

CHEMICAL SCIENCES	
CYCLE	XXXVII
COORDINATOR	Prof.ssa Alessia BACCHI email: alessia.bacchi@unipr.it Department of Chemistry, Life Sciences and Environmental Sustainability
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/01/2022
TRAINING OBJECTIVES	
<p>The training program aims to provide the PhD in Chemical Sciences the necessary skills to propose and manage research projects in the advanced fields of Analytical Chemistry, General and Inorganic Chemistry, Physical Chemistry, Industrial Chemistry, and Organic Chemistry. The PhD course in Chemical Sciences requires each student to work within one of the research groups active at the Chemistry Unit of the Department of Chemistry, Life Sciences and Environmental Sustainability (SCVSA), and to follow a specific training pathway in the chosen sector; this is achieved also through: participation in research activities at qualified centers both in Italy and abroad, participation to national and international schools and conferences, and through the publication of scientific results in international journals. Interdisciplinary training activities, aimed at developing PhD students the ability to exhibit, discuss and disseminate the subjects of their work both in the academic and industrial context and even more generally in society, are also part of the program.</p>	
ADMISSION REQUIREMENTS	<p>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:</p> <ul style="list-style-type: none"> – Laurea specialistica or Laurea magistrale (second cycle master's degree) – Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations); – Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2021.</p>

POSITION PUT OUT TO COMPETITION	6	With Scholarship - Action IV.5 - "Doctorates on Green issues of the PON R&I 2014-2020"	6
Position with Scholarship LINKED TO SPECIFIC TOPICS			
<p>When registering for the competition, candidates must indicate to the Examining Board, in the specific section of ANNEX A, their interest of being assigned one or more scholarships on a specific topic. The Examination Board will evaluate their eligibility based on specific competences, experience and specific aptitudes of the applicants.</p>			
N°	ACTION	BOUND RESEARCH TOPIC	
6	Action IV.5 - "Doctorates on Green issues of the PON R&I 2014-2020"	<p>A) Sustainable development and circular economy: design of innovative materials derived from industrial by-products as a resource for the agronomic and agri-food supply chain</p> <p>B) Development of sustainable synthetic methodologies for the pharmaceutical industry</p> <p>C) Development of materials and processes for energy efficiency and climate change effects mitigation</p>	

ADMISSION PROCEDURES		<p>Assessment of QUALIFICATIONS: up to 40 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam)</p> <p>ORAL EXAM: up to 80 points</p> <p>Minimum score for ELIGIBILITY: 70/120</p>
Foreign Language	<p>Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.</p> <p>The evaluation of the knowledge of this language will be oral and will consist in the discussion of part of the research topics in English.</p>	
<p>CANDIDATES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</p> <p>(Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)</p>		
<p>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</p>		
<p>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</p>		
<p>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</p>		
ANNEX A	(art. 5 of the Competition notice)	
Identification Document	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)	
Curriculum Vitae et studiorum	No specific CV format is required (see art. 4 of the Competition notice)	
Abstract of degree thesis	Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)	
Qualifications	<p>Certificates and academic transcript of records for both Bachelor and Master degrees containing the following details for each degree held: (art. 4 of the Competition notice): University that granted the degree - Type of degree (first cycle/second cycle/single cycle) Name of the degree program - Date of graduation - Final mark - List of exams and corresponding scores (academic transcript of records) - Translation into Italian or English (only for degrees issued in languages other than Italian or English).</p>	
Research Project	<p>Drawn up according to the format attached to the competition announcement</p> <p>THE EVALUATION OF THE PROJECT WILL TAKE PLACE DURING THE ORAL EXAM</p>	
<p>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT (only qualifications attested by a document drawn up in Italian or in English will be considered)</p>		
Scientific Publications	Articles on scientific journals with referees, communications presented at conferences or symposia, book chapters, other publications related to Chemical Sciences.	
Other experiences	<ul style="list-style-type: none"> - Participation in Schools or training courses related to Chemical Sciences - Any awards received related to Chemical 	
<p>EVALUATION CRITERIA</p>		
QUALIFICATION	EVALUTATION CRITERIA	POINTS
Curriculum Vitae et studiorum	Relevance of the academic career as well as postgraduate experiences and other research activities related to Chemical Sciences	Up to 20 points

Graduation mark or Average of the exam marks (if the candidate will attain the degree no later than 31 October 2021)	Assignment of a score related to the final mark or, for candidates who will attain the degree by 31 October 2021, a score related to the average of the exam marks	Up to 5 points
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral programme research topics	Up to 10 points
Scientific publications	Impact and relevance of the qualifications presented related to Chemical Sciences	Up to 5 points
ORAL EXAM	EVALUATION CRITERIA	POINTS
The ORAL EXAM includes the presentation and discussion of the research project and is intended to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the related topics	<p>Project evaluation score (up to 25 points):</p> <ul style="list-style-type: none"> – scientific value and originality of the proposal – articulation of the proposal – feasibility of the proposal – consistency with the related issues <ul style="list-style-type: none"> ○ Knowledge of the subject and predisposition of the candidate to the proposed research activities: up to 50 points ○ knowledge of English is assessed by discussion of topics of research and by understanding of scientific texts: up to 5 points 	Up to 80 points
SCHEDULE OF THE ADMISSION EXAMS		
ORAL EXAM	DATE	25 October 2021 (with possible extension to 26 October 2021)
	TIME	10:30 am (Italian time)
	PLACE	Department of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY
OTHER INFORMATION	<p>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</p> <p>The choice of the Research Topic to be expressed in Annex A is not binding on the assignment of the research project, and it is intended to assess candidates skills during the admission exam.</p>	