



PHD PROGRAMME TABLE 40TH CYCLE

ERRATA CORRIGE

Section "Available Positions and Scholarships" integrated on 27/05/2024



Section "Available Positions and Scholarships" integrated on 10/06/2024




Section "Available Positions and Scholarships" integrated on 13/06/2024

PROGRAMME'S NAME	INDUSTRIAL CHEMISTRY
DURATION	3 years
PROGRAMME START DATE	01/11/2024 (DD/MM/YYYY)
LANGUAGES	English
COORDINATOR	Prof. Fabrizio Cavani (fabrizio.cavani@unibo.it)
PHD POSITIONS	13
ADMISSION PROCEDURE	Qualifications evaluation Oral examination

Available Positions and Scholarships

Post o n.	Sostegno finanziario	Descrizione	Posizioni a tema vincolato
1	<i>PhD scholarship</i>	Funded by the Department of Industrial Chemistry "Toso Montanari" with funds made available by the project HORIZON-EIC-2023-PATHFINDEROPEN-01 - Project nr. 101130006 — BioMembrOS "Biomimetic Membranes for Organ Support" - CUP J53C23003670006 - Prof. Giuseppina Montante	Development of an innovative membrane unit for artificial respiration
2	<i>PhD scholarship</i>	Totally funded by the University of Bologna general budget	
3	<i>PhD scholarship</i>	Totally funded by the University of Bologna general budget	
4	<i>PhD scholarship</i>	Totally funded by the University of Bologna general budget	
5	<i>PhD scholarship</i>	Funded by the EU – NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) – M4C2I1.3 by Partenariato Esteso 15 - Space It Up! Project (topic 15 PNRR "Space activities") - CUP J53C24000580006	Recycling of aerospace complex components
6	<i>Research Grant</i>	Provided by the Department of Industrial Chemistry with funds made available by the project PRIN 2022 PNRR – Code P202282F9N "Effective Recycling of cellulosic waste	Waste to chemicals: nano-designed catalysts for the

		<p>from paper industry (REWAMP)” funded by the EU - NextGenerationEU - National Recovery and Resilience Plan (NRRP) - Mission 4 Education and Research – Component 2 From Research to Business - Investment 1.1 Programma Nazionale di Ricerca e Progetti di Rilevante Interesse Nazionale (PRIN), Call: Prin 2022 PNRR by DD N. 1409 of 14/09/2022 - CUP J53D23014510001. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount of €19,367.00 per year.</p>	<p>upgrading of organic waste streams</p>
			
7	Research Grant	<p>Provided by the Department of Industrial Chemistry with funds made available by the project MITE National Electricity System Research 2019-2021 Three-Year Plan “CSEAA_00014 MIAMI Materiali Innovativi per Sistemi di Accumulo ibrido” - CUP J53C22004050001 – Prof. Fabrizio Passarini. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount €19,367.00 per year.</p>	<p>LCA applied to energy storage devices and materials</p>
8	Research Grant	<p>Provided by the Department of Industrial Chemistry with funds made available by the project MITE National Electricity System Research 2019-2021 Three-Year Plan “CSEAA_00014 MIAMI Materiali Innovativi per Sistemi di Accumulo ibrido” - CUP J53C22004050001 – Prof. Francesco Basile. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount €19,367.00 per year.</p>	<p>Development of Innovative materials for a hybrid Power to X energy storage system</p>
9	PhD scholarship	<p>Funded by Polynt S.p.A.</p>	<p>Development of innovative catalytic processes for the synthesis of maleic anhydride</p>
10	Research Grant	<p>Provided by Interdepartmental Centre for Industrial Research in Renewable Resources, Environment, Sea and Energy (CIRI FRAME) with funds made available by the project CIRI FRAME “H2-Synergy - Green hydrogen and syngas from circular economy obtained by high temperature electrolysis in synergy with gasification of biomass and plastic residues” - PR FESR programme – Action 1.1.2 – Call for strategic industrial research projects addressing priority areas of the Intelligent Specialisation Strategy – DGR 2097/2022 and subsequent amendments and additions. – CUP: J47G22000780003. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount of €19,367.00 per year.</p>	<p>Development of hydrogen and fuel production processes from integrated electrolysis and thermochemical processes</p>
			

11	Research Grant	<p>Provided by Interdepartmental Centre for Industrial Research in Renewable Resources, Environment, Sea and Energy (CIRI FRAME) with funds made available by the project CIRI FRAME “CCS4CER - Carbon capture storage and CO2 mineralization for Ceramic Industry” PR FESR programme – Action 1.1.2 – Call for strategic industrial research projects addressing priority areas of the Intelligent Specialisation Strategy - DGR 2097/2022 and subsequent amendments and additions – CUP E87G22000550007. The research grant will have a duration of 12 months, renewable up to 36 months, and gross percipient amount of €19,367.00 per year.</p> 	Development of innovative processes for the capture, storage and use of CO2
12	PhD scholarship	<p>Funded by ENEA Agenzia Nazionale per le Nuove Tecnologie, l’Energia e lo Sviluppo Sostenibile funded by the EU - NextGenerationEU - National Recovery and Resilience Plan (NRRP) - Mission 2 - Component 2 - Investment 3.5, Research Operational Plan “Research and Development of Technologies for the Hydrogen Industry”</p> 	Development of electrocatalyser/membrane systems through electrospays to increase the operating pressure and performance of AEM cells
13	PhD scholarship	<p>Funded by ENEA Agenzia Nazionale per le Nuove Tecnologie, l’Energia e lo Sviluppo Sostenibile funded by the EU - NextGenerationEU - National Recovery and Resilience Plan (NRRP) - Mission 2 - Component 2 - Investment 3.5, Research Operational Plan “Research and Development of Technologies for the Hydrogen Industry”</p> 	Study and development of innovative processes and materials for the synthesis of hydrogen carriers from CO2

The number of positions and scholarships may be incremented in case additional funding becomes available, notwithstanding the terms of the application process in the Call. Any amendment, update or integration of the Programme Table will be published on the University website, 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.

Admission Exams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants’ participation is not required	Available from 11/07/2024
Oral examination	<p>Date: starting from 16/07/2024 – 9.00 a.m. CEST</p> <p>Place: In presence, Sala Riunioni, UE4 Building, Departments of Chemistry and Industrial Chemistry, Via Pero Gobetti 85, Bologna. Remotely, using Microsoft Teams</p>	Available from 19/07/2024

The results of the qualifications and research proposal evaluation shall 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) 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	In the Curriculum Vitae a brief description of the topics researched in the second cycle degree final thesis is required. 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 - 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	3 point max

Consistency of the thesis topics, as described in the abstract, with the research topics of the PhD programme	17 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".