

# UK-Japan Workshop on Industrial Sustainability

Prof Mike Gregory

***22<sup>nd</sup> July 2011***

***The Institute of Materials, Minerals & Mining  
One Carlton House Terrace***

# Outline

- Background to the visit
- Aims
- Outline of study tour
- Today's agenda
- What next?

# Origins of the Study Visit

- Symposium 2-3 June 2010

- Green manufacturing
- Eco-innovation



The Royal Academy  
of Engineering

- Selected topics

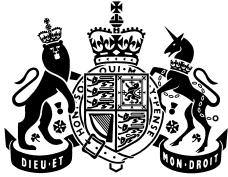
- Sustainability challenge
- Skills & systems thinking
- Society & assessment
- Japanese excellence in efficiency



# Suggested Actions



- Highlight case studies in best practice
- Academics to act as champions and advisors
- Involve young people in the response to the sustainability challenge
- **Identify opportunities for mutual learning & collaboration**



# UK-Japan Industrial Sustainability Study Visit & Workshop

*Accelerating the contribution of  
education and research*

**Prof Mike Gregory**

**Dr Jaqi Lee**

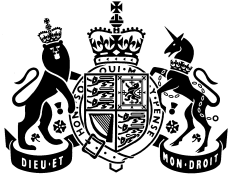
**Prof Steve Evans**

**Dr Derek Gillespie**

**Prof Shahin Rahimifard**

**Dr Tim Short**

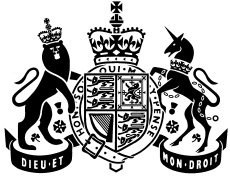
**Dr Dai Morgan**



# Industrial Sustainability



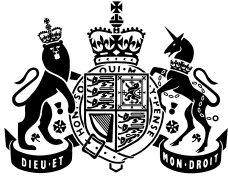
- Rapidly growing awareness of importance
- Complements focus on environment & energy
- Reflects a 'systems' view of industry
- Japan identified as home of much good practice
- EPSRC willing to support study visit



# Aims



- Share experience and expertise in the field of education and research toward industrial sustainability.
- Identify current education and research best practices and industrial needs.
- Identify opportunities for collaborative projects between UK and Japan.

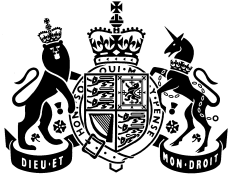


# The Team!



- **Prof Steve Evans – Cranfield**
  - Design, Production, Life Cycle Engineering
- **Dr Derek Gillespie – EPSRC**
  - Research structures and programme design
- **Prof Sir Mike Gregory – Cambridge**
  - Manufacturing Systems
- **Dr Jaqi Lee – Surrey**
  - Environmental strategy
- **Dr Dai Morgan – Cambridge**
  - Sustainable production
- **Prof Shahin Rahimifard – Loughborough**
  - Sustainable Manufacturing Systems
- **Dr Tim Short – Liverpool**
  - Engineering Design





# Approach

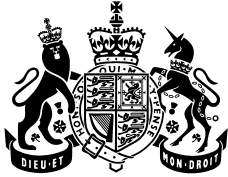


Workshop to:

- meet leading Japanese academics
- share expertise and interests
- Identify areas for collaboration

Visits to:

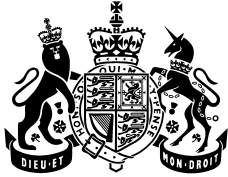
- understand research context
- observe key institutions



# Workshop



- Presentations
  - Breakout groups
  - Collection & discussion
  - Final Report
- Engineering Academy of Japan
  - Hosei University
  - Osaka University
  - The University of Tokyo
  - Kobe University
  - Keio University
  - National Institute of Advanced Industrial Science and Technology (AIST)
  - Institute for Global Environmental Strategies
  - Shinshu University



# Visits



- Japan Science and Technology Agency (JST)
- Waseda University
- Institute for Global Environmental Strategies (IGES)
- Keio University, Graduate School of System Design and Management
- Institute of Industrial Science (IIS), University of Tokyo,

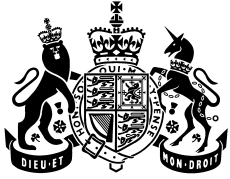
## UK-Japan Workshop on Industrial Sustainability

**EPSRC**

Pioneering research  
and skills

### Agenda

<b>Time</b>	<b>Activity</b>	
0915	Registration Opens	
0945	Introduction to Workshop	Prof Sir Mike Gregory
0955	Industrial Sustainability and Japan	Prof Steve Evans
1015	Panel Q&A, Workshop Briefing	UK Study Team
1030	Break & Poster Session	
1045	Workshop Breakout Groups	UK Study Team
1145	Feedback from Workshop Groups	Group Leaders
1200	Introduction to EPSRC Centre for Innovative Manufacturing in Industrial Sustainability	Prof Steve Evans
1220	Next Steps & Actions	Prof Sir Mike Gregory
1230	Lunch	
1300	Close	



# Next steps



- [www.ifm.eng.cam.ac.uk/sis/Japan](http://www.ifm.eng.cam.ac.uk/sis/Japan)
  - Today's presentations
  - Pdf of report
  - Links to groups and institutions
- Workshop report
  - Circulated for comment
  - Shared with Japanese colleagues
- Development of specific collaborations