

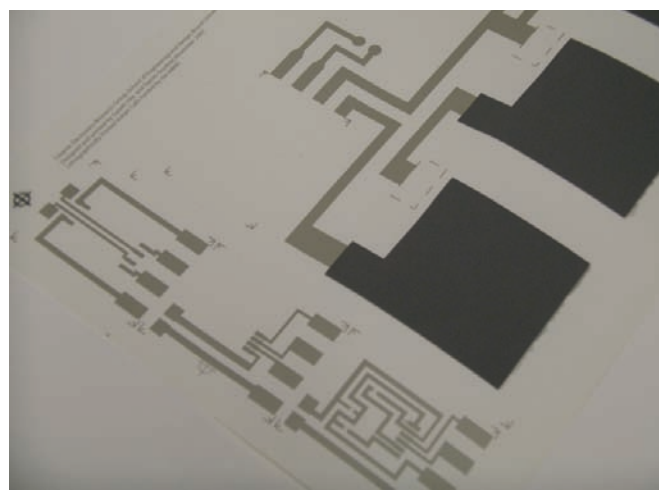
DESIGN AND MANUFACTURING Cleaner Electronics Research Group

Current Activities

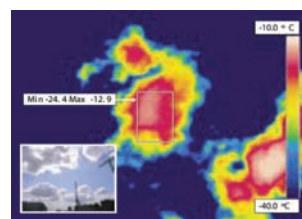
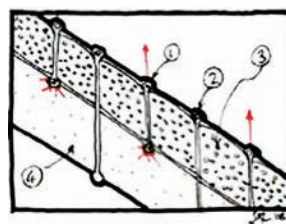
The work of this group focuses on design and the environment. Projects include research into a framework to support design for sustainable behaviour, an investigation into the role of design standards in sustainable design, and the design of modular daylighting systems for buildings. Collaborative work with industry includes the development of design methods for sustainable design and inclusive design in construction. One significant focus for the group is the development of less environmentally damaging approaches for the fabrication of electronics, including printed electronics. Current projects in printed electronics include the use of soft lithography for the fabrication of electronics, and work on printed sensors and displays. New projects are being launched on the use of ink jet printing to control the tribological properties of surfaces.

Group members:

Professor David Harrison, Dr Peter Evans,
Dr Yanmeng Xu, Dr Brian Griffiths



Printed Battery

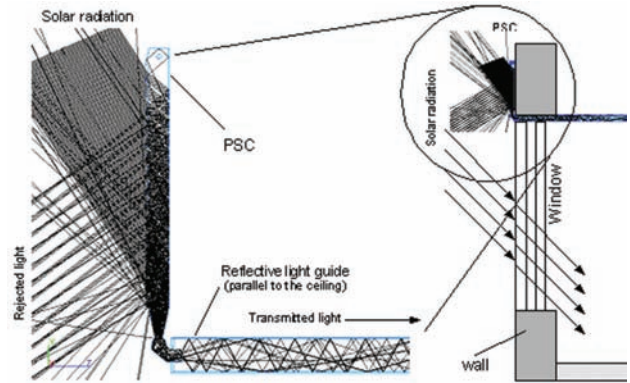


Development of heat-selective insulation for radiative cooling of buildings (collaboration with Buro Happold)

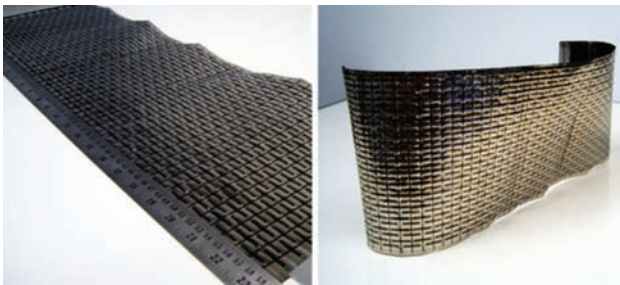
Facilities

The group has access to rapid prototyping machines, materials labs and specialist inkjet, litho and thick film printing equipment.

The research work is supported by grants from the EPSRC, and other government funding bodies such as the Technology Programme, the EU, and industry.



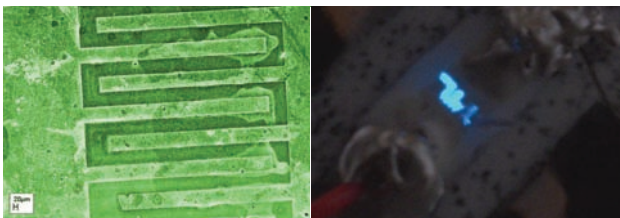
Modular daylighting system using prismatic solar concentrators based on total internal reflection



Thin-film based low-cost thermoelectric sheeting by Duby and Ramsey



Development and testing of a design framework for influencing more sustainable user behaviour



Low-voltage electroluminescent displays printed using soft lithography

