



**Internship /Proposition de stage**  
**Master /PFE Ingénieur et/ou Master M2**  
**MicroOmiX**  
Mars- août 2022 / March-August 2022  
**Integrated optical microfluidic system**

**Company:** MicroOmiX,  
74 Rte du Rhin, 67400 Illkirch-Graffenstaden  
<https://microomixtech.com/>

**Context:**

Secreted molecules are the key regulators of dynamic and adaptative biological processes. Their analysis is achieved by fluorescence. At MicroOmiX, young spin-off of the University of Strasbourg, we have developed a versatile and robust optical-microfluidic-based technology enabling to analyze secreted protein at the single cell level [1]. The technology is patented and already experimentally implemented. It makes possible high throughput systematic analysis on single cell for biological, medical and diagnosis applications. We currently work on a new version, where the optical part will be more integrated.

**Description:**

During the six months internship, you will contribute to the conception of a new fibered version of the optical system (optical excitation and detection): design, components selection, assembly, and test. You will also work on the proof of concept of a full-integrated optical microfluidic system. The project will be in collaboration with the Photonics team (IPP) of the ICube lab at Strasbourg.

**Skills:** Optical design, biophotonics.

**Contact:** [christophe.arnaud@microomixtech.com](mailto:christophe.arnaud@microomixtech.com)

**Traineeship grant /Gratification de stage:**

Gratification de stage conformément aux règles en vigueur (3,90 €/h ~ 600 €/mois).

**Poursuite possible en thèse CIFRE/ Possible PhD position:** yes

**References:**

[1] S. Ursuegui, M. Mosser and A. Wagner, RSC Adv., 2016, 6, 94942.