



# The University of Southampton's Mountbatten Building and Sustainable Clean Rooms

## 18 June 2010

The University of Southampton's striking new Mountbatten Building, which has risen from the ashes of the fire that destroyed its predecessor in 2005, has won a Royal Institute of British Architects (RIBA) Award. The judges felt that it embodies "21st century scientific research in a sustainable, academic setting" and noted that its design should consume 65% less energy than a comparable scheme of its type. The building houses the University's School of Electronics and Computer Science (ECS) and its Optoelectronics Research Centre (ORC) and contains 820m<sup>2</sup> of state-of-the-art clean rooms for work on nanotechnology, bionanotechnology and photonics.

The morning of this free event focuses on the building and its facilities, with presentations from architects, M&E contractors and internal users. The afternoon broadens to consider general issues of sustainable clean room design with presentations by:

- Amorette Getty, an expert on sustainable clean rooms, presenting on environmental improvement in clean rooms and laboratories resulting from the LabRats programme at the University of California, Santa Barbara.
- Experts in clean room and lab energy efficiency in the health and pharmaceutical sectors addressing topics such as permanent air-change rate reductions, temporary set-back and switching off UDAF (uni-directional airflow) units in "out-of-hours" periods, more use of variable speed drives on fans, widening temperature & humidity control ranges, reducing pressure drops by installing increased capacity filters for the first and second stages of supply air filtration, and use of catalyst technology for gaseous decontamination of clean rooms and associated material transfer devices, thereby enabling air recirculation and energy savings.

The event is organised by the **S-Lab** (Safe, Successful, Sustainable Laboratories) initiative of the Higher Education Environmental Performance Improvement project, in collaboration with the **Pharmaceutical and Health Care Sciences Society** and the US **Labs21** initiative. Although targeted at universities, the issues being discussed are similar in all clean rooms and laboratories and so external attendees are welcome. Facilities staff, clean room and lab managers, architects, M&E engineers, and project managers should find the event especially valuable.

### ***Associated links and sources for further exploration:***

Building details and location: <http://www.ecs.soton.ac.uk/about/mountbatten.php>

HEEPI/S-Lab [www.goodcampus.org](http://www.goodcampus.org) /Labs21 [www.labs21.org.uk](http://www.labs21.org.uk) /LabRATS

<http://sustainability.ucsb.edu/LARS> /PHSS [www.phss.co.uk](http://www.phss.co.uk)

# The University of Southampton's Mountbatten Building and Sustainable Clean Rooms

Mountbatten Building, University of Southampton 18/6/2010  
Draft Programme

10.10 – 10.30	Registration & Coffee
10.30 – 10.50	Welcome and Overview of University and Mountbatten Vision, and Key Energy and Sustainability Issues in Physical Science Laboratories <i>Speaker tbc, University of Southampton</i> <i>Professor Peter James, Director, S-Lab</i>
10.50 – 11.30	The Mountbatten Building – Architect's Perspective <i>Tony Ling, Director, and/or Julian Dickens, Associate, Jestico + Whiles</i>
11.30 – 12.10	The Mountbatten Building – M&E Perspective <i>George Pollock, Design Operations Manager, CH2M Hill</i>
12.15 – 12.45	The Mountbatten Building – User Perspective <i>Dr Iain Anteney, Clean Room Manager, Southampton Nanofabrication Centre</i>
12.45 – 13.45	Lunch, and Facility Tour
13.45 – 14.25	Improving Clean Room and Laboratory Sustainability in the University of California <i>Amorette Getty, LabRats Co-ordinator, Institute of Energy Efficiency, University of California, Santa Barbara</i>
14.25 – 15.05	Presentation tbc
15.10 – 15.50	Greening Clean Rooms – Issues and Solutions <i>Nigel Lenegan, Director, Energy &amp; Carbon Reduction Solutions, and Chair, Global Sustainability Group, International Society of Pharmaceutical Engineers (which is preparing best practice guidance/case studies on energy efficient clean rooms and labs)</i>
16.00	End of event

Please book at [www.goodcampus.org](http://www.goodcampus.org) Events section. The workshop is free but cancellations after 11<sup>th</sup> June, and no shows that are not due to illness, may be depriving others of a place and so will be charged £100.