

10/02/2020



ESR9: PhD Student Position at IMT Lucca within EU MSCA-ITN-ETN NewFrac

Where to apply

Application Deadline: 30/06/2020 17:00 - Europe/Brussels

Contact Details

Where to send your application.

COMPANY

IMT School for Advanced Studies Lucca

WEBSITE

<https://www.newfrac.eu/application-form>

Hiring/Funding Organisation/Institute

ORGANISATION/COMPANY

IMT School for Advanced Studies Lucca

COUNTRY

Italy

DEPARTMENT

Multi-scale Analysis of Materials (MUSAM)

CITY

Lucca

ORGANISATION TYPE

Higher Education Institute

WEBSITE

<https://www.imtlucca.it>

ORGANISATION/COMPANY

LOCATION

IMT School for Advanced Studies Lucca

Italy › Lucca

RESEARCH FIELD

Engineering › Materials engineering
Engineering › Mechanical engineering

TYPE OF CONTRACT

Temporary

RESEARCHER PROFILE

First Stage Researcher (R1)

JOB STATUS

Full-time

APPLICATION DEADLINE

30/06/2020 17:00 - Europe/Brussels

HOURS PER WEEK

40

OFFER STARTING DATE

02/11/2020

EU RESEARCH FRAMEWORK PROGRAMME

H2020 / Marie Skłodowska-Curie
Actions

REFERENCE NUMBER

NEWFRAC

MARIE CURIE GRANT AGREEMENT NUMBER

861061

The Marie Skłodowska-Curie Innovative Training Network "**NEWFRAC**" (www.newfrac.eu) is a high-level training of a new generation of creative, entrepreneurial and innovative early-stage researchers (ESRs) through the development and engineering applications of a new modeling framework focused on the prediction and analysis of multi-field fracture phenomena in heterogeneous engineering systems at different scales. NEWFRAC in its mission of training students capable of solving the current problems of multi-field fracture phenomena in heterogeneous engineering systems, offers **13 PhD positions** for early stage researchers (**ESRs**) distributed in a network of 5 European countries (**France, Germany, Italy, Portugal and Spain**) and 2 countries associated (**Israel and Switzerland**), with the participation of prestigious academic and industrial institutions that will allow researchers to grow and develop their technical skills in a multisectoral environment.

Besides working on their project at their home institutions, the researchers will participate in network-wide training events like summer schools. Moreover, they will conduct secondments at other network partners combining academic and industrial experiences.

The following position and project is available at **IMT School for advanced materials** in **Lucca, Italy**:

ESR 9: Multi-field and multi-scale modeling of fracture for renewable energy applications

Objectives: *Fracture mechanics of materials for renewable energy applications (photovoltaics, solid oxide fuel cells, etc.) is a fundamental tool to assess the reliability and the durability of these technologies. From the modeling point of view, the study of these problems is challenging due to the simultaneous presence of multiple fields, often strongly coupled together. In this regard, there is room for innovation in terms of development of novel FEM software that can be incorporated into existing FEM tools for industrial simulation and virtual material testing. To make advancement in this research, a deep knowledge on numerical analysis and FEM procedures, with a strong background on the physical-mathematical formulations of the multi-field phenomena is required. Therefore, advanced training on these topics is original and highly relevant for the realization of a new class of specialized analysts to be employed in research and development departments of companies. For more information about this position please go to <https://www.newfrac.eu/phd-positions/esr9>*

Contract signing and incorporation dates are orientative and have yet to be defined. For **more information** about the call and application process visit www.newfrac.eu

ADDITIONAL INFORMATION

Benefits

A full-time fixed-term contract is offered. Marie Curie ITNs provide competitive financial support to the ESR including: a competitive monthly living and mobility allowance and salary, coverage of the expenses related to the participation of the ESR in research and training activities (contribution to research-related costs, meetings, conference attendance, training actions, etc.). The recruited researchers will have a regular contract with the same rights and obligations as any other staff member of the institution.

Eligibility criteria

Applicants must at the time of recruitment: **1)** Be in the first four years (full-time equivalent) of their research careers. The four years start to count from the date when a researcher obtained the degree (e.g. Master's degree) which would formally entitle him/her to embark on a doctorate.

2) Candidates could be of any nationality but have not resided in the host country for more than 12 months in the last 3 years **3)** Have NOT been awarded a doctoral degree.

Selection process

Applicants are evaluated by a selection committee on the basis of past academic performance (grades) and background, scientific relevance and aptitude to research, and any other additional pertinent data submitted in the application (such as scientific publications, if any). The candidates that pass the initial assessment of the applications will be invited for an interview with the selection committee, either in person at the campus, or via standard internet videoconference. Equal opportunities are ensured to all candidates throughout the evaluation process.

Web site for additional job details

<https://www.newfrac.eu/application-form>

REQUIREMENTS

Offer Requirements

REQUIRED EDUCATION LEVEL

Engineering: Master Degree or equivalent

REQUIRED LANGUAGES

ENGLISH: Excellent

Skills/Qualifications

- Master's degree in Mechanical/Aeronautical/Civil Engineering/ Physics/ Applied Mathematics, **earned before October 31 2020**
- Excellent undergraduated and Master's degree grades
- High level of written and spoken English
- Teamwork ability

Map Information



Job Work Location



Personal Assistance locations

WORK LOCATION(S)

1 position(s) available at
 IMT School for Advanced
 Studies Lucca
 Italy
 Lucca
 Piazza S.Francesco, 19

EURAXESS offer ID: 491145

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