



The Royal Academy
of Engineering



The Engineering Academy of Japan/Royal Academy of Engineering
Symposium on Green manufacturing and Eco-innovation

グリーンマニュファクチャリングとエコイノベーション

3 Carlton House Terrace
London
SW1Y 5DG

2-3 June 2010

If you would like to attend please RSVP to:

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The Engineering Academy of Japan/Royal Academy of Engineering Symposium on Green manufacturing and Eco-innovation

Programme Day 1

Session 1: Welcome and introductory session

- 9.30am Welcome
Sir William Wakeham FREng, Honorary International Secretary, RAEng
Dr Masatoshi Okada, Chair of the Committee on International Affairs, EAJ
- 9.40am Introductory remarks
Economic Minister Hiroshi Oka, Japanese Embassy
- 9.50am Keynote Speech: UK sustainable development policy and the move to a low carbon economy
Dr Brian Collins FREng, Chief Scientific Advisor, Department for Business, Innovation and Skills
- 10.30am Keynote Speech: Roadmap toward low carbon Japan: feasibility, cost and burden sharing
Dr Shuzo Nishioka, Senior Visiting Researcher, National Institute for Environmental Studies
- 11.10am Break

Session 2: Business model and process innovation

- 11.30am Internalising sustainability through innovation
Prof Steve Evans, Cranfield University
- 12.00pm Accelerating deployment of responses to climate change
Dr David Clarke, Energy Technologies Institute
- 12.30pm Towards sustainable industrial systems
Prof Mike Gregory CBE, University of Cambridge
- 1.00pm Lunch

Session 3: Product design

- 2.00pm Urban mining to recycle critical metals in electric products
Dr Kohmei Halada, National Institute for Materials Science
- 2.30pm Water-less washing and other disruptive eco-innovations
Prof Richard Williams OBE FREng, University of Leeds
- 3.00pm Break
- 3.30pm A method to analyze real eco-efficiency of products:
A new design support tool that suggests efficient 3R strategies
Dr Nozomu Mishima, National Institute of Advanced Industrial Science and Technology
- 4.00pm Creating industrial solutions – the environmental challenge
Paul Stein FREng, Rolls-Royce Plc
- 4.30pm Summing up for Day 1
- 5.00pm Close of Day 1
- 5.30pm Evening reception

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Programme Day 2

Session 4: Power supply innovation and energy efficiency

- 9.30am** Welcome
Sir William Wakeham FREng, RAEng
Dr Masatoshi Okada, EAJ
- 9.40am** Energy efficiency of Japanese process industries
Mr Yutaka Wakasa, Yokogawa Electric Corporation
- 10.10am** ICT Research for Smart grid
Prof Joe McGeehan CBE FREng, Toshiba Research Europe Ltd
- 10.40am** A large integration of renewable energy sources into smart grids
Prof Akihiko Yokoyama, The University of Tokyo
- 11.10am** Break
- 11.30am** Electrolyser technology and green hydrogen solutions
Prof Marcus Newborough, ITM Power Plc
- 12.00pm** Non-Pt fuel cell technology with carbon alloy catalysts towards low carbon society
Prof Masaharu Oshima, The University of Tokyo
- 12.30pm** The future of PV power generation and low energy lighting in the UK
Dr Jon Heffernan, Sharp Laboratories of Europe Ltd
- 1.00pm** Lunch
- Session 5: New design concepts**
- 2.00pm** Practically applicable micro systems
Prof Masayoshi Esashi, Tohoku University
- 2.30pm** Channeling the forces of nature for the creation of innovative life style
Prof Emile H. Ishida, Tohoku University
- 3.00pm** Mechanical behavior of seashell and biologically inspired composite design
Dr Hideki Kakisawa, National Institute for Materials Science
- 3.30pm** Break
- Session 6: Panel discussion and summing up**
- 4.00pm** Panel discussion: Developing and promoting engineering leadership in eco-innovation
- 4.45pm** Summing up for day 2
- 5.15pm** Close of Day 2