

Enterprise and Business Committee

Horizon 2020 Inquiry

Visit to Glyndwr University and OpTIC: Thursday 28 June 2012

Glyndwr University Vice Chancellor and senior managers (first meeting)

The Committee Chair, Nick Ramsay AM, thanked Glyndwr University for welcoming Members of the Enterprise and Business Committee and for facilitating the visit. The Chair gave a brief outline of the Committee's Horizon 2020 Inquiry and summarised some of the issues that have been identified to date.

Professor Michael Scott, Vice Chancellor, introduced several members of his senior management team:

Professor Richard Day, Professor of Composites Engineering,

Professor Helen James, Pro Vice-Chancellor and Professor of Widening Participation and Social Justice,

Professor Peter Excell - Dean of the Institute of Arts, Science and Technology, and

Professor Peter Heard, Executive Director of the Graduate School and Professor of Widening Participation and Economic Development.

Professor Scott told Committee Members that the employability of its graduates is a key priority for Glyndwr University. To support this, the university develops close relationships with industry and actively aims its research activity at the needs of local businesses. It is proud of its high graduate employment rate of 94.7% (graduates in employment within 6 months of graduating). It is also proud that a high proportion of its undergraduates come from families that would not traditionally consider higher education (over 70% from families with a household income of less than £18,000 p.a.).

Its relationship with Airbus is particularly important for the university but Professor Day stressed that it has significant relationships with other large local businesses, for example, UPM paper mill, Deeside Industrial Estate and Sharp Solar Electronics. However the lack of company headquarters and associated R&D facilities in North East Wales is a concern for the university.

The university's focus isn't solely on STEM subjects and the university's multi-disciplinary approach is demonstrated in its "Faculty of Arts, Science and Technology".

The university has a number of collaborative research relationships with other universities, for example, with Stafford, Manchester and Bradford universities.

Impact of European funding

Since 2006/07, Glyndwr University has secured European funding for 30 projects, some of which has been direct and some through WEFO. Twelve of those projects were supported by convergence funding (totalling £1.58 million), while two (totalling £458k) were supported by EU Framework Programmes.

The university has one full-time central member of staff who supports applications for research funding. The administrative burden of applying for European funding (FP7) was cited as a problem. The university thinks that the pilot Knowledge Innovations Communities (KICs) could provide important opportunities for North East Wales, particularly in conjunction with the Welsh Government's Innovation Strategy (currently issued for public consultation).

The university would like the Welsh Government to take a more pro-active role as a facilitator in bringing Welsh universities together to encourage collaborative projects and joint applications for European research funding.

The Advanced Composite Training and Development Centre, Broughton (second meeting)

The University's [Advanced Composite Training and Development Centre](#) was opened in 2010. The centre is the result of a financial partnership between the Welsh Government, the university and Airbus. It is based in Broughton, just outside the Airbus factory site. The Centre also has a close collaboration with Deeside college. College staff train the students (mainly, but not exclusively from Airbus) and the college also validates the City and Guilds qualifications. Airbus apprentices and employees usually spend four weeks in the training facility, learning how to work with composite materials. There is also a composites research facility on the premises which makes and assesses small composite materials projects, in close collaboration with university staff and researchers.

The centre is part of a pan-Wales £26 million Advanced Sustainable Manufacturing Technologies (ASTUTE) project, that aims to help companies develop more sustainable products through using composites, reduce manufacturing costs or cut time to market by adopting composite technologies. ASTUTE is part-funded by the EU's Convergence European Regional Development Fund through the Welsh Government.

OpTIC, St. Asaph (third meeting)

OpTIC was acquired by Glyndwr University in 2009. It was previously a Technium and still retains informal links to the remaining Technium network. Committee Members were given a tour of the R&D/Technology Centre but there is also an Incubation Centre providing accommodation for start-up businesses coming from either industry or academia. As part of their tour, Members were able to see three projects/activities:

- A €5 million contract for prototype hexagonal segments for the world's largest telescope to be built by the European Southern Observatory (ESO) in Chile. Each prototype segment measures 1.42 metres in diameter. This project involves precision measurement and polishing to a tolerance of 7.5 nanometres;
- UPS2, a partnership with Cranfield University - a world-leading highly accurate diamond turning machine which has recently been optimised to improve the performance for Fresnel lens cutting. OpTIC uses the machine to make very large linear master moulds, up to 1.4m long with multiple pattern repeats, for private sector customers, including Microsoft; and
- A £4.4 million solar energy project led by OpTIC's Centre for Solar Energy Research (CSER), which is working on the issues around affordable renewable energy for domestic homes. The Research Centre is developing new photovoltaic (PV) solar cells which are optimised for collecting solar energy from weather conditions in Wales. The project is part of the Solar Photovoltaic Academic Research Consortium Cymru (SPARC Cymru). The CSER has also recently won A4B funding to develop new screening methods for Solar/PV companies to enable higher throughput production of solar cells.

In the final session:



- OpTIC staff showed a short video about the optical engineering design services in the Centre, commenting that they found it difficult to recruit suitably qualified engineers into the team;
- Professor Michael Scott outlined the importance of Glyndwr's multi-disciplinary approach with the acquisition (in July 2012) of the Leonard and Mary-Lou Goldstein Library;
- In response to a Member's question, Professor Scott said that 3 of OpTIC's permanent staff are female (of a total of 15 staff) and there are 2 female professors in the university;
- Techniquet Glyndwr has been visited by over 500,000 children and young people; and finally
- Although Wrexham wasn't in a European convergence area, OpTIC is located in a Convergence area which has been very important for European funding applications.

The Committee Members thanked staff from Glyndwr University, the Composites Centre and OpTIC for a very interesting and informative visit.