# R&D Post-doctoral Position: Development of point of care device on paper for diagnosis (CEA Leti - Grenoble)

**Post-doctoral fellow will be part of a European project (H2020, Innpaper). Innpaper is a project in the printed electronics field, which is designing a configurable and recyclable electronic platform based on paper. This project will develop three use-cases, oriented towards the food, security and medical sectors. This last use-case will be developed by CEA Leti-Health. Starts September 2018**

**CEA/LETI/Healthcare department** is a 150+ people division devoted to the development and industry transfer of micro- and nano- technologies in the biology and healthcare fields (Leti-Health, http://www-leti.cea.fr/en). Closely with hospital universities and institutions of higher education, the Healthcare Department develops new technologies to improve medical diagnosis and treatment of patients and works in a multidisciplinary environment at the chemistry/biology interface, in an applied research laboratory linking basic research and industrial transfer of technologies.

**Position description**
Many activities of Leti-Health focused on point of care (POC) devices. In particular, this project aims at developing POC device based on smart paper to detect viruses and bacteria in biological samples. This device should prepare the sample and diagnose quickly the presence of infectious diseases by DNA amplification.
Based on our previous know-how, and thanks to his/her expertise, the post-doctoral fellow will take in charge the design, the manufacturing and the validation tests of paper POC device. (S)He will also work in close interactions with biologists and electrochemists for the further evaluation of the POC device (choice of DNA amplification method and type of printed-electrode…) to achieve a simple and fast diagnostic tools. The efficiency of diagnosis will be evaluated and compared to traditional reference methods.

**Location**: CEA Grenoble, France
**Duration**: 36 months
**Starting date**: July 2018

**Required Skills:**
Applicants should hold a Master of Sciences and/or PhD in microfluidic, biotechnology or bioengineering. A background in electrochemistry, molecular biology or paper materials should be really appreciated. Experimental rigor and ability to work in a cross-disciplinary environment (collaborative, EU and industrial projects) in connection with biologists, chemists and industrial is absolutely required. Good skills in English.

**Contact:**
Interested applicants should send a Cover letter, a CV with contact information of two references. Please send your application only by email to: **pierre-alexandre.setier@cea.fr**

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