

Post-doctoral position in LIMMS CNRS/University of Tokyo

Subject: Advanced tools for toxicological and biological research: Micro-Tissue/Organ Devices

The LIMMS (Laboratory of Integrated Micro Mechatronic Systems), which is an international laboratory belonging both to CNRS and University of Tokyo, opens a new postdoctoral position, for October 2006. The recruited post-doctorate will be affected on a new integrated project focusing on the applications of MEMS or microfluidic technologies in tissue/organ cell culture for advanced in vitro toxicology.

Over the current microwell plate-based toxicological screening methodology, MEMS or microfluidic technologies are expected to provide very promising new alternatives. New devices will be investigated, based on miniaturized biochips devoted to the culture of cells. Target cells envisioned in the scope of this project are i) cells derived from various target organs, ii) cells controlling the metabolic processes in humans, iii) tissue/organ stem or progenitor cells including embryonic stem cells. Long term stable culture of these cells will be established in vivo-mimicking three-dimensional micro structures, where their responses will be continuously monitored by micro-scale integrated sensors or imaging. Such approaches based on a real integration of various fundamental technologies are of great importance for applied research in biology but will have also a huge impact in basic biological research.

The research will take place in Institute of Industrial Science in the University of Tokyo and will be held in the framework of a new LIMMS project conducted by two Professors of the University of Tokyo and a CNRS researcher.

Website: <http://toshi.fujita3.iis.u-tokyo.ac.jp/limms/>

Qualification: Experience of the candidate in one of these domains will be appreciated : Tissue Engineering, cell biology, biophysics, biochemistry, microfluidics technology

Salary: equivalent to JSPS post-doctoral salaries

Interested candidates should send their CV and motivation letter to:

Y. Sakai, T. Fujii, B. Le Pioufle, and LIMMS Direction

To: sakaiyas@iis.u-tokyo.ac.jp, tfujii@iis.u-tokyo.ac.jp, pioufle@iis.u-tokyo.ac.jp, limmsadm@iis.u-tokyo.ac.jp