Torr Scientific Ltd.
Specialists in UHV, Optical and X-ray Components

NEWS

www.torrscientific.co.uk
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See Torr Scientific at:

Southern Manufacturing & Electronics 2014
Our stand: L50
12-13 February 2014
Farnborough, UK

SPEM2014
International Workshop on Scanning Photo-Electron Microscopy
20-21 March 2014
Oxfordshire, UK

Exhibition of Scientific Instruments and Literature
25–27 March 2014
Mainz, Germany

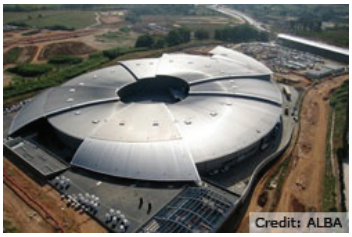
Advanced Materials for Demanding Applications
7-10 April 2014
St Asaph, UK

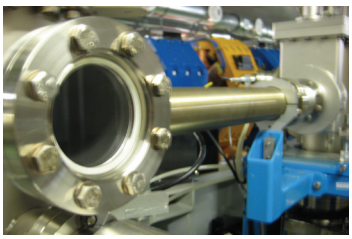
TSL Products:

AR Coatings
UHV Viewports
X-ray Sources
CVD Diamond
Phosphor Screens
Filaments
UHV Components

FS 585099

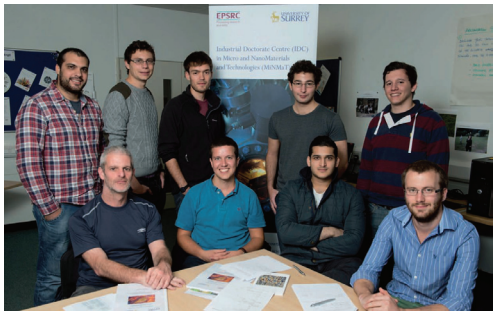
High Optical Quality Vacuum Window


Credit: ALBA



Located in Barcelona, ALBA is a Synchrotron Light Source producing radiation for experiments in many fields of science, www.cells.es. The quality of the radiation delivered to users depends on the quality of the electron beam and it is therefore necessary to continuously monitor the beam status in a non-invasive way. At ALBA, the visible part of the synchrotron radiation itself is used to measure distribution of electrons in the machine. The used synchrotron radiation is guided far from the machine tunnel up to an "extraction mirror". In order to maintain the vacuum in the tunnel, the radiation routed up to the mirror is in-vacuum too. A Torr Scientific viewport is used for extracting the light. The goal this year is to measure the transverse beam size by using the interference pattern produced by the synchrotron radiation passing through a double slits aperture. The performance of this kind of experiment requires the preservation of the quality of the light. Torr Scientific therefore provided a special viewport with a flatness better than lambda/10 and a curvature better than 1 arc sec. Accelerator Division Researcher Laura Torino said 'the special viewport we ordered fulfills all the requirements outstandingly; even better than what we were asking. Thank you for the great job you did'. This ALBA project is sponsored by oPAC.

Vacuum Optic Research



Since completion of the KTP (Knowledge Transfer Partnership) project between Torr Scientific and The University of Surrey to develop an in-line X-ray monochromator concept, David Stupple is continuing research at The Industrial Doctorate Centre at The University, this time to develop techniques to manufacture advanced specification vacuum optics. David is pictured (bottom left) with the new cohort of research engineers at Surrey.

Hastings Half Marathon

TSL's Mirander Reilly, Simon Mitchell, James Jones and Calvin Hatter have entered the 2014 Hastings Half Marathon taking place on 23rd March in support of the Rockinghorse Charity which makes life better for sick children in Sussex. Your sponsorship will be greatly appreciated and can be made here.