



## DOCTORAL PROGRAMME IN CHEMICAL SCIENCES

Director prof. Anna Maria Papini

XXXVIII cycle – academic year 2022/2023

<b>SCIENTIFIC AREA</b>	
<b>ADMINISTRATIVE OFFICE</b>	Department of Chemistry "Ugo Schiff"
<b>CURRICULA</b>	<ol style="list-style-type: none"><li>1. Chemistry</li><li>2. Science for the Conservation of Cultural Heritage</li></ol>
<b>POSITIONS AVAILABLE: 11</b> Positions with Scholarship: 11 Positions without Scholarship: <i>not available</i>	
<b>RANKING LIST FOR STANDARD POSITIONS SCHOLARSHIPS AVAILABLE: 8</b>	<p><b>6</b> - Università di Firenze di cui <b>5</b> a cofinanziamento del Progetto Ministeriale "Dipartimenti di Eccellenza 2018-2022" (58503_DIPECC - C.U.P. B96C17000200008)</p> <p><b>2</b> - Dipartimento di Chimica "Ugo Schiff" Progetto Ministeriale "Dipartimenti di Eccellenza 2018-2022" (58503_DIPECC - C.U.P. B96C17000200008)</p>
<b>RANKING LISTS FOR POSITIONS WITH SPECIFIC RESEARCH TOPICS SCHOLARSHIPS AVAILABLE: 3</b>	<p><b>1</b> - Dipartimento di Chimica "Ugo Schiff" finanziata su fondi Progetto ERC StG ELECTRA "Electrically controlled magnetic anisotropy" - C.U.P. B95F22000160006 grant agreement n. 101039890 <b>Thematic:</b> Magnetolectric effects on metal complexes - Effetti magnetoelettrici su complessi metallici</p> <p><b>1</b> - co-funded by Istituto Cristallografia CNR Bari for thematic on "Synthesis and characterization of peptides as biomarkers for applications in the diagnostic/prognostic and therapeutic field" (recovery of funds PAPINIFIS18 "Research and development of synthesis and analysis methods of peptides of pharmaceutical interest and of any related amino acid building blocks" Prof. Anna Maria Papini, Department of Chemistry "Ugo Schiff") and by Department of Neuroscienze, Area del Farmaco e Salute del Bambino on project funds: GRATTERIINTESASANPAOLO2021 "Targeting di strutture G-quadruplex di acidi nucleici e anidresi carbonica per lo sviluppo di strategie terapeutiche tumorali multibersaglio" - C.U.P. B55F21007740007; CONVROVE130 "Ottimizzazione del metodo di sintesi di antigeni peptidici" - C.U.P. B14I19000230007; CONVROVE189 "Sviluppo di peptidi per la preparazione di scaffold biocompatibili" - C.U.P. B15F21003090007 <b>Thematic:</b> Rational design and synthesis of "peptide nucleic acids" and ligands for targeting and modulation of hybrid nucleic acid structures.</p>

	<p><b>1 – ENI s.p.a.</b>  <b>Thematic:</b> Development of materials for the selective coordination of critical metal ions present in production waters</p>
<b>STUDY/RESEARCH PERIODS ABROAD</b>	3-6 months
<b>DOCUMENTS REQUIRED FOR THE ADMISSION</b> (under penalty of exclusion)	<ul style="list-style-type: none"> <li>• Copy of the Identification Document</li> <li>• Self-declaration for qualifications obtained in Italy (laurea Triennale, Specialistica o Magistrale o ciclo unico) with a list of all exams taken and their marks, title of the thesis and graduation mark (download the form <a href="#">here</a>, make sure you <b>fill in all the fields</b>)</li> <li>• Qualifications obtained abroad (Bachelor’s and Master Degrees or combined cycle Degree) with a list of all exams taken and their marks, title of the thesis and graduation mark.</li> </ul> <p><i>The same documentation except for the final mark must be submitted by those who will graduate within the 31/10/2022</i></p>
<b>DOCUMENTS REQUIRED FOR THE EVALUATION</b>	<p><b>MANDATORY</b></p> <ul style="list-style-type: none"> <li>• Curriculum vitae et studiorum including a typewritten self-declaration for each qualification obtained (bachelor and master, or combined cycle degree) reporting the date of first enrollment, exams passed with number of credits, weighted and arithmetic average of the marks</li> <li>• Research project</li> <li>• Title and extended abstract of the M.Sc. thesis (maximum five A4 sheets)</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• List of scientific publications</li> <li>• List of qualification documents including periods spent abroad for study or research mobilities</li> </ul>
<b>REFERENCE LETTERS</b>	A section is provided in the online application to specify the e-mail address of one professor/researcher willing to provide information about candidates training path and activities performed within a scientific field related to the Ph.D. course.
<b>RESEARCH PROJECT</b>	The research project shall be written in English in no more than 12,000 characters including spaces, including abstract (no more than 500 characters including spaces), introduction and references, in order to assess the applicant’s aptitude to research.
<b>INTERVIEW MODE</b>	<p><b>Remotely</b> (Videocall)</p> <p>The interview can be conducted in English language.  If it is presented in Italian, the interview shall include an assessment of English language proficiency.</p>

<b>EVALUATION MARKS</b>	<table border="1"> <thead> <tr> <th>parameter</th> <th>minimum score</th> <th>maximum score</th> </tr> </thead> <tbody> <tr> <td>Curriculum vitae et studiorum, research project, publications, other qualification documents</td> <td>40/120</td> <td>60/120</td> </tr> <tr> <td colspan="3"><b>Applicants who obtain a mark of at least 40/120 in the evaluation of the above parameters will be admitted to the interview</b></td> </tr> <tr> <td>Interview: discussion of the research project, publications and qualification documents</td> <td>40/120</td> <td>60/120</td> </tr> <tr> <td colspan="3"><b>Eligibility is achieved with a minimum score of 80/120</b></td> </tr> </tbody> </table>	parameter	minimum score	maximum score	Curriculum vitae et studiorum, research project, publications, other qualification documents	40/120	60/120	<b>Applicants who obtain a mark of at least 40/120 in the evaluation of the above parameters will be admitted to the interview</b>			Interview: discussion of the research project, publications and qualification documents	40/120	60/120	<b>Eligibility is achieved with a minimum score of 80/120</b>		
	parameter	minimum score	maximum score													
	Curriculum vitae et studiorum, research project, publications, other qualification documents	40/120	60/120													
	<b>Applicants who obtain a mark of at least 40/120 in the evaluation of the above parameters will be admitted to the interview</b>															
	Interview: discussion of the research project, publications and qualification documents	40/120	60/120													
<b>Eligibility is achieved with a minimum score of 80/120</b>																
<b>FURTHER INFORMATION ON THE EXAMINATION</b>	The interview will be focused on the research project. The discussion with the committee members will be based on the scientific background of the candidate also in the field of the research project performed for the Bachelor and Master thesis or for equivalent titles. <b>The research project must be presented by maximum 8 slides.</b>															
Further information available at the following web page: <a href="https://www.dottoratoscienzachimiche.unifi.it/index.html?newlang=eng">https://www.dottoratoscienzachimiche.unifi.it/index.html?newlang=eng</a>																

<b>EXAMINATION SCHEDULE</b>		
	<b>DATE</b>	<b>TIME</b>
<b>INTERVIEW</b>	August 23 <sup>rd</sup> 2022	08:30 a.m.
The list of candidates admitted to the interview and the final ranking will be published at the following web page: <a href="https://www.unifi.it/p12202.html">https://www.unifi.it/p12202.html</a>		