



<b>BIOTECHNOLOGY AND LIFE SCIENCE</b>	
<b>CYCLE</b>	<b>XXXVII</b>
<b>COORDINATOR</b>	Prof. Marco VENTURA email: <a href="mailto:marco.ventura@unipr.it">marco.ventura@unipr.it</a> Department of Chemistry, Life Sciences and Environmental Sustainability
<b>DURATION</b>	3 anni
<b>STARTING DATE OF THE PHD PROGRAM</b>	01/11/2021
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"> <li>• Environmental</li> <li>• Biomolecular</li> <li>• Genetics and microbiology</li> </ul>	
<b>TRAINING OBJECTIVES</b>	
<p>The PhD in Biotechnology and Biosciences aims to train experts who can carry out advanced research activities in the biological disciplines and biotechnology. The Doctor's research themes concern the study of the function, organization and expression of the genome of microbial, plant and animal organisms (including humans), to deepen their basic knowledge, also in view of possible applications in biotechnology. The methodologies used are mainly those of genetic, microbiology, molecular biology, biochemistry and applied biology. Starting from this common objective and from a highly cross-cutting advanced teaching activity, in order to train PhDs with highly qualified skills in specific areas of Biotechnology and Life Sciences, three main areas of research defined as such: 1) environmental; 2) genetics and microbiology; 3) biochemical-molecular. PhD students will be involved full-time in a research project, to which they will also make critical and proactive contributions. In this way, they will acquire a marked scientific and management autonomy, also thanks to the numerous scientific, national and international collaborations in which they will be involved.</p>	
<b>ADMISSION REQUIREMENTS</b>	<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"> <li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li> <li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li> </ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>

<b>POSITION PUT OUT TO COMPETITION</b>	<b>11</b>	With Scholarship	<b>9</b>
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	<b>2</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>	<b>Research Topic, if any</b>	
<b>3</b>	Scholarship funded by University of Parma (Ministerial funds)	<ul style="list-style-type: none"> <li>• Environmental</li> <li>• Biomolecular</li> <li>• Genetics and microbiology</li> </ul>	
<b>1</b>	Scholarship funded by University of Parma (University funds)	<ul style="list-style-type: none"> <li>• Genetics and microbiology</li> </ul>	
<b>1</b>	Scholarship co-funded by Fondazione Cariparma	<ul style="list-style-type: none"> <li>• Biomolecular</li> </ul>	



## Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)

During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.

N°	Funding entity	BOUND RESEARCH TOPIC
2	Scholarship funded by Department of Chemistry, Life Sciences and Environmental Sustainability (funds of "Departments of Excellence" program)	<ul style="list-style-type: none"> <li>• Biomolecular</li> <li>• Genetics and microbiology</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability	<ul style="list-style-type: none"> <li>• Genetics and microbiology</li> </ul>
1	Scholarship funded by Preclinics, Gesellschaft für präklinische Forschung mbH	<ul style="list-style-type: none"> <li>• Biomolecular – Topic "Development of a platform for the design and construction of protein constructs, based on anti-tetanus immunity, for vaccination and therapeutic use. Single domain VHH antibodies (nanotubes) functionalized for the production of molecular tools to be used for diagnostic purposes"</li> </ul>

## Position reserved for "INDUSTRIAL DOCTORATE" (according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)

N°	Company/Institution
1	Reserved to employees of Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna – IZSLER Specific Topic "Swine influenza viruses: genetic and antigenic evolution of influenza viruses circulating in porcine farms in Italy in a constantly evolving context"
1	Reserved to employees of NAICONS S.r.l.

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 40 points (a minimum score of 18 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 80 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.
<b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b> (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)



<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)	
<b>Abstract of degree thesis</b>	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)	
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)		
<b>Scientific Publications</b>	Articles on national and international journals, papers presented at conferences or symposia, book chapters and indexed national publications.	
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program	
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>- Periods of study abroad, outside th country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>- Other qualifications attesting the suitability of the applicants (scholarships or research grants, awards, etc.)</li> <li>- Employment contracts at public and / or private research centers</li> </ul>	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 5 points</b>
<b>Graduation mark</b>	Score related to the final mark: - 110 with honours (magna cum laude): 20 points; - 110: 18 points; - From 103 to 109: points 4-16 (2 points for each mark unit); - Until 102: 3 points.	<b>Up to 20 points</b>
<b>Average of the exam marks (if the candidate will attain the degree no later than 31 October 2021)</b>	Score related to the average of the exam marks: - 30/30: 18 points; - From 22/30 to 29/30: points 2-16 (2 points for each unit average score)	<b>Up to 18 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	<b>Up to 6 points</b>
<b>Scientific publications</b>	Publications in <i>peer-reviewed</i> international journals: 2 points for each publication (for evaluation purposes it is mandatory to attach a pdf copy of each publication to the application)	<b>Up to 6 points</b>



<b>Communiations to conferences, publication in indexed national journals, book chapters</b>		1 point for each conference abstract, publication in indexed national journals or book chapters (for evaluation purposes it is mandatory to attach a pdf copy of each term to the application)	<b>Up to 3 points</b>
<b>ORAL EXAM</b>		<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course		The Oral Exam will focus on critical reading and discussion of a scientific article chosen by the candidate among those proposed by the Committee within the each of the three main research topics. Candidates will be asked by the Committee members to discuss and explain the contents of the scientific publication they have selected. During this Oral Exam and interview, knowledge of the English language will also be evaluated.	<b>Up to 80 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>			
<b>ORAL EXAM</b>	<b>DATE</b>	16 September 2021 (with possible extension in the following days)	
	<b>TIME</b>	09.00	
	<b>PLACE</b>	AULE (A/B, C e D) CASCINA AMBOLANA Parco Area delle 33/A – Campus Universitario 43124 PARMA - ITALY	
<b>OTHER INFORMATION</b>		The applicant <b>MUST</b> indicate in the application his/her preference for one of the three main research topics proposed in the selection announcement (Environmental, Genetics and microbiology, Biomolecular); the possible candidate's interest for one of the 'bound research topics' may also be specified, if applicable. For foreign candidates, admission examinations may be held in English as per candidate's request.	



PHYSICS	
CYCLE	XXXVII
COORDINATOR	Prof. Stefano CARRETTA email: <a href="mailto:stefano.carretta@unipr.it">stefano.carretta@unipr.it</a> Department of Mathematical, Physical and Computer Sciences
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"><li>• Technische Universität Dresden (Germany)</li></ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Novel environmental-friendly solar cells with absorber made of Earth-abundant elements</li><li>• Diffusion phenomena and structure of real-world complex networks</li><li>• Numerical Modeling of the Gravitational-Wave signal emitted by Neutron stars and characterization of the post-merger signal of Binary Neutron Star systems (BNS) (<i>Bound research topic</i>)</li><li>• Stimuli-responsive nanostructures for biomedical applications</li><li>• Carbon nanostructures for high-performance lithium and sodium ion batteries</li><li>• New physics searches from cosmological observations</li><li>• Solving superconformal field theories with bootstrap methods</li><li>• Biophysics of Chromatin by Correlative Imaging and Simulation (<i>Bound research topic</i>)</li><li>• Metal-insulator transitions and Dirac insulators in strong spin-orbit interaction metal oxides by local-probe experiments and DFT</li></ul>	
<b>TRAINING OBJECTIVES</b>	
<p>The PhD in Physics, with a duration of 3 years, is established as a unifying element of the third-level University education in the Physics area. Besides their main commitment to the research activity, students are supposed to spend a substantial part of their training period in attending advanced courses as well as national and international schools. Students are encouraged to spend part of their time abroad, in order to participate in scientific collaborations in their fields of interest, and follow advanced courses in support of their research program. During the three years, teaching commitments are progressively reduced towards a full time engagement in the research activity. The evaluation of the training program is carried out - at the end of each year - through open seminars held by the students. The independent scientific research is expected to lead to publication of results in international, peer reviewed journals. The ultimate goal of the PhD in Physics is a highly specialized scientific training that opens professional carriers in academic institutions and research laboratories, either public or private. The PhD in Physics is divided into three areas corresponding to major groups of disciplines of Physical Sciences covered by the research activity of the Department of Mathematical, Physical and Computer Sciences: Condensed Matter and Materials Physics, Theoretical Physics, Biophysics and Applied Physics.</p>	
<b>ADMISSION REQUIREMENTS</b>	<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"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>



<b>POSITION PUT OUT TO COMPETITION</b>	<b>7</b>	With Scholarship	<b>7</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>	<b>Research Topic, if any</b>	
<b>4</b>	Scholarship funded by University of Parma (Ministerial funds)	---	
<b>1</b>	Scholarship co-funded by Fondazione Cariparma	---	
<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</b>			
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.			
<b>N°</b>	<b>Funding entity</b>	<b>BOUND RESEARCH TOPIC</b>	
<b>1</b>	Scholarship funded by INFN – The Italian National Institute for Nuclear Physics	<ul style="list-style-type: none"> <li>Numerical Modeling of the Gravitational-Wave signal emitted by Neutron stars and characterization of the post-merger signal of Binary Neutron Star systems (BNS)</li> </ul>	
<b>1</b>	Scholarship funded by ITT – Istituto Italiano di Tecnologia	<ul style="list-style-type: none"> <li>Biophysics of Chromatin by Correlative Imaging and Simulation</li> </ul>	

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 50 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 70 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> .
<b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b> (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis countersigned by their supervisor.



<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)		
<b>Research Project and Statement of Research interest</b>	A brief text (max 3 pages) in English. The candidates must describe their research interests and indicate the preferred topic among those listed above, possibly suggesting a second choice theme. For the first choice theme, candidates must outlay an original research project including a concise state of the art, the relevance of the problem and the expected results. Candidates are warmly invited to contact the potential supervisors listed at <a href="http://smfi.unipr.it/it">http://smfi.unipr.it/it</a> It <u>does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board.	
<b>Other qualifications</b>	Any other document certifying the applicant's training and abilities. Publications, awards, presentations to scientific meeting, stages, fellowships, reference letters, etc	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 25 points</b>
<b>Graduation thesis</b>	Consistency of the Master' Degree thesis with the doctoral program research topics. The assessment will make use of the information contained in the abstract (max 1 page) of the thesis (although not yet discussed, in this case countersigned by the thesis supervisor) and in the curriculum, where a brief description of the thesis work should be reported.	<b>Up to 5 points</b>
<b>Research Project and Statement of Research Iterest</b>	The project will be evaluated in relation to its scientific value and originality. The motivation expressed by the candidate in relation to the themes of the research doctorate will be evaluated	<b>Up to 10 points</b>
<b>Other qualifications</b>	Publications, awards, presentations to scientific meeting, stages, fellowships, reference letters, etc	<b>Up to 10 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course	<ul style="list-style-type: none"> <li>○ preparation on the issues related to the Master's degree thesis</li> <li>○ research project presentation</li> <li>○ general knowledge of issues connected to the PhD course</li> <li>○ knowledge of the foreign language</li> </ul>	<b>Up to 70 points</b>



## SCHEDULE OF THE ADMISSION EXAMS

<b>ORAL EXAM</b>	<b>DATE</b>	14 September 2021 (with possible extension in the following days)
	<b>TIME</b>	09.30 am (Italian time) The schedule of oral examinations will appear at <a href="http://smfi.unipr.it/it">http://smfi.unipr.it/it</a>
	<b>PLACE</b>	Department of Mathematical, Physical and Computer Sciences PHYSICS BUILDING Parco Area delle Scienze, 7/A – Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	<p>The Oral Exam will focus on the description of the research work carried out to prepare the Graduation Thesis for the Laurea Magistrale/Specialistica, as well as on the research project that the candidate proposes to carry out within the research topics of the Research Doctorate Program in Physics at the Department of Mathematical, Physical and Computer Sciences of the University of Parma which are described at <a href="http://smfi.unipr.it/it">http://smfi.unipr.it/it</a></p> <p>In the application to participate in the competitive examination, the candidate must choose and specify one research topic. The candidate may indicate a second priority choice. The above choice will be binding with regard to the winner's research activity.</p> <p>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</p>	






CIVIL ENGINEERING AND ARCHITECTURE	
CYCLE	XXXVII
COORDINATOR	Prof. Sandro LONGO email: <a href="mailto:sandro.longo@unipr.it">sandro.longo@unipr.it</a> Department of Engineering and Architecture
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"><li>New Jersey Institute of Technology (USA)</li></ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A or indicate if he / she participates for a scholarship with a specific topic)	
<ul style="list-style-type: none"><li>Infrastructure and Environmental Engineering</li><li>Structural and Geotechnical Engineering</li><li>Architecture and Urban Planning</li></ul>	
<b>TRAINING OBJECTIVES</b>	
To develop specialized skills in the following fields: <ol style="list-style-type: none"><li>Infrastructure and Environmental Engineering: civil infrastructures for transport; survey, management, and analysis of land data, control and monitoring of displacements and deformations at all scales; issues related to surface waters and groundwater;</li><li>Structural and Geotechnical Engineering: mechanical behaviour of materials, structural components and structures; behaviour of soils and geotechnical structures;</li><li>Architecture and Urban Planning: theoretical, formal, distributional and functional aspects in architecture; the problems related to methods for survey and to computer-graphics in architecture; issues related to the implementation and the development of urban settlements; historical, artistic, technical and aesthetic themes in the architecture of the past.</li></ol>	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"><li>Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations)</li><li>Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .

POSITION PUT OUT TO COMPETITION	7	With Scholarship	7
<b>Position with Scholarship</b>			
N°	Funding entity		Research Topic, if any
3	Scholarship funded by University of Parma (Ministerial funds)		---
1	Scholarship funded by University of Parma (University funds)		---
1	Scholarship co-funded by Fondazione Cariparma		---



Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)		
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Engineering and Architecture	<ul style="list-style-type: none"> <li>Laboratory characterization and performance-based mechanical modeling of cold recycled asphalt mixtures</li> </ul>
1	Scholarship funded by EMILIA ROMAGNA REGION  <i>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</i>	<ul style="list-style-type: none"> <li>"ARES - Artificial intelligence for flood RESilience"</li> </ul>

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 70 points (a minimum score of 40 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 50 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	The language for which the fluency must be assessed during the Oral Examination: <b>ENGLISH</b> . The assessment of knowledge of this language will be oral and will consist in reading and translating a scientific text.
<b>CANDIDATES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b> (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)



<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).	
<b>Statement of Research interest</b>	Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)		
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities. The reference letters must be sent directly by the signer to the address e-mail: <a href="mailto:andrea.maranzoni@unipr.it">andrea.maranzoni@unipr.it</a> Reference letters sent directly by the candidate or received in any other way will not be evaluated.	
<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results. The project must focus on an original research topic (unpublished, personally developed by the candidate). <b>It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project.</b> <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board.	
<b>Scientific Publications</b>	Max 2 Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark. Mandatory: <b>Statement of Research Interest</b> Not mandatory: <b>Reference Letters</b>	<b>Up to 30 points</b>
<b>Graduation mark</b>	---	<b>Up to 5 points</b>
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	---	<b>Up to 5 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae by attaching the abstract of the degree thesis or draft of the thesis approved by the supervisor)	<b>Up to 6 points</b>
<b>Research Project</b>	---	<b>Up to 25 points</b>
<b>Scientific publications</b>	Maximum 2	<b>Up to 4 points</b>



ORAL EXAM		EVALUATION CRITERIA	POINTS
The ORAL EXAM includes the presentation 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 PhD course		<ul style="list-style-type: none"><li>○ knowledge of the foreign language</li><li>○ research project presentation</li><li>○ general knowledge of issues connected to the PhD course</li></ul>	<b>Up to 50 points</b>
SCHEDULE OF THE ADMISSION EXAMS			
ORAL EXAM	DATE	15 September 2021 (with possible extension in the following days)	
	TIME	09:30 AM (Italian time)	
	PLACE	Department of Engineering and Architecture MEETING ROMM – Building 10 Parco Area delle Scienze, 181/A – Campus 43124 PARMA - ITALY	
OTHER INFORMATION		<p>The Oral Exam must be taken in Italian or in English. <b>If the candidate wishes to take the oral exam in English he/she must attach a formal request to the application form (Form ANNEX A).</b></p> <p>In the application for participation in the competitive examination, the Applicant <b>must choose and specify only ONE Thematics</b> (between the 3 possible Thematics), and the Applicant must take the oral exam on the chosen Thematics. During the Oral Exam the candidate must indicate the theme of research of his/her interest among those listed in <a href="https://dia.unipr.it/en/themes_37_Cycle">https://dia.unipr.it/en/themes_37_Cycle</a></p> <p>In the case of admission to the PhD programme, the above choice will be binding for the research activity of the winner.</p> <p>For Applicants who will take the Oral Exam in Italian, knowledge of English will be assessed orally and the test will consist of reading and translating a scientific text.</p> <p>Foreign Applicants, if they are among the winners of the PhD admission competition, are strongly encouraged to attend an Italian language course (<a href="http://www.lass.unipr.it/en/teaching/italian-courses-foreigners">http://www.lass.unipr.it/en/teaching/italian-courses-foreigners</a>). The Faculty Board will recognize the credits based on the level of knowledge acquired.</p>	



INDUSTRIAL ENGINEERING	
CYCLE	<b>XXXVII</b>
COORDINATOR	Prof. Gianni ROYER CARFAGNI email: <a href="mailto:gianni.royer@unipr.it">gianni.royer@unipr.it</a> Department of Engineering and Architecture
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"> <li>• Universidade Federal de Santa Caterina (Brazil)</li> </ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"> <li>• Theoretical and applied mechanics, mechanics of materials and structures, material technology, machine design, measurements and diagnostics.</li> <li>• Economic, organizational, managerial, logistics, plants and legal aspects in the field of engineering.</li> <li>• Energy systems, thermo-fluid dynamics, fluid machinery, applied physics.</li> </ul>	
<b>TRAINING OBJECTIVES</b>	
<p>The Industrial Engineering PhD program aims to give participants a deep knowledge in the main topics relevant to industrial engineering. The PhD course presents numerical, analytical and experimental techniques, in order to face any technical or scientific problem of the industrial engineering, with managerial skills, to provide autonomy in work and readiness of inclusion in a collaborative environment with other researchers and technicians. The internationalization phase envisaged in the three-year curriculum allows to forge links with other foreign reality by providing the PhD an additional tool to get into a scientific context not just limited to national borders.</p>	
<b>ADMISSION REQUIREMENTS</b>	<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"> <li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li> <li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li> </ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>

<b>POSITION PUT OUT TO COMPETITION</b>	<b>9</b>	With Scholarship	<b>8</b>
		Reserved to holders of scholarship within specific international mobility programs	<b>1</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>	<b>Research Topic, if any</b>	
<b>2</b>	Scholarship funded by University of Parma (Ministerial funds)	• .....	
<b>1</b>	Scholarship co-funded by Fondazione Cariparma	• .....	
<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</b>			



During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.

N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship funded by University of Parma (Ministerial funds)	<ul style="list-style-type: none"> <li>Advanced techniques in Control and diagnostics</li> </ul>
1	Scholarship funded by University of Parma (University funds)	<ul style="list-style-type: none"> <li>New approaches for the design and management of logistics and production systems</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by Maffei Engineering S.p.A.	<ul style="list-style-type: none"> <li>Advanced modelling of lightweight special structures</li> </ul>
1	Scholarship partly financed by Department of Engineering and Architecture co-financed by Casappa S.p.A.	<ul style="list-style-type: none"> <li>Development of experimental methodologies and mathematical models to increase the efficiency of positive displacement hydraulic machines</li> </ul>
	Scholarship partly financed by Department of Engineering and Architecture co-financed by FMB S.r.l.	<ul style="list-style-type: none"> <li>Virtualization approaches for industrial plants control and design</li> </ul>
<b>Reserved to HOLDERS OF SCHOLARSHIP WITHIN SPECIFIC INTERNAZIONALE MOBILITY PROGRAMS</b>		
N°	Agreements/Cooperations/Mobility Programs	
1	Reserved to holders under the mobility program PROJECT UE H2020 – MSCA ITN "Innovation Training Networks" INT-ETN HiStabJuice project 956257 "Establishing a strong and lasting international training network for innovation in food and juice industries: a 4D-research approach for fruit juice processing"	

<b>ADMISSION PROCEDURES</b>	<p><b>Assessment of QUALIFICATIONS:</b> up to 70 points (a minimum score of 40 points shall be required to be admitted to the Oral Exam)</p> <p><b>ORAL EXAM:</b> up to 50 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<b>ADMISSION PROCEDURES for positions reserved to holders of scholarship holders within specific international mobility programs</b>	<p style="text-align: center;"><b>Assessment of QUALIFICATIONS: up to 120 points</b></p> <p style="text-align: center;"><b>Minimum score for ELIGIBILITY: 70/120</b></p>
<b>Foreign Language</b>	<p>Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b>.</p> <p>The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.</p>
<p><b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b></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><b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b></p>	
<p><b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b></p>	
<p><b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b></p>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)



<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).
<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focused on an original research topic ( <b>unpublished, developed personally by the candidate. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project</b> ) and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. To identify the topic of the aforementioned project, the candidate may contact one of the Members of the Academic Board (available at: <a href="https://dia.unipr.it/it/node/2834">https://dia.unipr.it/it/node/2834</a> ). <u>The project does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board.
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)	
<b>Statement of Research interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests
<b>Scientific Publications</b>	Articles on national and international journals, contributions presented at conferences or symposia, book chapters. It is necessary to attach a copy to online application
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities (to be attached to the online application)
<b>Other Academic qualifications and other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program</li> <li>– Periods of study abroad, outside th country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>– Scholarships, awards, etc.)</li> <li>– Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units</li> <li>– Working activity</li> <li>– Professional and/or training internship</li> <li>– Language proficiency certificates</li> <li>– Other qualifications attesting the suitability of the applicants</li> </ul>
<b>EVALUATION CRITERIA</b>	



QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 15 points</b>
<b>Graduation mark</b>	Score related to the final mark: - 110 with honours (magna cum laude): 10 points; - 110: 8 points; - From 105 to 109: up to 6 points; - From 100 to 104: up to 3 points; - From 66 to 99: 0 points The scores will be proportionally renormalized in case of equivalent evaluations	<b>Up to 10 points</b>
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	Score related to the average of the exam marks: - 30/30: 10 points; - From 28/30 to 29/30: up to 5 points; - From 26/30 to 27/30: up to 3 points; - From 18/30 to 25/30: 0 points; The scores will be proportionally renormalized in case of equivalent evaluations	<b>Up to 10 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics	<b>Up to 10 points</b>
<b>Research Project</b>	Consistency of the Research Project with the doctoral program research topics	<b>Up to 15 points</b>
<b>Statement of Research Interest</b>	Evaluation of the candidate's motivations to attend the doctoral course and congruity of the research interests with the research topics of the doctoral course.	<b>Up to 5 points</b>
<b>Scientific publications</b>	Articles on national and international journals, contributions presented at conferences or symposia, book chapters. It is necessary to attach a copy to online application	<b>Up to 5 points</b>
<b>Reference Letters</b>	a maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities	<b>Up to 5 points</b>
<b>Other Academic qualifications and other experiences</b>	<ul style="list-style-type: none"> <li>- First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program</li> <li>- Periods of study abroad, outside th country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>- Scholarships, awards, etc.)</li> <li>- Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units</li> <li>- Working activity</li> <li>- Professional and/or training internship</li> <li>- Language proficiency certificates</li> <li>- Other qualifications attesting the suitability of the applicants</li> </ul>	<b>Up to 5 points</b>
ORAL EXAM	EVALUATION CRITERIA	POINTS
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of	<ul style="list-style-type: none"> <li>○ research project presentation</li> <li>○ general knowledge of issues connected to the PhD course</li> <li>○ knowledge of foreign languages</li> </ul>	<b>Up to 50 points</b>





issues connected to the PhD course		
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b> Positions reserved to holders of scholarship within specific international mobility programs		
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 40 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics	<b>Up to 20 points</b>
<b>Research Project</b>	Consistency of the Research Project with the doctoral program research topics	<b>Up to 40 points</b>
<b>Statement of Research Interest</b>	Evaluation of the candidate's motivations to attend the doctoral course and congruity of the research interests with the research topics of the doctoral course.	<b>Up to 5 points</b>
<b>Scientific publications</b>	Articles on national and international journals, contributions presented at conferences or symposia, book chapters. It is necessary to attach a copy to online application	<b>Up to 5 points</b>
<b>Reference Letters</b>	a maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities	<b>Up to 5 points</b>
<b>Other Academic qualifications and other experiences</b>	<ul style="list-style-type: none"> <li>– First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program</li> <li>– Periods of study abroad, outside th country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>– Scholarships, awards, etc.)</li> <li>– Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units</li> <li>– Working activity</li> <li>– Professional and/or training internship</li> <li>– Language proficiency certificates</li> <li>– Other qualifications attesting the suitability of the applicants</li> </ul>	<b>Up to 5 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	14 September 2021 (with possible extension in the following days)
	<b>TIME</b>	08:30 am (Italian time)
	<b>PLACE</b>	Meeting Room – Building 10 Department of Engineering and Architecture Parco Area delle Scienze, 181/A - Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>		For foreign candidates, the admission examinations may be held in English at the candidate's choice.



MATHEMATICS	
CYCLE	XXXVII
COORDINATOR	Prof.ssa Alessandra LUNARDI email: <a href="mailto:alessandra.lunardi@unipr.it">alessandra.lunardi@unipr.it</a> Department of Mathematical, Physical and Computer Sciences
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION	<ul style="list-style-type: none"><li>• University of Modena e Reggio Emilia</li><li>• University of Ferrara</li></ul>
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"><li>• KU Leuven (Belgium)</li><li>• Universidade do Minho (Portugal)</li></ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Statistical mechanics</li><li>• Probability</li><li>• Discrete mathematics and combinatorics</li><li>• Algebraic and geometric topology of manifolds</li><li>• Partial differential equations</li><li>• Differential equations and dynamical systems</li><li>• Calculus of variations and applications to variational problems</li><li>• Infinite dimensional analysis</li><li>• Mathematical models and methods in complex systems</li><li>• Mathematical methods in quantum mechanics</li><li>• Modelization and scientific calculus</li><li>• Numerical methods for integral equations</li><li>• Numerical optimization and applications</li><li>• Combinatorial optimization</li><li>• Sequential, parallel and real-time algorithms</li><li>• Hopf algebras and quantum groups</li><li>• Projective differential geometry</li><li>• Complex analysis and geometry</li><li>• Differential geometry</li><li>• History of mathematics</li><li>• Mathematics education</li><li>• Thermomechanics of countinuous media</li><li>• Exterior differential systems</li><li>• Kinetic methods in physical, economics, and social sciences</li><li>• Number theory</li><li>• Artificial intelligence</li><li>• Automatic reasoning</li></ul>	
<b>TRAINING OBJECTIVES</b>	
The main purpose is to produce highly qualified experts in the field of Mathematics, with advanced expertise on mathematical models and methodologies, exploitable also in interdisciplinary applications. This aim is achieved through lectures, talks, participations to workshops and research periods in other institutions which introduce PhD students to research work and allow them to establish work contacts which may continue even after the attainment of the PhD diploma. The education is addressed to the skills to recognise significant research problems, to find their solutions and to pass down the results to other people,	



through research papers or talks. At the end of the program the PhD student should be able to make autonomous research work, to produce original and relevant results and to integrate into the international scientific community.

<b>ADMISSION REQUIREMENTS</b>	<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"> <li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li> <li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li> </ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>
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<b>POSITION PUT OUT TO COMPETITION</b>	<b>11</b>	With Scholarship	<b>11</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>		<b>Research Topic, if any</b>
<b>2</b>	Scholarship funded by University of Parma (University funds)		---
<b>3</b>	Scholarship funded by University of Ferrara		---
<b>3</b>	Scholarship funded by University of Modena e Reggio Emilia		---
<b>1</b>	Scholarship co-funded by Fondazione Cariparma		---
<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</b>			
<p>During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.</p>			
<b>N°</b>	<b>Funding entity</b>		<b>BOUND RESEARCH TOPIC</b>
<b>2</b>	Scholarship funded by Hipert S.r.l.		<ul style="list-style-type: none"> <li>• Artificial Intelligence for underwater navigation. The goal of the research is to improve underwater vehicle navigation by exploiting artificial intelligence and sensor fusion in tasks such as underwater object detection, semantic segmentation, localization and mapping.</li> <li>• SLAM and V-SLAM techniques for Autonomous Underwater Vehicles (AUVs). The aim of the research is to develop new SLAM-based techniques to improve the navigation of Autonomous Underwater Vehicles (AUVs).</li> </ul>

<b>ADMISSION PROCEDURES</b>	<p><b>Assessment of QUALIFICATIONS:</b> up to 60 points (a minimum score of 30 points will be required to be admitted to the Oral Exam)</p> <p><b>ORAL EXAM:</b> up to 60 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<b>Foreign Language</b>	<p>Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b>.</p> <p>The evaluation of the knowledge of this language will be oral and will consist in conversation and translation of a scientific text.</p>



**CANDIDATES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE  
OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE**

(Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)

**THE INTERVIEW MAY BE HELD ALSO IN ENGLISH**

**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT**

**MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION**

<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).

**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)

<b>Statement of Research interest</b>	Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests. It may contain the proposal for a research project.
<b>Scientific Publications</b>	Articles on national and international journals, contributions presented at conferences or symposia, book chapters etc.
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program
<b>Other experiences (training, work, research, teaching, etc.)</b>	Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)

**EVALUATION CRITERIA**

<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 10 points</b>



<b>Graduation thesis</b>	Scientific content and presentation	<b>Up to 20 points</b>
<b>Statement of Research Interest</b>	Candidate's maturity and depth in the presentation of her/his interests, her/his motivation and a possible research project	<b>Up to 20 points</b>
<b>Scientific publications</b>	Scientific relevance of the results and their editorial positioning	<b>Up to 5 points</b>
<b>Reference Letters</b>	Significant presentation of the candidates in the letters, relevance of the qualifications for the PhD purposes.	<b>Up to 5 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL PROOF consists in a presentation and discussion of the scientific interests of the candidate; it aims to find out the aptitude of the candidate for scientific research and her/his general knowledge of basic topics relevant to the subject matters of the PhD course	<ul style="list-style-type: none"> <li>○ knowledge of foreign languages: max 10 points</li> <li>○ good argument concerning research interests: max 25 points</li> <li>○ preparation on the topics of the PhD course: max 25 points</li> </ul>	<b>Up to 60 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	14 September 2021
	<b>TIME</b>	10:00 am Italian time (with extension to 15 September at 09.00 am Italian time)
	<b>PLACE</b>	Department of Mathematical, Physical and Computer Sciences Parco Area delle Scienze, 53/A - Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	



MOLECULAR MEDICINE	
CYCLE	<b>XXXVII</b>
COORDINATOR	Prof. Prisco MIRANDOLA email: <a href="mailto:prisco.mirandola@unipr.it">prisco.mirandola@unipr.it</a> Department of Medicine and Surgery
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"> <li>• Aalborg University (Denmark)</li> </ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"> <li>• Innovative applications of molecular medicine in the medical-legal field</li> <li>• Cardiac pathophysiology</li> <li>• Microbiology and Clinical Microbiology</li> <li>• Digital Dentistry</li> <li>• Adapted physical activity in surgery.</li> <li>• Constrained topic. Big Data Analytics in Maxillofacial Surgery</li> <li>• Constrained topic. Salivary diagnostics of oral and systemic pathologies</li> <li>• Constrained topic. A machine learning algorithm in choosing between functional or instrumental test in patients with non-acute chest pain</li> <li>• Bats and emerging viruses: eco-epidemiological investigations to protect public health and biodiversity (Constrained topic "Industrial Doctorate")</li> </ul>	
<b>TRAINING OBJECTIVES</b>	
The Research Doctorate Course in Molecular Medicine aims to provide PhD students with the cultural and methodological skills necessary to carry out high-profile research in different scientific disciplines in the biomedical field, integrated in an interdisciplinary perspective. The acquired training will allow PhD students in Molecular Medicine to employ themselves in high level research and development activities in Universities, research centers and industries engaged in the medical, biological and biotechnological sectors.)	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"> <li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li> <li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li> </ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .


<b>POSITION PUT OUT TO COMPETITION</b>	<b>9</b>	With Scholarship	<b>8</b>
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	<b>1</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>	<b>Research Topic, if any</b>	
<b>4</b>	Scholarship funded by University of Parma (Ministerial funds)	<ul style="list-style-type: none"> <li>• Innovative applications of molecular medicine in the medical-legal field</li> </ul>	



		<ul style="list-style-type: none"> <li>• Cardiac pathophysiology</li> <li>• Microbiology and Clinical Microbiology</li> <li>• Digital Dentistry</li> <li>• Adapted physical activity in surgery</li> </ul>
1	Scholarship co-funded by Fondazione Cariparma	<ul style="list-style-type: none"> <li>• Innovative applications of molecular medicine in the medical-legal field</li> <li>• Cardiac pathophysiology</li> <li>• Microbiology and Clinical Microbiology</li> <li>• Digital Dentistry</li> <li>• Adapted physical activity in surgery</li> </ul>

**Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)**

During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.

N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship funded by EMILIA ROMAGNA REGION  <b>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</b>	<ul style="list-style-type: none"> <li>• OCCURS: Oral Cancers Clustering Using Risk Stratification. Forecasting the prognosis and therapeutic outcome in patients with squamous cell carcinomas of the oral cavity (OSCC) using Big Data Analytics aimed at stratification by risk of biological aggression.</li> </ul>
1	Scholarship funded by Associazione Provinciale LILT Parma A.P.S.	<ul style="list-style-type: none"> <li>• Evaluation of salivary and serological miRNAs in patients with breast cancer associated to BRCA1 and BRCA2 mutations. Perspective for the development of novel diagnostics approaches</li> </ul>
1	Scholarship funded by Federazione nazionale Ordini dei TSRM e delle professioni sanitarie tecniche, della riabilitazione e della prevenzione	<ul style="list-style-type: none"> <li>• A machine learning algorithm in choosing between functional or instrumental test in patients with non-acute chest pain</li> </ul>

**Position reserved for "INDUSTRIAL DOCTORATE"  
(according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)**

N°	Company/Institution
1	Reserved to employees of Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna – IZSLER Specific Topic "Bats and emerging viruses: eco-epidemiological investigations to protect public health and biodiversity"

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 60 points (a minimum score of 10 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 60 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The evaluation of the knowledge of this language will be by an oral examination and will consist in translating of a scientific text.



## CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE

(Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)

### LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

#### MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).
<b>Research Project</b>	The research project shall consist of a maximum of _____ pages, be written in Italian or in English, focused on an original research topic, consistent with the research topics of Phd Program, <b>unpublished, developed personally by the candidate. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project.</b> The Project shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation; <u>It does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board.</u>
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)	
<b>Statement of Research interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests
<b>Scientific Publications</b>	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.
<b>Reference Letters</b>	A maximum of 3 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities, to be attached to the online application
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program





<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units</li> <li>– Working activity</li> <li>– Professional and/or training internship</li> <li>– Language proficiency certificates</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, awards, etc.)</li> </ul>	
EVALUATION CRITERIA		
QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 10 points</b>
<b>Graduation mark</b>	Score related to the final mark: - 110 with honours (magna cum laude): 5 points; - 110: 3 points; - From 100 to 109: 0,2 point for each mark unit	<b>Up to 5 points</b>
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	Score related to the average of the exam marks: - > 28/30: 5 points - > 27/30: 3 points - > 25/30: 1 point	<b>Up to 5 points</b>
<b>Graduation thesis</b>	Consistency with the research themes of the PhD course and quality of the research methodology	<b>Up to 7 points</b>
<b>Research Project</b>	<ul style="list-style-type: none"> <li>○ scientific value and originality</li> <li>○ articulation of the proposal</li> <li>○ research feasibility</li> <li>○ rigor and appropriateness methodological</li> </ul>	<b>Up to 10 points</b>
<b>Statement of Research Interest</b>	Clarity, maturity, motivation and expectations	<b>Up to 9 points</b>
<b>Scientific publications</b>	Evaluation of the candidate's contribution and the editorial location of the product.	<b>Up to 9 points</b>
<b>Reference Letters</b>	one point per letter	<b>Up to 3 points</b>
<b>Other Academic qualifications</b>	Academic qualifications/experience abroad/grants, scholarships and awards	<b>Up to 5 points</b>
<b>Other experiences</b>		<b>Up to 2 points</b>
ORAL EXAM	EVALUATION CRITERIA	POINTS
The ORAL EXAM includes the presentation 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 PhD course	<ul style="list-style-type: none"> <li>○ knowledge of the foreign language: max 4 points</li> <li>○ ability to argue the project proposal: max 28 points</li> <li>○ knowledge of chosen topic: max 28 points</li> </ul>	<b>Up to ..... points</b>
SCHEDULE OF THE ADMISSION EXAMS		



# UNIVERSITÀ DI PARMA

<b>ORAL EXAM</b>	<b>DATE</b>	20 September 2021 (with possible extension in the following days)
	<b>TIME</b>	10:00 am (Italian time)
	<b>PLACE</b>	Department of Medicine and Surgery Integrated Biotechnological Plexus Via Volturno, 39 – 43125 PARMA - ITALY
<b>OTHER INFORMATION</b>	The Oral Exam is held in Italian.	



NEUROSCIENCES	
CYCLE	XXXVII
COORDINATOR	Prof. Vittorio GALLESE email: <a href="mailto:vittorio.gallese@unipr.it">vittorio.gallese@unipr.it</a> Department of Medicine and Surgery
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
CURRICULA	1. Neurosciences 2. Behavioural Biology
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"> <li>• <b>Integrated neuroscience:</b> comparative neurophysiology and neuroethology, cognitive and social neuroscience, cognitive psychology, psychology of perception and action, psychobiology, psychophysiology.</li> <li>• <b>Behavioral biology:</b> biological basis of social, competitive and parental behavior, gene / environment interactions on the development of behavior, cognitive ethology and emotions in animals and humans.</li> </ul>	
<b>TRAINING OBJECTIVES</b>	
<ul style="list-style-type: none"> <li>• Provide a global and interdisciplinary vision of the proposed research sectors, guaranteeing a high degree of specialization in research in these areas;</li> <li>• Acquire skills and abilities in the autonomous use of at least one neuroscientific investigation technique;</li> <li>• Promote the development of networks of national and international relations and exchanges aimed at sharing and deepening the research topic addressed.</li> </ul>	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"> <li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li> <li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li> </ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .

<b>POSITION PUT OUT TO COMPETITION*</b> <b>(Modified by Rector Decree n. 1447 of 30.07.2021)</b>	<b>12</b>	With Scholarship	<b>11</b>
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	<b>1</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>	<b>Research Topic, if any</b>	
<b>3</b>	Scholarship funded by University of Parma (Ministerial funds)	---	
<b>1</b>	Scholarship funded by University of Parma (University funds)	---	
<b>1</b>	Scholarship co-funded by Fondazione Cariparma	---	



Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice) (Modified by Rector Decree n. 1447 of 30.07.2021)		
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.		
N°	Funding entity	BOUND RESEARCH TOPIC
2	Scholarship funded by Department of Medicine and Surgery	<ul style="list-style-type: none"> <li>Wireless neuroethology in nonhuman primates</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Engineering and Architecture	<ul style="list-style-type: none"> <li>Development of IoT (internet of Things) systems for monitoring a car driver psychophysiological state</li> </ul>
1	Scholarship funded by Neuroscience Institute (Italian National Research Council C.N.R.)	<ul style="list-style-type: none"> <li>Development of Action observation Training protocols in the recovery and acquisition of sport gestures</li> </ul>
1	Scholarship co-funded by the Department of Engineering and Architecture and co-funded by University of Trento	<ul style="list-style-type: none"> <li>Number-space association: A comparative, developmental and neurobiological approach</li> </ul>
1	Istituto Superiori di Sanità	<ul style="list-style-type: none"> <li>Investigate the potential beneficial effect of early life (birth to weaning) dietary supplementation with 3 nutrient blends alone or in combination on cognitive functions in mice</li> </ul>
Position reserved for "INDUSTRIAL DOCTORATE" (according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)		
N°	Company/Institution	
1	Reserved to employees of A.S.S.T. Grande Ospedale Metropolitano Niguarda	

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 40 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 80 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The knowledge of this language will be tested in oral form and will consist of a short conversation in English.
<b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b>  (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)



<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)	
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)	
<b>Abstract of degree thesis</b>	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)	
<b>Qualifications</b>	<p><b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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>	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)		
<b>Research Project</b>	<p>The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focused on an original research topic (<b>unpublished, developed personally by the candidate. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project</b>) and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, methodology and experimental design/data analysis, expected results.</p> <p>The Research Project <u>not represent a constraint with respect to the following choice of the doctoral thesis</u>, that shall be defined together with the supervisor and approved by the Academic Board</p>	
<b>Statement of Research interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests	
<b>Scientific Publications</b>	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.	
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities, attached to the online application	
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program	
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units</li> <li>– Working activity</li> <li>– Professional and/or training internship</li> <li>– Language proficiency certificates</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, awards, etc.)</li> </ul>	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 40 points</b>



The candidate's Curriculum Vitae et Studiorum will be evaluated based on the following qualifications and scores:		
<b>Graduation mark</b>	Score related to the final mark: - 110 with honours (magna cum laude): 10 points - 110: 7 points; - From 105 to 109: 4 points; - Under 105: 0 points	<b>Up to 10 points</b>
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	Score related to the average of the exam marks: - From 29/30 to 30/30: 10 points - From 27/30 to 28.9/30: 8 points - Under 27/30: 0 points	<b>Up to 10 points</b>
<b>Graduation thesis</b>	<ul style="list-style-type: none"> <li>o Experimental thesis related to the PhD program of Neuroscience: 10 points</li> <li>o Non-experimental and relevant thesis: 5 points</li> <li>o Thesis not relevant: 0 points</li> </ul>	<b>Up to 10 points</b>
<b>Research Project</b>	Points relating to the research project shall be allocated on the basis of the following criteria: <ul style="list-style-type: none"> <li>o Scientific value and ground-breaking nature of the proposal: 2.5 points</li> <li>o description and structure of the proposal: 2.5 points</li> <li>o proposal feasibility: 2.5 points</li> <li>o originality of the proposal: 2.5 points</li> </ul>	<b>Up to 10 points</b>
<b>Statement of Research Interest</b>	Short text – maximum 1 page – in Italian or in English	<b>Up to 2 points</b>
<b>Scientific publications</b>	<ul style="list-style-type: none"> <li>o Each article in a peer-reviewed international journal: 1 point</li> <li>o Each book chapter: 0.4 points</li> <li>o abstracts/papers/posters presented at conferences or symposia: 0.3 points</li> </ul> <p>The same categories are half valued if in Italian. The points of the publications are normalized for post-graduate years, that is, divided by the numbers of post-graduate years.</p>	<b>Up to 5 points</b>
<b>Reference Letters</b>	maximum 2 reference letters	<b>Up to 2 points</b>
<b>Other Academic qualifications</b>	Other academic qualifications consistent with the research topics of this PhD program	<b>Up to 1 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
<p>The ORAL examination includes:</p> <p><b>A1) Neurosciences: the oral report on 2 topics chosen by lot from those indicated in the list below:</b></p> <ol style="list-style-type: none"> <li>1) The origin of the nervous impulses</li> <li>2) The synapses</li> <li>3) The reflexes</li> <li>4) Molecular and cellular bases of signal transduction</li> <li>5) The motor system</li> <li>6) The visual system</li> <li>7) The somatosensory system</li> </ol>	<ul style="list-style-type: none"> <li>o Up to 40 points for the oral report on the two topics extracted (up to 20 points per topic)</li> <li>o Up to 20 points for the project presentation</li> <li>o Up to 20 points for knowledge of the foreign language</li> </ul>	<b>Up to 80 points</b>



- 8) The autonomic nervous system
- 9) Neurobiology of language
- 10) Neurobiology of attention
- 11) Neurobiology of emotions
- 12) Memory and learning

**A2) Behavioural Biology: the oral report on 2 topics chosen by lot from those indicated in the list below:**

- 1) Individual and social learning
- 2) Imprinting and development of behavior
- 3) Genetic and epigenetic of behavior
- 4) Parental effort and sexual selection
- 5) Social behavior, reproductive systems and parental care
- 6) Aggression, assault and social hierarchies
- 7) Hormones, neurotransmitters and behavior
- 8) Parental selection and altruism
- 9) Behavioral evolution
- 10) Communication and emotions emozioni

**B) The presentation and discussion of the research project**, aimed at verifying the candidate's aptitude for scientific research

<b>ORAL EXAM</b>	<b>DATE</b>	14 September 2021 (with possible extension in the following days)
	<b>TIME</b>	09:00 am (Italian Time)
	<b>PLACE</b>	Department of Medicine and Surgery Neuroscience Unit - Building E - 1 <sup>st</sup> Floor Via Volturno, 39 - 43125 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	



PSYCHOLOGY	
CYCLE	XXXVII
COORDINATOR	Prof.ssa Luisa MOLINARI email: <a href="mailto:luisa.molinari@unipr.it">luisa.molinari@unipr.it</a> Department of Humanities, Social Sciences and Cultural Industries
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"><li>• Universitat Autònoma de Barcelona (Spain)</li><li>• Universidad de Málaga (Spain)</li></ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Psychosocial processes in complex societies</li><li>• Learning and developmental processes</li><li>• Clinical and dynamic processes in life contexts</li></ul>	
<b>TRAINING OBJECTIVES</b>	
Training researchers able to project and realize studies in basic or applied psychology, with a special emphasis on social, educational and clinical contexts.	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .

POSITION PUT OUT TO COMPETITION	5	With Scholarship	4
		Reserved to holders of Research Grant	1
<b>Position with Scholarship</b>			
N°	<i>Funding entity</i>	<i>Research Topic, if any</i>	
1	Scholarship funded by University of Parma (Ministerial funds)	---	
1	Scholarship co-funded by Fondazione Cariparma	---	
<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</b>			
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.			





N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Humanities, Social Sciences and Cultural Industries	• ---
1	Scholarship partly financed with UNIVERSITY funds and co-financed by University of Bologna	• -----
<b>Position reserved to HOLDERS OF RESEARCH GRANT</b>		
N°	Subject area of the research	
1	"Strategic human resources management in the Public Administration: the promotion of organizational efficiency through the analysis of organizational culture, roles and workflow"	

<b>ADMISSION PROCEDURES</b>	<p><b>Assessment of QUALIFICATIONS:</b> up to 60 points (a minimum score of 35 points shall be required to be admitted to the Oral Exam)</p> <p><b>ORAL EXAM:</b> up to 60 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<b>Foreign Language</b>	<p>Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b>.</p> <p>The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.</p>
<p><b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b></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><b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b></p>	
<p><b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b></p>	
<p><b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b></p>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<p><b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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>



<b>Research Project</b>	<p>The research project shall consist of a maximum of 2500 words, be written in Italian or in English, and it must be an original research project (inedited, unpublished, personally developed by the candidate) and be structured as follows: theoretical introduction, relevance of the problem, research design and methodology, expected results and discussion, essential bibliography (maximum 5 bibliographic entries)</p> <p>The Research Project <u>does not represent a constraint with respect to the following choice of the doctoral thesis</u>, that shall be defined together with the supervisor and approved by the Academic Board.</p>	
<p><b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)</p>		
<b>Scientific Publications</b>	Articles on national and international journals, reports presented at conferences or symposia, book chapters etc.	
<b>Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program	
<b>Other experiences</b>	study or research experiences abroad, prizes, scholarships and research grants (will be taken into consideration only if clearly documented).	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Graduation mark</b>  Or  <b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	Score related to the final mark: - 110 and 110 with honours (magna cum laude): 10 points; - From 100 to 109: 8 points - Under 99: 5 points  Score related to the average of the exam marks: - 30/30: 10 points - From 27/30 to 29/30: 8 points; - Under 26/30: 5 points	<b>Up to 10 points</b>
<b>Abstract of the Graduation thesis</b>	Consistency with the research themes of the PhD course and quality of the research methodology	<b>Up to 5 points</b>
<b>Research Project</b>	<ul style="list-style-type: none"> <li>○ Scientific value and internal consistency: 20 points (aspects that will be considered: validity of the theoretical formulation, relevance of the problem faced, clarity of the objectives and appropriateness of the methodology, consistency of the expected results and relative discussion)</li> <li>○ Formal and grammatical aspects: 4 points</li> <li>○ Congruence with the research themes of the PhD course: 4 points</li> </ul>	<b>Up to 28 points</b>
<b>The candidate's Curriculum Vitae et Studiorum will be evaluated based on the following qualifications and scores:</b>		
<b>Scientific publications</b>	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc	<b>Up to 10 points</b>
<b>Academic qualifications</b>	First or second level master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD programme	<b>Up to 5 points</b>
<b>Other experiences</b>	study or research experiences abroad, prizes, scholarships and research grants (documented)	<b>Up to 2 points</b>



ORAL EXAM		EVALUATION CRITERIA	POINTS
The ORAL EXAM focuses on the knowledge of the English language, on the discussion of the research project, on the knowledge related to the research themes of the PhD programme		<ul style="list-style-type: none"><li>○ knowledge of foreign languages (English): 10 points</li><li>○ discussion and argumentation of the projec: 35 points</li><li>○ knowledge on at least one of the themes of the PhD programme: 15 points</li></ul>	<b>Up to 60 points</b>
SCHEDULE OF THE ADMISSION EXAMS			
PROVA ORALE	DATA	17 September 2021	
	ORA	09:30 am (Italian Time)	
	LUOGO	ROOM C POLO DIDATTICO Via del Prato – 43121 PARMA - ITALY	
OTHER INFORMATION		For foreign candidates, the admission examinations may be held in English.	



MATERIALS SCIENCE AND TECHNOLOGY	
CYCLE	XXXVII
COORDINATOR	Prof. Enrico DALCANALE email: <a href="mailto:enrico.dalcanale@unipr.it">enrico.dalcanale@unipr.it</a> Department of Chemistry, Life Sciences and Environmental Sustainability
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION	<ul style="list-style-type: none"><li>The Italian National Research Council (C.N.R.)</li></ul>
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"><li>Kazan University (Russia)</li></ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>Photovoltaic devices</li><li>Functional materials</li><li>Nanodiagnostics</li><li>Nanostructured materials</li><li>Supramolecular sensors and devices</li><li>Semiconductive massive crystals</li><li>Low dimensionality semiconductive structures</li><li>Self-healing and self-diagnostic polymers</li><li>Ceramic and composite materials</li><li>Magnetic materials and magneto-refrigeration</li></ul>	
<b>TRAINING OBJECTIVES</b>	
The PhD program in Materials Science aims at the preparation of PhDs equipped with strong scientific background and wide research experience in materials science. Enrollment is open to MS laureates in Materials Science, Chemistry, Physics, Industrial Chemistry, Engineering and Biological Sciences. The Board provides a wide range of courses and seminars in different scientific areas, with particular focus on all aspects of materials science (synthesis, characterization, functions and devices). It also offers soft skills courses. The PhD program offers an interdisciplinary preparation through research activity, also in collaboration with foreign Institutions.	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .

POSITION PUT OUT TO COMPETITION	15	With Scholarship	11
		Reserved to holders of Research Grant	2
		Reserved to holders of scholarship within specific international mobility programs	2



Position with Scholarship		
N°	Funding entity	Research Topic, if any
3	Scholarship funded by University of Parma (Ministerial funds)	<ul style="list-style-type: none"> <li>Control of the electrical and optical properties of doped Ga<sub>2</sub>O<sub>3</sub> epitaxial thin films (<i>Supervisor: Dr. Piero Mazzolini</i>)</li> <li>Solar cells based on high band-gap chalcogenides by ultra low-cost synthesis and deposition techniques (<i>Supervisor: Dr. Andrea Zappettini</i>)</li> <li>Design of biomedical devices for innovative approaches in the treatment of difficult-to-heal dermatological wounds (<i>Supervisor: Dr. Monica Sandri</i>)</li> </ul>
1	Scholarship funded by University of Parma (University funds)	<ul style="list-style-type: none"> <li>Self-diagnostic vitrimers (<i>Supervisor: Prof. Roberta Pinalli</i>)</li> </ul>
1	Scholarship funded by by The Italian National Research Council C.N.R. - IMEM	<ul style="list-style-type: none"> <li>Magnetocaloric materials for low-carbon solid-state refrigeration and thermomagnetic generation (<i>Supervisor: Dr. Franca Albertini</i>)</li> </ul>
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)		
<p>During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.</p>		
N°	Funding entity	BOUND RESEARCH TOPIC
2	Scholarship funded by Department of Chemistry, Life Sciences and Environmental Sustainability (funds of "Departments of Excellence" program)	<ul style="list-style-type: none"> <li>Applications of colloidal nanostructures in catalysis, magnetism, and structural materials (<i>Supervisor: Prof. Ludovico Cademartiri</i>)</li> <li>Hybrid Nanomaterials from Near-Infrared Dyes and Plasmonic Nanostructures (<i>Supervisor: Prof. Andrea Secchi</i>)</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability	<ul style="list-style-type: none"> <li>Supramolecular nanostructures for bacteria detection (<i>Supervisor: Prof. Alessandro Casnati</i>)</li> </ul>
1	Scholarship funded by 10 10 ONE OBJECT OWNER S.B. S.r.l.	<ul style="list-style-type: none"> <li>Laser induced graphene: synthesis and applications (<i>Supervisor: Prof. Mauro Riccò</i>)</li> </ul>
1	Scholarship partly financed by Department of Chemistry, Life Sciences and Environmental Sustainability and co-financed by Davines S.p.A.	<ul style="list-style-type: none"> <li>Sustainable materials derived from cosmetic waste (<i>Supervisor: Prof. Federica Bianchi</i>)</li> </ul>
1	Scholarship co-funded by Bormioli Pharma S.p.A. and by The Italian National Research Council (C.N.R.)	<ul style="list-style-type: none"> <li>Increase the mechanical resistance of glass containers by improving the surface quality (<i>Supervisor: Dr. Davide Calestani</i>)</li> </ul>
Position reserved to HOLDERS OF RESEARCH GRANT		
N°	Subject area of the research	
1	ISTEC – Institute of Science and Technology for Ceramics "Development of new drug delivery systems based on biomimetic calcium phosphate nanoparticles" ( <i>Supervisor: Dr. Michele Iafisco</i> )	
1	IMEM - Institute of Materials for Electronics and Magnetism "New-concept magnetic materials for sustainable permanent magnets" ( <i>Supervisor: Dr. César de Julián Fernández</i> )	



Reserved to HOLDERS OF SCHOLARSHIP WITHIN SPECIFIC INTERNAZIONAL MOBILITY PROGRAMS	
N°	Agreements/Cooperations/Mobility Programs
2	Reserved to holders under the PROJECT UE H2020 MSCA-ITN-ETN "NanED" project 956099 (Supervisor: Dr. Mauro Gemmi)

<b>ADMISSION PROCEDURES</b>	<p><b>Assessment of QUALIFICATIONS:</b> up to 60 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam)</p> <p><b>ORAL EXAM:</b> up to 60 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<b>ADMISSION PROCEDURES for positions reserved to of scholarship funded by foreign States and/or scholarship holders within specific international mobility programs</b>	<p><b>Assessment of QUALIFICATIONS:</b> up to 120 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The evaluation of the knowledge of this language will be oral and will consist in translating of a scientific text.
<p><b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b></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><b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b></p>	
<p><b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b></p>	
<p><b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b></p>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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><b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)</p>	
<b>Statement of Research interest</b>	Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests



<b>Scientific Publications</b>	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings	
<b>Final mark of graduation</b>		
<b>Average of the exam marks</b>	(for candidates enrolled under conditions and who graduate by 31.10.2021)	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 20 points</b>
<b>Graduation mark</b>	Score related to the final mark: - 110 with honors (magna cum laude): 20 points - 110: 16 points - From 105 to 109: 12 points - From 100 to 104: 8 points - From 95 to 99: 4 points - Under 95: 0 points	<b>Up to 20 points</b>
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	Score related to the average of the exam marks: - 30/30: 20 points - From 28/30 to 29/30: 16 points - From 26/30 to 27/30: 12 points - 25/30: 8 points - 24/30: 4 points - Under 24/30: 0 points	<b>Up to 20 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	<b>Up to 10 points</b>
<b>Statement of Research Interest</b>	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	<b>Up to 5 points</b>
<b>Scientific publications</b>	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings	<b>Up to 5 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM will focus on the candidate's motivation to attend the PhD, on the description of his specific research interests and on a discussion of the qualifications presented by the candidate.	<ul style="list-style-type: none"> <li>○ knowledge of foreign languages: 10 points</li> <li>○ general knowledge of issue connected to the Master's thesis: 25 points</li> <li>○ general knowledge of issues connected to the PhD course: 25 points</li> </ul>	<b>Up to 60 points</b>
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>		
<b>Positions reserved to holders of scholarship within specific international mobility programs</b>		
<b>Curriculum Vitae et studiorum</b>	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	<b>Up to 50 points</b>



<b>Graduation mark</b>	Score related to the final mark: - 110 with honors (magna cum laude): 20 points - 110: 16 points - From 105 to 109: 12 points - From 100 to 104: 8 points - From 95 to 99: 4 points - Under 95: 0 points	<b>Up to 20 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	<b>Up to 30 points</b>
<b>Statement of Research Interest</b>	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	<b>Up to 10 points</b>
<b>Scientific Publications</b>	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings	<b>Up to 10 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	16 September 2021 (with possible extension in the following days)
	<b>TIME</b>	09:00 AM (Italian time)
	<b>PLACE</b>	Department of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	





CHEMICAL SCIENCES	
CYCLE	XXXVII
COORDINATOR	Prof.ssa Alessia BACCHI email: <a href="mailto:alessia.bacchi@unipr.it">alessia.bacchi@unipr.it</a> Department of Chemistry, Life Sciences and Environmental Sustainability
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<p><b>A)</b> Macrocyclic and metallamacrocyclic complexes of lanthanides for applications in nano- and biotechnology</p> <p><b>B)</b> Spectroscopy and modeling of fluorescent systems for microscopy and advanced applications</p> <p><b>C)</b> Design and characterization of polydentate ligand for the complexation and extraction of critical metals</p> <p><b>D)</b> Heterogeneous catalysts for eco-compatible syntheses</p> <p><b>E)</b> Fabrication of functional materials by molecular inclusion in porous MOFs</p> <p><b>F)</b> Synthesis of multivalent calixarene-based ligands for transition metal catalysis</p> <p><b>G)</b> An original access to molecular complexity through the activation of conjugated allenes promoted by visible light</p> <p><b>H)</b> Development of catalytic methodologies for the synthesis of industrially/pharmaceutically relevant compounds (grant PoC del MISE - CUP: C96I20000110006)</p> <p><b>I)</b> Synthesis and evaluation of new additives for lubricants</p> <p><b>L)</b> Synthesis and study of multichromophoric ligands for applications of biomedical interest (grant PRIN 2017, 2017E44A9P: BacHounds: Supramolecular nanostructures for bacteria detection – CUP D54I17000140001)</p>	
<b>TRAINING OBJECTIVES</b>	
<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>	
<b>ADMISSION REQUIREMENTS</b>	<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"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>



POSITION PUT OUT TO COMPETITION	10	With Scholarship	10
<b>Position with Scholarship</b>			
N°	Funding entity		Research Topic
3	Scholarship funded by University of Parma (Ministerial funds)		Research Topic: <b>A-B-C-D-E-F</b>
1	Scholarship funded by University of Parma (University funds)		Research Topic: <b>A-B-C-D-E-F</b>
1	Scholarship co-funded by Fondazione Cariparma		Research Topic: <b>A-B-C-D-E-F</b>
1	Scholarship funded by the Department of Chemistry, Life Sciences and Environmental Sustainability (funds of "Departments of Excellence" program)		Research Topic: <b>A-B-C-D-E-F</b>
1	Scholarship funded by the Department of Chemistry, Life Sciences and Environmental Sustainability		Research Topic <b>G</b> ): An original access to molecular complexity through the activation of conjugated allenes promoted by visible light
1	Scholarship partly financed with University funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (co-financed by project PRIN 2017, 2017E44A9P: BacHounds: Supramolecular nanostructures for bacteria detection - CUP D54I17000140001)		Research Topic <b>L</b> ): Synthesis and study of multichromophoric ligands for applications of biomedical interest
1	Scholarship partly financed with University funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability (co-financed by project PoC MISE – CUP: C96I20000110006)		Research Topic <b>H</b> ): Development of catalytic methodologies for the synthesis of industrially/pharmaceutically relevant compounds
1	Scholarship funded by Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali (INSTM)		Research Topic <b>I</b> ): Synthesis and evaluation of new additives for lubricants

<b>ADMISSION PROCEDURES</b>	<p><b>Assessment of QUALIFICATIONS:</b> up to 40 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam)</p> <p><b>ORAL EXAM:</b> up to 80 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<b>Foreign Language</b>	<p>Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b>.</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><b>CANDIDATES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b></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><b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b></p>	
<p><b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b></p>	
<p><b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b></p>	



<b>ANNEX A</b>	(art. 5 of the Competition notice)	
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)	
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)	
<b>Abstract of degree thesis</b>	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)	
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor and Master degrees</b> 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).	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English will be considered)		
<b>Statement of Research interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at: 1) explaining the candidate's reasons to attend the PhD programme; 2) research interests, with particular reference to topics of interest in the specific topics proposed; 3) skills that can contribute to a research project in the field of Chemical Sciences.	
<b>Scientific Publications</b>	Articles on scientific journals with referees, communications presented at conferences or symposia, book chapters, other publications related to Chemical Sciences.	
<b>Other experiences</b>	<ul style="list-style-type: none"> <li>– <b>Participation in Schools or training courses</b> related to Chemical Sciences</li> <li>– <b>Any awards</b> received related to Chemical</li> </ul>	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Relevance of the academic career as well as postgraduate experiences and other research activities related to Chemical Sciences	<b>Up to 17 points</b>
<b>Graduation mark or Average of the exam marks</b> (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	<b>Up to 5 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral programme research topics	<b>Up to 10 points</b>
<b>Statement of Research Interest</b>	Motivation and competence proved in the text presented	<b>Up to 3 points</b>
<b>Scientific publications</b>	Impact and relevance of the qualifications presented related to Chemical Sciences	<b>Up to 5 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM takes place in Italian or in English for foreign candidates. It includes a discussion of the qualifications presented by the candidate and an assessment of their scientific profile and design skills.	<ul style="list-style-type: none"> <li>○ knowledge of the subject and skills of the candidate for the proposed research activities are assessed by a discussion on the qualifications submitted for evaluation</li> <li>○ knowledge of English is assessed by discussion of topics of research and by understanding of scientific texts.</li> </ul>	<b>Up to 80 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		




<b>ORAL EXAM</b>	<b>DATE</b>	15 September 2021 (with possible extension in the following days)
	<b>TIME</b>	09:30 am (Italian time)
	<b>PLACE</b>	Department of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.  <b>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.</b>	



FOOD SCIENCE	
CYCLE	XXXVII
COORDINATOR	Prof.ssa Chiara DALL'ASTA Food and Drug Department email: <a href="mailto:chiara.dallasta@unipr.it">chiara.dallasta@unipr.it</a>
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"><li>• Universitat Rovira i Virgili (Spagna)</li><li>• Universidad Politécnica de Cartagena (Spagna)</li><li>• Universidad de Córdoba (Spagna)</li></ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ol style="list-style-type: none"><li>1. Indigestible polysaccharides/oligosaccharides from different food sources: extraction, enzymatic hydrolysis and structural characterization</li><li>2. Using consumer science to improve healthy and sustainable eating behaviour</li><li>3. Metabolic phenotypes related to dietary (poly)phenols and their impact on cardiometabolic health</li><li>4. Bio-sustainable technologies to produce raw materials and food products with improved physico-chemical, nutritional and safety properties</li><li>5. Decreasing food allergenicity through process-induced tailored protein modification in legumes and alternative protein sources</li><li>6. The right to food and its dimensions as a basis to promote sustainable agrifood systems</li><li>7. Development of targeted / untargeted UHPLC-HRMS methods for the determination of quality in hazelnut and finished products of the confectionery industry</li><li>8. Computational approaches integrated to biomolecular technologies to study viral infections of food origin: virulence factors and identification of food components with potential antiviral activity</li><li>9. Establishing a strong and lasting international training network for innovation in food and juice industries: a 4D-research approach for fruit juice processing</li><li>10. Large-scale phenotyping using milk Fourier Transform Infrared Spectroscopy and factors affecting the accuracy of predictions</li><li>11. Development of welfare indicators for lactating cows at the slaughterhouse</li></ol>	
<b>TRAINING OBJECTIVES</b>	
The PhD candidates will acquire advanced theoretical and practical expertise to provide innovative approaches and methodologies in the agro-food sector, under a multidisciplinary perspective.	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .



<b>POSITION PUT OUT TO COMPETITION</b>	<b>11</b>	With Scholarship	<b>8</b>
		Reserved to holders of scholarship within specific international mobility programs	<b>1</b>
		Reserved to holders of scholarship funded by foreign States	<b>1</b>
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	<b>1</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>		<b>Research Topic, if any</b>
<b>4</b>	Scholarship funded by University of Parma (Ministerial funds)		<ul style="list-style-type: none"> <li>• Food Chemistry</li> <li>• Consumer Science</li> <li>• Food Technology</li> <li>• Human Nutrition</li> </ul>
<b>1</b>	Scholarship co-funded by Fondazione Cariparma		<ul style="list-style-type: none"> <li>• Bioorganic Chemistry</li> </ul>
<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</b>			
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.			
<b>N°</b>	<b>Funding entity</b>		<b>BOUND RESEARCH TOPIC</b>
<b>1</b>	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Veterinary Science		<ul style="list-style-type: none"> <li>• Large-scale phenotyping using milk Fourier Transform Infrared Spectroscopy and factors affecting the accuracy of predictions</li> </ul>
<b>1</b>	Scholarship funded by Soremartec Italia S.p.A.		<ul style="list-style-type: none"> <li>• Development of targeted / untargeted UHPLC-HRMS methods for the determination of quality in hazelnut and finished products of the confectionery industry</li> </ul>
<b>1</b>	Scholaship funded by EMILIA ROMAGNA REGION  <b>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</b>		<ul style="list-style-type: none"> <li>• Computational approaches integrated to biomolecular technologies to study viral infections of food origin: virulence factors and identification of food components with potential antiviral activity</li> </ul>
<b>Reserved to HOLDERS OF SCHOLARSHIP WITHIN SPECIFIC INTERNAZIONALE MOBILITY PROGRAMS</b>			
<b>N°</b>	<b>Agreements/Cooperations/Mobility Programs</b>		
<b>1</b>	Reserved to holders under the PROJECT UE H2020 – MSCA ITN "Innovation Training Networks" INT-ETN HiStabJuice project 956257		
<b>Position reserved to HOLDERS OF SCHOLARSHIP FUNDED BY FOREIGN STATES</b>			
<b>N°</b>	<b>University or Foreign State</b>		
<b>1</b>	Reserved to holders or with equivalent financial support within the RESEARCH PROJECT of FAO Chile Food Systems Consultant "The right to food and its dimensions as a basis to promote sustainable agrifood systems"		
<b>Position reserved for "INDUSTRIAL DOCTORATE" (according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)</b>			
<b>N°</b>	<b>Company/Institution</b>		
<b>1</b>	Reserved to employees of Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna – IZSLER Specific Topic: "Welfare indicators for farmed dairy cows and their collection in slaughterhouses"		



<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 30 points (a minimum score of 18 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 90 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign States and/or scholarship holders within specific international mobility programs</b>	<b>Assessment of QUALIFICATIONS:</b> up to 120 points  <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific test. For foreign candidates, basic knowledge of ITALIAN LANGUAGE will also be assessed.
<p style="text-align: center;"><b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b></p> <p style="text-align: center;">(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>	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<p style="text-align: center;"><b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b></p>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).
<b>Research Project</b>	The research project shall consist of a maximum of 2 pages, be written in Italian or in English, focused on an original research topic ( <b>unpublished, developed personally by the candidate. It should be noted that the Examination Board can use tools useful for verifying the originality of the submitted Project</b> ) concerning one of the specific topic indicated in this notice and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. <u>The research project does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board;





## 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)

<b>Statement of Research interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests
<b>Scientific Publications</b>	Articles and/or reviews in scientific journals with peer reviewing, scientific book chapters with national or international circulation
<b>Reference Letters</b>	Maximum no. 1 letter written by professors or researchers or experts in the research areas working in public or private research institutions
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– Language proficiency certificates</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, awards, etc.)</li> </ul>

### EVALUATION CRITERIA

QUALIFICATION	EVALUATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark. Voting examinations and graduation marks will be the most relevant element of the evaluation.	<b>Up to 20 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	<b>Up to 4 points</b>
<b>Statement of Research Interest</b>	Originality and research attitude	<b>Up to 2 points</b>
<b>Scientific publications</b>	International peer-reviewed papers: up to 2 points National peer-reviewed papers: up to 1 point Book chapters: up to 1 point	<b>Up to 3 points</b>
<b>Reference Letters</b>	Motivation and research attitude	<b>Up to 1 point</b>

### The Research Project will be evaluated during the Oral Exam

ORAL EXAM	EVALUATION CRITERIA	POINTS
The ORAL EXAM includes the presentation 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 PhD course	<ul style="list-style-type: none"> <li>○ English reading and speaking and for foreign candidates also Italian language: up to 10 points</li> <li>○ ability to argue on the interpretation of the scientific</li> <li>○ impact of the research described in the original proposal: up to 50 points</li> <li>○ expertise in the specific research field: up to 30 points</li> </ul>	<b>Up to 90 points</b>

### LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

**Positions reserved to holders of scholarship funded by Foreign States or  
Reserved to holders of scholarship within specific international mobility programs**

<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark. Voting examinations and graduation marks will be the most relevant element of the evaluation.	<b>Up to 36 points</b>
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<b>Research Project</b>	Congruence with the program research proposed and with the research topics of the PhD course. Clarity of objectives and definition of success indicators. Implementation and sustainability of the feasibility plan	<b>Up to 70 points</b>
<b>Statement of Research Interest</b>	Originality and research attitude	<b>Up to 10 points</b>
<b>Scientific Publications</b>	International peer-reviewed papers: up to 2 points National peer-reviewed papers: up to 1 point Book chapters: up to 1 point	<b>Up to 3 points</b>
<b>Reference Letters</b>	Motivation and research attitude	<b>Up to 1 point</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	13 September 2021 (with possible extension to 16 September 2021)
	<b>TIME</b>	09:00 am (Italian time)
	<b>PLACE</b>	Food and Drug Department Parco Area delle Scienze, 27/A – Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates it is possible to carry out the admission examination exclusively in English, after checking the basic knowledge of ITALIAN LANGUAGE. For Italian candidates it will be possible to take the admission examination in Italian or in English at the candidate's choice.	



DRUG SCIENCES	
CYCLE	XXXVII
COORDINATOR	Prof. Marco MOR email: <a href="mailto:marco.mor@unipr.it">marco.mor@unipr.it</a> Food and Drug Department
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Biochemistry and Molecular Biology</li><li>• Biopharmaceutics – Pharmacokinetics</li><li>• Bio-organic chemistry</li><li>• Experimental Pharmacology and Toxicology</li><li>• Drug Design and Synthesis</li></ul>	
<b>TRAINING OBJECTIVES</b>	
The PhD programme "Drugs Sciences" is aimed at the preparation of "Dottori di ricerca" having scientific bases and research experience in the design, discovery, development, production and control of drugs and health products, as well as in the investigation of mechanisms of action for drugs and bioactive compounds. The Course offers multi-disciplinary formation in different scientific areas, mainly chemical and biological with particular focus on medicinal chemistry, pharmaceutical technology, pharmacology and biochemistry. All the contributions converge toward the education and research training of PhD students who, at the end of the course, are expected to produce innovation and new knowledge in the field of drugs, biomolecules, health products and their interaction with biological substrates.	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .

POSITION PUT OUT TO COMPETITION	8	With Scholarship	8
<b>Position with Scholarship</b>			
N°	Funding entity	Research Topic, if any	
3	Scholarship funded by University of Parma (Ministerial funds)	<ul style="list-style-type: none"><li>• Biopharmaceutics - Pharmacokinetics</li><li>• Experimental Pharmacology and Toxicology</li><li>• Drug Design and Synthesis</li></ul>	
1	Scholarship funded by University of Parma (University funds)	<ul style="list-style-type: none"><li>• Bio-organic chemistry</li></ul>	
1	Scholarship co-funded by Fondazione Cariparma	<ul style="list-style-type: none"><li>• Drug Design and Synthesis</li></ul>	



Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)		
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship funded by Food and Drug Department and by Biopharmanet TEC - Centro Interdipartimentale di Ricerca per l'Innovazione dei Prodotti per la Salute ( <i>funds PRIN ref. Project: CODICE RADIM_2019_PRIN_Bando2017 CUP D94I19001800001</i> )	<ul style="list-style-type: none"> <li>New inhalation drug delivery systems for the treatment of pulmonary fibrosis</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by Biopharmanet TEC - Centro Interdipartimentale di Ricerca per l'Innovazione dei Prodotti per la Salute	<ul style="list-style-type: none"> <li>Protein labelling for interaction studies with drugs and biomolecules</li> </ul>
1	Scholarship funded by EMILIA ROMAGNA REGION  <b>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</b>	<ul style="list-style-type: none"> <li>A computational platform for drug design by multi-scale simulations and machine learning</li> </ul>

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 50 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 70 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.
<b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b> (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)



<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).	
<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focused on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results. It should be noted that the Examination Board can use tools useful for verifying the originality of the submitted Project. <u>The research project does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board.	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)		
<b>Scientific Publications</b>	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings.	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 20 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	<b>Up to 10 points</b>
<b>Research Project</b>	Points relating to the research project shall be allocated on the basis of the following criteria: <ul style="list-style-type: none"> <li>○ Scientific value and ground-breaking nature of the proposal: 5 points</li> <li>○ description and structure of the proposal: 5 points</li> <li>○ consistency with the themes of the doctorate: doctorate proposal feasibility: 5 points</li> </ul>	<b>Up to 15 points</b>
<b>Scientific publications</b>	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings.	<b>Up to 5 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course	<ul style="list-style-type: none"> <li>○ knowledge of the oreign language: max 10 points</li> <li>○ research project presentation: max 30 points</li> <li>○ general knowledge of issues connected to the PhD course: max 30 points</li> </ul>	<b>Up to 70 points</b>



## SCHEDULE OF THE ADMISSION EXAMS

<b>ORAL EXAM</b>	<b>DATE</b>	16 September 2021 ( <b>remotely oral exam</b> using the Microsoft Teams platform) 20 September 2021 (oral exam <b>in presence</b> )
	<b>TIME</b>	09:30 am - Italian Time
	<b>PLACE</b>	Food and Drug Department Parco Area delle Scienze, 27/A – Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>		For foreign candidates, the admission examinations may be held in English at the candidate's choice.



EARTH SCIENCES	
CYCLE	XXXVII
COORDINATOR	Prof. Marco ROVERI email: <a href="mailto:marco.roveri@unipr.it">marco.roveri@unipr.it</a> Department of Chemistry, Life Sciences and Environmental Sustainability
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Micro(nano)plastics contamination in groundwater</li><li>• Optimization of bioremediation solutions for hydrocarbon contaminated aquifers</li><li>• Fracture stratigraphy in folded and faulted sandstone turbidites: comparison between the Northern Apennines (Italy) and Limnos (Greece)</li><li>• Carbonate deposition during the Messinian salinity crisis</li><li>• Northern Apennines debris flows and climate change: analysis of recent events and reconstructions at different time scales</li><li>• Late Aquitanian-Burdigalian planktonic foraminifera high-resolution quantitative biostratigraphy in oceanic successions and implications for the definition of the Burdigalian GSSP</li><li>• Extension in the lower plate of a subduction zone: geometry, mode, timing and mechanism of foreland extension with examples from Sicily channel and Apulian swell</li></ul>	
<b>TRAINING OBJECTIVES</b>	
The main aim of the Ph.D. Course in Earth Sciences is to provide highly qualified study and research paths within the large and multidisciplinary framework of Geosciences.	
<b>ADMISSION REQUIREMENTS</b>	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .

POSITION PUT OUT TO COMPETITION	5	With Scholarship	5
<b>Position with Scholarship</b>			
N°	Funding entity		Research Topic, if any
2	Scholarship funded by University of Parma (Ministerial funds)		---
1	Scholarship co-funded by Fondazione Cariparma		---
1	Scholarship funded by Department of Chemistry, Life Sciences and Environmental Sustainability (funds of "Departments of Excellence" program)		---



## Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)

During the Oral Exam, applicants may express their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.

N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Chemistry, Life Sciences and Environmental Sustainability	<ul style="list-style-type: none"> <li>• Micro(nano)plastics contamination in groundwater</li> </ul>

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 40 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 80 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The assessment of knowledge of this language will be oral and will consist in reading and translating a paragraph of scientific text.
<b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b> (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).
<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focused on an original research topic ( <b>unpublished, developed personally by the candidate</b> ). <b>It should be noted that the Examination Board can use tools useful for verifying the originality of the submitted Project</b> and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results. <u>it does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board.</u>



## 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)

<b>Statement of Research Interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests
<b>Scientific Publications</b>	Articles on national and international journals, papers presented at conferences or symposia, monographs, chapters of books, convention papers, reviews
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities (to be attached to the online application)
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <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, awards, etc.)</li> </ul>

### EVALUATION CRITERIA

QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 6 points</b>
<b>Graduation mark</b>	Score related to the final mark: <ul style="list-style-type: none"> <li>- 110 and 110 with honours (magna cum laude): 5 points</li> <li>- from 107 to 109: 4.5 points</li> <li>- from 105 to 106: 3.5 points</li> <li>- from 100 to 104: 2.5 points</li> <li>- from 95 to 99: 1 point</li> <li>- under 95: 0.5 points</li> </ul>	<b>Up to 5 points</b>
<b>Average of the exam marks (if the candidate will attain the degree no later than 31 October 2021)</b>	Score related to the average of the exam marks: <ul style="list-style-type: none"> <li>- from 28 to 30: 5 points</li> <li>- from 27 to 27.99: 4.5 points</li> <li>- from 26.5 to 26.99: 3.5 points</li> <li>- from 26 to 26.49: 2.5 points</li> <li>- from 25 to 25.99: 1 point</li> <li>- under 25: 0.5 points</li> </ul>	<b>Up to 5 points</b>
<b>Graduation thesis</b>	Scientific quality of work performed and consistency of the Master's Degree thesis with the doctoral program research topics	<b>Up to 8 points</b>
<b>Research Project</b>	Points relating to the research project shall be allocated on the basis of the following criteria: <ul style="list-style-type: none"> <li>○ Scientific value and originality of the proposal and consistency with the doctoral program research topics: 6 point</li> <li>○ description and structure of the proposal: 2 points</li> <li>○ proposal feasibility: 2 points</li> </ul>	<b>Up to 10 points</b>
<b>Statement of Research Interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests	<b>Up to 1 point</b>





<b>Scientific publications</b>	<ul style="list-style-type: none"> <li>○ Abstract presented at a national or international congress: 1 point</li> <li>○ Articles on scientific journals (ISI/SCOPUS): 3 points</li> <li>○ Other publication (related to the topics of PhD program): 1 point</li> </ul>	<b>Up to 5 points</b>
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research	<b>Up to 2 points</b>
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program	<b>Up to 1 point</b>
<b>Other experiences</b>	<ul style="list-style-type: none"> <li>○ Periods of study abroad: 1 point</li> <li>○ Scholarships, scientific associations awards: 1 point</li> </ul>	<b>Up to 2 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course	<ul style="list-style-type: none"> <li>○ knowledge of foreign languages: 5 points</li> <li>○ research project presentation: 50 points</li> <li>○ general knowledge of issues connected to the PhD course: 25 points</li> </ul>	<b>Up to 80 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	14 September 2021 (with possible extension to 15 September 2021)
	<b>TIME</b>	09:00 am (Italian time)
	<b>PLACE</b>	Department of Chemistry, Life Sciences and Environmental Sustainability EARTH SCIENCES BUILDING Parco Area delle Scienze, 157/A – Campus 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	



## PHILOLOGICAL-LITERARY, HISTORICAL-PHILOSOPHICAL AND ARTISTIC STUDIES

<b>CYCLE</b>	<b>XXXVII</b>
<b>COORDINATOR</b>	Prof. Italo TESTA email: <a href="mailto:italo.testa@unipr.it">italo.testa@unipr.it</a> Department of Humanities, Social Sciences and Cultural Industries
<b>DURATION</b>	3 anni
<b>STARTING DATE OF THE PHD PROGRAM</b>	01/11/2021
<b>PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS</b>	<ul style="list-style-type: none"><li>• Istanbul Technical University (Turchia)</li></ul>
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Greek and Latin Philology</li><li>• Philosophy</li><li>• Italianistics and Romance Philology</li><li>• Foreign Languages and Literatures</li><li>• History</li><li>• History of Art and Entertainment</li></ul>	
<b>TRAINING OBJECTIVES</b>	
<ul style="list-style-type: none"><li>• In <b>Greek and Latin Philology</b> the knowledge and skills of doctoral candidates will be deepened in the sciences of antiquity, with particular reference to linguistics, philological-literary studies, archaeology, papyrology, and the development of the Greek and Latin tradition in the Middle Ages and in the Humanistic and Renaissance period. The doctoral candidates will be led to realize a critical edition, a commentary or an essay, concerning texts in Greek or Latin, or the edition of sources or archaeological contexts, according to the complete time span of their tradition and their continuity of life.</li><li>• In <b>Philosophy</b>, PhD students' critical ability and logical-argumentative skills will be developed, as will their knowledge in the history of philosophy. Phd students will acquire the ability to conduct an original piece of research – which requires being able to put into practice conceptual analysis, reasoning, historic and philological documentation – in the fields of theoretical philosophy, the philosophy of language and aesthetics, and the history of medieval, modern and contemporary philosophy.</li><li>• In <b>Italian and Romance Studies</b> the aim is to train researchers able both in the linguistic and philological fields as well as literary theory. They will be able to produce critical texts and commentaries of texts from the Romance field or that of Italian literature, and to conduct innovative, historical-literary or thematic analysis of various time periods.</li><li>• In <b>Foreign Languages and Literature</b>, the focus is on the learning of languages and foreign literature within the European area (English, French, German, Spanish and Russian) as well as, where applicable, their expression in the field of post colonialism. Within the course, original and innovative research activities, based on the latest theoretical and methodological approaches and relevant to the discipline of linguistics (translation, discourse analysis, corpus linguistics, lexicography) and the historical-critical analysis of literature and of the culture between the early modern age and contemporaneity, are promoted.</li><li>• In <b>History</b>, the goal is to train young academics in the field of historical sciences through the acquisition of skills, methodologies and critical abilities that are necessary for historical, classical and contemporary-age research. PhD students will be supervised during their realisation of original and innovative research projects, focused on various types of sources and dealing with the main issues relating to different perspectives in political and religious history, the history of ideas, and social and economic analysis.</li><li>• In <b>History of Art and the Performing Arts</b>, the aim is to provide the methodological and critical tools necessary for conducting research in the history of medieval art, or modern or contemporary art, in the history of criticism and museology, but also in the fields of the history of theatre and cinema. PhD students will acquire the ability to consciously recall critical debate, to be able to read the various sources available, and above all the ability to employ philological tools when reading an image.</li></ul>	



<b>ADMISSION REQUIREMENTS</b>	<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"> <li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li> <li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li> </ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>
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<b>POSITION PUT OUT TO COMPETITION</b>	<b>7</b>	With Scholarship	<b>7</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>		<b>Research Topic, if any</b>
5	Scholarship funded by University of Parma (Ministerial funds)		---
1	Scholarship co-funded by Fondazione Cariparma		---
<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</b>			
<p>During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.</p>			
<b>N°</b>	<b>Funding entity</b>		<b>BOUND RESEARCH TOPIC</b>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Humanities, Social Sciences and Cultural Industries (Erasmus KA203 ENCODE BRIDGING THE <GAP> IN ANCIENT WRITING CULTURES: ENHANCE COMPETENCES IN THE DIGITAL ERA - Project Reference: 2020-1-IT02-KA203-079585 – CUP D92F20000090006)		<ul style="list-style-type: none"> <li>• Development of collaborative and participatory digital tools and approaches to the edition and annotation of texts in ancient Greek language, transmitted through papyri, inscriptions and literature</li> </ul>

<b>ADMISSION PROCEDURES</b>	<p><b>Assessment of QUALIFICATIONS:</b> up to 80 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam)</p> <p><b>ORAL EXAM:</b> up to 40 points</p> <p><b>Minimum score for ELIGIBILITY:</b> 70/120</p>
<b>Foreign Language</b>	<p>Language the fluency of which shall be assessed during the Oral Exam: <b>FRENCH, ENGLISH, GERMAN, SPANISH</b> (at the candidate's choice).</p> <p>The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a short passage.</p>
<p><b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b></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><b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b></p>	



## LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

### MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).
<b>Research Project</b>	The research project shall consist of a maximum of 10 pages (2000 characters each page including spaces) including reference bibliography, written in Italian or in English. The project shall be focused on an original research topic ( <b>unpublished, developed personally by the candidate. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project</b> ) and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. The project <u>does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board.

### 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)

<b>Scientific Publications</b>	Monographs, articles in national and international scientific journals, book chapters, conference proceedings, reviews.
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program
<b>Other experiences</b>	<ul style="list-style-type: none"> <li>- Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units</li> <li>- Working activity</li> <li>- Professional and/or training internship</li> <li>- Language proficiency certificates</li> <li>- Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes) and post-graduate research activities;</li> <li>- Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>

### EVALUATION CRITERIA

QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Graduation mark</b>	Score related to the final mark: - 110 with honours (magna cum laude)	<b>Up to 1 point</b>



<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	Score related to the average of the exam marks: - 30/30	<b>Up to 1 point</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis with the doctoral programme research topics, methodological rigor, knowledge of critical literature	<b>Up to 25 points</b>
<b>Research Project</b>	Points relating to the research project : (originality, articulation, feasibility of the proposal)	<b>Up to 25 points</b>
<b>Scientific publications</b>	Monographs, articles in national and international scientific journals, book chapters, conference proceedings, reviews.	<b>Up to 14 points</b>
<b>Other experiences</b>	Post lauream scholarship, experience abroad, award, etc.	<b>Up to 14 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course	<ul style="list-style-type: none"> <li>○ knowledge and methodology necessary for the realization of the project: max 35 points</li> <li>○ knowledge of chosen foreign language: max 5 points</li> </ul>	<b>Up to 40 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	14 September 2021
	<b>TIME</b>	09:30 am (Italian time)
	<b>PLACE</b>	Department of Humanities, Social Sciences and Cultural Industries Via D'Azeglio, 85 43125 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	



## TRASLATIONAL MEDICAL AND SURGICAL SCIENCES

<b>CYCLE</b>	<b>XXXVII</b>
<b>COORDINATOR</b>	Prof. Nicola SVERZELLATI email: <a href="mailto:nicola.sverzellati@unipr.it">nicola.sverzellati@unipr.it</a> Department of Medicine and Surgery
<b>DURATION</b>	3 anni
<b>STARTING DATE OF THE PHD PROGRAM</b>	01/11/2021
<b>RESEARCH TOPICS</b> (Applicant <b>MUST</b> indicate one research topic in the ANNEX A)	
<ol style="list-style-type: none"><li>1. Stem cells in the diagnosis and treatment of neoplasms, chronic and degenerative disorders, cardiovascular diseases and musculoskeletal diseases;</li><li>2. Translational medicine and immunologic dysregulation of gastrointestinal, respiratory, infective, haematological, oncological, endocrinological, nephrological and dermatological diseases, and of vasculitis;</li><li>3. Plasticity, function and diagnostic-therapeutic use of genomic, transcriptomic, proteomic and metabolomic platforms of cells, organs and tissues to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;</li><li>4. Development and “theragnostic” function of imaging and technologically advanced phenotyping platforms to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;</li><li>5. Development and application of technologically advanced devices (i.e. biological devices), to measure and support and/or replace the function of cells, tissues or organs in medical and/or surgical diseases;</li><li>6. Advanced and innovative strategies for recovery and functional rehabilitation to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;</li><li>7. Role of governance and organization of healthcare systems and services in the prevention and care of disorders with a potentially high social and economic impact, including, but not limited to, environmental and professional diseases;</li><li>8. Role of microbiota and microbiome in translational medicine and surgery;</li><li>9. Retrieval and role of “big data” in translational medicine and surgery;</li><li>10. Role of advanced technologies, including robotics, in translational surgery</li><li>11. Role of qualitative and quantitative imaging in the diagnosis of neoplasms, infections and chronic degenerative diseases</li></ol>	
<b>TRAINING OBJECTIVES</b>	
<p>The PhD Program in Translational Medical and Surgical Sciences is a multidisciplinary program, in which the common denominator of the various research activities conducted by the PhD students is represented by the application of the acquired knowledge to clinical practice. In fact, the close link between preclinical and clinical research will allow discoveries and methodological skills acquired through experimental studies to be transferred into medical practice. Such a link will enable PhD students to deal with real problems, ranging from diagnosis to therapy and from prevention to rehabilitation, all of which deeply connected with human diseases and patient care.</p> <p>The bidirectional exchange between lab and clinical research will bring back to the lab the results of clinical and epidemiological observations, and at the same time it will anchor experimental research to issues that originate from real-world inputs and tests carried out directly on humans.</p> <p>Therefore, the final goal of the PhD Program in Translational Medical and Surgical Sciences is to provide a highly qualifying training to the PhD students, offering them opportunities, skills and technological resources necessary to practice translational research at a high level in either public or private Institutions, national or international, including, but not limited to, Universities, Research Institutes and PharmaMed Industries.</p>	



<b>ADMISSION REQUIREMENTS</b>	<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"> <li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li> <li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li> </ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>
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<b>POSITION PUT OUT TO COMPETITION*</b> <b>(Modified by Rector Decree n. 1550 of 02.09.2021)</b>	<b>11</b>	With Scholarship	<b>7</b>
		Reserved to holders of Research Grant	<b>1</b>
		Reserved to holders of scholarship funded by foreign States	<b>1</b>
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	<b>2</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>		<b>Research Topic, if any</b>
<b>3</b>	Scholarship funded by University of Parma (Ministerial funds)		---
<b>1</b>	Scholarship funded by University of Parma (University funds)		---
<b>1</b>	Scholarship co-funded by Fondazione Cariparma		---
<b>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</b>			
<p>During the Oral Exam, applicants may express and/or confirm their interest of being assigned a scholarship linked to a specific research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and specific aptitudes of the applicants.</p>			
<b>N°</b>	<b>Funding entity</b>		<b>BOUND RESEARCH TOPIC</b>
<b>1</b>	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Medicine and Surgery		<ul style="list-style-type: none"> <li>• Pollution and exposome: searching for effect indicators</li> </ul>
<b>1</b>	Scholarship funded by Chiesi Farmaceutici S.p.A.		<ul style="list-style-type: none"> <li>• Development of translational PET/SPECT imaging biomarkers of fibrosis</li> </ul>
<b>Position reserved to HOLDERS OF RESEARCH GRANT</b>			
<b>N°</b>	<b>Subject area of the research</b>		
<b>1</b>	Study of protective immune responses in HBV infection to develop novel immunomodulatory therapies and to identify predictive immunological parameters of response to therapy		
<b>Position reserved to HOLDERS OF SCHOLARSHIP FUNDED BY FOREIGN COUNTRIES</b>			
<b>N°</b>	<b>Foreign Country/University</b>		
<b>1</b>	Reserved to holders of Germany		
<b>Position reserved for "INDUSTRIAL DOCTORATE"</b> <b>(according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)</b> <b>(Modified by Rector Decree n. 1550 of 02.09.2021)</b>			



N°	Company/Institution
1	Reserved to employees of Azienda Unità Sanitaria Locale of Piacenza on the research topic "Interprofessionality in health care"
1	Reserved to employees of Azienda Unità Sanitaria Locale of Piacenza on the research topic "Effect of probiotic supplementation on lipid profile in pediatric patients with familial hypercholesterolaemia on nutritional treatment "

<b>ADMISSION PROCEDURES</b>	<b>ASSESSMENT of QUALIFICATIONS:</b> up to 45 points <b>ORAL EXAM:</b> up to 75 points <b>MINIMUM SCORE FOR ELIGIBILITY:</b> 70/120	
<b>ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign Countries</b>	<b>ASSESSMENT OF QUALIFICATIONS: up to 120 points</b> <b>MINIMUM SCORE FOR ELIGIBILITY: 70/120</b>	
<b>Foreign Language</b>	Language fluency which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The knowledge of the English language will be assessed orally and will consist in reading and translating a scientific text.	
<b>APPLICANTS ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b>  (Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)		
<b>THE ORAL EXAM MAY BE HELD ALSO IN ENGLISH</b>		
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>		
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>		
<b>ANNEX A</b>	(art. 5 of the Competition notice)	
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)	
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)	
<b>Abstract of degree thesis</b>	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)	
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).	
<b>Research Project</b>	The research project, written in Italian or in English and consisting of a maximum of 3 pages, shall be focused on an original research topic ( <b>unpublished, developed personally by the applicant. It should be noted that the Examination Board can use IT tools to verify the originality of the submitted Project</b> ) and structured as follows: scientific context, significance of the problem, expected results.	





	The research project does not represent a constraint with respect to the following choice <u>of the doctoral thesis</u> , that shall be defined with the supervisor and approved by the Academic Board.	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)		
<b>Statement of Research interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the applicant's reasons to attend the PhD program and at describing her/his specific research interests	
<b>Scientific Publications</b>	Articles and/or reviews published on peer-reviewed scientific journals, abstracts of papers or posters presented at conventions or meetings; book chapters, etc.	
<b>Reference Letters</b>	A maximum of 2 letters, written by Professors or Researchers from the applicant's University or from other Universities or from experts in the research field working in public or private research facilities. The reference letters must be produced on the letterhead of the University/Operating Unit/Structure of the Referee and attached to the online application by the applicant.	
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects related to the research topics of this PhD program.	
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– Research activities (basic, applied, translational, etc.) carried out in any way, including those covered by research grant, and conducted as a staff member of research units</li> <li>– Working activity</li> <li>– Activities at accredited laboratories</li> <li>– Professional and/or training internship</li> <li>– Language proficiency certificates</li> <li>– Periods of study abroad, outside the country of origin (e.g. Erasmus or similar programmes)</li> <li>– Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 9 points</b>
<b>Graduation mark</b>	Score assignable to the final mark: - 110 with honours (magna cum laude): 5 points; - 110: 3 points; - From 106 to 109: 2 points; - From 102 to 105: 1 point.	<b>Up to 5 points</b>
<b>Average of the exam marks</b> (if the applicant will attain the degree no later than 31 October 2021)	Score assignable to the average of the exam marks: - 30/30: 5 points; - From 28/30 to 29/30: 3 points; - From 26/30 to 27/30: 2 points; - From 24/30 to 25/30: 1 point.	<b>Up to 5 points</b>
<b>Graduation thesis</b>	Congruence with the research topics of the PhD Program and quality of the research methodology	<b>Up to 2 points</b>



<b>Research Project</b>	Score assignable for the research project: <ul style="list-style-type: none"> <li>○ Scientific value and ground-breaking nature of the proposal: max 7 points</li> <li>○ Description and structure of the proposal: max 2 points</li> <li>○ Proposal feasibility: 1 point</li> </ul>	<b>Up to 10 points</b>
<b>Statement of Research Interest</b>		<b>Up to 1 point</b>
<b>Scientific publications</b>		<b>Up to 9 points</b>
<b>Reference Letters</b>		<b>Up to 3 points</b>
<b>Other Academic qualifications</b>	<ul style="list-style-type: none"> <li>● Second level Master's degree and Specialization: 3 points</li> <li>● First level Master's degree and / or Advanced training and / or specialization and / or Higher Education course: 1 point</li> </ul>	<b>Up to 3 points</b>
<b>Other experiences</b>		<b>Up to 3 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM includes the presentation 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 PhD course	<ul style="list-style-type: none"> <li>○ Ability to argument the project proposal: up to 30 points</li> <li>○ Discussion of the critical points of the project: up to 18 points</li> <li>○ Ability to provide an adequate scientific context to the project proposal: up to 15 points</li> <li>○ Ability to mitigate risks deriving from unexpected results: up to 10 points</li> <li>○ Knowledge of the English language: up to 7 points</li> </ul>	<b>Up to 75 points</b>
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b> Positions reserved to holders of scholarship funded by Foreign States		
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.  No specific CV format is required	<b>Up to 20 points</b>
<b>Degree thesis</b>	It will be assessed the congruence with the research topics of the PhD Program and the quality of the research methodology	<b>Up to 8 points</b>
<b>Research Project</b>	The research project, written in Italian or in English and consisting of a maximum of 3 pages, shall be focused on an original research topic ( <b>unpublished, developed personally by the applicant. It should be noted that the Examination Board can use IT tools to verify the originality of the submitted Project</b> ) and structured as follows: scientific context, significance of the problem, expected results. <u>The research project does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined with the supervisor and approved by the Academic Board.  Score assignable for the research project: <ul style="list-style-type: none"> <li>○ Scientific value and ground-breaking nature of the proposal: max 30 points</li> <li>○ Description and structure of the proposal: max 20 points</li> <li>○ Proposal feasibility: 10 point</li> </ul>	<b>Up to 60 points</b>



<b>Statement of Research Interest</b>	Short text – maximum 1 page – in Italian or in English, aimed at explaining the applicant’s reasons to attend the PhD program and at describing her/his specific research interests.	<b>Up to 4 points</b>
<b>Scientific Publications</b>	Articles and/or reviews published on peer-reviewed scientific journals, abstracts of papers or posters presented at conventions or meetings, book chapters, etc.	<b>Up to 10 points</b>
<b>Reference Letters</b>	A maximum of 2 letters, written by Professors or Researchers from the applicant’s University or from other Universities or from experts in the research areas working in public or private research facilities. The reference letters must be produced on the letterhead of the University/Operating Unit/Structure of the Referee and attached to the online application by the applicant.	<b>Up to 6 points</b>
<b>Other Academic qualifications</b>	University Masters, Postgraduate and/or Specialization Courses, etc. in subjects relating to the research topics of the PhD Program.	<b>Up to 6 points</b>
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– Research activities (basic, applied, translational, etc.) carried out in any way, including those covered by research grant, and conducted as a staff member of research units</li> <li>– Working activity</li> <li>– Activities at accredited laboratories</li> <li>– Professional and/or training internship</li> <li>– Language proficiency certificates</li> <li>– Periods of study abroad, outside the native country (e.g. Erasmus or similar programmes)</li> <li>– Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>	<b>Up to 6 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	17 September 2021 (with possible extension to 20 September 2021)
	<b>TIME</b>	09:00 am (Italian time)
	<b>PLACE</b>	Department of Medicine and Surgery BUILDING 26 – INTERNAL MEDICINE CLASSROOM Via A. Gramsci, 14 43126 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign applicants it will be possible to carry out the oral exam in English. For Italian applicants it will be possible to take it in either Italian or English.	



VETERINARY SCIENCES	
<b>CYCLE</b>	<b>XXXVII</b>
<b>COORDINATOR</b>	Prof. Gaetano DONOFRIO email: <a href="mailto:gaetano.donofrio@unipr.it">gaetano.donofrio@unipr.it</a> Department of Veterinary Science
<b>DURATION</b>	3 anni
<b>STARTING DATE OF THE PHD PROGRAM</b>	01/11/2021
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"> <li>• Pathological Sciences</li> <li>• Clinical Sciences</li> <li>• Basic Sciences</li> <li>• Animal Production Sciences and Technologies</li> <li>• Food inspection and Public Health</li> </ul>	
<b>TRAINING OBJECTIVES</b>	
<p>Veterinary Science Doctoral course aims at training PhD-students about research topics on basic, pre-clinical, clinical and non-clinical areas (animal production and food inspection) by novel methodology and technology. PhD student chooses to develop his/her own research project under the supervision of a Tutor and to produce scientific outcomes in the following area: VET, AGR and BIO.</p>	
<b>ADMISSION REQUIREMENTS</b>	<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"> <li>– "Laurea Magistrale" LM-42 Veterinary Medicine</li> <li>– "Laurea Magistrale" LM-6 Biology</li> <li>– "Laurea Magistrale" LM-9 Medical Biotechnology, Veterinary and Pharmaceutica</li> <li>– "Laurea Magistrale" LM-86 Zootechnical Sciences and Animal Technologies</li> </ul> <p>as well as the equivalent "laurea specialistica" or "laurea" achieved based on the university system in force before the entry into force of Italian Ministerial Decree No. 509/99</p> <ul style="list-style-type: none"> <li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programs</li> </ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b>.</p>

<b>POSITION PUT OUT TO COMPETITION</b>	<b>8</b>	With Scholarship	<b>7</b>
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	<b>1</b>
<b>Position with Scholarship</b>			
<b>N°</b>	<b>Funding entity</b>	<b>Research Topic, if any</b>	
<b>3</b>	Scholarship funded by University of Parma (Ministerial funds)	---	
<b>1</b>	Scholarship co-funded by Fondazione Cariparma " <b>Carlo Gabbi</b> "	---	



Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)		
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship funded by Department of Veterinary Science	<ul style="list-style-type: none"> <li>Genetics and genomics for the monitoring of genetic diversity and for the development of new selection indices</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of Veterinary Science	<ul style="list-style-type: none"> <li>Urinary chemistry and biomarkers in dogs affected by heart disease</li> </ul>
1	Scholarship funded by Chiesi Farmaceutici S.p.A.	<ul style="list-style-type: none"> <li>Setting-up and validation of new tools and technology to improve the translational power of Bronchopulmonary dysplasia models</li> </ul>
Position reserved for "INDUSTRIAL DOCTORATE" (according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)		
N°	Company/Institution	
1	Reserved to employees of Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna – IZSLER Specific Topic: " Neglected Arboviruses detection in hematophagous insects from italian Emilia-Romagna region"	

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 40 points <b>ORAL EXAM:</b> up to 80 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The evaluation of the knowledge of this language will be oral and will consist in translation and comprehension of a scientific text.
<b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b> (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	
<b>LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT</b>	
<b>MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION</b>	
<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)



<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).	
<b>FURTHER QUALIFICATIONS THAT MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT</b> (only qualifications attested by a document drawn up in Italian or in English)		
<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focused on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. <u>The research project does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board.	
<b>Statement of Research interest</b>	Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests	
<b>Scientific Publications</b>	Articles published in journals indexed in databases Wos and Scopus	
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities	
<b>Other Academic qualifications</b>	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program	
<b>Other qualifications</b>	Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)	
<b>EVALUATION CRITERIA</b>		
<b>QUALIFICATION</b>	<b>EVALUTATION CRITERIA</b>	<b>POINTS</b>
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark.	<b>Up to 2 points</b>
<b>Graduation mark</b>	Score related to the final mark: - 110 with honours (magna cum laude): 3 points; - 110: 2 points; - From 100 to 109: 0.1 points for each mark unit	<b>Up to 3 points</b>
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2021)	Score related to the average of the exam marks: - 30/30: 3 points; - From 26/30 to 29/30: 2 points; - From 22/30 to 25/30: 1 point; - From 18/30 to 21/30: 0.5 points	<b>Up to 3 points</b>
<b>Graduation thesis</b>	Abstract of the second cycle master's degree thesis	<b>Up to 5 points</b>



<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focus on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation	<b>Up to 10 points</b>
<b>Statement of Research Interest</b>	Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests	<b>Up to 5 points</b>
<b>Scientific publications</b>	Articles published in journals indexed in databases Wos and Scopus	<b>Up to 5 points</b>
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities	<b>Up to 5 points</b>
<b>Other qualifications</b>	Scholarship, awards, trainings, etc.	<b>Up to 5 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM will consist of an interview on scientific or aptitude also based on topics of previously published research if any		<b>Up to 80 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	15 September 2021 with possible extension in the following days
	<b>TIME</b>	09:30 am (Italian time)
	<b>PLACE</b>	<b>ROOM "D"</b> Department of Veterinary Science Via del Taglio, 10 43126 PARMA - ITALY
<b>OTHER INFORMATION</b>	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	




INFORMATION TECHNOLOGIES	
CYCLE	XXXVII
COORDINATOR	Prof. Marco LOCATELLI email: <a href="mailto:marco.locatelli@unipr.it">marco.locatelli@unipr.it</a> Department of Engineering and Architecture
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
RESEARCH TOPICS (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Electronics instrumentation and electrical drives</li><li>• Computer systems and automatic control</li><li>• Telecommunications and electromagnetic fields</li></ul>	
TRAINING OBJECTIVES	
The course aims at educating the future Ph.D.'s so that they will enter the research world with an active role, within both universities and industries.	
ADMISSION REQUIREMENTS	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"><li>– Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>– Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>– Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2021</b> .

POSITION PUT OUT TO COMPETITION	11	With Scholarship	9
		Reserved to holders of scholarship funded by foreign States	1
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	1
Position with Scholarship			
N°	Funding entity	Research Topic, if any	
3	Scholarship funded by University of Parma (Ministerial funds)	---	
1	Scholarship funded by University of Parma (University funds)	---	
1	Scholarship co-funded by Fondazione Cariparma	---	





Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)		
During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic.. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship funded by Department of Engineering and Architecture	<ul style="list-style-type: none"> <li>Applications of Artificial Vision To Autonomous Driving</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by Casappa S.p.A.	<ul style="list-style-type: none"> <li>Electrification of endothermic and hydraulic components and systems for machinery</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co-financed by Elettric 80 S.p.A.	<ul style="list-style-type: none"> <li>Design and programming of a mobile manipulator for grasping and transportation of packages in industrial environments</li> </ul>
1	Scholarship funded by EMILIA ROMAGNA REGION  <b>The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna</b>	<ul style="list-style-type: none"> <li>Big data in the management of autonomous vehicle fleets in industry: analysis of sensory data, detection and prediction of faults and optimization of system operation</li> </ul>
Position reserved to HOLDERS OF SCHOLARSHIP FUNDED BY FOREIGN STATES		
N°	University or Foreign State	
1	Reserved to holders of Qatar	
Position reserved for "INDUSTRIAL DOCTORATE" (according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)		
N°	Company/Institution	
1	Reserved to employees of RETAIL TUNE S.r.l.	

<b>ADMISSION PROCEDURES</b>	<b>Assessment of QUALIFICATIONS:</b> up to 70 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam) <b>ORAL EXAM:</b> up to 50 points <b>Minimum score for ELIGIBILITY:</b> 70/120
<b>Foreign Language</b>	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The evaluation of the knowledge of this language will be oral and will consist of a brief interview on a technical topic (for example a translation of a scientific text).
<b>CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE</b> (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
<b>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</b>	



## LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

### MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION

<b>ANNEX A</b>	(art. 5 of the Competition notice)
<b>Identification Document</b>	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)
<b>Curriculum Vitae et studiorum</b>	No specific CV format is required (see art. 4 of the Competition notice)
<b>Abstract of degree thesis</b>	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)
<b>Qualifications</b>	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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).
<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in English, focused on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. <u>It does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board.</u>

### 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)

<b>Scientific Publications</b>	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.
<b>Reference Letters</b>	Maximum 2 letters and must be sent directly by the signer to the address e-mail: <a href="mailto:marco.locatelli@unipr.it">marco.locatelli@unipr.it</a> (The candidate, therefore, must not upload them through the procedure of the competition online registration)
<b>Other experiences (training, work, research, teaching, etc.)</b>	<ul style="list-style-type: none"> <li>– <b>Periods of study abroad</b>, outside the country of origin (e.g., Erasmus programme or other similar mobility programmes)</li> <li>– <b>Other qualifications</b> attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>

### EVALUATION CRITERIA

QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	Evaluation of the marks of the exams and of the master's degree mark (if available). The candidate is required to provide the average of the marks of all the exams of the master's degree, in addition to the details of the same  It will also be evaluated the congruence of the degree obtained with the PhD themes.	<b>Up to 25 points</b>
<b>Abstract of the Master's degree thesis</b>	Consistency of the Master's Degree thesis with the doctoral program research topics	<b>Up to 5 points</b>



<b>Research Project</b>	Points relating to the research project shall be allocated on the basis of the following criteria: <ul style="list-style-type: none"> <li>○ Scientific value and originality of the proposal: max 10 points</li> <li>○ description and structure of the proposal: max 10 points</li> <li>○ proposal feasibility: max 10 points</li> </ul>	<b>Up to 30 points</b>
<b>Scientific publications</b>	Evaluation of the editorial position of the publication and its impact on the scientific community on the basis of the available indicators.	<b>Up to 5 points</b>
<b>Reference Letters</b>	Evaluation of the judgments reported in the reference letters.	<b>Up to 2 points</b>
<b>Other experiences</b>	Duration evaluation (for scholarships and internships), score (for the GRE test), prestige (for awards)	<b>Up to 3 points</b>
<b>ORAL EXAM</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course	<ul style="list-style-type: none"> <li>○ knowledge of the foreign language: max 5 points</li> <li>○ research project presentation: max 25 points</li> <li>○ general knowledge of issues connected to the PhD course: max 20 points</li> </ul>	<b>Up to 50 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	15 September 2021 (with possible extension in the following days)
	<b>TIME</b>	09:00 am (Italian Time)
	<b>PLACE</b>	Department of Engineering and Architecture Parco Area delle Scienze, 181/A – Campus Universitario 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	<p>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</p> <p><b>For foreign candidates all documents written in a language other than Italian will have to be translated into English, otherwise they will not be evaluated</b></p>	



**UNIVERSITÀ  
DI PARMA**