



CHEMICAL SCIENCES	
Cycle	XXXIII
Duration	3 years
Coordinator	Prof. Roberto CORRADINI – Department of Chemistry, Life Sciences and Environmental Sustainability E-mail: roberto.corradini@unipr.it
Research Topics (the applicant MUST indicate one research topic)	<ol style="list-style-type: none">1. Crystal engineering of materials for applications in the fields of health, nutrition and environment2. Pharmaceutical and environmental applications of coordination chemistry3. Molecular materials for photonic and electronic applications4. Synthesis of fine chemicals by heterogeneous catalysis5. Molecular Recognition in Biophotonics and bioelectronics6. Characterization of new molecular recognition platforms based metal-organic frameworks for sensing, absorption and release of volatile ingredients related to human and animal nutrition, health and environment
Training objectives	The aim of the training program is to enable the PhD in Chemistry to acquire the necessary skills to propose and manage research projects in advanced fields of Analytical Chemistry, General and Inorganic Chemistry, Physical Chemistry, Industrial Chemistry and Organic chemistry. The Doctorate in Chemistry requires that each PhD student work within one of the active research groups at the of Chemistry Units of the of the Department of Chemistry, Life Sciences and Environmental Sustainability (SCVSA), and follow a specific training course in the frame of the chosen sector, through the participation in research activities at qualified centers both in Italy and abroad, at schools and national and international conferences, and by publishing the scientific results achieved in journals with international relevance. Interdisciplinary training activities are also planned to develop the PhD students' ability to expose, discuss and disseminate the subjects covered by their work both in academic and industrial contexts and in general in the entire society.
Academic degree required	Laurea pursuant to the previous Italian university system, "laurea specialistica" or "laurea magistrale", or a foreign academic degree that has been recognized as equivalent (Master of Science level)
POSITIONS PUT OUT TO COMPETITION	
With Scholarship	5
Reserved to holders of scholarship within specific international mobility programs	1
TOTAL	6



KIND OF SCHOLARSHIP		
N°	Funding entity	Research Topic, if any
2	Scholarship Ministerial funds	<ul style="list-style-type: none"> • See previous Research Topics n. 1-4
1	Scholarship University funds	
1	Funded by Department of Chemistry, Life Sciences and Environmental Sustainability	
1	Co-funded by Fondazione Cariparma	<ul style="list-style-type: none"> • Molecular Recognition in Biophotonics and bioelectronics
Positions reserved to scholarship holders within specific international mobility programs		
N°	Agreements/Cooperations/Mobility Programs	Research Topic, if any
1	Protocol of International University Cooperation for Educational and Scientific Purposes with Indian Institute of Science Education and Research Thiruvananthapuram – India (IISER TVM)	<ul style="list-style-type: none"> • Characterization of new molecular recognition platforms based metal-organic frameworks for sensing, absorption and release of volatile ingredients related to human and animal nutrition, health and environment
ADMISSION PROCEDURES		
<p align="center">Assessment of QUALIFICATIONS: up to 40 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 80 points Minimum score for ELIGIBILITY: 70/120</p>		
ADMISSION PROCEDURES for positions reserved to scholarship holders within specific international mobility programs		<p align="center">Assessment of QUALIFICATIONS: up to 120 points 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 comprehension of a scientific texts .</p>
<p align="center">Possibility of videoconference for candidates residing or temporarily abroad (the relevant request shall be submitted using the form attached to the competitive examination announcement)</p>		YES
THE INTERVIEW MAY BE HELD ALSO IN ENGLISH		
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
Graduation thesis	Abstract of the graduation thesis (mandatory qualification)	Up to 15 points
	Relevance of the graduation thesis to the research topics of the Doctorate Program	For position reserved Up to 30 points



Curriculum Vitae et studiorum and other qualifications	Including academic career and postgraduate experience, accompanied with a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark (mandatory qualification)	Up to 15 points For position reserved Up to 50 points
Statement of Research Interest	Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD and at describing the specific research interests in the specific topics proposed for the 33rd cycle.	Up to 5 points For position reserved Up to 30 points
Scientific publications	Articles published in scientific journals with referee, Papers presented at conventions or meetings	Up to 5 points For position reserved Up to 10 points
SCHEDULE OF THE ADMISSION EXAMS		
ORAL EXAM	ORAL EXAM DATE: 20 September 2017 TIME: 09:30am PLACE: ROOM A Chemistry Building Department of Chemistry, Life Sciences and Environmental Sustainability Parco Area delle Scienze, 17/A – 43124 PARMA - ITALY	
Oral Exam topics	The Oral Exam will be held in Italian or in English for foreign candidates. It will consist in a discussion on the qualifications submitted by the candidate, as well as in the assessment of his/her scientific background and research designing skills. The candidate's fluency in English will be assessed in terms of comprehension of scientific texts.	
OTHER INFORMATION	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	