Partner

Superlum Diodes



Superlum Diodes partner with CAPPA CIT and celebrate their 25 year anniversary from a position of strength

Profile of Company

Superlum is a pioneer on the Photonics market and for over 25 years Superlum has been delivering the most Innovative, Top-of-the-Range Low Coherent Light Emitting Diodes to the World. Superlum collaborates with leading research groups in developing cutting-edge high performance products and new solutions for Medical OCT and imaging for Life Sciences, Industrial OCT and high precision Industrial sensors, Navigation and aerospace, Metrology and Atomic Microscopy.

Partnering with CAPPA CIT

CAPPA have a long-established and productive working relationship with Superlum spanning many years. This has primarily revolved around the use and optimisation of Superlum's products in Optical Coherence Tomography (OCT) systems for real-time, 3D imaging. In 2008 an SFI funded project involved CAPPA constructing and analysing a bench-top swept source laser system using Superlum components. This sparked interest from Superlum in the possibility of growing their semiconductor superluminescent diode (SLD) devices business using the cleanroom facilities at the Tyndall National Institute, and exploring novel fabrication approaches to optimise and expand their capabilities.

Following a successful Enterprise Ireland funded Feasibility Study in 2010 to establish the compatibility of the designs with the CAPPA facilities, CAPPA and Superlum embarked on a year-long €100k Enterprise Ireland Innovation Partnership project, aimed at significantly broadening the width of the spectrum covered by their SLDs. In 2011, Superlum also lent their support to a CAPPA-led Technology Innovation Development Award (TIDA) project, targeting improved output power and lifetime of short wavelength (~650nm) visible SLDs.

Superlum have also partnered with CAPPA on a number of EU FP7 and Horizon 2020 grant proposals over the years, and in 2011 they were a partner in the €4M Marie Curie Training Network, PROPHET, coordinated by CAPPA. The project funded a postdoctoral researcher for two years based full-time in Superlum, working on broadband sources for OCT at 850nm. This was in collaboration with four other European partners, within a network of 13 partners in total, from both academia and industry.

Following the end of the PROPHET funding, Superlum has continued to employ the researcher, Dr. Alexander Chamorovskiy, who is now a key member of their team.



Long Term Relationship

Superlum continue to engage with CAPPA through Innovation Vouchers and direct funded projects, and via H2020 proposals such as Fast Track to Innovation and SME Instruments. This year Superlum celebrate their 25 year anniversary and continue to go from strength to strength providing bespoke optical solutions for partners worldwide.

With the relaunch of a new website, a broader variety of components and devices on offer and the continuing collaboration with CAPPA, the potential for Superlum to have many more anniversaries to celebrate is great.

Superlum as a company have worked with CAPPA over the last 10 years, their ability to adapt to various roles both as a facilitator for training programs and engaging in fundamental R&D, gives them a strong competitive advantage in the market place and a flexibility that is unique within industry. Superlum has always trusted in the collaborative process and has benefited greatly from it – Dr Liam Lewis CAPPA Centre Manager http://www.cappa.ie



