, and questions regarding studying and working at LTU will also be covered.

In research, CO₂ capture and storage is a hot issue recently, and the corresponding fundamental theoretical research is going on at the division of energy engineering. Based on statistical associating fluid theory (SAFT) equation of state (EOS), phase equilibrium and thermodynamic properties for aqueous electrolyte solutions and ionic liquids will be presented briefly, and future research interests will be discussed.

Brief Introduction

Dr. Xiaoyan Ji got her Ph.D. degree from Nanjing University of Chemical Technology in Dec. 1999. From 2000 to 2008, she worked in different institutions distributed in China, Sweden, Germany and USA. Now she is an assistant professor in Division of Energy Engineering, Luleå University of Technology, Luleå, Sweden from May, 2009. Her research refers to CO₂ separation with ionic liquids, Process integration for pulp & paper mill, Enhanced oil recovery by CO₂ flooding, Water-free organic solvent production, Advanced power cycle, and Phase equilibria and process simulation for aqueous solutions with chemical reactions. She has published 43 journal papers and 20 conference papers till now.