Publishable summary

The photonics market is innovation driven. In Europe Small- and Medium-sized Enterprises are very often at the heart of this innovation, and draw their strength from flexibility and quick time-to-market. These SMEs however are also vulnerable when exposed to innovation roadblocks. This happens when they cannot rely on the best experts in the field or when they do not have the financial means to invest in cutting-edge technological facilities that are crucial in the R&D innovation process.

A practical way to lower this innovation barrier is the creation of a European trans-national centre to photonics expertise and R&D infrastructure that supports European companies with the know-how of the best experts and the best facilities that Europe has to offer. What is more, this innovation barrier could even be entirely removed when also the initial cost of the innovation support, delivered by the centre, could be partially or fully waived with financial support from the European Commission.

Implementing, testing, and fine-tuning this new subsidy model for short-term industrial innovation in the micro-optics sub-domain of photonics, and demonstrating its efficiency and innovation impact have been the objectives of the Access Centre To Micro-Optics expertise, Services and Technologies "ACTMOST".

ACTMOST is a European consortium of 14 high-tech research laboratories from 6 European member states, coordinated by Prof. Hugo Thienpont from Vrije Universiteit Brussel. It kicked-off in September 2010 to create a "one-stop-shop" solution provider to support European industry with access to large-scale facilities, to centres that are equipped with manufacturing technologies, to instrumentation that is nowhere else available, and to photonics experts who are gifted with know-how, expertise and experience, and capable of coming up with practical solutions for industrial innovation challenges in a timely, cost-effective, and risk-free manner. ACTMOST received 1.2 Million Euro funding from the European Commission and started serving European companies on January 2011 for a test period of 30 months.

ACTMOST installed a policy that privileges SMEs by delivering them photonics innovation support free-of-charge, while large scale companies received innovation support at 50% of the innovation support cost. With €600K EU project budget to cover the costs of the "Innovation Projects" ACTMOST successfully supported 29 companies, 80% of which were SMEs. 20 companies were identified as photonics industry, while the others were identified as photonics-enabled industry and developed innovative products enhanced with photonics in a wide field of industrial sectors such as biomedicine, green energy, safety and security, or transport.

A first estimate of ACTMOST's impact, based on the business plans of the companies, indicates that every Euro of EU funding leveraged the R&D innovation expenditure with a factor of 2,75 and will create on average €15 of additional company revenue per year for a duration of at least 4 years as soon as the new product will be successfully marketed.

As such the €600K EU funding is expected to create 45 new jobs and additional company revenue of €9M per year over a period of at least 4. This estimate straightforwardly illustrates what can be achieved with an innovation instrument such as ACTMOST. The great interest for this new model from a considerable number of companies proves the real need and growing interest of SMEs and large scale companies for short-term photonics innovation support. ACTMOST's "Overall user satisfaction" and "quality of services" ratings scored "very good" or "excellent" showing that this new innovation instrument is very well received by the supported European companies. Industry appreciates in particular the single-stop-shop character of the solution-providing centre, the centralized contact and entry point, the quick guidance to experts, the fast and professional support, the IPR policy, and the low-administrative overhead. What is more, the "technology-support-

instead-of-money" subsidy model is very well received and effectively lowers the companies' barriers to start with photonics-driven product innovation.
The ACTMOST pilot project has therefore clearly demonstrated the great value-for-money of this innovation model. It fills the gap of R&D innovation schemes for which currently there are no support instruments at the European level. It is especially suited for SMEs, who need fast, business-driven, practical, and free-of-charge support to accelerate innovation or technology take-up, rather than quantum-leap research, to stay ahead of competition.

For more information: www.actmost.eu

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Logo:

ACT MOST
Access to Micro-Optics Expertise, Services & Technologies

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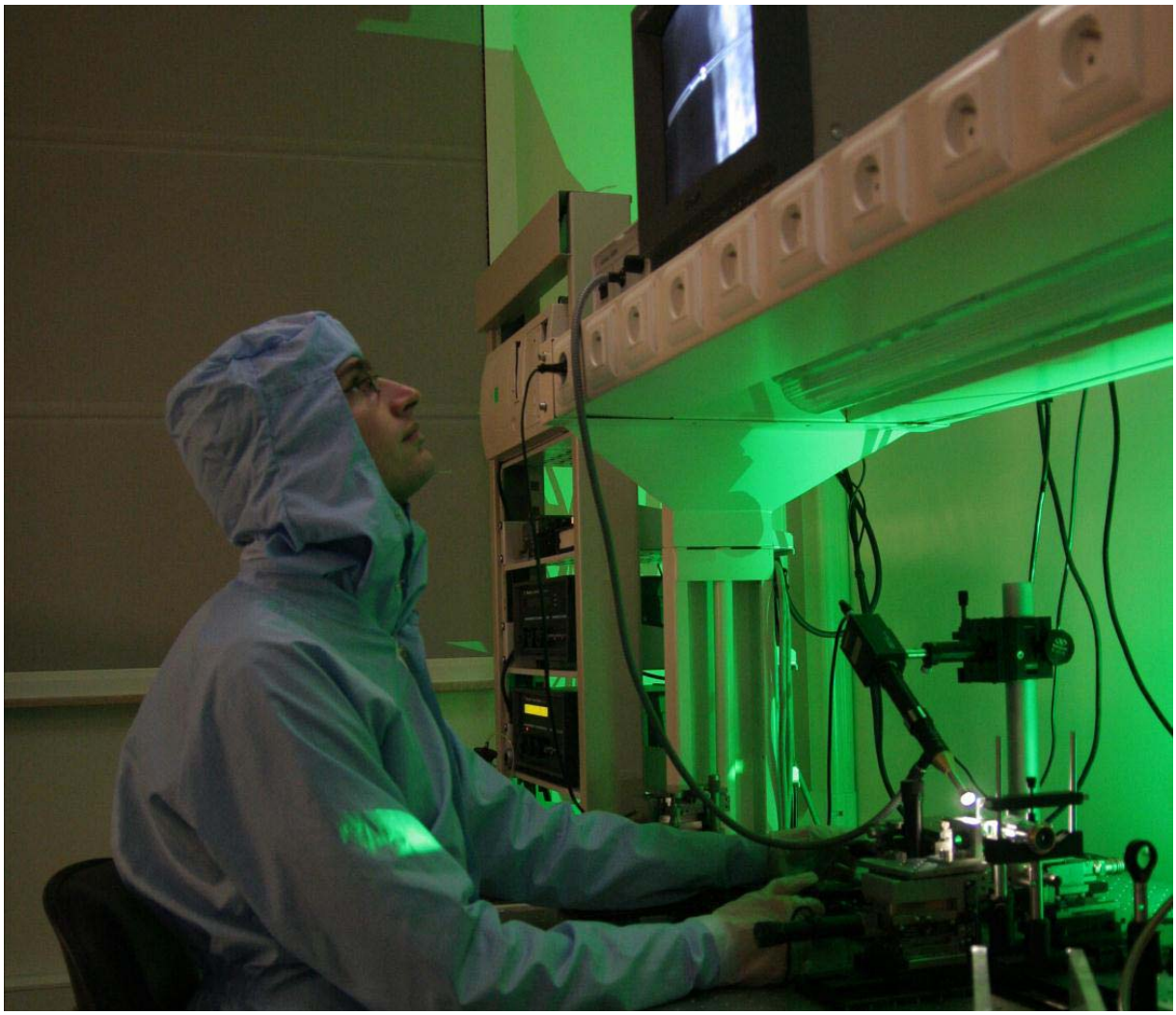
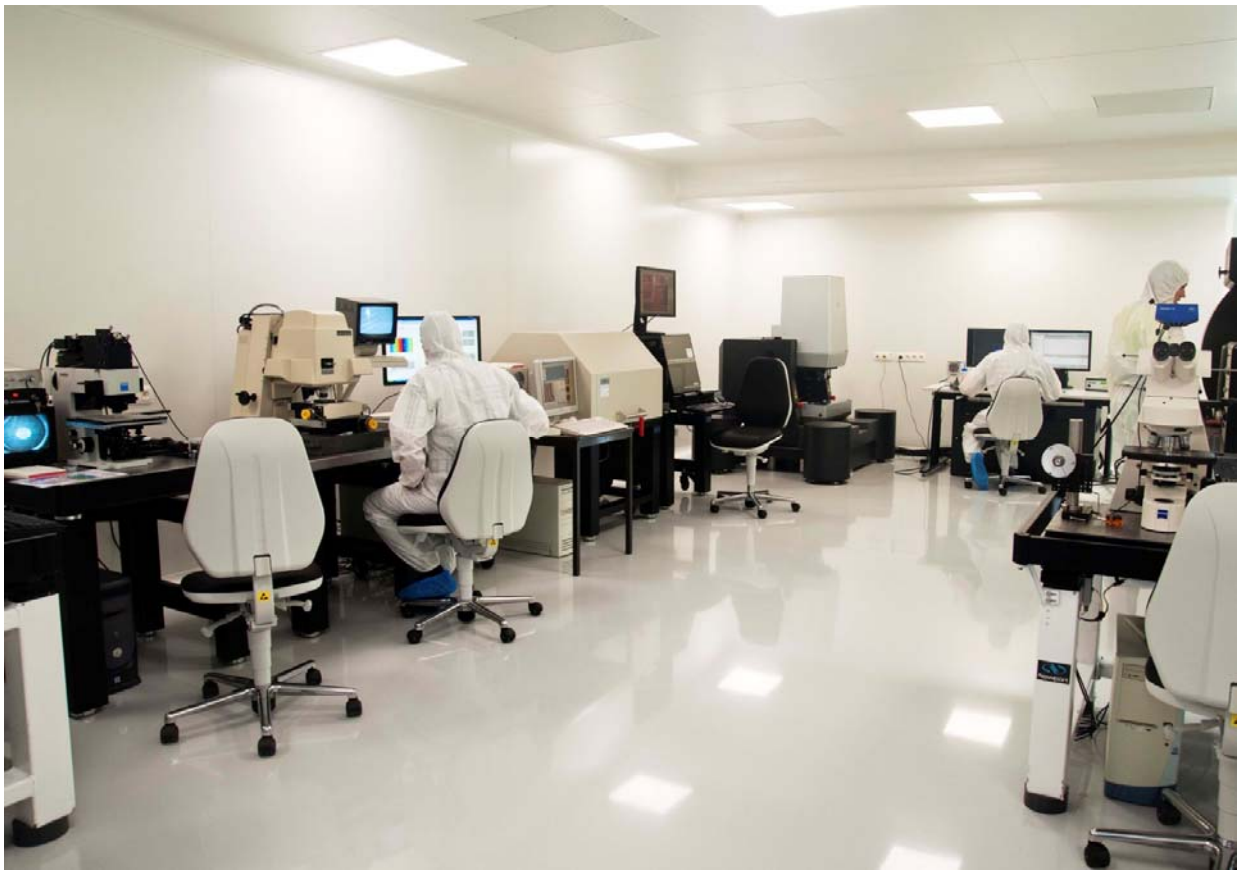


ACTMOST specialist performs quality control of micro-lens arrays in clean room conditions



ACTMOST experts working in a clean room equipped with optical instrumentation

ACTMOST teams up European top-experts to support photonics-driven innovation with SMEs

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