

Announcement of Selection nr. 3/2017 - Publication date 15/02/2017

**1 Junior Researcher Position in H2020 DREAM research project.**

In the framework of the FOF-13-2016: Photonics Laser-based production, Driving up Reliability and Efficiency of Additive Manufacturing (DREAM), one Junior Researcher position is available at the INSTM Research Unit of Modena, Department of Engineering “Enzo Ferrari” University of Modena and Reggio Emilia

Project: Sustainability Impact Assessment of the DREAM project

The main activities of the Junior Researcher will be focused on:

The aim of the DREAM project is to improve the performances of laser Powder Bed Fusion of titanium, aluminium, and steel components in terms of speed, costs, material use and reliability also using LCA/LCC approach. The activities will be devoted to:

**1. Life Cycle Assessment (LCA)**

A detailed Life Cycle Assessment in agreement with UNI EN ISO 14040-14043 regulations will be pursued in order to quantitatively highlight the environmental performance of the DREAM products and processes, through a “cradle to grave” perspective.

**2. Life Cycle Cost Analysis (LCCA)**

The cost-effectiveness of the project actions will be assessed through the Life Cycle Costing methodology over the entire expected lifecycle of the considered systems.

**3. End-of-Life Evaluation/Recyclability**

A combination of lifecycle options (e.g. product reuse, component reuse, closed-loop recycling and cascade recycling) will be considered by LCA methodology in order to define the optimal products end-of-life strategy.

Scientific Responsible: Prof. Anna Maria Ferrari

Our Offer: the position is for a “Ricercatore Junior 1”. The monthly gross salary will be about € 1.575,00. The health insurance is covered by the social security system.

Starting date and duration: approx. 1<sup>st</sup> March 2017 Duration 24 months

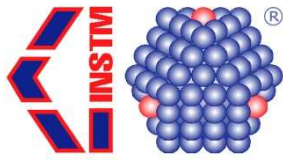
Your profile:

Candidates must have completed the Master Degree in one of the following classes: Management Engineering or Environmental Sciences (34/S, LM31); Science and Technology for the Environment (82/S, LM-75); Engineering for the Environment and the Territory (38/S, LM-35); Architecture and Building Engineering (4/S, LM4).

Candidates must have an excellent knowledge of the Life Cycle Assessment methodology (LCA) and in particular of the following concepts:

1. impact and damage categories; allocation; avoided product; functional unit; system boundaries; Ecoinvent databases.
2. software SimaPro and its uses.
3. impact evaluation methods (+ IMPACT2002; EcoIndicator99; ReCiPe etc.).

Deadline: 25/02/2017



## CONSORZIO INTERUNIVERSITARIO NAZIONALE PER LA SCIENZA E TECNOLOGIA DEI MATERIALI

How to apply: Please submit your motivation letter + detailed CV by e-mail to the scientific coordinator of the DREAM project, prof. Anna Maria Ferrari [annamaria.ferrari@unimore.it](mailto:annamaria.ferrari@unimore.it) and to the INSTM administrative office, [segreteria@instm.it](mailto:segreteria@instm.it).

Please quote the Announcement number in the e-mail subject.

INSTM, in its sole judgment, reserves the right not to hire somebody, should the applications received, being unsuitable against the subject of the announcement or the expertise needed.

In any case, INSTM, based on actual needs, convenience or opportunity, in its sole judgment and without notification, reserves the right not to open the position.

*In order to comply with Italian law (art. 23 of Privacy Law of the Italian Legislative Decree n. 196/03), the candidate is kindly asked to give his/her consent to allow Consorzio INSTM to process his/her personal data.*

*We inform you that the information you provide will be solely used for the purpose of assessing your professional profile to meet the requirements of Consorzio INSTM. Your data will be processed by Consorzio INSTM, with its headquarters in Florence, Via Giusti 9, acting as the Data Holder, using computer and paper-based means, observing the rules on the protection of personal data, including those relating to the security of data. Please also note that, pursuant to art.7 of Legislative Decree 196/2003, you may exercise your rights at any time as a party concerned by contacting the Data Manager.*

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