

New European opportunities

The expansion of the EU last year made dealing with many Eastern European countries even easier – and photonics is an industry taking full advantage, according to **Tim Gillett**

PHOTONICS IN EASTERN EUROPE HAS been a growth industry in recent years – not least since a succession of countries joined the European Union in 2004.

While several photonics companies in the region have been in existence for decades – the Czech Republic's Crytur, for example, was formed some 60 years ago – many report that international business has picked up strongly since their home countries joined the EU. The year 2004 saw the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia join the European Union.

International links have long been important for Eastern European photonics companies. Crytur's Jan Tous, who is responsible for imaging systems within the company, tells *Electro Optics* that the company works in co-operation with more than 20 universities worldwide, as well as carrying out research in-house.

He explains: 'Exporting to a wide variety of overseas destinations including the United States, Israel, Japan, France, Germany and Sweden, Crytur has achieved production growth of about 15 to 20 per cent in recent years. This development has accelerated even more since the Czech Republic joined the EU.'

Foreign markets are essential for many firms in this part of the world – largely because domestic markets are small. Lithuania's EKSPLA, for example, operates in a country that has just 3.5 million residents and whose capital city, Vilnius, is home to just 500,000 people.

EKSPLA's commercial director Raimondas Kondrotas says: 'Our customers are well-distributed around the globe, but there is a concentration in the US market and also within the EU. That said, the market is certainly opening up in Lithuania – there is now a better infrastructure and there are

funds available for upgrading R&D institutions.

'There has certainly been lots of activity over the past two years, since 2004, with a marked growth in other markets close to us. The future is very difficult to predict in this industry – especially in this region, where it has developed so fast in recent years but, based on the last couple of years, which have been very positive for us, the future is looking bright.'

Slovenia has seen similar developments since 2004, according to Optotek's president Boris Vedlin.

He tells *Electro Optics*: 'Even if it is not the case in the UK, most industries in Slovenia are extremely positive about joining the EU. We have only a very small photonics market at home and we see ourselves as being on the very fringe of Europe, so EU membership has certainly been a very positive experience. While the United States and several Asian territories are important for us, Germany, France and other European countries represent the major part of our client base.'

While Optotek's products are mainly related to medical processes, one major growth area for the company is in the measurement of black carbon and other organic substances in the atmosphere, in relation to environmental applications. Our products in this sphere, which have been developed with Magee Scientific, in Berkeley, California, have been used at the United States base on Antarctica.

China is also showing signs of becoming a very important territory for Optotek, Vedlin says. The country is moving fast to fight environmental damage being caused by the burning of fossil fuels, and Optotek recently achieved a government standard to supply our equipment to China, leading to a significant number of orders.

If there was any doubt about the importance of

joining the EU for photonics companies in Eastern Europe, one need look no further than Russia, where one company says it is suffering in comparison to those states that joined the European Union in 1994.

Grigory Kropotov is general manager of St Petersburg-based **TYDEX**, which produces optical components such as lenses, mirrors and windows. He says that, though the company has 98 customers in 25 countries – with a strong bias towards the United States and Germany – it would no doubt benefit from the same trading conditions as experienced in EU states.

Kropotov concludes: 'We have definitely suffered due to the fact that companies in the EU don't have import taxes – we have to pay 20 per cent – and customs taxes. In addition, delivery times are less within the EU, so we have to be faster on our feet. To achieve this we have to employ more staff, which means that our expenses are higher and, consequently, our profits are smaller.'

PROFILES

Crytur

Palackeho 175

51101 Turnov

Czech Republic

Tel: +420 481 319 511

Fax: +420 481 322 323

Web: www.crytur.cz

Email: crytur@crytur.cz



Crytur has been manufacturing and developing synthetic single crystals for 60 years; its products are used as components in technical, medicinal, military and space technology applications.

The company currently

focuses on the research, development and production of crystals for new types of solid-phase lasers in medicine and technology.

One important group of Crytur's products consists of ionising radiation detectors, especially electron and X-ray detectors with a high spatial resolution, very high sensitivity and fast response. Crystal optics, sapphire products and optical coatings also form part of the Crytur portfolio.

Most of Crytur's business is abroad, with many clients in the United States, Israel and Japan, as well as European countries including France, Germany and Sweden.

As well as the 'standard' products mentioned above, the company also has a portfolio of unique products such as scintillation crystals grown under reduction conditions, 5µm thick imaging screens, V:YAG saturable adsorber, composite laser rods, an X-ray camera with a 1µm resolution, and graded reflectivity laser mirrors.

Optotek d.o.o.

Stegne 13a

1000 Ljubljana

Slovenia

Tel: +386 1 500 14 00

Fax: +386 1 500 14 01

Web: www.optotek.si

Email: optotek@optotek.si



Optotek specialises in developing innovative optical and laser solutions and technologies for

applications in medicine and life environments.

The company's strong interaction between research, engineering and marketing enables it to develop new products to meet the emerging needs of the marketplace.

Optotek's ISO-certified facility (ISO 9001 and 13485), technical support and competitive prices mean the company aims to offer the best combination of performance and value without any compromise in quality.

Over the years Optotek has developed and produced a range of custom-made (OEM) laser systems and assemblies, such as medical therapeutic and diagnostic devices and articulated arms for laser systems.

Equipment built by Optotek is in use on all continents of the world, including instrumentation to measure black carbon in the atmosphere, installed at the South Pole Station in Antarctica.

EKSPLA UAB

Savanoriu Av. 231

02300 Vilnius-53

Lithuania

Tel: +370 5 2649629

Fax: +370 5 2641809

Web: www.ekspla.com

Email: ekspla@ekspla.com



EKSPLA is a supplier of photonic solutions and separate products for research and development as well as industrial applications. Since its formation, the company has aimed to produce high quality photonic products.

New ideas, the broad knowledge of its engineers and physicists, along with a skilled and experienced staff have made it possible to create a unique company, which cites the design and production of customised laser systems as one of its major strengths.

The company's experts are pleased to discuss, design and produce laser systems to meet clients' needs – no matter how unusual their specifications might be.

Since its inception, EKSPLA has significantly increased its range of production and now offers: solid-state lasers, laser systems and accessories; optical parametric oscillators/generators; custom-designed laser systems; optical components; nonlinear and laser crystals; mechanical components and optomechanics; and laser power supply and cooling units.

TYDEX, J.S.Co.

Stavropolskaya str., 10,

191124 St. Petersburg,

RUSSIA

Tel: 7-812-2798047

Fax: 7-812-3359782

Web: <http://www.tydex.ru>

Email: tyros@peterlink.ru



Tydex is a private company that was founded in 1994 in St. Petersburg, known as the optical centre of Russia.

The company produces and supplies optical components for research and industry in fields such as spectroscopy, lasers, astro-optics, pyrometry and thermography, metrology, X-ray and THz devices. Some of the products are produced in close association with former state optics-manufacturing enterprises and state institutes.

Tydex says it ensures full spectrophotometer control from X-rays to 1000 microns, as well as interferometer control. The quality of its products is tested with the use of autocollimators, MTF measuring equipment, environmental and other testing instruments.

The firm's sales engineers have background in physics, while its opticians have been in the industry for an average of more than 20 years. Operating from 600 sq/m facilities, Tydex aims to offer flexible prices and reliable in-time deliveries.

▶ MANUFACTURER

▶ DISTRIBUTOR

▶ PARTNER

LASER COMPONENTS

LASER OPTICS

- High Damage Threshold
- Gaussian Mirrors
- Internet Stocklist
- IR Optics
- DOEs

SPECTROSCOPIC LASERS

- Single Mode Quality
- VCSEL, DFB
- Lead Salt, QCL

DETECTORS

- APDs, PbS/PbSe
- SiC (UV), Si (vis),
- InGaAs (NIR)
- MCT, Thermopile,
- Pyroelectric
- Colour Sensors

LASER DIODES

- Pulsed Laser Diodes
- CW Laser Diodes
- Custom Electronics

LASER DIODE MODULES

- High Quality Modules
- Custom Design
- Red, Green and Blue available

Please visit our website for further information

www.lasercomponents.co.uk

Tel: 01245 491499 Fax: 01245 491801

Email: info@lasercomponents.co.uk