







# PHD PROGRAMME TABLE

# Call for Applications for further PhD positions funded by Next Generation EU – NRRP ex M.D. 629/2024 and 630/2024 and from other sources - PhD programmes (40th cycle) A.Y. 2024/2025

PROGRAMME'S NAME	CHEMISTRY
DURATION	3 years
PROGRAMME START DATE	01/11/2024 (DD/MM/YYYY)
LANGUAGES	English
COORDINATOR	Prof. Luca Prodi ( <u>luca.prodi@unibo.it</u> )
PhD POSITIONS	9
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. 630/2024	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. 630/2024) and by Ferrari S.p.A.	Future cell technology and cell materials for automotive application
2	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Fresenius Kabi Ipsum S.r.L.	Development of sustainable methodologies for synthesis of API
3	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Zaitex S.p.A	Development of metalized dyes from natural and renewable resources having low-toxic metals
4	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Glueton S.r.L.	Development of adhesive formulations based on biodegradable polymers and raw materials from renewable sources.
5	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Davines S.p.A.	Identification of molecules capable of strengthening and repairing the keratin structure of the hair bearing a breakdown of disulfide and peptide bonds at the level of split ends

6	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Ferrari S.p.A.	Electrochemical analysis and post-mortem characterization of batteries
7	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Soko Chimica S.r.L.	Development, characterization and application of functional materials for textiles
8	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Recordati S.p.A.	Development of new methodologies and process optimization for the synthesis of biologically active compounds
9	PhD Scholarship PNRR ex M.D. 630/2024	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. 630/2024) and by Davines S.p.A.	Evaluation of peptide- based supramolecular gels for skin care formulations, including rheological and structural studies, to find the best chemical-physical conditions of emulsion formulation compatible with the reported gelators

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, in the Call for Applications, and in the MM.DD. 629/2024 and 630/2024.

#### **Admission Exams**

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from <b>23/08/2024</b>
Oral examination	Date: starting from 02/09/2024 – 9 a.m. CEST Place: Remotely, using Microsoft Teams	Available from <b>05/09/2024</b>

The results of the qualifications and research proposal evaluation shall be available on the webpage <u>Studenti Online</u> (select "summary of the requests in progress" > "see detail" and open the .pdf file at the bottom of the page) together with the oral examination detailed schedule. **No personal written communication will be sent to applicants concerning the examinations results**.

During the oral examination, applicants may express their interest in one or more positions linked to specific research topics.

# 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	rriculum Vitae The Curriculum Vitae must be drawn up according to the "EuroPass" standard.	
<b>Degrees</b> Documents attesting the awarding of the first and second cycle degrees, the exams ta the marks obtained (see Art. 3 of the Call for Applications). Please, note that the corre		

	completion of the fields relating to the qualifications on the application procedure on <a href="Studenti Online">Studenti Online</a> 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 <b>second cycle degree thesis.</b> 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 DOCUM	MENTS
Personal statement	This must include the reasons prompting the applicant to attend the PhD Programme and those <b>relevant experiences and research interests</b> , that make the applicant suitable for the specific PhD Programme (3,000 characters maximum, including spaces).
Publications	<ul> <li>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</li> <li>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.</li> </ul>
Other documents	<ul> <li>Postgraduate vocational training programmes and/or specialisation programmes relevant to the PhD Programme</li> <li>Teaching activities carried out at academic level</li> <li>Specialisation thesis abstract (5000 characters max)</li> <li>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</li> <li>Work activity</li> <li>Curricular and non-curricular professional internships</li> <li>Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc)</li> </ul>
	<ul> <li>Work activity</li> <li>Curricular and non-curricular professional internships</li> <li>Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> </ul>

# 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	45 points max
to the available PhD positions	

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 <u>University website</u>, selecting the relevant PhD Programme > "More information".