

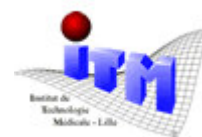
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Optical Technologies in Healthcare Monitoring



As we already mentioned it in the previous Multitel News, the Applied Photonics Department of Multitel successfully obtained an IST project of the 6th Framework Programme, called SABIO. Another project was launched on the 1st of March 2006. It is the second European project coordinated by this department of Multitel. Actually, this STREP (Specific Targeted Research Project) type project was obtained at the Call IST4 and is entitled "Integrated biomedical information for better health". The project will spread out over a three year and a half duration and amounts to 3.5 million € with a budget of 2.3 million € granted by the European Commission. The consortium is composed of 11 partners from textile, optics and medical fields composed of SMEs, Research Centres and industry. Five countries of the European Community are represented.

Partners



The aim of the project OFSETH is the integration of the optical fibres related technology into functional textiles to extend the capabilities of wearable solutions for health monitoring. The expected results should allow to enlarge those wearable solutions in healthcare monitoring for a continuous medical assistance and treatment, for which there are no satisfying solutions, until now at least.

The development will take into account two critical parameters of the physiological state of an individual, i.e. the respiratory rates and oximetry. Other technologies, such as Fibre Bragg Grating sensors and Near Infrared Spectrometry will be investigated here. On parallel, the compatibility of diverse types of silica and polymer fibres with textile processes will also be investigated, with the possibility to make these technologies wearable for the patients and these parameters assessable continuously.

Two domains of application will be explored and submitted to clinical evaluation:

- In a hospital environment for the monitoring of the health parameters of anaesthetised patients during IRM examinations

- In a non hospital environment for domestic and wearable applications, such as the prevention of SIDS (Sudden Infant Death Syndrome), for instance

For more information on the OFSETH project, visit the website www.ofseth.org or send a mail to research@multitel.be

