

## **PhD position description**

Currently an application call is open for a PhD position at the Faculty of Civil Engineering of the University of Rijeka. To interested candidates a short description of the position is provided below.

**Country:**

Croatia

**Institution:**

Faculty of Civil Engineering, University of Rijeka

**General information:**

The total duration of the PhD program is four years within which the PhD candidate will work on research and project related activities, while no teaching activities are expected. The position is formally a full-time job (40 hours per week) on a full-time fixed-term contract with the duration of four years. The net salary is 900 euros, with the gross salary covering medical insurance, pension contributions and taxes.

The PhD student will be financially supported by the Croatian Science Foundation to join the team working on the International project MSCA ITN “Joint Training on Numerical Modelling of Highly Flexible Structures for Industrial Applications (THREAD)” funded by the European Union’s Horizon 2020 programme.

**Research topic:**

The research will be devoted to time integration of non-smooth dynamical problems. Such problems are characterized by the fact that the time derivatives of the functions that describe the movement of the bodies in the system are not continuous functions of time. This problem will be studied on the problem of rocking of a rigid block on an elastic beam. Particular attention will be devoted to the contact interaction between the block and beam which is the source of the discontinuity in the time derivatives of the position functions. Furthermore, it is also expected that a campaign of experimental tests will be designed in order to compare the numerical schemes with experimental data.

**Applicant requirements:**

- Graduate degree in the field of technical sciences, mathematics or physics
- Excellent knowledge of written and spoken English
- Grade point average above 67.5%

**Application deadline:**

18<sup>th</sup> December 2021.

**Links and additional information:**

- Application call and all necessary information:

<https://euraxess.ec.europa.eu/jobs/710270>

<https://gradri.uniri.hr/natjecaj-za-izbor-9/>

<https://narodne-novine.nn.hr/clanci/oglasio/08326489.html>

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