



HECToR's bigger brother, the Cray 'Kraken' supercomputer at Oak Ridge National Laboratories, United States. © Oak Ridge National Laboratory

TURN THE UK'S LARGEST COMPUTER INTO A WORK OF ART!

To mark the unveiling of the third phase of HECToR – the UK's largest, fastest and most powerful supercomputer – in summer 2011, the Research Councils are launching a competition to produce a design for the front of the computer. The winning entry will be turned, by professional designers, into a room-sized picture spanning the front panels of the HECToR supercomputer.

PRIZES

The winner(s) will receive a contribution towards travel costs to attend the launch ceremony in Edinburgh in 2012 when the artwork will be unveiled. They will also receive a wall plaque for their school/science club/STEM club to mark their contribution to the understanding of science in the UK.

Second prize will be £50 of Amazon vouchers, third prize will be £30 of Amazon vouchers.

The prizes will be awarded to the designs that best demonstrate:

- an understanding of the breadth of science undertaken on HECToR
- that science can be inspiring and benefit society as a whole
- originality and creativity

The winning designs will be chosen by a panel of judges from the Research Councils and the University of Edinburgh.

COMPETITION RULES

- Entries can be hand drawn or designed on a computer and can be submitted on paper or as a high quality image on CD-ROM (TBC).
- Entrants must be between 11 and 16 years old on the 8th July 2011
- The closing date for entries is 5pm on **Friday 8 July.**
- Entries must be submitted with the entry form.
- For further details, including full terms and conditions, design specifications and to get a copy of the entry form, please e-mail: hectorcompetition@epsrc.ac.uk

HECToR facts

HECToR is the UK's largest, fastest and most powerful supercomputer. Here are some key facts to better understand just how powerful it is:

- HECToR is capable of over 827 million million calculations a second – that's over 68,000 calculations a second for every man, woman and child on Earth!
- HECToR occupies an area the size of two tennis courts
- HECToR has a memory of 80 Terabytes – equivalent to 49,000 iPod Nanos!
- HECToR also has one Petabyte of disk space for storing data – if your iPod had that much space it could hold 200 million tracks – if you started listening to them all now you would still be listening in 3152!



HECToR's role in science

HECToR allows researchers to tackle some of today's biggest scientific and engineering challenges. This might be forecasting climate change, designing new life-saving drugs, constructing safer aircrafts, predicting natural disasters or understanding how complex biological systems work and develop.

HECToR is owned by the Engineering and Physical Sciences Research Council (EPSRC), Biotechnology and Biological Sciences Research Council (BBSRC) and Natural Environmental Research Council (NERC), and is located within the University of Edinburgh.

To find out more about HECToR, and some of the exciting science undertaken on it, please visit www.hector.ac.uk/casestudies/

