



Call 09/2020

**Announcement of public selection based on qualifications and interview for no. 1 professionalizing fellowship in the field of “High Performance Computing (HPC) for Earth System”, by the scientific research section “Seismological Research Center” – CRS of the National Institute of Oceanography and Applied Geophysics– OGS.**

#### **Description of the activity**

The fellowship is part of the Training Program HPC-TRES.

The research activity consists in the development, application and deployment of high-performance computational methodologies applied to the study of the Earth System. The activity is specifically finalized to contribute to the research lines described in detail in the scientific plan of the HPC-TRES program. The research activities include:

1. Development of tools and codes for earthquake detection;
2. Development of parallel solutions running on cloud or GPU;
3. Implementation of tools exploiting AI.

#### **Art. 1 – Vacancies and general part**

A public selection based on qualifications and interview is open for no. 1 professionalizing fellowship in the field of “*High Performance Computing (HPC) for Earth System*”, by the scientific research section “Seismological Research Center” – CRS of the National Institute of Oceanography and Applied Geophysics – OGS – Scientific Disciplinary Sectors: GEO/10 (Solid Earth Geophysics) and GEO/11 (Applied Geophysics).

According to art. 22, paragraph 1 of the Law no. 240/2010, officials or permanent members of staff working for Italian Universities and Public Research Bodies (OGS included) are not eligible to take part in the selection and are therefore automatically excluded.

The research fellowship may not be combined with any other fellowships with the exception of those awarded by national or international institutions aimed at integrating the research activity of the grantees with stays abroad.

The holder of the fellowship is not compatible with the participation in degree courses, master’s degrees, fellowship PhD, in Italy or abroad both on fixed-term or full-time, with the exception of unpaid leave from work.

OGS may not pay any additional payments to grantees.

A copy of this selection notice is available by the OGS Headquarters as well as on the OGS institutional web page at <http://www.ogs.trieste.it/it/job-opportunities>.

All information, news and notices referred to this call may be found at <http://www.ogs.trieste.it/it/job-opportunities>.

#### **Art. 2 – Duration and salary amount**

The fellowship will have a duration of 12 months and cannot be renewed automatically. Upon request by the Tutor, the fellowship renewal may be proposed by the Director of the Section where the fellowship holder is implementing the research activities to the General Director of OGS. The renewal proposal shall be accompanied by a short report written by the fellowship holder detailing the implemented activities and which should be countersigned by the Tutor.



Even in the case of any possible renewals, the duration of the fellowship cannot exceed six years. The total duration of the fellowships also includes the fellowships implemented in other organizations or universities, with the exception of the time during which the fellowship overlapped a PhD course (not paid) to a maximum duration of the course itself.

The fellowship cannot be awarded to applicants who have already benefited from a fellowship, further renewals included, for a period of time of six years, with the exclusion of the above-mentioned paragraph.

In the case that the successful applicant has already benefited from fellowships for a period of less than six years, the annual research fellowship and/or its possible renewal shall be granted within the above-mentioned termination.

The gross annual salary of the research professionalizing fellowship, net for charges borne by OGS and including the social security contributions concerning the part borne by the grantee, is equal to € 21,000.00 and shall be paid in monthly instalments.

From the third year, the annual amount of the fellowship, net for charges borne by OGS and including the social security contributions concerning the part borne by the grantee, will be re-modulated for the total amount of € 23,000.00, when there is financial provision and subject to the positive evaluation of the research activities of the fellow by a Selection Board appointed by the Director of the Section and consisting of the same Director of the Section, the person in charge of the research project and an expert in the field.

The amount of the fellowship does not include any possible allowance for missions in Italy and abroad which may be deemed necessary for the implementation of the research activities connected to the fellowship. The mission allowance is determined in proportion to the allowance paid to the OGS staff belonging to the III professional level.

Fiscal and social security regulatory provisions in force are applied to all fellowships.

### **Art. 3 – Requirements**

The requirements for the admission to the public selection are:

- MSc Degree in Physics, Mathematics, Engineering, Earth Sciences, or Computer Sciences obtained in accordance with the current Italian legislation prior to Ministerial Decree no. 509/99 or MSc Degree as per Ministerial Decree no. 270/04 in all the subject classes that have been equalized under the Italian Interministerial Decree dated July 9 2009 and according to the table annexed to the above-mentioned Decree obtained at any Italian University or at any foreign University;
- Suitable and fitting scientific CV (post-graduate specialization courses, research activities at public or private institutions, fellowship, grants in Italy or abroad);
- Knowledge and use of the scientific programming languages;
- Good knowledge of English language;
- Knowledge of Italian language (only for foreign applicants).

Candidates who obtained a qualification abroad that has been declared equivalent by the Italian competent educational authorities or validated according to the rules in force (Art. 38 Legislative Decree 165/2001), are admitted to participate in the call.

The candidate without such requisite at the date of the application shall present a detailed documentation concerning his/her education in order to allow the selection board to evaluate the application limited to the present call for applicants.

The admission requirements must be fulfilled at the date of this notice of recruitment.



**Art. 4 – Application form: terms and conditions**

The application forms for the participation in the call shall be sent in simple paper, according to the form herewith attached (Annex 1), agreed with handwritten or digital signature by the relevant parties and sent by one of the following options:

- a) By PEC (Electronic Certified Email), in conformity with the current legislation on the matter, to the following PEC address: [ogs@pec.it](mailto:ogs@pec.it).  
The application form must be handed in at the latest by 12.30 (half past midday) on the closing date;
- b) By registered mail with notice of delivery to:  
Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS  
Ufficio Affari Generali e Protocollo (Room no.34, 1<sup>st</sup> floor)  
Località Borgo Grotta Gigante, 42/c  
34010 Sgonico – TS.  
The application form shall be presented at the latest the fifth day following the date of closure of the call.  
The official postmark date will serve as proof;

Different methods of delivery will not be accepted.

Only and exclusively for non-national candidates, applications to the call drafted on plain paper and in accordance to the table in annex to the present call (Annex sub 1), with the applicants handwritten or digital signature by the usual European standards, may also sent according to the following procedure.

- c) By email, to the following email address: [protocollo@ogs.trieste.it](mailto:protocollo@ogs.trieste.it).  
The application form must be handed in at the latest by 12.30 (half past midday) on the closing date.

For points a) and b), the applications not undersigned with handwritten or digital signature as well as the applications received after the deadline will not be considered and excluded from the selection.

Only and exclusively for non-national candidates with reference to the means of transmission laid down in point c) of this clause, all applications not containing the candidates handwritten or digital signature by the usual European standards, as well as all applications received after the set deadline, shall not be considered.

As per point c) in the case of applications sent with handwritten signature, such applications shall be validated with handwritten signature to be signed in the presence of the Commission before the interview.

Under his/her own responsibility, the candidate must declare the following information:

- Surname and name
- Place and date of birth
- residence
- citizenship
- Not have been convicted or found guilty of any criminal offence, or, if any, what kind of criminal offence the candidate has been found guilty;
- To be in possession of the requested qualifications, with all the details concerning date, place of issue, final mark;
- The candidate's position with reference to the award of other fellowships;
- To be in possession of further requirements as per art. 3 of this call
- Knowledge of the Italian language (only for foreign candidates)
- The chosen address for the call

The candidate shall attach to the application form the following documents:



- Scientific cv demonstrating relevant expertise for the implementation of the research activities (dated and undersigned);
- List of publications (undersigned).

The candidate may attach all documents, qualifications and publications that he/she deems appropriate to present in his/her own interest.

The candidate shall also attach to the application:

- 1) Self-declaration affidavit in accordance with art. 46 Presidential Decree dated. 28.12.2000, no. 445 (Annex 2), concerning the degree obtained;
- 2) Self-declaration affidavit, in accordance with art. 47 Presidential Decree dated 28.12.2000, no. 445 (Annex 3), concerning the scientific cv, the implemented research activities and the list of publications.

As an alternative to the declaration as per paragraph 1) copy of the degree may be attached to the application form accompanied by the self-declaration affidavit certifying the exact copy of the original in accordance to art. 47 Presidential Decree dated 28.12.2000, no. 445 (Annex 3).

The self-declaration affidavit shall be accompanied by a copy of a valid identity card.

Application forms not accompanied by the self-declaration affidavit as per paragraph 1) or the copy of the degree certificate with the relative self-declaration affidavit will not be taken into consideration; Application forms not accompanied by the declaration as per paragraph 2), filled under the provisions thereof.

Special needs candidates, with reference to their own disability, shall mention their specific request for assistance in the application form.

#### **Art. 5 – Exclusions**

The following reasons constitute ground for ex-officio exclusion:

- Applications not submitted within the fixed deadline referred to in Art. 4;
- Applications sent under conditions other than those referred to in Art. 4;
- Partial or total omission of the information requested as per Art. 4;
- Being in one of the conditions referred to in Art. 1, paragraphs 2, 3 and 4;
- Fail to submit the application form;
- Failure to submit a copy of a valid identification document attached to the application form;
- Failure to comply with any of those requirements as per art. 3;
- Failure to attach the self-declaration affidavit as per art. 4, paragraph 1) as well as the self-declaration affidavit as per art. 4 paragraph 2).

Candidates are admitted to the selection provisionally. The Director of the Human Resources management has the faculty to exclude a candidate at any time in case of lack of the above-mentioned requirements by providing a valid justification.

If the motivations that determined the exclusion are verified after the completion of the selection, the Director General, with a valid justification, provides automatic forfeiture of any rights connected to the participation in the selection itself.

Exclusion of candidates shall also be applied in case of failure in presenting accurate declarations requested by the application form in accordance with Presidential Decree dated 28.12.2000, no. 445.

#### **Art. 6 – Selection Board: measurable qualifications, interview and ranking list**

The Selection Board is appointed by an official Act of the General Director of OGS.



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The Selection Board can assign up to 100 points, divided as follows: 30 points for the evaluation of the qualifications and 70 points for the interview.

Only candidates obtaining at least 21/30 points in the first evaluation will be admitted to the interview.

The Selection Board preliminary adopts the criteria and the parameters to which it intends to apply, with specific reference to the characteristics of the research project.

The evaluating titles are:

- MSc Degree obtained at any Italian or foreign University;
- Post-graduate and specialization courses, either in Italy or abroad;
- Research activities in public or private organizations, including contracts, fellowships or assignments, both in Italy and abroad in the subject of the call;
- Knowledge and use of the main scientific programming languages;
- Publications on scientific journals and any other contribution to reports, documents and books in the subject of the call.

In particular, any title obtained abroad would be considered as an asset, for the purpose of awarding the fellowship.

After the qualifications have been evaluated, the Selection Board makes a shortlist of applicants who will be invited to the interview.

The list of applicants admitted to the interview and details on date, time and place will be published at least 20 days prior on the website of OGS <http://www.ogs.trieste.it/it/job-opportunities>.

Such publication effectively constitutes an official notification.

On request of the candidates to be detailed on the application form, the interview could be taken by using remote audio/video computer tools. The interview may be both in English or Italian upon request of the candidate.

For the interview the candidates shall present a valid identification document.

The candidates who will not attend the interview, or, if the interview will be made through a video conference call, will not be connected according to the indications given by OGS, will lose any right to participate and will therefore be disregarded.

Candidates failing to present a valid identification document or in possession of expired ID cards will not be admitted to the interview.

The interview is considered as "passed" if the applicant gets the minimum score of 49/70.

After completion of the interviews, the Selection Board makes a shortlist, in descending order, of the final ranking obtained by the candidates.

The selection is considered as passed if the applicant obtains the minimum score 70/100 points.

Candidates ranking list is drawn up according to the overall votes each candidate received. In the case of candidates with the same score, the preference will be attributed to the younger candidate.

The ranking list with the indication of the grant winner or winners will be published by the President of the Selection Board with the same forms of advertising provided in the call.



#### **Art. 7 – Ranking list approval and appointment of the grant winner**

The Director of the Human Resources Department, once ascertained the formal validity of the documents transmitted to the Selection Board, approves the ranking list and appoints the grant winner.

The ranking lists shall remain valid for 18 months after the date of approval.

In case of formal renunciation of the grant winner, or if the grant winner does not accept the fellowship within the prescribed period according to Art. 8 of the present call, the grant shall be awarded to the next eligible candidate in the ranking list.

The grants available following renunciation or resolution of the grant winner may be awarded to the candidates indicated in the ranking list within the limits of its duration.

#### **Art. 8 – Awarding of the fellowship**

After budget and provisions verification, the OGS General Director, awards the fellowship to the grant winner.

The grant winner will be duly notified of the result and shall send an official declaration of acceptance of the grant within 15 days after acknowledgement of receipt of the above-mentioned notice.

Once obtained the declaration of acceptance from the winner candidate, a contract between the General Director of OGS and the grant winner is prepared and signed, a document which defines the terms and the research activities object of the collaboration.

Concerning taxation all the regulatory provisions referred to art. 4 of the Law dated August 13 1984 no. 476 are applied to research fellowships and, in terms of social security, the applicable law is referred to art. 2, paragraphs 26 and following, Law no. 335 dated August 1995 and subsequent amendments; for maternity leave matters the applicable law refers to provisions as per Ministerial Decree dated July 12 2007, published on the Official Journal no. 247 dated October 23 2007 and for matters concerning sick leave, art. 1 paragraph 788 of Law no. 296 dated December 27 2006 and subsequent amendments. During the maternity leave, the allowance paid by the Italian Social Security Institute (INPS) with reference to art. 5 of the above-mentioned decree dated July 12 2007 is integrated by OGS up to the total amount of the research fellowship

#### **Art. 9 – Implementation of the research activities**

The activities of the fellowship holder are carried out in complete autonomy and with no scheduled working time, within the specific research programme and according to the guidance provided by the scientific tutor.

The scientific tutor must coordinate the activities of the fellowship holder together with other participants in the programme, by providing all the necessary indications for the implementation of the activity object of the collaboration.

The activity of the fellowship holder under any circumstances foreshadows a status of employment.

#### **Art. 10 – Fellowship obligations**

The fellowship holder must carry out the commitments foreseen by the research programme prepared by the scientific tutor and under his/her supervision. At the end of the fellowship the holder must submit to OGS a final research report that includes the obtained results. The report must be approved by the tutor. All technical, scientific and administrative data and information gathered by the fellowship holder during the implementation of the activity shall be considered confidential and therefore the use such information for purposes different than those for which the grant has been awarded. Concerning the protection of the intellectual property of the results or products obtained on the performance of the activity of the fellowship please refer to OGS regulations on patents and protection of intellectual property.



**Art. 11 – Personal data management**

In accordance with current legislation, personal data provided by candidates in the application form will be settled by the Head of Human Resources Office of OGS and processed for the only purpose of the assignment of the grant and the ensuing relevant procedures.

**Art. 12 – Provisional extraordinary regulations**

Due to the current Covid-19 epidemiological emergency situation, and in accordance with the Prime Minister's Decree 8<sup>th</sup> March 2020, the subsequent Prime Minister's Decree 9<sup>th</sup> March 2020, the Decree Law 17 March 2020 no. 18, and the Prime Minister's Circular 2/2020, with regard to the public recruiting procedures, the meetings of the Selection Board and the interviews of the candidates shall exclusively be made via video conference call, if those meetings/interviews are planned to take place during the emergency period.

In this case OGS will publish on its website all the necessary information on how to connect for the interview and the system requirements needed.

Once the emergency period is finished, the Selection Board meetings and the interviews via video conference call could still be used, but the decision on this matter will be up to the Board.

**Art. 13 – Final proceedings**

For matters not covered by this selection notice please refer to the Grant and Research Fellowship rules of OGS.

This call for individual grant will be posted on the OGS website, on the call's website of MIUR and on the European Commission Internet portal-Euraxess.

In accordance with the Law dated 7/08/1990 no. 241 art. 5 the Responsible of the Proceedings is the Director of the Human Resources Office.



Application form

To: Istituto Nazionale di Oceanografia  
e di Geofisica Sperimentale – OGS  
Località Borgo Grotta Gigante, 42/c  
34010 Sgonico – TS

Call \_\_\_\_\_/2020 – \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

The \_\_\_\_\_ undersigned \_\_\_\_\_ (name) \_\_\_\_\_ (surname)  
\_\_\_\_\_ born \_\_\_\_\_ (Province \_\_\_\_\_) on \_\_\_\_\_  
and resident in \_\_\_\_\_ address \_\_\_\_\_ n.  
\_\_\_\_\_ requests to participate in the selection of the call in object.

For this purpose, the applicant declares under his/her own responsibility:

- citizenship \_\_\_\_\_
- not have been convicted or found guilty of any criminal offence (please specify, if any)  
\_\_\_\_\_  
\_\_\_\_\_
- to hold a degree (please cross the type of degree you hold)
  - preceding university's reform pursuant Ministerial Decree no. 509/99
  - master's degree pursuant Ministerial Decree no. 509/99
  - master's degree pursuant Ministerial Decree no. D.M. 270/04
- in \_\_\_\_\_ obtained on date  
\_\_\_\_\_ from the University of \_\_\_\_\_  
with the score of \_\_\_\_\_ / \_\_\_\_\_

**if the qualification is obtained abroad**

- to have already obtained the recognition of the equivalence as per Art. 38 of the Legislative Decree dated March 30 2001, n. 165, in view of the documents annexed to the application  
*or*
- to have already applied for the recognition of the equivalence as per Art. 38 of the Legislative Decree dated March 30 2001, n. 165, in view of the documents annexed to the application  
*or*
- to present the following detailed documentation of the attended training in order to allow the selection board to assess the recognition of equivalence only for the purposes of the applicant's participation in the mentioned call for applicants





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- no fellowships have been awarded before
- the following fellowships have been awarded  
from \_\_\_\_\_ to \_\_\_\_\_  
by \_\_\_\_\_  
from \_\_\_\_\_ to \_\_\_\_\_  
by \_\_\_\_\_  
from \_\_\_\_\_ to \_\_\_\_\_  
by \_\_\_\_\_
- to currently hold a fellowship  
from \_\_\_\_\_ to \_\_\_\_\_  
by \_\_\_\_\_
- to be eligible for the following criteria (art. 3 present call)
  - to have knowledge of the Italian language (only for foreign candidates)
  - to hold the following titles that may be evaluated:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Also attached to this form:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

to wish to receive all communication referring to this call to the following address:

(street) \_\_\_\_\_

(town) \_\_\_\_\_

(ZIP code) \_\_\_\_\_

Telephone \_\_\_\_\_

e-mail \_\_\_\_\_

Date \_\_\_\_\_

Signature

\_\_\_\_\_



**Istituto Nazionale  
di Oceanografia e di Geofisica Sperimentale**

The undersigned \_\_\_\_\_  
For participating in this call \_\_\_\_\_ requests to carry out the interview via video-conference call  
through the following videoconference account \_\_\_\_\_

Signature

\_\_\_\_\_

The undersigned \_\_\_\_\_  
For participating in this call \_\_\_\_\_ request to take the exam in one of the following languages

Italian

English

Signature

\_\_\_\_\_



SELF DECLARATION AFFIDAVIT

(art. 46 Presidential Decree 28.12.2000 no. 445)

The undersigned (name) \_\_\_\_\_ (surname) \_\_\_\_\_  
born in \_\_\_\_\_ (province \_\_\_\_\_) on \_\_\_\_\_  
and resident in \_\_\_\_\_ address \_\_\_\_\_ no.  
\_\_\_\_\_

aware that false declarations are punishable by law (art. 76 Presidential Decree 28.12.2000 no. 445)

DECLARES

- to hold a degree (please cross the type of degree you hold)

- preceding university's reform pursuant Ministerial Decree no. 509/99
- master's degree pursuant Ministerial Decree no. 509/99
- master's degree pursuant Ministerial Decree no. D.M. 270/04

in \_\_\_\_\_ obtained on date  
\_\_\_\_\_

from the University of \_\_\_\_\_

- with the score of \_\_\_\_\_ / \_\_\_\_\_

- to be in possession of the PhD in \_\_\_\_\_

\_\_\_\_\_ obtained on date \_\_\_\_\_

from the University of \_\_\_\_\_

namely

- to be enrolled on a PhD course in \_\_\_\_\_

by \_\_\_\_\_

from \_\_\_\_\_ and to have completed no. of year(s) \_\_\_\_\_

- to be in possession of the following title of specialisation or certificate of attendance to a post  
lauream specialisation course \_\_\_\_\_

obtained on date \_\_\_\_\_ issued by \_\_\_\_\_

with the score of \_\_\_\_\_

The undersigned also declares that he/she has been informed that, in accordance with current  
legislation, personal data will be treated, by computer tools also, exclusively within the object for which  
the declaration has been drawn up.

Date \_\_\_\_\_

Signature

\_\_\_\_\_



SELF DECLARATION AFFIDAVIT  
(art. 47 Presidential Decree 28.12.2000 no. 445)

The undersigned (name) \_\_\_\_\_ (surname) \_\_\_\_\_  
born in \_\_\_\_\_ (province \_\_\_\_\_) on \_\_\_\_\_  
and resident in \_\_\_\_\_ address \_\_\_\_\_ no. \_\_\_\_\_  
aware that false declarations are punishable by law (art. 76 Presidential Decree 28.12.2000 no. 445)

DECLARES

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (1)

Purely by way of example here below a list of options that may be used in the self-declaration affidavit

- the copy of the degree certificate attached to the application form of no. \_\_\_\_\_ pages is a true copy of the original
- the copy of the following title or document or publication  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ of no. \_\_\_\_\_ pages, is a true copy of the original.

The undersigned also declares that he/she has been informed that, in accordance with current legislation, personal data will be treated, by computer tools also, exclusively within the object for which the declaration has been drawn up

Date \_\_\_\_\_

Signature

\_\_\_\_\_

(1) The declarant shall send attached to the declaration **a copy of a valid identification document.**