

九州大学グローバル COE 「新炭素資源学」 講演会
Kyushu University Global COE: Novel Carbon Resource Sciences
A Seminar on Chemical Engineering

講演題目: **Particle Technology and Its Application** (粉体技術とその応用)

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主催: 九州大学九州大学グローバル COE 「新炭素資源学」

日時: 2012 年 6 月 27 日 13:00 – 15:00 (講演: 13:00~14:00, 討論: 14:00~15:00)
(June 27, 2012, 13:00 – 15:00)

場所: 筑紫キャンパス先導物質化学研究所 111 号室
(Room 111, Inst. Materials Chem. Eng., Chikushi Campus)

講演概要

工業生産において、多くの中間製品および最終製品は粉体である。しかしながら、多くの粉体操作技術は経験に基づいて行われているのが現状であり、これは、粉体挙動の物理に関する本質的な理解が不十分であるためである。本講演では、回転ドラムにおける物性の異なる複数種の固体粒子の偏析、粉体流れ場における多相の挙動と相間相互作用、等の演者の最近の研究成果を述べる。加えて、流動層技術のエネルギー・環境分野や光学素子・デバイス分野(ウェブコーティング等)への応用に関しても述べる。

Abstract

Many final products and intermediate products in industry are in particulate forms. Nevertheless, most industrial solids processing operations are based on the previous experience of the operators. The underlying physics of many industrial operations still lack fundamental understanding. In this presentation, I will show our latest work in understanding the solids segregation mechanisms in a rotating drum and the interacting behaviour of the multiple phases in granular flows. Our work in the operations of the fluidised beds for energy and environmental applications and in the web coated optic/cell devices will also be introduced.

Biography of Dr. Hsiu-Po Kuo

Dr. Hsiu-Po Kuo graduated from Department of Chemical Engineering at National Taiwan University in 1995. After the military service (1995-1997), He began his study at The University of Birmingham, UK in 1998 and received his Ph.D. degree in Chemical Engineering in 2001. He joined Department of Chemical and Materials Engineering at Chang Gung University (CGU) in 2002 as Assistant Professor and is promoted as Associate Professor in 2007. He was the Director of Centre for Innovation and Incubation in CGU from 2005 to 2010. He is the best-contributed editor in 2010 and 2011 for Advanced Powder Technology Journal. His research interests include the fundamentals and modelling of particle segregation, the environmental and energy applications of fluidised beds and coating on flexible substrates.

問い合わせ先(contact person)

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