

### CALL FOR APPLICATIONS FOR THE AWARD OF RESEARCH FELLOWSHIPS

In accordance to Horizon 2020 Marie Skłodowska-Curie actions, Innovative Training Networks H2020-MSCA-ITN-2019 program regulations – within the Project “GW4SHM -Guided Waves for Structural Health Monitoring” (Marie Skłodowska- Curie Actions Innovative Training Networks H2020- MSCA-ITN-2019), Grant Agreement n. 860104 (hereinafter Grant Agreement) and Regulation on Research Fellowships pursuant to Italian Law no. 240/2010 Alma Mater Studiorum University of Bologna, issued by Rectoral Decree no. 416 of 19/04/2011

Protocol num. 611 Rep. 81 Fascicolo 5427946 dated 31/03/2020

#### *Art. 1 - Purpose*

Applications are invited for the selection running at (structure): DIPARTIMENTO DI INGEGNERIA DELL'ENERGIA ELETTRICA E DELL'INFORMAZIONE "GUGLIELMO MARCONI" of the Alma Mater Studiorum University of Bologna for the award of 1 grant research fellowship(s), for the execution of research activities within the project entitled “Transducers and Sensor-near Signal Processing for SHM of Composite Structures”, according to the annexed Activity Programme. The call for applications for the research fellowship **issued pursuant to the University Regulation** issued by Rectoral Decree (D.R.) no. 416 of 19/04/2011, also in accordance to Horizon 2020 Marie Skłodowska-Curie actions, Innovative Training Networks H2020-MSCA-ITN-2019– withinh the Project “GW4SHM -Guided Waves for Structural Health Monitoring” (Marie Skłodowska- Curie Actions Innovative Training Networks H2020-MSCA-ITN-2019), Grant Agreement 860104 (hereinafter Grant Agreement) Resp. Prof. Luca De Marchi, funded with H2020 GW4SHM (Grant Agreement n. 860104) - Resp. Prof. Luca De Marchi, approved by the structure with D.D. Rep. 72/2020 Prot. 566 of 24 March 2020.

The activities shall be carried out under the supervision of a tutor identified by the structure as Prof. LUCA DE MARCHI, in a non-subordinate relationship with no set working hours.

The main place of work will be: DIPARTIMENTO DI INGEGNERIA DELL'ENERGIA ELETTRICA E DELL'INFORMAZIONE "GUGLIELMO MARCONI", VIALE DEL RISORGIMENTO, 2 40136 BOLOGNA

#### *Art. 2 - Requirements for candidacy*

The selection is open to candidates in possession of the following qualification:

- Master Degree / specialist or old system or equivalent in **Electronic Engineering, Mechanical Engineering, Mechatronics Engineering, Aerospace Engineering, Telecommunications Engineering, Physics, Materials Science** with appropriate scientific and professional curriculum.

Applicants must have the qualifications required on the deadline for submission of applications laid down in this call. Applicants who do not meet the qualifications above mentioned will not be considered.

- Competences/requirements laid down for candidates: - **The ESR must not have resided or carried out his/her main activity (work, studies etc.) in Italy for more than 12 months in the 3 years immediately prior to the recruitment date; - At the date of recruitment, the ESR shall be in the first 4 years (full-time equivalent research experience) of their research careers since they obtained the title giving access to PhD; - At the date of recruitment, a PhD degree in any field is not compatible with this ESR position..**

The selection is not open to any persons who are related by blood or by marriage up to the fourth degree, to a professor working in the department or structure for which the call is issued, or to the Rector, Director General or a member of the Board of Governors of the University.

The selection is also not open to anyone who has held research fellowship contracts with any institution, pursuant to Italian Law no. 240/2010, for a period which, summed to the foreseen duration of this contract, exceeds a total of 6 years, excluding any period in which the contract coincided with a PhD without scholarship, for the maximum limit of the legal duration of the PhD programme.

Furthermore the selection is not open to anyone who has had research fellowship or fixed-term researcher contracts at the University of Bologna or any other state-funded, private-funded or distance-learning Italian university pursuant to articles 22 and 24 of Italian Law 240/2010, or with any other body listed in paragraph 1 of Art. 22 of Italian Law 240/2010 for a period which, summed to the foreseen duration of this contract, exceeds a total of 12 years, even if not consecutive. For the purposes of the duration of the above-described periods, in compliance with the laws in force any periods of maternity or sick leave shall not be calculated.

#### *Art. 3 - Application*

Applications may only be submitted online by accessing the website: <https://concorsi.unibo.it/>, after completing the registration process, following the web procedure instructions. **The last day available to submit the application is Thursday, April 30, 2020 at 23:59 - Europe/Brussels**; applications submitted after this time will not be considered. The date shown on the receipt sent electronically to the candidate is deemed to be the date of the application submission.

Any communications will be sent to candidates exclusively via email, to the address provided in the application.

In the online application, following the web procedure instructions, candidates must indicate, under their own responsibility:

- surname and name;
- date and place of birth;
- nationality;
- residence and chosen address for correspondence for the purposes of this selection;
- that they do not have a criminal record and are not involved in any current criminal proceedings (or if so, state which);
- that they have the qualification required by art. 2 of the call for applications, specifying the University and year in which it was obtained;

or

- that they possess an academic qualification obtained abroad, which is deemed equivalent.

The candidates in possession of a qualification obtained abroad must annex to their applications a translation into Italian or English of their foreign qualification, accompanied by a sworn statement that it is a faithful translation of the original certificate.

The foreign qualification may be declared admissible by the Evaluation Board, solely for the purposes of admission to the selection procedure.

**In case of award, the winning candidates having obtained their qualification in a country outside of the European Union, must provide the Structure, in the same manner as laid down for the presentation of applications, the official translation with a declaration of value of the foreign qualification** issued by the competent diplomatic representation or Italian consulate in their home country, in accordance with the applicable laws, **within 60 days from the notification of official approval of the selection procedure reports**. If the documents are not received by the Structure within the stated deadline, the candidate will not be awarded the contract.

Candidates must also enclose the following with their applications:

- copy of a valid identity document;
- scientific and professional curriculum vitae also containing scientific productivity and list of scientific publications (conference proceedings, journal articles), in English (in a single pdf file with a maximum size of 1 MB) and must also include:
  - Copies of degree and academic transcripts (document indicating marks as well as courses/classes attended within the BSc and Master Degree)
  - A motivation letter (Statement of Purpose) (max 2 pages)
  - (Optional) A letter of reference

Candidates are admitted to the selection procedure with reserve.

At any time, even after participation in any tests, the Administration may, with justification, exclude them from the selection procedure. The concerned candidate will be notified of such exclusion.

#### ***Art. 4 - Comparative assessment of the candidates and the Evaluation Board***

The candidates will be assessed comparatively by an Evaluation Board appointed by the Board of the Structure, and formed by the following members:

- Prof. Luca De Marchi
- Prof. Alessandro Marzani
- Dott. Antonio Palermo
- Substitute: Dott. Nicola Testoni

The selection procedure focuses on the examination of the selection criteria laid down in advance by the evaluation board, the candidates' scientific-professional curriculum containing also the scientific work and publications as well as an interview, aiming to verify the suitability of the candidate for carrying out the research programme.

During the interview, the Board will also verify the candidates' knowledge of the foreign language(s) english on relevant sectoral topics.

The list of candidates admitted to interview will be published on the following notice board:

DIPARTIMENTO DI INGEGNERIA DELL'ENERGIA ELETTRICA E DELL'INFORMAZIONE "GUGLIELMO MARCONI", VIALE DEL RISORGIMENTO, 2, city BOLOGNA, on (date) Wednesday May 13, 2020.

The list of candidates admitted to interview will be also published on the site calls, tenders and competitions <https://bandi.unibo.it/ricerca/assegni-ricerca>.

For any info regarding the research project, the research activity and scientific-curricular competences please send an email to [l.demarchi@unibo.it](mailto:l.demarchi@unibo.it); for information on the administrative procedure, please send an email to [fabio.cumella2@unibo.it](mailto:fabio.cumella2@unibo.it)

**The interview will take place by May 27, 2020 at DIPARTIMENTO DI INGEGNERIA DELL'ENERGIA ELETTRICA E DELL'INFORMAZIONE "GUGLIELMO MARCONI", VIALE DEL RISORGIMENTO, 2 BOLOGNA.**

To be admitted for interview, the candidates must present a valid ID document.

With the approval of the Board, candidates may sit the interview on-line, via a Skype audio and video teleconference.

Candidates must explicitly request the use of such method in their application, providing their Skype

contact and ensuring that the workstation from which they will sit the interview is equipped with a webcam - which is indispensable for the recognition of the candidate - as well as a microphone and earphones/speakers. For this purpose, candidates admitted to the interview are invited to contact the Board promptly at the following e-mail address: [l.demarchi@unibo.it](mailto:l.demarchi@unibo.it)

At the start of the on-line interview, the candidates must exhibit to the Board the same ID document submitted with their application.

Remote interviews will be held on the same day as the interviews held in person, in the order and at the times established by the Board

The on-line interviews are public and may be watched by the audience at the interview site set up for this purpose.

At the end of the selection procedure, the Board will draw up a list of candidates with relative scores, , for a period of 12 months .

Candidates will preferably have a PhD or medical specialisation school diploma.

If two candidates receive the same scores, preference will be given to the younger candidate.

The Head of the Structure shall confirm in writing his/her approval of the list drawn up by the Board which will be published on <https://bandi.unibo.it/ricerca/assegni-ricerca>.

The list of candidates may be used to award other research contracts within the same research project, also of a lesser duration than that indicated in the call for applications and in any case no less than one year.

#### ***Art. 5 - Duration and amount of the contract***

The contract has a duration of **36 months**. The maximum total amount of the research fellowship contract is **€ 162.499,68** per three years, entirely financed by REA; this amount has been calculated following MSCA guidelines defining compensation (cost month/person) to the researcher in the Project; in particular, the amount results from the sum of the following allowances:

1. Living allowance = € 3.413,88x 36 months = € 122.899,68
2. Mobility allowance = € 600 x 36 months = € 21.600,00
3. Family allowance = € 500 x 36 months = € 18.000,00 (if due)

**The gross amount of the research fellowship is € 39.217,20 per year.** This amount has been calculated following MSCA guidelines defining compensation (cost month/person) to the researcher in the Project. The gross amount may be increased to **44.102,39 € if the winner possess the requirements to benefit the “Family allowance”** as foreseen by the Grant Agreement and MSCA guidelines. The amount is exempt of withholding tax and includes all statutory social security charges the Research Fellow is subject to. The amount will be paid in deferred monthly payments.

The Research Fellow is provided with accident insurance, against payment of the required contribution which will be withheld from the first monthly instalment.

#### ***Art. 6 – Contract signature***

The winning candidate will be invited to sign a research contract with the Structure within Monday, November 30, 2020.

The non-acceptance within the deadline notified by the structure shall lead to the forfeiture of the right to sign the contract.

#### ***Art. 7 - Rights and Duties***

a) The contract is governed by the following regulations concerning leave: for obligatory maternity leave, the provisions laid down in the Decree of the Ministry of Labour and Social Welfare of 12 July 2007, published in the Official Journal no. 247 of 23 October 2007, and, for sick leave, article 1, paragraph 788, of Italian law no. 296 of 27 December 2006 and amendments.

b) The research activities are carried out under the supervision of the tutor, in a non-subordinate relationship with no fixed working hours. The research fellow shall personally carry out the required activities laid down in the Activity Programme without any substitution.

The Fellow undertakes to work exclusively on the research programme and not to receive compensation other than that provided by the Department (or by other entities identified in the Grant Agreement) for activities carried out within the framework of the research programme.

c) Research Fellows assigned to medical and clinical subject areas: the Research Fellow may carry out care activities exclusively for the purposes and needs of the research project, in the methods and limits laid down in the contract, or, in the case of activities carried out in healthcare structures, as laid down in specific agreements between the university and the health board.

d) Upon the conclusion of the activity, the Fellow shall present to the Department's Board a detailed final report on the activity carried out, the results achieved and the scientific publications, accompanied by an opinion by the tutor, and shall complete and submit the questionnaires provided by the Agency (REA) according to the terms and conditions set out in the Grant Agreement. In addition, the Fellow must submit one or more interim reports to the tutor according to the conditions set out in the Grant Agreement.

e) According to the conditions set out in the Grant Agreement, and following verification of compatibility with the funding programme's rules, the Fellow may conduct additional research abroad on one or more

occasions, according to a schedule to be defined with the affiliation structure and with the costs to be borne by the department, without eligibility for specific incentives without prejudice to the possibility to obtain specific funding.

#### ***Art. 8 - Regulations concerning Intellectual Property***

Industrial Property rights over the results achieved by the Research Fellow in the execution of activities undertaken on behalf of the University, including but not limited to industrial inventions, models, drawings, plant varieties, as well as the intellectual and industrial property rights deriving from the production of software or databases ("Results"), belong exclusively to the University, which may freely use them also within agreements made by the departments with third parties, without prejudice to the moral rights of the Research Fellow who shall be acknowledged as the author or inventor.

The Fellow shall be entitled to publish the results of his or her research activity in accordance with the obligations established by the Grant Agreement and all associated agreements, unless such publication jeopardises the University's right to protect the results. The Fellow is required to ensure the visibility of European Marie Skłodowska-Curie funding in his or her publications, communications and applications for the protections of results, as provided for in the Grant Agreement.

The Research Fellow therefore undertakes to promptly notify the achievement of the results to the tutor, who shall verify the existence of any such prejudice.

In any case the Research Fellow undertakes to sign a specific Undertaking of Confidentiality with the referred Structure, which will be annexed to the contract.

#### ***Art. 9 - Non-accumulation, incompatibility, leave***

The Fellow undertakes to abide by the situations of incompatibility or ban on cumulative positions pursuant to the law and the University Rules on Research Fellowships (416 of 19.4.2011) and the Grant Agreement.

1. The position of research fellow is incompatible with the following positions:

a) fixed-term and full-time staff employed by the bodies listed in art. 22 para. 1 of Italian Law no. 240/2010;

b) persons employed by any private bodies, on a fixed term, permanent or part-time basis; For staff of any Public Administration other than those listed in letter a) refer to the provisions of point 2 below;

c) persons with fixed-term research contracts with any university;

d) persons enrolled in any first, second or single cycle degree programmes, PhD programmes with scholarships or specialisation school. Self-funded research contracts are compatible with enrolments in non-medical specialisation schools, for which no study grant or contract is foreseen or master's degree only where authorised in advance by the structure Director, and having sought the opinion of the tutor.

e) persons awarded research fellowships at any other body.

2. Employees of public administrations other than those listed in point a) with a fixed-term, permanent or part-time contract shall take unpaid leave of absence for the whole period of the research contract.

3. Freelance professional activities are compatible with the research fellowship contract where authorised in advance by the Board of the structure, with the motivated opinion of the tutor and having verified that the activities in addition to the research fellowship do not prejudice the regular execution of the contract.

4. The accumulation of the research fellowship contract with study grants awarded for any purpose is not permitted, with the exception of those granted by national or foreign institutions for the purposes of integrating the research activities with study periods abroad.

5. The above requirements must be possessed from the moment of entry into force of the contract. The winning candidate shall sign a specific affidavit undertaking to notify the department of any variations in the declared situations as soon as they occur.

#### ***Art. 10 – Forfeiture***

Any candidate who within the deadline notified by the structure does not sign the contract, unless for promptly and duly demonstrated reasons of health or force majeure, shall forfeit the right to sign the contract.

#### ***Art. 11 - Reference norms***

For any matters not laid down in this call for applications, refer to the Regulation on Research Fellows issued by the University of Bologna by Rectoral Decree no. 416 dated 19.04.2011 and to regulations set by Horizon 2020 Marie Skłodowska-Curie actions, Innovative Training Networks H2020-MSCA-ITN-2019 – withing the Project "GW4SHM - Guided Waves for Structural Health Monitoring" (Marie Skłodowska- Curie Actions Innovative Training Networks H2020- MSCA-ITN-2019), Grant Agreement n. 860104.

The personal data provided by the candidates in their applications, pursuant to General Data Protection Regulation- Regulation (EU) 2016/679, shall be processed for the purposes of managing the selection procedure and the contract.

Selection procedure manager Dott.ssa Barbara Di Placido.

For information of an administrative nature on this announcement please contact Fabio Cumella, [fabio.cumella2@unibo.it](mailto:fabio.cumella2@unibo.it), 0512093279.

This call for applications will be published on the University Portal, the MIUR website and the European Mobility Portal (EURAXESS).

Date, Tuesday, March 31, 2020

HEAD OF DEPARTMENT  
Prof. Ing. CLAUDIO MELCHIORRI