



**Gloucester Area**  
Western Region Present

# **NATURE INSPIRED ENGINEERING:**

## **AN INNOVATIVE APPROACH TO MATERIAL AND PROCESS DESIGN**

Institution of  
**MECHANICAL  
ENGINEERS**

**Speaker: Dr Victor Francia, Department  
of Chemical Engineering, University  
College London**

For further details and to book a seat, see  
IMechE Near-You:

<http://nearyou.imeche.org/near-you/UK/Western/Gloucester-Area>

The Centre for Nature Inspired Engineering, *CNIE*, at University College London draws lessons from nature to create new materials and technology targeting major challenges in water, energy, healthcare and living space.

One area of research is dynamic self-organisation which takes its inspiration from self-assembly mechanisms in nature e.g. pattern formation, snow, to engineer new responsive materials and complex flows.

Our speaker researches the creation of structured granular flows for the intensification of industrial processes in the consumer goods, chemical and energy sectors. In contrast to conventional fluidization, the flow structure is fully scalable and provides an unprecedented level of control, thus defining a new methodology “*dynamically structured fluidised beds*” where the flow structure can be externally controlled.

**Wednesday 17th October  
6:30pm for 7:00pm start**

EDF Energy, Barnett Way, Barnwood  
Gloucester, GL4 3RS  
United Kingdom

For more information contact:  
Stephen Stapleton- Tel 07734595723

**Improving the world through engineering**