

PhD Programme Table - 39th cycle
Call for Applications for further PhD positions
funded by Next Generation EU - NRRP ex M.D. 117/2023 and 118/2023
and from other sources - PhD Programmes (39th cycle)
A.Y. 2023/2024



Section “Available Positions and Scholarships” integrated on 02/08/2023

PROGRAMME'S NAME	CHEMISTRY
DURATION	3 years
PROGRAMME START DATE	01/11/2023 (DD/MM/YYYY)
LANGUAGES	English
COORDINATOR	Prof. Luca Prodi (luca.prodi@unibo.it)
PHD POSITIONS	8
ADMISSION PROCEDURE	Qualifications evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to a specific research topic
1	PhD Scholarship PNRR ex M.D. 117/2023	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 117/2023) and by Sinbiosys Srl	Development of a technological platform based on semiconductor luminescent nanomaterials for industrial applications
2	PhD Scholarship PNRR ex M.D. 117/2023	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 117/2023) and by Comas Costruzioni Macchine Speciali SpA	Definition of innovative industrial processes for the production of electrochemical energy storage systems, such as lithium batteries and/or supercapacitors, with particular attention to the circularity of the process. The study will mainly focus on electrode materials and on the sustainability of their manufacturing, excluding critical materials and/or evaluating their reuse/recovery
3	PhD Scholarship PNRR ex M.D. 117/2023	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 117/2023) and by Janssen-Cilag, S.A.	Photochemical Catalytic Technologies for Selective Late Stage Functionalisation
4	PhD Scholarship PNRR ex M.D. 117/2023	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 117/2023) and by Janssen-Cilag, S.A.	Radical Methods for Late-Stage Difluoromethoxylation and Trifluoromethoxylation driven by Light and Electricity

5	PhD Scholarship	Funded by the Department of Chemistry "G. Ciamician"	Electrochemistry of N-doped nanographenes and nanographene systems bearing metal coordination units for electrocatalysis
6	PhD Scholarship PNRR ex M.D. 117/2023	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 117/2023) and by Mixer SpA	Investigation and development of photochemical and e-beam cross-linking processes of polymeric compounds using suitable activators: study of the photochemical properties of the various components, process optimization and evaluation of the mechanical properties of the crosslinked material. Study of luminescent silicon nanocrystals as markers for polymer compounds marking and anti-counterfeiting
7	PhD Scholarship PNRR ex M.D. 117/2023	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 117/2023) and by Spraying Systems Comtosi Srl	Technological innovation for API synthesis
8	PhD Scholarship PNRR ex M.D. 117/2023	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (M.D. 117/2023) and by AUTOMOTIVE CELLS COMPANY SE	Study of new materials for future battery technologies

The number of positions and scholarships may be incremented in case additional funding becomes available, notwithstanding the terms of the application process as detailed in Art. 3 of the Call for Applications. Any amendment, update or integration of the Programme Table will be published, even after the Call for Applications has expired. Any further PhD positions shall be integrated in the PhD Programme Table within ten days before the oral examination.

All PhD positions winners shall fulfill the learning and research obligations decided by the Academic Board and the obligations foreseen in the relevant regulations, funding schemes and eventual agreements, and in the Call for Applications. Moreover, applicants awarded with PhD scholarships funded by Next Generation EU shall fulfill specific obligations foreseen in the relevant funding scheme, in the relevant regulations and in the Call for Applications.

Admission Exams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from 01/09/2023**
Oral examination	Date: starting from 04/09/2023 – 9.00 a.m. CEST* Place: In presence, Room 2E - UE1 Building, via della Beverara 123/1, Bologna. Remotely, using Microsoft Teams	Available from 08/09/2023**

* In case that the oral examination cannot be completed in one day due to the large number of applicants, the oral examination detailed schedule shall be made available on the webpage [Studenti Online](#) together with the results of the qualifications evaluation. **During the oral examination, applicants may express their interest in one or more positions linked to specific research topics.**

** The **results of the admission exams** will be available on the webpage [Studenti Online](#) (select "summary of the requests in progress" > "see detail" and open the .pdf file at the bottom of the page). **No personal written communication will be sent to applicants concerning the examinations results.**

Required and Supporting Documents to be attached to the application

All the documents listed below **shall be drawn up in English or in Italian**. In case of documents originally issued in any other language (e.g. identity document, qualifications), an official translation is required.

Only qualifications obtained **during the last 5 calendar years** shall be taken into consideration, except for the University Degree. The Admission Board will assess the relevance of the supporting documents to the PhD Programme.

REQUIRED DOCUMENTS	
Identity document	Valid identity document with photo (i.e. identity card, passport)
Curriculum Vitae	The Curriculum Vitae must be drawn up according to the “EuroPass” standard.
Degrees	Documents attesting the awarding of the first and second cycle degrees, the exams taken and the marks obtained (see Art. 3 of the Call for Applications). Please, note that the correct completion of the fields relating to the qualifications on the application procedure on Studenti Online is required (declarations about “Degree - Second or single cycle degree” e “Degree – First cycle degree”). A 10 points penalty on the total qualification evaluation score shall be applied to applicants not filling correctly the said fields.
Thesis abstract	Abstract of the second cycle degree thesis . Graduands applicants may submit the draft of the thesis. Abstracts cannot exceed 3,000 characters, including spaces and formula possibly used. The above figure does not include: the title of the thesis, the outline, references, and images such as graphs, diagrams, tables etc.
SUPPORTING DOCUMENTS	
Personal statement	This must include the reasons prompting the applicant to attend the PhD Programme and those relevant experiences and research interests , that make the applicant suitable for the specific PhD Programme (3,000 characters maximum, including spaces).
Publications	<ul style="list-style-type: none"> - List of publications (i.e. monographs, articles on scientific journals) - max 2 – information required: author(s)’s name, title of article, name of the journal, year of publication, first page number-last page number, journal’s IF, article/publication’s DOI number - List of presentations at academic conferences - max 3 – the presentation will be evaluated only if the candidate is the presenting author. Required information: presentation type (oral or poster), national or international relevance of the conference. Abstract required.
Other documents	<ul style="list-style-type: none"> - Postgraduate vocational training programmes and/or specialisation programmes relevant to the PhD Programme - Teaching activities carried out at academic level - Specialisation thesis abstract (5000 characters max) - Research activity - whether basic, applied, translational, etc. - carried out in any capacity, including when covered by research grants, and as a staff member of research units - Work activity - Curricular and non-curricular professional internships - Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes) - Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc)

Evaluation criteria*

Scores will be expressed in points out of 100, as follows.

1. Qualifications evaluation

Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

First and Second cycle degree final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	20 points max
Publications	5 point max
Consistency of the thesis topics, as described in the abstract, with the research topics of the PhD programme	15 points max
Personal statement	5 points max
Other supporting documents	5 points max

2. Oral examination

Minimum score for eligibility: 30 points, Maximum score 50 points

English language proficiency	5 points max
General knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions	45 points max

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions. **During the oral examination, the applicant's English proficiency shall be assessed.**

The oral examination is carried out in Italian or English.

* Possible further evaluation criteria will be available on the [University website](#), selecting the relevant PhD Programme > "More information".