Summer Internship
Market study for a new metal injection process

Description
This topic is aiming at students interested in an internship addressing the management of technology and more specifically, on learning and doing a pre-market study. Jointly between the Galatea Lab and the Laboratory of Materials Metallurgy at EPFL, we are currently developing a process - called FEMTOcast and for which, we are considering its potential for a spin-off venture. The schematic below briefly explains how this process works:

This process can use different type of materials for the substrate. In the schematic, we currently use fused silica, but it is likely that sapphire can also be used. As for the metal, every metal that has a melting point below 1200°C are potential candidates (like for instance silver, gold or copper to name a few).

Objective of the internship
As a preparatory work for a possible spin-off venture, a preliminary study of the overall market is required. More specifically, the student interested in this project will perform the following tasks:

1. A study of metal embedded in ceramics, their field of applications, the current processing methods, as well as the future of these components/devices.
2. Market requirements, identification of today’s needs for such systems.
Required skills / Profile

Students in business school (HEC Lausanne or alike), students in management of the technology, students studying microengineering and doing a minor in management of the technology.

Conditions

The Galatea Lab is located at the campus of EPFL/Microcity in Neuchâtel. This is a fulltime two-month internship over the summer months (July-August). Allocation of about 1600 CHF/month.

About the Galatea Lab

The Galatea Lab at EPFL is conducting research in the broad field of laser-matter interaction in the context of multiscale micro-manufacturing problems and system integration at the microscale. More information can be found here: http://galatea.epfl.ch/

Contact

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