



Commonwealth Scientific and Industrial Research Organization (CSIRO)



Speaker: Lu Liming

Topic: CSIRO Iron Ore Research and Development

Date & Time: 2:30–4:30(pm), Mar 25, 2013 (Monday)

Venue: Meeting Room 304, IPE Building

Introduction

Dr Liming Lu is currently a Principal Research Scientist and Research Group Leader with CSIRO Process Science and Engineering. He leads a multidisciplinary group of researchers from the fields of geology, chemistry, materials science, chemical and metallurgical engineering, and mathematics. His research focuses on:

- *Characterization, processing, and evaluation of minerals, coals and iron bearing wastes*
- *Structure and reactivities of coals, coke and other industrial carbonaceous materials*
- *Behaviour and inhibiting technologies of gaseous, particulate and organic compound emissions during iron ore sintering and coke making*
- *Processing, solidification and properties of aluminium and magnesium alloys*
- *Development of ISO Standards for physical testing of iron ore, sinter and coke*

Abstract

CSIRO's iron ore research and development (R&D) capabilities range from exploration, mineral characterisation, and beneficiation to agglomeration and process modelling, with a particular focus on developing methods for removing impurities from the lower grade ores and counteracting their adverse effects on downstream processing. CSIRO is working actively with the worldwide iron ore industry to investigate ways to optimise the development of the massive sub-economic deposits of lower-grade ores and maximise their value and attractiveness in an aggressive international market place. This presentation provides an overview of the challenges facing worldwide iron ore industry and CSIRO's R&D activities in processing these lower-grade iron ores to ensure the future sustainable development of Australia's iron ore industry.