



Press Release

EC-Funded LIFT Project Takes the Leadership in Fibre Lasers

LIFT - **L**eadership **I**n **F**ibre Laser **T**echnology, is a collaborative, large-scale integrated project funded by the NMP Directorate in the 7th Framework Programme of the European Commission.

The 16 Million Euro project will expand the limits of advanced materials processing applications through a new generation of high-brilliance fibre-based lasers.

European industry today leads in industrial laser processing. Continuous innovation and adoption of novel technologies are required to maintain this position. Fibre lasers represent only 10% of an estimated market volume of 2 billion Euros worldwide for industrial lasers. The market share of fibre lasers is expected to double by 2010 and double again by 2013, when fibre lasers will account for more than 30% of all industrial lasers sold each year.

In order for Europe to advance its position as technology and manufacturing leader in industrial laser processing, it is imperative for European manufacturers to take the *Leadership In Fibre* laser Technologies. That is exactly the goal of the LIFT project.

This project will establish an internationally leading position for Europe in the science, application and production technologies of fibre lasers. The consortium will develop innovative laser sources with intelligent beam delivery systems and dynamic beam manipulation, in continuous-wave, nanosecond pulsed, and ultra-short pulsed femtosecond laser sources, operating at power levels ranging into the kilowatt regime. LIFT will enable a greater market share for existing applications, create new application areas for manufacturing, and build a European network of components' suppliers and laser system manufacturers. Demonstrations will show the potential of this technology in domains where there are large existing markets such as high-speed remote cutting and welding, medical diagnostics and treatment, TFT patterning or where there are large potential markets such as solar cell fabrication and cold ablation for ceramics manufacturing.

The research, development and innovation that constitute the LIFT project will lead to a new level of high-brilliance laser sources. The results of the consortium work will bring radical advances in four important application areas:

- Laser Materials Processing
- Health Care Delivery
- Cost-Effective Manufacturing of Solar Cells for Renewable Energy
- Manufacturing of the next-generation of ICs with nanometre feature size.

The Consortium:

Fraunhofer IWS, Fraunhofer IOF (D), European Photonics Industry Consortium EPIC (FR), Oclaro (CH), Eolite Systems (FR), Quantel (FR), Time-Bandwidth Products (CH), Gooch & Housego (UK), Rofin Sinar Laser (D), Tampere University of Technology (FIN) 3S Photonics (FR), Politecnico di Torino (I), University of Swansea (UK), SPI Laser (UK), Dilas Diodenlaser (D), Perfos (FR), NKT / Crystal Fibre (DK), Optoskand (S), IxFibre (FR), Raicol Crystals (ISR), Corelase (FIN),

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