



### Rector's Decree

Call for additional public selection for admission to PhD Courses XXXVIII cycle - A. A. 2022/2023 - University of Calabria and the allocation of no. 2 places funded under the European project "*EXBRINER - Next-generation membrane technologies for sustainable exploitation of Seawater brine resources: transition towards a circular blue industry*" - Grant Agreement No. 101072449, Horizon - MSCA - 2021 - DN.

### The Rector

**HAVING REGARD TO** the Statute of Autonomy;

**HAVING REGARD TO** the General Regulations of the University;

**HAVING REGARD TO** the Teaching Regulations of the University;

**HAVING REGARD TO** the Regulations for Administrative and Accounting;

**HAVING REGARD TO** the University Regulations on the PhD Programme of the University of Calabria;

**HAVING REGARD TO** the Code of Ethics and Conduct;

**HAVING REGARD TO** Law No. 476 of 13 August 1984 on Scholarships and Doctorates in Universities;

**HAVING REGARD TO** Law No. 240 of 30 December 2010, in particular Art. 19;

**HAVING REGARD TO** Ministerial Decree No. 226 of 14 December 2021, which issued the "*Regulation laying down procedures for the accreditation of doctoral establishments and courses and criteria for the establishment of doctoral courses by accredited organs*";

**HAVING REGARD TO** Ministerial Decree No. 301 of 22 March 2022, which approved the "*Guidelines for the accreditation of PhD programmes*";

**HAVING REGARD TO** Law No. 104 of 5 February 1992 as supplemented and amended by Law No. 17 of 28 January 1999 on "*Assistance, Social Integration and the Rights of Persons with Disabilities*";

**HAVING REGARD TO** Decree no. 445 of 28 December 2000 of the President of the Republic "*Consolidated text of the laws and regulations on administrative documentation*";

**HAVING REGARD TO** Law No. 148 of 11 July 2002 "*Ratification and implementation of the Convention on the Recognition of Qualifications in Higher Education in the European Region, done at Lisbon on 11 April 1997 and rules for the adaptation of the national legal system*" and in particular, art. 2, which empowers universities to recognise the entry qualification for obtaining a Ph.D.;

**HAVING REGARD TO** Legislative Decree No. 196 of 30 June 2003 "*Code on the protection of personal data*";

**HAVING REGARD TO** Ministerial Decree No. 270 of 22 October 2004 "*Amendments to the Regulation on the teaching autonomy of universities, approved by Decree no. 509 of 3 November 1999 of the Ministry of Universities and Scientific and Technological Research*";

**HAVING REGARD TO** Legislative Decree No. 167 of 14 September 2011 "*Single text of the apprenticeship, pursuant to Article 1, paragraph 30, of Law No. 247 of 24 December 2007*";

**HAVING REGARD TO** the General Data Protection Regulation (GDPR) - Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data, and the free movement of such data;

**HAVING REGARD TO** Ministerial Decree No. 247 of 23 February 2022, which increased the gross annual amount of the PhD scholarship;

**HAVING REGARD TO** its Decree No. 374 of 1 March 2022 by which the "Tax, Contribution and Exemption Regulation 2022/2023" was issued;

**HAVING REGARD TO** the provisions of the MUR concerning the Procedures for Entry, Residence and Registration of Foreign/International Students at Higher Education Courses in Italy for a.a. 2022/2023 available at the link: <https://www.studiare-in-italia.it/studentistranieri/>;

**HAVING REGARD TO** Law No. 33 of 12 April 2022 on "Provisions concerning simultaneous enrolment in two courses of higher education";

**HAVING REGARD TO** the results of the ANVUR examination of the proposal to renew the doctoral courses activated at the University of Calabria for the XXXVIII cycle;

**HAVING REGARD TO** its Decree No. 1121 of 3 August 2022 "Call for public selection for admission to PhD courses - XXXVIII cycle - a.a. 2022/2023";

**HAVING REGARD TO** Grant Agreement n. 101072449 related to the project "EXBRINER - Next-generation membrane technologies for sustainable exploitation of seawater brine resources: transition towards a circular blue industry", Horizon - MSCA - 2021 - DN;

**HAVING REGARD TO** the agreement between the Institute for Membrane Technology of the National Research Council (ITM-CNR) and the Physics Department of the University of Calabria for the funding of n.1 scholarship from the EXBRINER Horizon Europe MSCA-2021-Doctoral Networks for the attendance of doctoral courses XXXVIII cycle - PhD course in Physical Sciences and Technologies, Chemistry and Materials;

**HAVING REGARD TO** the resolution of the Board of Directors, meeting of 31 May 2022;

**ASCERTAINED** the financial availability within the above mentioned project for the coverage of the doctoral posts referred to in this selection;

**CONSIDERED** necessary to provide for the issuance of the call for additional selection for admission to PhD Courses - XXXVIII cycle - A. A. 2022/2023 and the allocation of no. 2 places funded under the European project "EXBRINER - Next-generation membrane technologies for sustainable exploitation of Seawater brine resources: transition towards a circular blue industry" - Grant Agreement No. 101072449, Horizon - MSCA - 2021 - DN, with administrative headquarters at the University of Calabria;

## DECREES

### Art. 1 Indiction

**1.** It is announced at the University of Calabria the call for additional public selection for admission to PhD courses in:

1) Environmental, Territorial and Energy Sciences and Engineering (SIACE);

2) Physical, Chemical and Materials Sciences and Technologies (STFCM),

referred to in Annex A "Analytical Sheets of the PhD Courses XXXVIII cycle - A. A. 2022/2023" which is an integral and substantial part of this call.

**2.** This call will be published on the website of the Ministry of Universities and Research, on the European website Euraxess and on the portal of the University of Calabria at the following links:

<https://www.unical.it/didattica/offerta-formativa/dottorati/> and

[https://unical.portaleamministrazionetrasparente.it/pagina874\\_tc-7\\_dottorati-di-ricerca.html](https://unical.portaleamministrazionetrasparente.it/pagina874_tc-7_dottorati-di-ricerca.html) and it is equivalent to a notification to all intents and purposes.

**3.** In Annex A, relating to each Doctoral Course, are listed the Coordinator, the code and title of PhD scholarship, the Scientific Director of the EXBRINER Doctoral Grant put in competition, the duration, the



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proposing Department and any other Departments involved, the CUN Areas and the Disciplinary Scientific Areas of reference, the research topics, the description of the Scholarship Research Project the participation requirements, the admission procedures, the titles to be attached to the application for participation, the criteria for evaluation of the tests, the number of places and scholarships with the specification of the funders and objectives/research topics, information on the diary of the tests, the possible contact for information and the website of the PhD course.

4. Any changes, updates or additions to the content of the call will be made known, exclusively, with the publication on the portal of the University of Calabria at the following links:

<https://www.unical.it/didattica/offerta-formativa/dottorati/> and

[https://unical.portaleamministrazionetrasparente.it/pagina874\\_tc-7\\_dottorati-di-ricerca.html](https://unical.portaleamministrazionetrasparente.it/pagina874_tc-7_dottorati-di-ricerca.html).

Any personal communications to candidates relating to this notice will be made by e-mail. For this purpose, the e-mail address indicated by the candidate in the online application shall be used. The University assumes no responsibility for the dispersion of communications dependent on inaccurate indications of personal contact details by the candidate or by failure or late communication of their change, nor by electronic errors.

5. The submission of the application for participation through the procedure referred to in art. 4 presupposes the candidate's knowledge of the rules contained in this call, in the University Regulations on PhD and in the regulations on the source of funding; failure to comply with which will result in exclusion from the selection.

6. The beginning of the doctoral courses relating to the positions referred to in this call for proposals is 1st May 2023.

## Art. 2 Admission requirements

1. They can apply for participation in the selection of admission to the PhD Course referred to in the previous art. 1, regardless of age or nationality, who holds one of the following qualifications:

- a. Degree obtained according to the didactic systems in force prior to the D.M. 509/1999, whose legal duration was at least four years;
- b. Master's degree (laurea magistrale) obtained pursuant to the D.M. 270/2004;
- c. Master's degree (laurea specialistica) obtained pursuant to the D.M. 509/1999;
- d. Second level academic qualification issued by the institutions belonging to the AFAM sector;
- e. Degree obtained at foreign universities, legally recognized, provided that comparable duration, level and disciplinary field to the Italian qualification that allows access to the course.

In addition, the candidate must not have resided or carried out his activity in Italy for more than 12 (twelve) months in the 3 (three) years preceding the date of matriculation to the PhD Course, unless within the framework of a compulsory national service or procedure for obtaining refugee status under the Geneva Convention.

2. Those who hold a PhD degree cannot apply for participation in the selection.

## Art. 3 Qualification obtained abroad

1. The suitability of the qualification obtained at foreign universities is ascertained, only for the purposes of admission to selection, by the Selection Board in compliance with the legislation in force in Italy and in the country where the qualification was issued, and treaties or international agreements on the recognition of qualifications for further studies.

2. In this case, applicants must submit, in the manner indicated in Article 4 below, the degree certificate, indicating the examinations taken and the study plan followed, both first and second level. The candidate



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can also attach the diploma supplement or the declaration of value on site or certificate of comparability issued by CIMEA or other ENIC-NARIC centers and any other documentation useful to assess the eligibility of the qualification held at the chosen course. These documents, if they are not written in Italian or English, must be accompanied by a sworn translation in Italian or English. The Selection Board will assess the suitability of the foreign qualification on the basis of the documentation submitted and, therefore, may exclude the candidate even if there is insufficient evidence for the evaluation.

3. Candidates holding a foreign qualification are admitted to the selection with reservation, which can be dissolved only when, if winners, will produce the diploma supplement or declaration of value on site or certificate of comparability CIMEA or other ENIC-centersNARIC, as provided by art. 8.

#### Art. 4 Application for admission

1. The application for selection must be submitted using only the appropriate online procedure available on the page: <https://unical.esse3.cineca.it/>.

2. The electronic procedure for the submission of the application for online admission will be closed at **12:00 (noon Italian time) on 24 March 2023.**

3. The telematic procedure provides for preliminary registration for those who are not in possession of a student matriculation of the University of Calabria, in order to obtain credentials allowing access to the next step of filling in the application for admission to selection.

4. Candidates who are already registered must access the Reserved Area using the credentials they already have. Candidates are invited to update the data already present in the register, in particular the place of residence, the telephone number and the e-mail address to which any communications relating to the competition will be sent.

5. The application for admission to the selection process is deemed to have been submitted correctly only after the completion of the electronic procedure and **can no longer be modified online.**

6. The date of submission of the application for admission to the selection shall be certified by the computerised system which, at the end of the deadline for submission, will no longer allow access to and submission of the application.

7. There is no payment of an admission fee.

8. The online admission procedure requires the upload of the following documents in pdf format:

- copy, front/back, of a valid identity document;
- self-certification of the title of access pursuant to art. 47 of D.P.R. 445/2000 (annex B) for academic qualifications obtained in U.E.;
- documentation required for the assessment of candidates holding an academic qualification obtained abroad;
- concise survey of the state of the art (research project of 3,000-4,000 characters), in English, on the subject of the Doctoral Scholarship;
- curriculum vitae (CV);
- up to a maximum number of two Reference Letters;
- Motivation letter that highlights the consistency between the profile of the candidate and the position referred to in this notice;
- any additional titles specified in "Annex A" to this call, or other documents and publications deemed useful for the evaluation.



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9. All titles, documents and publications deemed useful for the purposes of the insolvency proceedings must be attached in electronic format. pdf with a maximum size of 20 MB; exceptionally, any documents that the candidate is unable to attach may be sent by certified e-mail (PEC) to the address [amministrazione@pec.unical.it](mailto:amministrazione@pec.unical.it) or delivered to the Office Protocol of the Central Administration, Via Pietro Bucci cubes 7-11 b, Arcavacata di Rende (CS) on weekdays from 10:00 to 12:00, always in compliance with the deadline of this notice. In addition, candidates who wish to supplement or amend the application or the annexes may submit the application together with the signed application for admission and a photocopy of a valid identity document in the same manner, within the mandatory deadline for expiry of the notice. In the event that the annexes are not received by the deadline and in the manner indicated, will be evaluated only the documents entered with the computerized procedure. The University assumes no responsibility for any telematic problems attributable to third parties.

10. Applications submitted in a manner other than that set out above will not be considered.

11. It is the candidate's responsibility to ensure the correct conclusion of the IT procedure; in this regard, this University declines all responsibility for any malfunctions of the computer system close to the deadline.

12. Candidates with proven disabilities, pursuant to Law No. 104/1992 as supplemented by Law 17/99, may request, in relation to their disability, the necessary aids and any additional time for the completion of the test. Candidates suffering from specific learning disorders in accordance with Law No. 170/2010 in relation to the type of test are granted an additional time equal to 30 percent more than the one defined. Disabled applicants, if they intend to use the aids provided by Law n. 104/1992 as integrated by Law 17/99, will also have to report during the completion of the online application, indicating the type of aid required.

13. All candidates are admitted to the selection subject to verification of the requirements of the notice, which will be carried out pursuant to art. 43 D.P.R. 445/2000. The University may, therefore, at any time order the exclusion of candidates from the selective procedure. The University will also, of its own motion, verify the veracity of the substitute declarations of certification submitted by the candidates: anyone who makes false statements is punished in accordance with the penal code and special laws on the subject.

14. The University reserves the right to take, even after the selection, measures to exclude candidates who do not meet the requirements or who have not complied with the requirements of the notice.

#### Art. 5 Admissions Committees

1. The Admissions Committees of the selection for admission to doctoral courses are appointed by the Rector in compliance with the "University Regulations in the field of PhD" of the University of Calabria.

2. The Commission of selection is responsible for the entire selection procedure of the candidates, for the drafting of the minutes, for the formulation of the merit rankings and for the assignment of the doctoral positions.

3. The composition of the individual committees will be published on the portal of the University of Calabria at the following links:

<https://www.unical.it/didattica/offerta-formativa/dottorati/> and

[https://unical.portaleamministrazionetrasparente.it/pagina874\\_tc-7\\_dottorati-di-ricerca.html](https://unical.portaleamministrazionetrasparente.it/pagina874_tc-7_dottorati-di-ricerca.html).

#### Art. 6 Admission tests

1. The admission is carried out in accordance with the procedures specified for each course in Annex A, an integral part of this decree.

2. The admission test log book for each course in Annex A shall be notified in full to the persons concerned. Any changes or additions to the exam schedule will be published exclusively on the portal of the University



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of Calabria at the web addresses indicated in Annex A for each course.

3. Failure to submit to the admission tests will be considered as renunciation of selection.
4. To support the tests, applicants must present one of the following identity documents valid: identity card, passport, driving licence with photograph, firearms licence, identification cards - bearing a photograph and a stamp or other equivalent mark - issued by a State Administration.
5. The selective procedure, aimed at ascertaining the candidate's aptitude for scientific research, consists of an evaluation of the candidates' qualifications, supplemented, in accordance with the provisions of each course in Annex A, by a oral test.
6. In the schedule of each doctorate are indicated the points available for each individual test, the award criteria, the minimum thresholds for admission to the following test.
7. The Commission, prior to the evaluation of qualifications, will have to establish the evaluation and scoring criteria for each individual item (curriculum vitae, concise survey of the state of the art in relation to the subject of the PhD scholarship, motivational letter, letters of reference, any certifications and/or publications, etc.).
8. The oral exam is public and includes the verification of the knowledge of one or more foreign languages.
9. The oral exam will be carried out electronically. The candidate must make a request in writing that must be sent to the PEC ([www.unical.it/pec](http://www.unical.it/pec)) of the Administrative Department of the Course reported in the individual PhD card as well as to the address [dottorati@unical.it](mailto:dottorati@unical.it), immediately after the publication of the results of the qualification evaluation for as indicated in the individual doctoral cards. A copy of a valid identification document must accompany the application. Applicants must ensure the use of a webcam to allow their identification to the Selection Board and must be available on the day and time set out in the test log of Annex A. The Commission may choose to agree with the Apply for a precise time for the start of the interview. For the purposes of identification and otherwise excluded from the selective procedure, each candidate is required, before the interview begins, to identify themselves, presenting the same identity document already transmitted as an attachment to the e-mail and the online application. The lack of connection, the candidate's unavailability on the specified day or time or the failure to provide the submitted identification document constitute grounds for exclusion from the selective procedure. The University declines any responsibility for the possibility that technical reasons prevent the smooth conduct of the oral interview.
10. At the end of the evaluation, the Commission, based on the scores reported by each candidate, prepares the ranking of merit.
11. Subsequently, the Commission assigns the positions considering the position in the merit ranking, the number of positions available and the topic of the scholarship relating to the EXBRINER project. According to the national legislation in force, each candidate may not benefit from more than one doctoral grant at the same time.
12. The President of the Admissions Committees transmits the documents relating to the competition procedure to the Rector.
13. Candidates are granted access to the documentation of the competition procedure, in accordance with current legislation.

#### **Art. 7 Admission to PhD Courses**

1. The Rector approves the acts of the selections and decrees the ranking of merit for the admission of candidates.



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2. The ranking of merit will be made known by publication on the portal of the University of Calabria to the following link:

<https://www.unical.it/didattica/offerta-formativa/dottorati/> and

[https://unical.portaleamministrazionetrasparente.it/pagina874\\_tc-7\\_dottorati-di-ricerca.html](https://unical.portaleamministrazionetrasparente.it/pagina874_tc-7_dottorati-di-ricerca.html).

3. Candidates will therefore not receive any personal communication.

4. Candidates are admitted to the course according to the ranking drawn up by the Commission of selection until all places available have been filled. In correspondence of any waivers of the right holders before the beginning of the course will succeed as many candidates according to the order of the ranking drawn up by the committee, always in compliance with the topics of the Doctoral Scholarships related to the EXBRINER project. In case of useful placement in more than one ranking, the candidate will have to exercise the option for a single doctoral course.

5. The selection involves the allocation of only places covered by equivalent funding. Therefore, the renunciation of the funding entails the renunciation of the doctoral course.

#### **Art. 8 Enrollment to PhD Courses**

1. The winners must register using the procedure available at <https://unical.esse3.cineca.it/> within the terms indicated at the same time as the publication of the Rector's Decree approving the acts of the selections. Failure to complete registration will result in forfeiture of the right to admission to the doctoral course.

2. The amount of fees for the attendance of doctoral courses, charged to all doctoral students, is inclusive of the regional fee for the right to study, stamp duty and insurance premium pursuant to the "*Regulations fees, contributions and exemptions 2022/2023*" to which reference is made.

3. The non-EU winners, after matriculation, will have to hand over to the Research Doctorates Sector of the Postgraduate Area, within a reasonable period agreed with the PhD Sector, a copy of the entry visa for study/university or residence permit.

4. Non-EU citizens applying for a visa must register on the University website <https://www.university.it/index.php/dashboard> under the heading "International students" to apply for an entry visa. Registration is only completed upon the issue of the entry visa for study in Italy, the exclusive competence of the Italian Diplomatic Representations abroad, regardless of the suitability acquired.

5. Applicants with a foreign qualification admitted to the course, if they have not submitted it during the admission phase, must submit to the PhD Sector of the Postgraduate Area, within a reasonable time agreed with the Sector itself, penalty blocking of the career and subsequent forfeiture, the declaration of value on the spot of the qualification, issued by the Italian Diplomatic Representation of the country to whose order the title refers. As an alternative to the declaration of value on site, it is possible to present the supplement diploma in English, issued by the same institution that issued the qualification, drawn up according to the model developed by the European Commission, by the Council of Europe and UNESCO/CEPES, or the certificate of comparability of CIMEA or ENIC-NARIC centres. If the "Declaration of Value" submitted by the candidate proves the validity of the title in the country of achievement for enrolment in a course similar to the Doctorate, the interested person lapses from the Doctoral Course.

6. In the event of the resignation of the persons entitled, the vacant posts are assigned to those who hold a useful position in the ranking of merit, with convocation by e-mail.

7. The University reserves the right to carry out appropriate checks on the veracity of the content of the declarations of the winner. If the content of the statements is not true, the winner shall forfeit the consequential benefits from the order issued based on the untrue statement.



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### **Art. 9 Funding of PhD positions**

1. The equivalent funding of the doctoral position will be made through a specific contract whose social security and welfare treatment will be similar to that envisaged for collaborations in research activities.
2. The total gross amount of the equivalent loan is equal to 140,817.60 euros as established in Grant Agreement no. 101072449 of the project.  
This amount includes the living allowance of €119,217.60 (A.1 of the G.A.) and the mobility allowance of €21,600.00 (A.2 of the G.A.). Further allowances are provided for in the case of an eligible PhD student, as established in the G.A.

### **Art. 10 Rights and duties of doctoral students**

1. Without prejudice to the rights and obligations established by the current University Regulations on PhDs and by the D.M. n. 226/21, the acceptance of position implies the fulfillment of the related obligations set forth in the EXBRINER project.
2. The provisions for the protection of maternity pursuant to the decree of the Minister of Labor and Social Security of 12 July 2007, published in the Official Gazette no. 247 of 23 October 2007.
3. The PhD students will have to carry out a compulsory period of study and research at public or private subjects abroad of at least ninety (90) days in the three-year period, previously authorized by the Teaching Board.
4. PhD students are required to attend the Doctoral Course and to continuously carry out study and research activities within the structures intended for this purpose, according to the methods established by the Academic Board and by the local Coordinator of the EXBRINER project.
5. PhD students must participate in the activities of the EXBRINER project, as specified by the Program and/or requested by the local Project Coordinator and/or the Doctoral Course Supervisor, including active participation in meetings, schools, conferences and cycles of lessons.
6. During the three years of the doctorate, the doctoral student will have to spend periods of mobility at the partner institutions on the recommendation of the local coordinator of the EXBRINER project, that can coinciding or not with the compulsory period referred to in the previous paragraph 3.
7. The PhD students are required to read the regulations relating to the source of funding and the University Regulations on PhD matters of the University of Calabria and to periodically consult the web portal, in particular the page <https://www.unical.it/didattica/offerta-formativa/dottorati/>.

### **Art. 11 Final examination and qualification**

The title of Doctor of Research ("Dr. Ric. or Ph.D.") is awarded by the Rector of the University of Calabria at the end of the course following the public discussion, before a commission appointed by the Rector himself, a research thesis that contributes to the advancement of knowledge or methodologies in the chosen field of investigation, as required by the University Regulations in the field of Phd.

### **Art. 12 Property of results**

1. Intellectual property rights in respect of possible results achieved by the PhD student, including, but not limited to, software, patentable or otherwise industrial inventions, know-how, models, data and data collections, are regulated in accordance with current legislation, the University Regulations and according to what is established in the individual agreements with the Universities, Companies or Entities involved.
2. The PhD student has the obligation to communicate without delay to the Coordinator the achievement of the results, committing himself not to divulge them and not to use them without the prior authorization



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of the University. In the event that the PhD student cooperates in research groups, he may be invited to sign a special commitment to the recognition of intellectual property rights and confidentiality in relation to information, data and documents of a confidential nature which should come to your knowledge in the performance of your activity at and/or on behalf of the University.

### **Art. 13 Processing of personal data**

1. In accordance to art. 13, of the General Data Protection Regulation (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016), inform candidates that the processing of personal data provided by them during participation in the selection or in any case acquired for this purpose by the University of Calabria is aimed solely at the performance of the competition activities and will be carried out by persons in charge of insolvency proceedings, also by the examining board, at the University of Calabria, with the use of procedures also computerized, in the ways and to the extent necessary to pursue the aforementioned purposes, even in case of possible communication to third parties. The provision of such data is necessary to verify the participation requirements and the possession of securities and their failure to indicate them may preclude such verification.

The data collected by the University of Calabria, for the aforementioned purposes, will be processed through an automated database even after the conclusion of the selection procedure for the purposes of managing the academic career of the winners. They may also be used, in aggregate form and for statistical purposes, by the MUR.

2. The personal data provided by the candidates will be communicated to the administrative structures of the University of Calabria and to the public bodies directly interested in the legal and economic position of the successful candidates.

3. Candidates shall be granted the rights referred to in Articles. 15 and ff. of the aforementioned Regulation 2016/679, in particular, the right to access their personal data, to request its rectification, cancellation, restriction of processing, as well as to oppose their processing, by addressing requests to the University of Calabria.

Data subjects who consider that the processing of personal data relating to them takes place in violation of the provisions of the Regulation have the right to lodge a complaint with the Guarantor for the protection of personal data, as provided for by art. 77 of the Regulation itself, or to refer to the appropriate courts (art. 79 of the Regulation).

4. All documentation and information related to the protection of personal data of the University of Calabria are available at the following link: <https://www.unical.it/privacy/>.

5. The data controller is the University of Calabria, via Pietro Bucci, 87036 Arcavacata di Rende (CS), tel. (+39) 0984 4911.

6. The contact details of the Data Protection Officer (RDP) are: via Pietro Bucci, Cubo 7/11, 87036 Arcavacata di Rende (CS), tel. (+39) 0984 493918; email: [rpd@unical.it](mailto:rpd@unical.it).

### **Art. 14 Responsible for the procedure**

In accordance to the Law no. 241 of 7 August 1990, the officer in charge of the administrative procedure is the Head of the Phd Research Department of the Post graduate Area - University of Calabria (e-mail: [dottorati@unical.it](mailto:dottorati@unical.it)).

### **Art. 15 Final regulations**

1. For what is not explicitly specified in this notice, the provisions of the current legislation on the subject, the University of Calabria University Regulations in the field of PhD research of the University of Calabria and



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the document on the National Recovery and Resilience Plan (PNRR), as well as the related ministerial implementing decrees.

2. This selection notice is translated into English but in case of disputes, the reference legal text will be the one in Italian.

The Rector  
Nicola Leone

*In this notice, the terms relating to people appear only in the masculine. They refer indiscriminately to people of the female and male genders. Formulations respectful of gender identity have been renounced in order not to compromise the readability of the text and to satisfy the need for simplicity of the same.*

*Digitally signed document pursuant to the Digital Administration Code and related regulations.*

**ANNEX A**

**“Analytical Sheets of the PhD Courses XXXVIII cycle - A. A. 2022/2023”**

**European Project “EXBRINER - Next-generation membrane technologies for sustainable exploitation of seawater brine resources: transition towards a circular blue industry”**

**Grant Agreement n. 101072449, Horizon - MSCA - 2021 - DN**

**PhD Course in Science and Engineering of the Environment, Construction and Energy - SIACE**

<b>Coordinator of PhD course</b>	Prof. Salvatore Critelli - Department of Environmental - DIAM Tel.: + 39 0984.493678 - e-mail: <a href="mailto:salvatore.critelli@unical.it">salvatore.critelli@unical.it</a> - SSD: GEO/02
<b>Doctoral Scholarship Code and Title</b>	EXBRINER-01_UNICAL. <i>Prototyping &amp; Digital Twin, exergo-economic analysis and Life Cycle Assessment of the integrated membrane system</i>
<b>Duration</b>	3 years
<b>Main Department</b>	Department of Environmental (DIAM)
<b>Other Departments involved</b>	Department of Mechanical, Energy and Management Engineering (DIMEG) Department of Biology, Ecology and Earth Sciences (DiBEST) physics department Department of Civil Engineering (DInCi) Department of Chemistry and Chemical Technologies (CTC) Department of Cultures, Education and Society (DiCES)
<b>Subject Areas</b>	Area CUN 01: MAT/07; Area CUN 02: FIS/01, FIS/07, FIS/08; Area CUN 03: CHIM/06, CHIM/07; Area CUN 04: GEO/01, GEO/02, GEO/04, GEO/06, GEO/07, GEO/08, GEO/09, GEO/10; Area CUN 08: ICAR/01, ICAR/02, ICAR/07, ICAR/08, ICAR/09, ICAR/20; Area CUN 09: ING-IND/22, ING-IND/27, ING-IND/33; Area CUN 10: L-ANT/09.
<b>Research topics of Phd course SIACE</b>	The PhD program aims at developing skills in basic and applied sciences, from civil and environmental engineering to the industrial and information one, from complex systems to scientific communication. In particular, main topics are: <ul style="list-style-type: none"> <li>• modelling and simulation of complex systems,</li> <li>• measuring equipment and sensors,</li> <li>• resources and natural hazards, soil conservation and pollution,</li> <li>• evolution of geological processes and georesources,</li> <li>• territory, architecture, buildings and cultural heritage,</li> <li>• energy, innovative materials and industrial change.</li> </ul>
<b>Research Project Description EXBRINER-01_UNICAL Fellowship</b>	The Marie Skłodowska-Curie Actions - Doctoral Network EXBRINER project ( <a href="http://exbriner.unical.it">http://exbriner.unical.it</a> ) aims to develop a new technological and interdisciplinary platform for the development of the next-generation membrane systems for sustainable exploitation of desalination brine resources, thus accelerating the transition towards a Circular Blue Industry. EXBRINER is implemented through a cross-sectoral network composed by eight European Universities, three Research Centers and four leading Industrial Companies, all with recognized excellence in the field of



	<p>membrane engineering. Research and Training activities include mandatory secondments in two academic centers and one industrial center for the recruited Doctoral Candidate.</p> <p>At University of Calabria, the research project includes the following activities: 1) Assembling and operating a hybrid Photothermal Membrane Distillation/Donnan Dialysis-Crystallization/Reverse Electrodialysis-Bipolar Membrane-assisted Electrolysis system, operated with real seawater Reverse-Osmosis brine; 2) Digitalization of the integrated system via modelling and simulation to enable its optimization through experimental data analytics; 3) Energy-Exergy and Cost Analysis; 4) Life Cycle Assessment.</p> <p>Two academic secondments will be required at the I AALBORG UNIVERSITET (Denmark) and UNIVERSITAT POLITECNICA DE CATALUNYA (Spain) and one industrial secondment at FCC AQUALIA SA (Spain).</p>	
<b>Application Requirements</b>	Italian University Degree (ante DM 509/1999) or Italian/Master's Degree (ante DM 509/1999 and DM 270/2004) or equivalent Degree obtained abroad.	
<b>Evaluation procedure</b>	Assessment of academic publications and titles, oral examination. During the oral exam, English language proficiency will be tested.	
<b>Evaluable academic publication and titles</b>	<p>Copy of academic qualification(s)/parchment(s) clearly stating the name of the University/Institution issuing the degree, the date of graduation, the final score (or Grade Point Average), along with copies of official transcripts of academic courses attended to obtain each degree (BSc, MSc or equivalent) and any other document considered useful to assess the eligibility of the Degree (e.g. Diploma Supplement). All documents must be provided in original language and, if not in Italian, translated in English.</p> <ul style="list-style-type: none"> <li>- Signed Curriculum Vitae (CV), in Italian or in English;</li> <li>- Signed Motivation Letter (one page maximum), in English, covering the following aspects: reasons for applying to the PhD position, skills and abilities that make the applicant a good candidate, motivations to carry out research abroad, professional interests and expectations.</li> <li>- Maximum two Reference Letters, in English, printed on letterhead and signed;</li> <li>- A concise recognition on the state-of-the-art (research project 3,000-4,000 characters), in English, on the topic addressed by the Individual Research Project EXBRINER-01_UNICAL;</li> <li>- Any additional qualification or documentation (e.g., publications), in Italian or English, deemed useful for the selection procedure.</li> </ul>	
<b>Evaluation Criteria</b>	<b>Maximum score of 100 points</b>	
	<b>Assessment of the applicant publications and titles</b>	<b>Maximum score 40 points</b>
	recognition on the state-of-the-art (research project 3,000-4,000 characters)	<b>Maximum score 20 points</b>
	Curriculum Vitae (CV), including titles and any publications	<b>Maximum score 15 points</b>
	Motivation and Reference Letters	<b>Maximum score 5 points</b>
	<b>Oral examination.</b> Selection criteria: the oral exam will focus on the contents of the research project	<b>Maximum score 60 points</b>



	<p>related to the EXBRINER-01_UNICAL PhD Scholarship. The candidate's skills for the realization of the doctoral project and the motivations for scientific research will also be evaluated. Furthermore, the candidate must demonstrate a good knowledge of the English language.</p>			
	<p>The minimum threshold for being admitted to the oral examination is of 30 points. The minimum threshold for positive oral examination is of 40 points.</p>			
<b>Position</b>	no. 1 (one) position			
<b>Financial support</b>	Equivalent funding under Grant Agreement no. 101072449 - Marie Skłodowska-Curie Actions - Doctoral Network (MSCA-DN) project "EXBRINER- Next-generation membrane technologies for sustainable exploitation of seawater brine resources: transition towards a circular blue industry", CUP H27G22000390006.			
<b>Start of activity</b>	May 1, 2023			
<b>Scientific Responsible of the EXBRINER-01_UNICAL Doctoral Scholarship</b>	Prof. Efrem Curcio, Professore Ordinario, Department of Environmental (DIAM), e-mail: <a href="mailto:efrem.curcio@unical.it">efrem.curcio@unical.it</a>			
<b>Agenda</b>	<b>Prova</b>	<b>Data</b>	<b>Ora</b>	<b>Luogo</b>
	Qualification assessment	12/04/2023		
	Oral examination	17/04/2023	9:30 AM Central European Time (CET)	Oral exams will take place on telematic mode
	The test results will be published on the PhD website at: <a href="https://www.unical.it/portale/strutture/dipartimenti_240/dibest/ricerca/dottorati/siace/">https://www.unical.it/portale/strutture/dipartimenti_240/dibest/ricerca/dottorati/siace/</a>			
<b>Contact for information</b>	<a href="mailto:salvatore.critelli@unical.it">salvatore.critelli@unical.it</a> ; tel.: +39 0984.493678; <a href="mailto:marinella.tedeschi@unical.it">marinella.tedeschi@unical.it</a> ; tel.: +39 0984.496650. Further information regarding the European project EXBRINER can be requested from the local coordinator of the project, Prof. Efrem Curcio, <a href="mailto:efrem.curcio@unical.it">efrem.curcio@unical.it</a>			
<b>PhD website</b>	<a href="https://www.unical.it/portale/strutture/dipartimenti_240/dibest/ricerca/dottorati/siace/">https://www.unical.it/portale/strutture/dipartimenti_240/dibest/ricerca/dottorati/siace/</a>			



**PhD Course in PHYSICAL, CHEMICAL AND MATERIALS SCIENCES AND TECHNOLOGIES - STFCM**

<b>Coordinator of PhD course</b>	Prof.ssa Gabriella Cipparrone - Department of Physics Tel.: +39 0984.496115 - e-mail: <a href="mailto:gabriella.cipparrone@fis.unical.it">gabriella.cipparrone@fis.unical.it</a> - SSD: FIS/03
<b>Doctoral Scholarship Code and Title</b>	EXBRINER-09_CNR. <i>Stability of membranes against fouling</i>
<b>Duration</b>	3 years
<b>Main Department</b>	Department of Physics
<b>Subject Areas</b>	Area CUN 02: FIS/01, FIS/02, FIS/03, FIS/05, FIS/06, FIS/07; Area CUN 03: CHIM/01, CHIM/02, CHIM/03; Area CUN 08: ICAR/08.
<b>Research Topics of the PhD course STFCM</b>	The doctorate course includes two curricula with the following topics. 1) "Physical sciences and technologies". The activities of this area mainly concern the following research topics: astrophysics and plasmas, geophysics, condensed matter physics and quantum physics, physics of complex systems, and of the continuous, physics of biological systems, high energy physics, in their experimental, theoretical and computational aspects. 2) "Advanced materials: chemistry and technologies". The activities of this area mainly concern the following research topics: science and technology of advanced materials and systems (membranes, interfaces, etc), polymeric, composite, multifunctional, hybrid and nanostructured, etc. Conceiving the study of materials in terms of structure and properties, design, production processes, characterization and use, with the aim of developing materials and methods for the conversion and accumulation of energy, technologies for cultural heritage protection, photonics, sensors, health, anti-counterfeiting and security.
<b>Research Project Description</b> EXBRINER-09_CNR Fellowship	The Marie Skłodowska-Curie Actions - Doctoral Network EXBRINER project ( <a href="http://exbriner.unical.it">http://exbriner.unical.it</a> ) aims to develop a new technological and interdisciplinary platform for the development of the next-generation membrane systems for sustainable exploitation of desalination brine resources, thus accelerating the transition towards a Circular Blue Industry. EXBRINER is implemented through a cross-sectoral network composed by eight European Universities, three Research Centers and four leading Industrial Companies, all with recognized excellence in the field of membrane engineering. Research and Training activities include mandatory secondments in two academic centers and one industrial center for the recruited Doctoral Candidate. At ITM-CNR, the research project is focused on the investigation of membrane biofouling: effect of membrane properties on adhesion and secretion of extracellular substances, which includes the following activities: i) insurgence of scaling and organic fouling in membranes; ii)



	<p>retention and selection of microorganisms (including cyanobacteria) at the surface of membranes in relation with operating conditions (eg., salinity, temperature, pretreatment steps), evaluating the effect of both physico-chemical and structural properties of the membranes in relation to extracellular substances secreted by microorganisms.</p> <p>Two academic secondments will be required at the KATHOLIEKE UNIVERSITEIT LEUVEN (Belgium) e l'INSTITUT NATIONAL DES SCIENCES APPLIQUEES DE TOULOUSE (France) and one industrial secondment at GVS SPA (Italy).</p>	
<b>Application Requirements</b>	<p>Italian University Degree (ante DM 509/1999) or Italian/Master's Degree (ante DM 509/1999 and DM 270/2004) or equivalent Degree obtained abroad.</p>	
<b>Evaluation procedure</b>	<p>Assessment of academic publications and titles, oral examination. During the oral exam, English language proficiency will be tested.</p>	
<b>Evaluable academic publication and titles</b>	<p>Copy of academic qualification(s)/parchment(s) clearly stating the name of the University/Institution issuing the degree, the date of graduation, the final score (or Grade Point Average), along with copies of official transcripts of academic courses attended to obtain each degree (BSc, MSc or equivalent) and any other document considered useful to assess the eligibility of the Degree (e.g. Diploma Supplement). All documents must be provided in original language and, if not in Italian, translated in English.</p> <ul style="list-style-type: none"> <li>- Signed Curriculum Vitae (CV), in Italian or in English;</li> <li>- Signed Motivation Letter (one page maximum), in English, covering the following aspects: reasons for applying to the PhD position, skills and abilities that make the applicant a good candidate, motivations to carry out research abroad, professional interests and expectations.</li> <li>- Maximum two Reference Letters, in English, printed on letterhead and signed;</li> <li>- A concise recognition on the state-of-the-art (research project 3,000-4,000 characters), in English, on the topic addressed by the Individual Research Project EXBRINER-01_UNICAL;</li> <li>- Any additional qualification or documentation (e.g., publications), in Italian or English, deemed useful for the selection procedure.</li> </ul>	
<b>Evaluation Criteria</b>	<b>Maximum score of 100 points</b>	
	<b>Assessment of the applicant publications and titles</b>	<b>Maximum score of 40 points</b>
	recognition on the state-of-the-art (research project 3,000-4,000 characters)	<b>Maximum score of 20 points</b>
	Curriculum Vitae (CV), including titles and any publications	<b>Maximum score of 15 points</b>



	Motivation and Reference Letters	<b>Maximum score of 5 points</b>		
	<p><b>Prova orale</b> <b>Oral examination.</b> Selection criteria: the oral exam will focus on the contents of the research project related to the EXBRINER-01_UNICAL PhD Scholarship. The candidate's skills for the realization of the doctoral project and the motivations for scientific research will also be evaluated. Furthermore, the candidate must demonstrate a good knowledge of the English language.</p>	<b>Maximum score of 60 points</b>		
	<p>The minimum threshold for being admitted to the oral examination is of 30 points. The minimum threshold for positive oral examination is of 40 points.</p>			
<b>Position</b>	no. 1 (one) position			
<b>Financial support</b>	Equivalent funding under Grant Agreement no. 101072449 - Marie Skłodowska-Curie Actions - Doctoral Network (MSCA-DN) project "EXBRINER- <i>Next-generation membrane technologies for sustainable exploitation of seawater brine resources: transition towards a circular blue industry</i> " CUP B27G22000750006			
<b>Start of activity</b>	May 1, 2023			
<b>Scientific Responsible of the EXBRINER-01_UNICAL Doctoral Scholarship</b>	Dott.ssa Loredana De Bartolo			
<b>Agenda</b>	<b>Prova</b>	<b>Data</b>	<b>Ora</b>	<b>Luogo</b>
	Qualification assessment	12/04/2023		
	Oral examination	17/04/2023	9:30 AM Central European Time (CET)	Oral exams will take place on telematic mode
	The test results will be published on the PhD website: <a href="https://fisica.unical.it/contents/news/list">https://fisica.unical.it/contents/news/list</a>			
<b>Contact for</b>	Dott.ssa Chiara Perri tel.: + 39 0984.494006 E-mail: <a href="mailto:chiara.perri@fis.unical.it">chiara.perri@fis.unical.it</a>			



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the European Union



	Further information regarding the European project EXBRINER can be requested from the CNR coordinator of the project, Dott.ssa Loredana De Bartolo ( <a href="mailto:l.debartolo@itm.cnr.it">l.debartolo@itm.cnr.it</a> )
PhD website	<a href="https://fisica.unical.it/didattica/formazione-post-laurea/dottorato-di-ricerca/">https://fisica.unical.it/didattica/formazione-post-laurea/dottorato-di-ricerca/</a>



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**ANNEX B**

**Self-Declaration Affidavit (art. 46 D.P.R.28 December 2000 n. 445) \***

The undersigned \_\_\_\_\_ Fiscal Code: \_\_\_\_\_  
Place of birth \_\_\_\_\_ date of birth \_\_\_\_\_ Sex M/F \_\_\_\_\_ residence (city) \_\_\_\_\_  
\_\_\_\_\_ prov. \_\_\_\_\_ via \_\_\_\_\_ n. \_\_\_\_\_ cap \_\_\_\_\_ e-mail \_\_\_\_\_

I understand that any incorrect information and false statements are subject to the penalties provided, according to art. 76 of the D.P.R. 28 December 2000, n. 445, pursuant to and for the purposes of D.P.R. n. 445/2000, and on its own responsibility:

**hereby declare**

to be in possession of the following access title pursuant to art. 2 of the selection notice:

*(please indicate precisely: exact name of the course, date of graduation and grade, University, list of exams with marks if required and for candidates not yet in possession of the qualification)*

Degree \_\_\_\_\_ achieved on \_\_\_\_\_  
with vote \_\_\_\_\_ at \_\_\_\_\_  
list of exams and grades (possible) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

A copy of the following identity document is attached: \_\_\_\_\_

The undersigned also declares to be informed, pursuant to and for the purposes of Legislative Decree No. 196 of 2003 and Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 that the personal data collected will be processed, also by computer, exclusively in the context of the procedure for which this declaration is made.

Place and date \_\_\_\_\_

*Declared by  
(legible signature)*

\_\_\_\_\_

\*This statement may relate to states, personal qualities or facts that are directly acquainted with the person concerned, as well as states, personal qualities and facts relating to other subjects of which he or she has direct knowledge.

This statement must provide proof of any qualifications (eg qualifications, examinations, professional qualifications, etc.) that are not attached to the application, as self-certification.

For the titles attached (eg documents issued by a public authority, copies of publications, copies of parchments or certificates of study or service qualifications, etc.) must in the same declaration state declare that they are in conformity to the original copy.

Lastly, a copy of a validation document must be dated, signed and attached.

N.B. - Subscribing to the aforementioned statements is not subject to authentication where it is assigned in the presence of the employee. If this declaration is sent or filed directly by a person other than the candidate, photostatic copy, front and rear, of a document of the identity of the subscriber must also be produced. Only photographic identity documents issued by a state administration will be considered valid.