West Lothian once again a powerhouse for cutting edge technologies

Technology vital to the exploration of Mars and the advancement of satellite communication has become a thriving industry in West Lothian.

The county now has the largest cluster of photonics businesses in Scotland.

Photonics is the science and technology of using light, lasers and fibre optics, and has developed locally over the last four decades.

Among the firms leading the way locally are are Alter UK in Livingston, who provided key electronic components to the NASA Mars Perseverance Rover which landed on Mars in 2020.

And photonics businesses are at the forefront of innovation, with links to semiconductors, electronics and advanced manufacturing. Other significant West Lothian employers in these sectors are aligned with photonics and increase local economic growth.

A meeting of the council's Economy, Community Empowerment and Wealth Building PDSP heard about the developments in an update from the council Business Development Team.

Jim Henderson the council's Business Development Manager told the Local Democracy Reporting Service: "The West Lothian economy benefits from long-term investment in the photonics sector. University spinouts and high-growth start-ups have made West Lothian their investment location of choice for more than 40 years.

"For example, both Edinburgh Instruments and Helia Photonics were founded by senior academics at Heriot-Watt University.

"The evolving nature of high-technology firms sees Alter Tech (formerly Optocap) continue to expand its scale of operation at their Livingston HQ.

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The firm provides precision manufacturing for a wide range of semiconductor-based photonic and electronic technologies. The company has been based at Bain Square, Livingston since 2003 and currently employs 45 full-time equivalents within this site.

As part of their strategic growth objectives, Alter UK plan to make a £5 million investment in a new Photonics Design Centre to help the company develop their own state-of-the-art photonic products alongside their current service-based offering.

One of the key flagship products to be developed is a Space Grade optical transceiver which will be a key component for data transfer and communications within Very High Throughout Telecom Satellites.

Alter UK were awarded a Jobs Task Force grant of £100,000. To help them recruit a further nine new staff, all as part of a multi-million-pound strategic investment in their Livingston HQ. The business has worked closely with Business Gateway and

Scottish Enterprise over the longer term.

Alter UK has also recently benefited from training support from the Flexible Workforce Development Fund and engagement with Heriot Watt University.

Mr Henderson added: "The value of photonics at a local and national level is exemplified by the recent award of £4.7 Million to scale-up the sector. The funding was received from the Engineering and Physical Sciences Research Council (EPSRC), part of UK Research & Innovation.

"This work, known as the Photonics & Quantum Accelerator (PQA), brings together researchers from the Universities of Glasgow, Strathclyde, Heriot-Watt and St Andrews, local authorities and industry bodies to advance the growth of the photonics sector across Scotland's Central Belt."

By Stuart Sommerville, Local Democracy Reporter