



LMP SEMINAR SERIES IN MANUFACTURING



Dr. Julian Allwood

Dept. of Engineering, U. of Cambridge

Julian Allwood is a Senior Lecturer in the Institute for Manufacturing at University of Cambridge and is a Fellow and Director of Studies in Engineering at Gonville and Caius College. He is a member of the Production Processes Group of the Institute for Manufacturing, and coordinator of the Institute's Sustainable Manufacturing Group. From 1996-2000 he was a lecturer in the department of Mechanical Engineering at Imperial College having completed his PhD in the Control Group at Imperial College and had a number of post-doctoral positions in the Centre for Process Systems Engineering. For 10 years much of his work was with Alcoa in Pittsburgh, developing models of the metal rolling process for control applications. His research group now works on innovative metal forming processes and sustainable manufacturing processes. He is a member of CIRP (the International Academy for Production Engineering) and ISIE (the International Society for Industrial Ecology.)



What would make a big difference?

The need for a significant reduction in greenhouse gas emissions to combat climate change is now widely agreed, but the means to achieve it is highly uncertain. One politically popular approach is the dream of a carbon free energy supply, but providing this either by renewables, nuclear power, or carbon capture and storage requires an unprecedented scale of investment and construction. In parallel, step change reductions in energy demand must be made, but it is currently difficult to identify where sufficiently big differences can be made. This talk will present a top-down analysis of global energy use broken down by engineering devices and systems. In particular, the talk will show that emissions from industry are dominated by production of five key materials (cement, steel, plastic, paper and aluminum) and will discuss the options for cutting these emissions in the face of likely demand growth.

Refreshments to follow the seminar

Date: Monday, February 09th

Time: 2:30 – 4:00 pm

Room: 32-155 (Stata Center)



Please note atypical
date, time & location