

CALL N. 400.002-ISPC-2022-CT- PNRR IR H2IOSC

Selection by qualifications and interview pursuant to article 8 of the "Regulations concerning the recruitment of personnel with fixed-term employment contracts", for the recruitment, pursuant to article 83 of the National Collective Labour Agreement for the 2016-2018 "Education and Research" sector, signed on 19 April 2018, of four staff members with a professional profile of **Researcher III** level, at the **Institute of Heritage Science of National Research Council** office headquarters **Catania**

THE DIRECTOR HEREBY PROVIDES AS FOLLOWS

➤ Article 1 - Positions to be assigned - Activity programmes

A public selection based on qualifications and an interview is announced pursuant to article 8 of the "Regulations concerning the hiring of personnel with a fixed-term employment contract" for the recruitment, with a fixed-term employment contract pursuant to article 83 of the CCNL (National Collective Bargaining Agreement) of the "Education and Research" Sector 2016-2018, signed on 19 April 2018, of four a staff members with a professional profile of Researcher - Level III, initial salary range, at the **Institute of Heritage Science of National Research Council** - office headquarters **Catania** for carrying out scientific-technological research activities within the project mentioned in the **according Annex 1)**

➤ Article 2 - Admission requirements

1. For admission to the selection, the following are required:

- a) Master's Degree or Specialized Degree, or University Degree within the framework of the previous system relating to the theme of the project **according to the selected profile code as per attachment 1)**;

For degrees obtained abroad, non-academic recognition is required according to the procedure indicated in article 38 of Legislative Decree No. 165/2001 with the procedures set out in article 2 of the Decree of the President of the Republic No. 189/2009, amended by article 1 paragraph 28-quinquies of Law No. 15/2022. The candidate who is not yet in possession of the provision for recognition of the foreign qualification must declare in the application form that he / she has submitted the relative request. In this case the candidate will be admitted to the selection with reserve, it being understood that this recognition must be presented before the stipulation of the employment contract;

- b) at least three years of experience in **related to the research activity/area referred to in Annex 1), or possession of the title of Research Doctor or a PhD relevant to the field of experience requested;**
- c) knowledge of the English language.

➤ Article 3 - Application form and deadlines for submission

1. The application form must be completed and submitted exclusively via Internet, using a computer application available in the selection area of the CNR site at <https://selezionionline.cnr.it>, following the instructions specified in the following article 4. No other forms for the submission of application forms are allowed, under penalty of exclusion.
2. The deadline for submitting the application is 30 days starting from the day following the publication of the notice of the announcement in the Official Gazette of the Italian Republic - 4th Special Series - Competitions and Exams. The application received by 18:00 on the last working day is considered to have been submitted within the deadline. The date of submission of the application to participate in the procedure is certified by the computer system which, upon expiry of the deadline for submission, will no longer allow access to the procedure.
3. In the application form, candidates declare under their own personal responsibility:
 - surname and name, date and place of birth;
 - residence and tax code;
 - citizenship;
 - if Italian citizens, the municipality in whose electoral lists they are registered;
 - if foreign citizens, confirmation that they enjoy civil and political rights in the country of origin (with the exception of candidates with refugee status or subsidiary protection status);
 - that they have not received any criminal convictions and that they have no pending criminal proceedings against them; otherwise, the candidates must indicate any criminal convictions reported even if they have not become final as well as any pending criminal proceedings, specifying the details of the sentence, plea bargaining or application for amnesty, pardon or judicial pardon, the authority that issued the act and the title of the offence; the declaration must be made in all cases even with a negative outcome;
 - the qualification held, with the indication of the complete wording on the qualification, the date of achievement and the institution that issued it;
 - that they have the experience required by article 2, letter b);
 - the possible need for aid during the examination tests in relation to a specific disability;
 - any services provided to a Public Administrations and any causes for the termination of such services;
 - that they have not been dismissed or placed on leave from employment in a Public Administration due to persistent and insufficient performance and that they have not lost their employment with another state organization for having obtained employment through

the production of false documents or vitiated by an invalidity that cannot be remedied , as well as not having been banned from public office on the basis of a final judgment;

- possession of any preferred qualifications o with equal merit pursuant to article 9 of this announcement;
- for foreign citizens only: to have adequate knowledge of the Italian language;
- the candidate's personal PEC address, or for foreign candidates the ordinary e-mail address;
- a telephone number.

4. Communications relating to this procedure will be sent to the candidate's personal PEC address; in case of failure to enter the personal PEC (Posta Elettronica Certificata) (certified email) address, the ordinary email address will be used, in the latter case the non-delivery of communications is the direct responsibility of the candidate. The CNR does not assume any liability arising from inaccurate information regarding the candidate's address or from failure or late communication of change of the certified email address and / or ordinary e-mail indicated in the application

➤ Article 4 - How to submit the application

1. To submit applications, it is necessary to proceed as follows (also using the "User Manual" available n the Online Selections procedure under "Altro" ("Other")):
 - a) register to obtain access credentials that will be communicated to the e-mail address indicated by the candidate: to register, use the link Nuova registrazione (New registration). For those who have already participated in a previous selection always on this site, it is not necessary to repeat the registration. For more information see the section "Accesso/registrazione in procedura" (Access/registration procedure) of the User Manual, while for assistance use the Helpdesk service.
 - b) fill in the application;
 - c) attach the Pdf of the curriculum vitae et studiorum, inserting all the information of both a substantial and formal nature relating to the qualifications that you intend to submit for the evaluation of the Examination Commission,
 - d) attach the Pdf of an identity document with a valid legible signature;
 - e) print the form (automatically completed by the procedure with the personal data entered by the candidate when submitting the application), concerning the personal sworn declarations or declarations in lieu of affidavits, pursuant to articles 46 and 47 of Decree of the President of the Republic 28 December 2000 n. 445, signing it with a legible handwritten signature and attaching it in Pdf format or inserting the same in a digitally signed form;
 - f) print the form (automatically filled in as the previous one), concerning the information on the processing of personal data pursuant to EU Regulation No. 2016/679, sign it with a legible handwritten signature and attach it in Pdf format or insert the same digitally signed form;
 - g) definitively confirm the request for the production of the receipt.
2. The computer system issues the receipt of the correct submission of the application. The questions that are not definitively confirmed in the procedure, as indicated in paragraph 1 leter. g), remain in a provisional state and are therefore void.

➤ Article 5 – Examination Commission

1. The Examination Commission, appointed by the Director of the **Institute of Heritage Science** is composed according to the provisions of articles 5 and 7 of the "Regulations concerning the hiring of personnel with fixed-term employment contracts" of 2005, as well as by Resolution No. 142/2021; the Examination Commission is composed of three effective members, of which at least one is external, and of two substitute members; the role of Chairman of the Commission is assigned to the external member.
2. The act of appointment is published on the CNR website page: at the addresses <https://www.urp.cnr.it/> and <https://selezionionline.cnr.it>.
3. Any changes in the legal status that occur after the appointment do not affect the quality of the Commissioner.
4. The Commission shall conclude the procedure within three months of the date of the first meeting. With his own provision, the Director to whom reference is made in paragraph 1 may extend the aforementioned term for one time only and for no more than two months. Failure to comply with this deadline must be collectively justified by the Examination Commission with a justified report to be sent to the Director himself.

➤ Article 6 - Curricula – Self declarations

1. Pursuant to article 15 of Law 12 November 2011 No. 183, it is forbidden to exhibit to public administrations and private managers of public services, certificates concerning personal statuses and facts and personal qualities, which must always be made by personal sworn declarations or declarations in lieu of affidavits pursuant to articles 46 and 47 of the Decree of the President of the Republic 28 December 2000 No. 445.
2. Candidates must attach to the application form the curriculum vitae et studiorum and the declarations to which reference is made in paragraph 4 below.
3. It is the responsibility of the candidate to include in the curriculum all the information necessary for the evaluation of qualifications, such as for example: references of the document (date, identification number if present in the document), natural or legal person who issued the document, as well as the curriculum vitae itself with useful information for evaluation purposes, such as: nature and duration of the assignment and / or activity carried out, functions, experience gained, role played by the candidate, etc. Any information included in the curriculum without the elements useful for evaluation will not be taken into consideration by the Commission.
4. The candidate must attach the form relating to personal sworn declarations or declarations in lieu of affidavits, to which reference is made in the aforementioned legislation, with a

photocopy of a valid identification document with legible signature, as indicated in article 4 of the announcement.

5. The personal sworn declarations foreseen for Italian citizens apply also to citizens of the European Union. People who are not citizens of the European Union can use the personal sworn declarations only in those cases in which there is the necessity of proving personal statuses, facts and qualities that can be certified or are certifiable by Italian public or private entities, that is to say in those cases where the production of the same declarations takes place in application of international conventions between Italy and the country of origin of the declarant.
6. The Administration carries out appropriate checks on the veracity of the content of the personal sworn declarations pursuant to article 71 of the Decree of the President of the Republic No. 445/2000.

➤ Article 7 - Exclusion

1. The following are reasons for official exclusion

- a) submission of the application and related attachments in ways other than those indicated in article 4;
- b) the lack of the requirements indicated in article 2;
- c) also excluded are those who have been banned from public offices and those who have been dismissed or excluded from employment in a Public Administration for persistent and insufficient performance or have been declared excluded from state employment, pursuant to article 127, paragraph 1, letter d) of the Presidential Decree 10 January 1957, n. 3, as well as those who have been dismissed for disciplinary reasons in accordance with the national collective labour agreements stipulated for the sectors of the Public Administration.

2. Candidates not excluded are in any case admitted to the selection procedure with reservations.

3. The person in charge of the procedure may order at any time the exclusion from the selection for lack of the prescribed requirements. If the reasons for the exclusion are ascertained after the completion of the selection procedure, the aforementioned person in charge of the procedure orders the forfeiture of any right resulting from participation in the procedure itself; the withdrawal of candidates will also be ordered if one of the declarations provided in the application for participation in the selection or the declarations made pursuant to the Decree of the President of the Republic No.445/2000 is not true.

➤ Article 8 - Qualifications and interview

1. The Commission first adopts the evaluation criteria before having examined the documentation submitted by the candidates. The criteria will also be oriented towards the achievement of gender equality.
2. For the evaluation of qualifications and the interview, the Examination Commission has a total of 90 points, divided as follows:
 - a) qualifications 30 points;
 - b) interview 60 points.

The Commission will assign the score on the basis of an overall reasoned judgment. In order to pursue the objectives expected by the PNRR in terms of effective achievement of gender equality, in the evaluation of the Curriculum Vitae the Commission will take into account periods of inactivity or abstention from work due to maternity or parental leave. Candidates who have achieved a score of not less than 21/30 in the examination of qualifications are admitted to the interview.

3. The notice of call for the interview, with the indication of the score obtained in the evaluation of the qualifications, is given to the admitted candidates, at least twenty days before the day in which they must take the interview to the candidate's PEC address (certified email); the CNR assumes no responsibility for any disruptions in the network connection
 4. Candidates must present themselves with a valid identification document. The interview, aimed at verifying the possession of the aptitude and professional requisites required in relation to the position to be filled, will focus on professional activities and / or experiences in the field of competences indicated in article 2 letter b) and can be done in Italian or in English.
 5. In order to pass the interview, the candidate must obtain a score of not less than 42/60.
 6. At the end of the session relating to the interview, the Examination Commission prepares the list of candidates with the indication of the marks achieved by each one in this test; the list, signed by the President and the Secretary of the Commission, is made public on the same day on the notice board of the examination centre.
 7. The Administration reserves the right to carry out the oral exam via videoconference, through the use of IT and digital tools, while ensuring the adoption of technical solutions that ensure its advertising, and the identification of participants, as well as the safety of telecommunications and their traceability; detailed information regarding the conduct of the test using electronic methods will be published on the CNR institutional website and on the online selection platform and candidates will be notified individually of them.
- Article 9 - Regularity of the acts - Approval of the ranking and nomination of the winner
1. The Director, within thirty days from the delivery of the documents by the Commission, after

verifying the regularity of the procedure by the person in charge of the procedure of the procedure, approves the merit ranking with his own provision and appoints the winners.

2. In the event that formal defects are found, the person in charge of the procedure sends the documents back to the Commission for their regularization, setting a deadline.
3. The ranking is formed according to the order of the points of the overall score reported by each candidate, with the compliance, with equal points, of the preferences provided for by article 5 paragraphs 4 and 5 of the Decree of the President of the Republic No. 487/94, as amended by article 2 , paragraph 9 of Law No. 191/98, declared by the candidate and certified by personal sworn declarations or declarations in lieu of affidavits xxxx pursuant to articles 46 and 47 of the Decree of the President of the Republic No. 445/2000, upon submitting the application form.
4. The provision indicated in paragraph 1 is published on the website at the addresses <https://www.urp.cnr.it/> and <https://selezionionline.cnr.it>; such publication will be announced, by notice, in the Official Gazette of the Italian Republic - 4th Special Series Competitions and Exams.

➤ Article 10 - Contractual terms

1. The individual fixed-term employment contract, stipulated pursuant to article 83 of the CCNL (National Collective Bargaining Agreement) of the 2016-2018 "Education and Research" Sector, signed on 19 April 2018, will last for one year, extendable up to the maximum duration of the project.
2. If, pending completion of the selection procedure, exclusionary circumstances of the recruitment are in place, whether of a regulatory, organizational or even financial nature, the Administration reserves the right not to proceed with the recruitment or to defer it.
3. The employee with a fixed-term employment contract is paid the initial salary of the current National Collective Labour Agreement, corresponding to that provided for CNR personnel belonging to the profile and level for which the selection is announced.
4. Based on the provisions of article 55 quater of Legislative Decree No. 165/2001 and subsequent amendments and additions, in the event of false documents or false declarations made in order to secure employment or following the establishment of the employment relationship, the termination of employment applies without prior notice.

➤ Article 11 - Financial coverage and suspension clause

1. The financial coverage of the post indicated in this announcement is, among other things, ensured by the resources indicated in the National Recovery and Resilience Plan (PNRR). The

Administration, in this regard, reserves the right not to proceed with the recruitment indicated in the call if the related funding is not confirmed. The stipulation of the contract with the winners of the selection procedures and their actual employment are in any case conditional on the approval of the respective funding.

➤ Article 12 - Treatment of personal data

1. The personal data provided by the candidates are processed for the purposes of managing this announcement, including the possible use of the ranking and for the subsequent possible establishment of the employment relationship, and for other purposes compatible with this selection procedure, as specifically indicated in the information contained in the form indicated in article 4 paragraph 1, letter f) of the announcement.
2. The data will be processed by the Consiglio Nazionale delle Ricerche - Piazzale Aldo Moro, 7 - 00185 Rome, as Data Controller, in accordance with EU Regulation No. 2016/679 and Legislative Decree No. 196/2003. The contact point at the Data Controller is the Director of the Institute who issued the call for applications and whose contact details are: **(direttore.ispc@ispc.cnr.it** PEC: **protocollo.ispc@pec.cnr.it** **_ Via Cardinale Guglielmo Sanfelice 8 – 80134 Napoli (NA).**
3. The supply of data is mandatory for the purposes of assessing the participation requirements, under penalty of exclusion from the competition.
4. The interested party enjoys the rights reported in article 15 and following articles of EU Regulation No. 2016/679, as specified in the information contained in the form indicated in paragraph 1, which can be exercised in the ways indicated in the same form.

➤ Article 13 - Access to documents

1. The right of access to the records of the selection procedure, pursuant to Law no. 241 of 7 August 1990 and subsequent additions and amendments, is exercised in the manner set out in article 10 of the organizational provision No. 22 of 18 May 2007, as supplemented and amended by provision No. 62 of 8 November 2007 (available on the CNR website www.cnr.it "utilità" section), with the limitations set forth in article 12 of the same.
2. Requests for access to the documents will be published in the competitions area at the aforementioned address.
3. This publication fulfills any obligation of communication to the interested parties pursuant to the aforementioned law. The CNR is therefore not required to proceed with any individual notification to the participants.

➤ Article 14 - Person responsible for the procedure

The person responsible for the procedure, appointed in accordance with article 13 of the "Regulations concerning the recruitment of personnel with fixed-term employment contracts", is Dr.

Sede secondaria di Catania
Via Biblioteca N° 4 c/o Palazzo Ingrassia 95124 Catania
Tel. +39 095311981 Fax. +39 095311981

Simona Galvano - profile Technologist level III, e-mail address: simona.galvano@cnr.it tel.095311981 int. 216.

➤ Article 15 - Publication and dissemination of information

1. This announcement is published on the Institutional website of the Consiglio Nazionale delle Ricerche: <https://www.urp.cnr.it> (Sezione Lavoro e Formazione (Job and Training Section)) and in the CNR online selection system <https://selezionionline.cnr.it>. 2. The notice of the announcement is published in the Official Gazette of the Italian Republic - 4th Special Series - Competitions and Exams.

➤ Article 16 - Final provisions

For anything not expressly foreseen by this announcement, the provisions of the legislation cited in the premises of this announcement, as well as the laws in force on the subject, are valid as applicable.

THE DIRECTOR
(Dr. Costanza Miliani)

Annex 1)

Selection notice no. 400.002-ISPC-2022-CT-PNRR IR H2IOSC

Code 01

Required profile: Professional Level III Researcher,

Number of personal units: 1;

Object of the activity: Development, deployment and maintenance of machine learning and artificial intelligence models and numerical solutions for the analysis of multimodal scientific datasets.

Development of software with graphical interface for visualisation and analysis of scientific data.

Place of work: CNR ISPC Secondary office in Catania

- Degree in Physics, Data Science, Computer Science, Data Engineering, Chemistry, Chemistry-Physics or other degrees relevant for the required experience;
- at least three years of experience in Development of software (Python, C/C++, Java, SQL) for processing, analysing and visualising scientific data even in distributed environments. Development of algorithms, numerical methods and statistical techniques of minimisation for data analysis, data reduction, data mining and data fusion with reference to structures for large datasets. Development of techniques of parallel computing and high-performance computing. Development of machine learning and artificial intelligence models for classification, regression and clustering in large datasets, or possession of a PhD title relevant to the required experience.
- knowledge of the English language.

Code 02

Required profile: Professional Level III Researcher,

Number of personal units: 1;

Object of the activity: Development of HPC services, AI/ML models and neural networks with remote access for the real-time simulation, elaboration, and classification of multimodal datasets and with reference to large data structures.

Place of work: CNR ISPC Secondary office in Catania

- Degree in Physics, Physical Chemistry, Chemistry, Data Science, Computer Science, Data Engineering or other degrees relevant for the required experience;
- at least three years of experience in Development of software (preferably with Python and C/C++) on web dashboard, web notebooks or with graphical interface for processing, exploring, and analysing scientific data even in distributed environments. Development of machine learning, numerical methods, and statistical techniques for the simulation of scientific data. Development of machine learning and neural network models for classification of imaging data. Development of techniques of parallel computing and high-performance computing.
- or possession of the PhD title relevant to the required experience.
- knowledge of the English language.

Code 03

Required profile: Professional Level III Researcher,

Number of personal units: 2;

Object of the activity: The scientific activity to be carried out will consist in development, implementation, installation, testing, and validation of X-ray based instrumentation designed on mechatronics devices with remote control capabilities for the characterization of materials of interest in the cultural heritage.

Place of work: CNR ISPC Secondary office in Catania

- Degree in Physics, Chemistry, Material Science, Physical Chemistry, Applied Science, Electronic Engineering or other degrees relevant for the required experience;
- at least three years of experience Experience in the application use (preferably in the field of cultural heritage) of X-rays spectroscopy, diffraction and imaging performed with mobile instrumentation, or laboratory systems or at synchrotrons; i.e. in the design and development of scientific instrumentation and analytical methods (preferably based on the use of X-rays); i.e. in the analysis of spectral data in the X-ray domain, in their visualization, in the extraction of features and in their statistical analysis; i.e. in development of codes for the analysis of X-rays data or for the management of control and acquisition systems in X-ray instrumentation (with preference in Python, C++, MATLAB or LABView) or in the use of software for the analysis of X-ray spectroscopy and X-ray diffraction data, or possession of a PhD title relevant to the required experience.
- knowledge of the English language.