

## Custom Lake Shore CRX Probe Station with CRAIC Spectrophotometer installed at Southampton



Elliot Scientific recently installed a unique integration of **Lake Shore** CRX micro-manipulated probe station, **CRAIC Technologies** InGaS Spectrophotometer, and Zeiss microscope at the University of Southampton's Centre for Photonic Metamaterials.

Combining our knowledge of both CRAIC and Lake Shore products, we offset mounted a Zeiss microscope carrying the CRAIC Spectrophotometer onto the probe station.

The microscope was supported in a custom manufactured rig to provide smooth movement in three axes above the sample chamber, enabling the researchers to closely observe the optical properties of nanostructured materials at cryogenic temperatures through a broadband objective lens of special design.



**Contact us** if your next project requires a custom engineering solution. We can help.

## Vescent's D2-135 Module offers superb frequency detuning for master and slave lasers

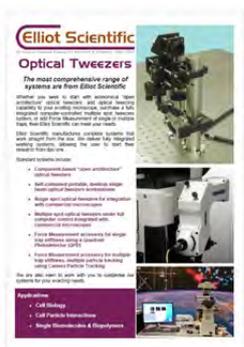
The **Vescent Photonics D2-135 Offset Phase Lock Servo** generates a frequency offset to a slave laser. The D2-135 OPLS precisely controls the frequency detuning between the master and slave lasers, and provides for an extremely tight phase lock between them. Broad, rapid detuning of the slave laser is possible via a phase frequency detector and an adjustable-parameter PID loop filter, which enables true phase lock with the conveniently large capture range of a phase lock.



- Options for either optical or electrical beat note inputs
- Quickly adjust the frequency detuning between two lasers
- High-bandwidth and large gain dynamic range
- Uses PFD (Phase/Frequency Detector)
- Offset Phase Locks up to 10 GHz
- Feed forward for rapid tuning and fast frequency jumping
- Internal VCO or external reference frequency input
- Offset Frequency stability determined by external reference stability
- User-adjustable servo loop parameters
- Internal ramp generator

Associated products from **Vescent Photonics** include a matching heterodyne module and high speed beat note detector, as well as low noise diode laser drivers and a PID servo loop controller. For further details, please **contact us**.

## Optical Tweezers brochure for 2015 now online



**Optical Tweezers** have been around for a long time. Over 40 years have passed since Arthur Ashkin and his colleagues described the single-beam gradient force trap and sparked a realisation in many scientists that this novel instrument would be a powerful tool for use in the course of their research. However, the costs and complexities of building Optical Tweezers were often prohibitive.

With the development of easy to use 'straight out of the box' systems by Elliot Scientific, Optical Tweezers have come down from the heights of esoteric research and can be found in many labs around the world.

We have now released our latest **Optical Tweezers Brochure** for 2015 which describes all the systems we offer; from open architecture kits to flagship computer-controlled multiple spot trapping systems with force detection and more.

Please **contact us now** for details.

## International Year of Light: Events to end of March



INTERNATIONAL  
YEAR OF LIGHT  
2015

### International Year of Light Launch Scotland

Edinburgh: February 23rd

### Cambridge Science Festival

Cambridge: March 9th-22nd

### Science & Engineering Day: Light Express RoadShow

The University of Southampton, March 14th

☀ *Need to measure light or colour?* Then have a look at **Gamma Scientific**

## FEMTOLASERS release latest ultrafast optics catalogue



**FEMTOOPTICS™** by **FEMTOLASERS**, is a premier line of optics optimised for femtosecond laser applications that include spectroscopy, OCT, THz, microscopy, micromachining and attoscience.

A new digital-only catalogue has just been released for 2015 that features an expanded range of broadband, low dispersion optical components. The FEMTOOPTICS™ product family has been specifically tailored for the optical needs of the femtosecond laser community, and it delivers with a comprehensive range of focusing optics, waveplates and mirrors.

In contrast to products offered by other manufacturers, FEMTOOPTICS™ are optimised for femtosecond pulse manipulation. Transmission optics are as thin as possible, AR-coatings are ultra broadband, metallic mirrors have low dispersion dielectric overcoatings, while focusing optics and waveplates are optimised both in terms of group delay dispersion and chromatic aberrations.

Download the **FEMTOOPTICS™ catalogue here** or, for more information about these or other products from FEMTOLASERS, **contact us now**.

## Next month, meet Elliot Scientific at...



### Photonex Roadshow: The University of Southampton

March 9th



### SU2P Symposium: The University of St. Andrews

March 23rd-24th

**Website**      **Product Overview 2015**      **Optical Tweezers 2015**      **Components Catalogue 2013**      **2014 Newsletters**      **2013 Newsletters**

**Blog**      **LinkedIn**      **Facebook**      **Library on Issuu**      **YouTube Channel**