



# TSL NEWS

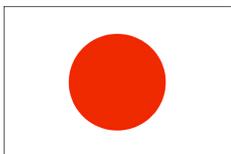
## Diamond Distribution

### Eastern Agents

Torr scientific is delighted to announce the appointments of exclusive agents in China and Japan.



Beijing Leyfond Vacuum Tech Co. Ltd.  
email sales@leyfond.com



T-Support. Co. Ltd.  
email t-spt.toyoshima@nifty.ne.jp

Agents Wanted! In Scandinavia, Spain, Portugal, Korea, South America, Australia.

### TSL Products:

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

Torr Scientific is proud to have been appointed the European agent for optical and thermal CVD diamond processed at The Plasma Laboratory, Hebei Institute of Laser in China. Natural diamond has always been of extreme scientific interest due to its unmatched properties including hardness, thermal conductivity, broadband transparency, chemical inertness and high temperature stability. However, the cost of natural diamond substrates is prohibitive in most cases. The big news in the last two decades is that CVD processes have been developed to the point

where economical artificial diamond substrates are now readily available. Effective immediately, Torr Scientific is offering CVD diamond substrates in various shapes for use in applications such as thermal mounts and laser windows as well as sealed into vacuum viewport assemblies for high vacuum applications. The CVD diamond performance is very close to that of natural diamond, so our customers can now take advantage of thermal conductivity that is five times that of copper and high transparency for optical wavelengths that range from 225 nanometers



CVD processing at Hebei

to beyond 100 microns! Please contact TSL to request quotations for your specific applications.

## Excimer Windows at ATRAP!

A pair of Torr Scientific AR-coated excimer windows and several custom phosphor screens are being utilized on an apparatus for the ATRAP Collaboration at CERN. The ATRAP Collaboration seeks to produce, trap, and study cold antihydrogen. ATRAP's goal is to perform high-resolution laser spectroscopy on trapped antihydrogen and compare its properties to those of hydrogen. The results may shed light on the observed matter-antimatter asymmetry in the universe. Torr Scientific has been pleased to work with Harvard University, one of ATRAP's collaborating institutions, in supplying the vacuum window assemblies that enable



One of the TSL screens for ATRAP

coupling of an excimer laser into the apparatus. Torr also worked with Harvard on supplying a number of phosphor scintillation screens which are used to take an image of the clouds of particles/ antiparticles that are trapped. For more information, contact G.Gabrielse at gabrielse@physics.harvard.edu



Torr Scientific supports the Rockinghorse Charity. This charity was chosen because of its mission to make life better for children in hospitals in Sussex such as The Royal Alexandra Hospital in Brighton.

### Skills Pledge

TSL has committed to the 'Skills Pledge' to actively encourage and support its employees to gain skills and competencies to improve company performance. TSL's youngest employee, Sarah Bates, is participating in a National Vocational Qualification (NVQ) apprenticeship.