OPEN COMPETITION FOR ADMISSION TO RESEARCH DOCTORATE COURSES
XXXIV CYCLE

Academic Year 2018/2019

DEADLINE FOR APPLICATION: 4th SEPTEMBER 2018 AT 01 pm (Italian time)

Issued with Rector’s Decree n. 1498/2018 Prot. n. 127744 – 27.06.2018

ARTICLE 1 - PURPOSES OF THE ANNOUNCEMENT AND GENERAL RULES

Public competitions are held at the University of Parma, for qualifications and exams, for admission to the XXXIV cycle – academic year 2018/2019 of the courses of research doctorate listed below:

1. **Evolutionary Biology and Ecology** (in agreement with University of Ferrara and Firenze)
2. **Biotechnology and Life Science**
3. **Economis & Management of Innovation and Sustainability** (in agreement with University of Ferrara)
4. **Physics**
5. **Civil Engineering and Architecture**
6. **Industrial Engineering**
7. **Molecular Medicine**
8. **Psychology**
9. **Materials Science and Technology** (in agreement with C.N.R. - The Italian National Research Council and the University of Cape Town, South Africa)
10. **Chemical Sciences**
11. **Food Science**
12. **Drugs, Biomolecules and Health Products**
13. **Earth Sciences**
14. **Philological-Literary, Historical-Philosophical and Artistic Studies**
15. **Juridical Sciences** (in agreement with University of Modena e Reggio Emilia)
16. **Translational Medical and Surgical Sciences**
17. **Veterinary Sciences**
18. **Information Technologies**

The effective admission to the courses listed above is subject to issuance by Ministry of Education, University and Research of the Decree for the integration of the corresponding D.M. of accreditation.

The Research Doctorate programs have a three-year duration starting from 1st November 2018.

For each of the above-mentioned courses, research topics, vacancies, admission requirements, procedures and criteria for the selection and assessment of candidates are specified in the forms attached, which are an integral part of this announcement.
Available positions shall be assigned based on the score lists as per Article 9 of this public Announcement.

Scholarships, training contracts, and any other forms of financial support from research funds or other University resources including research grants, as well as the number of place available shall be increased as a result of funding public and private entities. These additional places will be published before the expiry date of this announcement.

This announcement is to be considere an official notification.


This announcement is available in Italian and English in accordance with Italian laws and regulations on PH. D. qualifications and the University of Parma’s regulations.

ARTICLE 2 - ADMISSION REQUIREMENTS

Irrespective of their age and citizenship, all candidates may apply to participate in the competitive examination for admission granted that they hold one of the following:

- "laurea specialistica" or "laurea magistrale" [Italian academic degree equivalent to a Master's Degree] or "laurea" attained pursuant to the university degree system applicable before Italian Ministerial Decree No. 509 of 3 November 1999, came into force, as amended with Italian Ministerial Decree No. 270 of 22 October 2004, as well as second-level degrees equivalent to the above;
- an academic degree attained abroad, granted that it is comparable in terms of duration, level and, where possible, in terms of branch of learning, to the Italian degree allows admission to the Doctorate program, and recognized as eligible for the participation in the competitive examination only, pursuant to Article 3 below.

For each Research Doctorate program, the forms attached hereto specify the type of academic degree required to participate in the competitive examination and any other additional requirements.

Candidates that already hold a research doctoral degree may be admitted to attend, granted that the selection tests are sat and passed, another research doctorate program without any scholarship coverage.

In compliance with the terms set down in Article 5 below, graduands may also apply for admission, granted that they actually graduate and attain the degree required for admission no later than 31 October 2018, under penalty of exclusion. The candidates that have been admitted as graduants shall
communicate no later than 5 novembre 2018, to the to the "UO Formazione post lauream" [Doctoral Program] via e-mail to the following address dottorati@unipr.it, the date, the final mark achieved and the University that issued the relevant academic degree, by sending a self-certification, dated and hand-signed, with a copy of a valid document.

ARTICLE 3 – ACADEMIC DEGREE ATTAINED ABROAD

The eligibility of foreign academic degrees shall be verified by the Examination Board in charge of admission, in compliance with the applicable legislation in Italy and in the Country where the academic degree has been issued, as well as in compliance with any international agreements or treaties concerning the recognition of educational degrees for higher education.

The admission application that is filled in online shall entail an implicit request to assess the eligibility of the academic degree attained abroad. To this end, candidates must submit the following documents to their application:

a) a certificate of their academic degree listing the exams sat and passed with the relevant mark, specifying the minimum and maximum vote provided for in the educational system of your country. EU citizens may use a statutory declaration in lieu of the certificate, pursuant to Italian Presidential Decree No. 445/2000 as amended;

b) translation into English of the certificate as per item a), signed by the candidate under his/her responsibility, only where this document is not originally in English;

c) any other documents as useful to assess the academic degree eligibility (Diploma Supplement, etc.)

A certificate of academic qualification with the list of the examinations and the relative voting, specifying the minimum and maximum vote provided for in the educational system of your country

In case they win the competitive examination, candidates holding an academic degree attained abroad shall be admitted conditionally and shall hand in the "dichiarazione di valore in loco del titolo posseduto" [declaration of local value of the degree held] and the certificate of such degree setting forth the exams and marks, translated and certified by the Italian diplomatic representation or consulate in the Country where the institution that issued the degree is based. The declaration of value shall certify that the held degree is valid in the Country where it was attained for admission to an academic program similar to a Research Doctorate.

If the above "dichiarazione di valore in loco" is not available at the time of matriculation, a document shall be provided giving evidence that the application for its issue has been submitted to the competent diplomatic representation and the "dichiarazione di valore" shall be turned in as soon as possible.

ARTICLE 4 – QUALIFICATIONS

Candidates shall submit the following mandatory documentation for admission to all Research Doctorate Programs dealt with in this announcement:

UNIVERSITÀ DI PARMA
Via Università, 12 - 43121 Parma
www.unipr.it
- *curriculum vitae et studiorum* (preferably in European format and including a brief description of the topics of the degree thesis. It can also be written in English);

- an *abstract* of the second cycle Master’s degree thesis (approximately 10,000 characters including spaces). Undergraduates applicants may submit the draft of the thesis approved by their supervisor;

- Documents attesting that the applicant holds both the necessary first and second level degrees. Please, note that such documents must provide the following information:
  - university that has awarded the degree
  - type of degree awarded, whether second level master degree/single cycle second-level degrees/pre-reform degree
  - denomination of the degree awarded
  - “*Classe di Laurea*” (only for degree awarded in Italy)
  - date in which the degree has been awarded
  - final mark
  - academic transcript of records, including the full list of the exams taken and the related marks.

As to the supporting documents referred to in previous point aimed at attesting that the applicant holds both the first and second level master’s degrees required, please note that:

- applicants granted of the above academic degrees by Italian Universities must submit a self-certification, duly filled and signed, attesting the completion of their studies (both the first and second level master’ degree);

- applicants awarded by the above academic degrees by other foreign Universities must submit a certificate attesting the completion of their studies (i.e. first and second level master’ degree), and the transcript of records. The latter must include the full list of the exams taken and the related marks. In case of documents drawn up in languages other than Italian or English, the official translation in Italian/English of both the documents is required. Only official translations issued by the University which has awarded the degree or by other competent authorities in the State in which the title has been awarded shall be accepted.

Applicants holding a degree awarded in the other EU Member States can submit a self-certification (see previous point) or the Diploma Supplement as an alternative to the certificate.

Undergraduate applicants, lacking the academic requirements set by art. 2 at the time of the expiry of the present Call, may replace the certification relating to the second level master’s degree referred to in previous point with the transcript of records. The latter must include the full list of the exams taken and the related marks. Please, note that the transcript of record must further include the Weighted Average Mark (WAM). The latter can be estimated as follow:

For each completed unit of study:

- multiply the mark obtained by the number of credits points (please, note that "30 with honours" must be considered as 30);
— adding all the amounts received;
— divide the result by the total of the credit points.

Undergraduate applicants enrolled at non-Italian Universities are not required to indicate WAM.

To [http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca](http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca) page applicants may download a self-certification fac-simile to be used in the case the academic qualifications held has been awarded by an Italian public university.

In circumstances where following an assessment of the documents submitted the academic qualification held does not meet the requirements set by art. 2 of the present Call or the statements made are untrue; the University is entitled to issue a Rectoral Decree excluding the applicant by the selection procedure or by the PhD Programme. Such an exclusion can be established at any point during the selection procedure, even after the enrollment has been completed.

The forms attached hereto also specify other optional documents as provided for by each Research Doctorate program, of which a copy shall be attached to the application online for assessment purposes. All titles written in a language other than Italian will have to be translated into English, otherwise they will not be evaluated.

All documentation shall be submitted in accordance with Article 5 below.

**ARTICLE 5 - APPLICATIONS FOR ADMISSION**

Candidates may register for selection from 10th July 2018, 12.00pm (Italian time) to 4th September 2018, 1.00pm (Italian time, final deadline). Candidates must register electronically, by connecting from any PC with Internet access to the University website [https://unipr.esse3.cineca.it/Home.do](https://unipr.esse3.cineca.it/Home.do), having at hand their identity cards or passports, Tax IDs and the PC connected to a printer.

The candidate must:
- Go to the website [https://unipr.esse3.cineca.it/Home.do](https://unipr.esse3.cineca.it/Home.do);
- Register by entering the required data (or simply login if already registered);
- Click on the course chosen from the PhD Admission Test menu;
- Proceed with completing the online application, submitting the required information, attaching the necessary documents required by Article 4 (in addition to the requirements of each course), exclusively in pdf-format (maximum size limit of 5Mb for each attachment). The file will have to indicate the name of the candidate, for example: cognome_nomefile.pdf. It is also mandatory to attach a scanned version of ANNEX A “ADMISSION TO RESEARCH DOCTORATE COURSES” as well as a scanned valid ID of the applicant.

To properly loading the documents, please follow the instructions to [http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca](http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca) page.

The completed online application, accompanied by the ANNEX A, must contain the candidate’s
personal details, address and possibly a telephone number and an email address, for the purposes of the competition, as well as citizenship.

In annex A candidates must indicate:
- the exact denomination of doctoral program;
- indication of the chosen Research Topics;
- reserved position, if any, for which they intend to compete;
- the type of degree obtained (or to be obtained), the name of the University awarding the degree, the graduation date and the final grade.

To this end, candidates shall provide a certificate stating that the submitted documentation is identical to its original, under their responsibility and pursuant to Articles 46 and 47 of Italian Presidential Decree No. 445 of 28 December 2000, aware of forfeiture of any benefits obtained, as well as of the criminal penalties provided for by Articles 75 and 76, respectively of the above Decree, for false declarations and for forgery or use of forged documents.

The candidates with online application declare:

a) that they undertake to ensure attendance of the doctorate program based on the instructions given by the Program Board;

b) that they are not enrolled in postgraduate Specialty Schools or in courses of studies for Laurea or Laurea Specialistica/Magistrale, in University Master’s Degree courses or, should they be enrolled in the above courses, that they undertake to suspend attendance/ enrollment, or that they are enrolled in the Postgraduate Medical Specialty School at the same training center (in the latter case attaching a copy of the authorization given by the School Board to enrol in the specific doctorate program);

c) that they do not hold a research doctor qualification or that they already hold a research doctor qualification specifying the doctoral title in their possession (in the latter case, the winner of the competitive examination shall not be entitled to any scholarship, pursuant to Article 6 of Italian Law No. 398/1989 and to Article 5 of the University Regulation for the attainment of the research doctorate title);

d) that they have never benefited and they are not benefiting from any scholarship for a doctorate program.

Candidates suffering from impairments or learning disabilities may express their specific needs, by filling in form A38-1 or form A39-2, which can be downloaded from the website http://www.unipr.it/didattica/informazioni-amministrative/modulistica, and by including such form in their application for registration. The form, filled in and signed, shall be sent via fax to the number here below: +390521-347042 or via e-mail to the address: dottorati@unipr.it.

At any time, until the call expires, the candidate will be able to access his/her application to integrate or modify the data and attachments inserted.

The submission of the application to the University shall be completed automatically at the end of the procedure. Therefore, candidates do not have to deliver or send any printed material to the
offices. Through the online procedure candidates must also attach the documents proving the qualifications required for the admission to the PhD course chosen.

No other modes of presentation of qualifications will be accepted, other than online.

At the end of the admission procedure in the online contest no MAV (bulletin will not be printed) as it is not expected any university fees for admission.

Applications sent before 4th September 2018, 1.00 pm (Italian time) that are incomplete in the compilation and/or in the attachments required, will be excluded. Applications that are incomplete, irregular or not submitted in the manner and within the terms specified in this article will not be accepted.

In any case, additions to the documentation attached to the application will not be admitted after the deadline of the call, with the exception of those requested by the University.

Candidates intending to participate in the competitive examination for more than one doctorate programs shall submit more than one application, attaching the required documentation to each one of them.

In case the attached forms require research topics for the chosen Doctorate program, candidates shall set forth the specific topic chosen in their application for admission in Annex A.

Candidates are invited to complete the application to participate in the competitive examinations well before the set deadline.

It is the candidates' responsibility to verify the correct conclusion of the procedure. No claims will be accepted for any malfunctions of the computer system due to excessive load in proximity to the deadline.

ARTICLE 6 – RESERVED POSITIONS

As regards doctorate programs for which reserved positions are provided, candidates that graduated from foreign Universities or candidates holding scholarships funded by foreign States, candidates holding scholarships within specific international mobility programs and candidates that are the recipients of EU or international collaboration programs may compete for the positions reserved to the same, for which specific admission procedures may be set.

Any reserved positions are stated in the attached forms referring to the single doctorate programs, which shall be an integral part of this announcement.

Reserved positions may be provided to employees of companies having agreements in place for "Industrial Doctorate Programs."
The candidates intending to compete for the above reserved positions must attach additional documents to their application for participation in the competitive examination (ANNEX A), specifically:

- **Candidates holding a foreign academic degree:** in addition to the other documents as listed in the Form for the specific Doctorate Program, they shall attach a certificate of the foreign academic degree setting forth the exams sat and passed and the relevant marks and translated into Italian or English. This shall automatically entail that the candidates meeting the requirements will compete for the relevant reserved positions, where provided.

- **Candidates holding scholarships funded by foreign States:** in addition to the documents listed in the Form for the specific doctorate program, they shall attach a certificate stating that they are the holders of the scholarship granted.

- **Candidates under specific international mobility programs:** to the documents listed in the Form for the specific doctorate program, they shall attach a certificate stating the title of the scholarship provided as part of a specific international mobility program.

- **Candidates that are employees of companies having agreements for “Industrial Doctorate programs”:** in addition to the documents listed in the Form of the relevant doctorate program, they shall attach documents giving evidence of their being employees of the company. This shall automatically entail that the candidates meeting the requirements will compete for the relevant reserved positions, where provided. In the event that it is not possible to present a declaration certifying the title of the grant, as the comparative evaluation procedure has not yet been completed on the closing date of this call, candidates will be admitted subject to presentation of said documentation course or before 31.10.2018.

For reserved positions, the examination Board shall prepare a separate short-list in accordance with the type of reserved positions.

The positions that are reserved to holders of scholarships funded by foreign States or pertaining to specific international mobility programs, or reserved to research fellows or employees of companies having industrial doctorate agreements, or reserved for high training and research internship contracts and that have remained vacant shall not be awarded to other candidates. Should there be no winning candidates, any vacancies reserved for graduates from foreign universities will be added to the general ranking of each Research doctorate course.
ARTICLE 7 - ADMISSION EXAMINATION

Admission shall be based on a competitive examination consisting in assessment of qualifications and, possibly, of tests. In addition to the assessment of qualifications and/or the research project, the procedures for the comparative assessment, aimed at verifying the candidates' abilities and skills for scientific research may consist in a written exam, an oral exam open to the public, in a practical exam and/or test, or in a combination of the above chosen by the Doctorate Program Board.

The selection procedures and the assessment criteria for the admission to the PhD Programmes are described in the PhD Programme Tables in attachment, which form an integral part of the present Call for applications. Such Tables are also available in the webpage listing the PhD Programme available on the website http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca

The publication on the web of the above schedule shall amount to formal notification for all purposes convening candidates for the exams, if any. Therefore, candidates shall present themselves, with no notice or communication whatsoever required regarding admission exams, at the examination venue, on the day and at the time set forth in the above forms, with an identity document that has a photograph of the holder, is valid and has been issued by a State Body, under penalty of exclusion.

Only and exclusively where so provided in the Form relating to the chosen doctorate program, the exam may be held in a language other than Italian and with the use of IT tools and electronic modes as suitable to verify the candidates' identity.

The possible oral examination in public.

The Examination Board may award a total of 120 points. The breakdown of points of the single exams, including the minimum requirement to be admitted to written or oral test, is set forth in the forms relating to the single doctorate programs.

To qualify a total score not lower than 70 points shall be required. The final score shall be the sum of the points obtained in the assessment of qualifications and in the single exams.

In the case of scholarship linked to specific topics, during the written or oral exam, the candidates will have the possibility to show their interest for one or more scholarships linked to specific topics. The Examination Board will express a suitability assessment for the allocation of the scholarship linked to specific topics, taking into account the specific skills, experiences and aptitudes of the candidates.

Candidates will be able to view the results of the single exams and the outcome of the final long-listing by accessing the reserved web page of online students' office services from the University website https://unipr.esse3.cineca.it/Home.do.

Specific provisions for candidates residing abroad: candidates residing or temporarily abroad for study or work, only and exclusively where so stated in the form relating to the chosen doctorate
Program, may sit the oral exam, if any, remotely, via web teleconference, both audio and video (e.g.: Skype, Adobe Connect).

With regard to Doctorate Programs providing the possibility to sit the interview also via videoconference or other technology allowing remote viewing of the participants in the interview, candidate resident abroad or temporarily abroad for work or study and intend to use such operating mode shall submit the relevant request filling in the “Form for videoconference request”, and attach it to the online application for admission, along with a copy of a valid identity document.

The form shall state, under penalty of the candidate’s exclusion, the chosen platform (Skype or a similar one) and the user’s address to be used by the Board to make the video call. Candidates shall be available at their personal address, as previously communicated, on the day set for the oral exam, in accordance with the schedule included in the Form relating to the relevant Doctorate program. The Examination Board may decide to agree with the candidate on a precise time for the beginning of the interview.

For identification purposes and under penalty of exclusion from the selection procedure, each candidate shall identify him/herself, before the interview begins, by showing the same identity document a copy of which has been attached to the application for participation in the competitive examination.

In the event a candidate fails to communicate his/her personal address, fails to connect, or is not available on the day and at the time as agreed, or fails to show a valid identity document, pursuant to the previous paragraph, all these shall be grounds to exclude such candidate from the selection procedure. These grounds for exclusion shall not apply if the candidate, with a valid identity document, presents him/herself on the day set for the interview in order to sit the oral exam “in person”.

The acceptance of any requests to take the oral exam at a distance received after the expiry of the competition will be judged discretionally by the Examination Board, taking into account the particular needs expressed by the candidate who may go to preclude the possibility of taking the oral examination in attendance.

The University of Parma shall not be responsible for any technical causes which prevent the oral interview from being carried out regularly.

After the exams, the Examination Board shall prepare the general short-list based on the scores obtained by the candidates in the qualification assessment and in any single exams.

ARTICLE 8 – EXAMINATION BOARD

Examination Boards shall be appointed by the Rector and composed in accordance with Article 5 of the Regulation concerning Research Doctorate degrees of the University of Parma.
The composition of the single Boards shall be published, before the expiry of the notice, on the University website: http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca.

The Examination Boards shall not send any personal communication to candidates regarding the competitive exams: the candidates shall be responsible for obtaining information on the same in accordance with the procedures set out in Article 7 of this announcement.

**ARTICLE 9 - ADMISSION TO THE PROGRAMS (Final short-lists)**

Successful applicants will be admitted to the PhD programme, after the approval of selection deeds, in line with the ranking list until all positions available are covered, without prejudice to the specific procedures for the awarding of the positions set out in Arts. 6 and 7 of this call, concerning reserved positions and scholarships dedicated to specific research topics.

Candidates will be able to check whether they have qualified for admission to the chosen Doctorate Program, in the reserved dedicated website area, under the item admission tests, by logging in with the same procedures used to register for the competitive examination on the University website https://unipr.esse3.cineca.it/Home.do.

The beneficiaries of scholarships awarded by European and international institutions or other forms of financial support, on the basis of specific projects in which the University of Parma is a partner, may be admitted to the doctorate courses, after evaluation of the access requirements, provided they are assigned to a grant or other form of financial support won through participation in the selection procedures described in the regulation of each program.

The publication of the short-list on the website shall be the only official publications of the outcomes of the competitive examination and, therefore, no personal notifications shall be sent to the winning candidates.

In case a candidate ranks in a winning position in more than one short-list, he/she shall opt for only one Doctorate Program, concomitantly notifying his/her waiver of the other programs.

The choice of the PhD program, carried out at the time of registration is final and you cannot change it in any way.

The candidates that rank as winners in the final short-list, who are not over 29 years of age, may be selected in cooperation with any interested companies and based on each candidate's specific skills, for a "high training and research internship contract" to cover any vacancies, where any are set forth in the forms attached hereto.

Postgraduate students enrolled in a Medical Specialty School at the University of Parma who win the competitive examination for admission to a doctorate program held at the same University may be allowed to attend jointly both programs during the last year of the Medical Specialty School, granted that they are in the last year of the Specialty School at the time of matriculation in the doctorate program, in compliance with the deadlines set down in Article 10 below.
Joint attendance shall be allowed where compatible with the activities and commitment required by the same School, and such compatibility shall be stated by the authorization issued by the School Board.

The Doctorate Program Board shall resolve on any request for a reduction in the doctorate program, after assessing the research activities already carried out during the postgraduate medical specialty program as certified by the postgraduate medical specialty school, and may allow enrolment in the second year of the doctorate program.

In the year of joint attendance, the postgraduate student may not receive the doctorate program scholarship.

**ARTICLE 10 – ACCEPTANCE OF THE POSITION AND MATRICULATION**

The winning candidates shall complete a registration before formal matriculation using EXCLUSIVELY the ON-LINE procedure, accessing the page “https://unipr.esse3.cineca.it/Home.do” from 9th October 2018, 12.00 pm (Italian time) to no later than 16th October 2018, 12.00 pm (Italian time) by accessing the reserved dedicated area clicking on students' office/matriculation.

IT WILL NOT BE ACCEPTED OTHER MODES DIFFERENT FROM THE ONLINE REGISTRATION PROCEDURE.

Successful applicants who do not complete the enrolment procedure within the deadline indicated at the bottom of the final ranking list shall be considered having refused their PhD position tacitly.

Before you begin the online registration, the applicant must have:

- A device connected to the Internet;
- A printer;
- A valid ID;
- The tax code;
- BANK ACCOUNT NUMBER on which pay any scholarship;
- A valid e-mail address (which will be sent confirmation of registration);
- A credit card (unless you plan to use this form of payment, taking into account that commission fees may be applied by each Credit Institute).
- A passport photo.

At this stage, interested parties are required to attach (by uploading) in the data processing system:

1. own passport photo that shows the face in the foreground;
2. photocopy (front and back) of the personal identification document entered during registration;
3. photocopy of the tax code (Foreign nationals without tax code issued by the Entrace Agency will present the photocopy after arrival in Italy).
After the registration before formal matriculation, the candidate must print the enrollment form by including their signature and the date and present it no later than 19th October 2018 with the following documentation:
- application for enrollment in the first year of the PhD program (printed from online procedure) with indication of date and signature;
- receipt proving payment of the tuition fee (MAV) (in case you have not chosen to pay by credit card) at any bank in the country, without any commission fees, according to the contributions provided for in Article 12. Payments made by bank transfer or at the post office are not accepted;
- photocopy of your ID (back and front);
- Declaration attesting the qualifications held (Higher Diploma and Master’s Degree / Specialist) for graduates outside the University of PARMA according to the model downloadable from the site.

Scholarship assignees must also submit the following forms which can be downloaded from the website:
- Scholarship Acceptance Form or Withdrawal Form for the entire duration of the course (trainees will have to fill in the scholarship acceptance form reserved for them);
- declaration certifying the INPS (Social Security Insurance) position according to the form attached to the acceptance of the scholarship;
- Registration receipt for the separate management contribution to INPS (Social Security Insurance) for the payment of the scholarship (if not available immediately, no later than 09/11/2018).

Scholarship assignees from foreign countries shall complete and submit the above-mentioned forms reserved for them.

All the aforementioned documentation must be delivered, by October 19, 2018, directly to the UO Post Graduate Training - Research Doctorates - P.le San Francesco, 3 - 43121 Parma (open to the public: Monday, Tuesday, Wednesday, Friday from 09.00 to 12.00 - Thursday from 09.00 to 13.00) or sent by email to dottorati@unipr.it.

Registration will become effective only after the presentation of all the above-mentioned documents within the specified deadline. The candidates who do not comply with all the above within the relevant deadline will be cancelled from the list and considered renouncers. Vacancies will be made available to runner-ups, in order of merit.

Following a waiver by the winners of the competition, whether explicit or tacit, replacements will be made in line with the final ranking list. A communication is sent to the applicant taking over the available position via e-mail. In this case, enrollment must be completed within the peremptory term of 5 days from the date of sent of the notice of substitution, under penalty of revocation, using only the online procedure and sending or submitting the application in paper form, including the attachments requested, within the same deadline.
Candidates who received the notice of substitution, but intend to renounce the enrollment, must communicate their refusal without delay so that the available position can be offered to other applicants. The refusal must be notified via e-mail to dottorati@unipr.it, attaching the scanned front-back copy of a valid ID document.

Eligible applicants who fail to complete the enrollment procedure by the deadline set in the notice of substitution shall be considered having refused the position tacitly.

In case of equality the following criteria will apply:

- for positions covered by scholarships, the assessment of the economic situation, determined in accordance with D.P.C.M. of 09.04.2001, published in the Official Gazette no. 172 of 26.07.2001, without prejudice to the specific procedures for the awarding of the position set out in Arts. 6 and 7 concerning reserved positions and scholarships dedicated to specific research topics;
- for positions not covered by scholarship precedes the youngest candidate.

For admission to the doctorate program, candidates with the same ranking shall submit a self-certification concerning their income situation, pursuant to the Decree issued by the Italian Prime Minister on 9 April 2001 published in the Italian Official Journal issue No. 172 of 26 July 2001.

To the start of the course will be sent an email confirmation of registration, indicating the student number and the e-mail address assigned by the University. These data are essential for the PhD student’s career. The University of Parma will contact its PhD students only using the above-mentioned email account to communicate the administrative information regarding the PhD course.

For the duration of the course, students are required to edit, insert and promptly update any changes of personal details including the Bank Account Number for crediting of the scholarship, residence, domicile or any other number, connecting to the private area using the credentials possessed.

In case of waiver by a person so entitled within two months of the beginning of the program, the candidate on the short-list of eligible candidates ranking immediately after the waiving one shall take over the position, however, no later than at the end of the third month from the beginning of the program, taking into account, where necessary, of the specific research field related to funding.

Non-EU nationals shall submit a photocopy of the application for an Italian stay permit, for study or otherwise, and shall commit to turn in later the stay permit issued by the Questura di Parma.

All deeds and documents in a foreign language shall be translated and certified by the competent Italian diplomatic representation or consulates, in accordance with the applicable legislation concerning the admission of foreign students to courses at Italian Universities.

**ARTICLE 11 - SCHOLARSHIPS**

The scholarships will be assigned, during the planning of the activities of the first year of the course, by the Academic Board according to the order in the final ranking list, taking into account the
indications contained in the PhD programme tables, regarding reserved positions, positions with scholarships linked to specific topics and the judgments of suitability expressed by the Examination Boards during the competition.

The number of scholarship may be increased up to the maximum number of available places indicated in each course description sheet a result of further funding from public and private entities interesting to supporting the research activities, even after the publication of this announcement, however, within the deadline for submitting applications for admission.

The potential increased in the number of scholarships will be noted on the description sheets of each courses, published on the web site, without effecting the application deadline as indicated in art. 5 of this announcement.
The increase in the number of scholarship may determine an increase in the overall number of places available for that course.

Candidates who are assigned scholarships with a predetermined research activity will bound to carry out that activity.

Scholarships dedicated to specific research topics are those financed under certain programs, projects or agreements with external bodies that obligatorily require the activity to be carried out on a specific research topic (indicated in the PhD programme tables) and which bind the beneficiary to conduct this specific research.

Due to their particular nature, the scholarships dedicated to specific research topics can not be assigned on the basis of the general merit ranking, but require an additional specific assessment. The Examination Board, possibly supplemented by an expert member referred to in the previous art. 5, will express a suitability assessment for the assignment of the scholarship linked to specific topics, taking into consideration the specific competences, experiences and aptitudes of the candidates, as well as the profile sought, possibly indicated in the PhD programme tables.

In the modalities provided for by the PhD programme tables, each candidate can express to the Examination Boars his or her interest in the assignment of one or more scholarships with a fixed subject. This expression of interest is not binding for the purpose of assigning the suitability assessment.

All candidates who apply for a specific PhD course take part in the selection for general positions.

For candidates with the same ranking, the assessment of their income situation pursuant to the Decree issued by the Italian Prime Minister on 9 April 2001 and published in the Italian Official Journal Issued No.172 of 26 July 2001.

The yearly gross amount of the scholarship is € 15.343,28, as defined by the Ministerial Decree n. 40 of the 25.01.2018. Social-security contributions are deducted monthly from the gross scholarship by the University on behalf of the PhD candidates. Scholarships are paid to PhD candidates on a monthly basis, in arrears.
The scholarships are subject to the payment of the INPS social security contribution (Gestione separata INPS) according to the relevant legislation into force. Such a contribution is paid as follow: two-thirds to be paid by the University and one-third to be paid by the scholarship holder. PhD candidates enjoy the related rights and safeguards.

In tax terms, the provisions of Article 4 of Italian Law No. 476 of 13 August 1984 apply to scholarships for attendance of doctorate programs.

The scholarship shall not add to other research grants or other scholarships awarded on whatsoever ground, except for those awarded by Italian or foreign bodies and intended to integrate, with stays abroad, the training or research activities of the Doctoral Student.

The beneficiaries of research grants who are awarded scholarships as part of a PhD program must irrevocably renounce the grant or scholarship by the start date of the course on 01.11.2018 by promptly contacting their administration.

All doctoral students that have been awarded a scholarship for a doctorate program in the past, also a partial one, may not apply for a second one.

**ARTICLE 12 - TUITION FEES**

It is envisaged the total exemption from the payment of fees or grants to the University for the PhD students who have a scholarship and other forms of equivalent support under the D.M. 45/2013.

It is also envisaged, pursuant to Law 11 December 2016, no. 232, paragraph 262, the total exemption from paying taxes or grants to the University for PhD students who are not scholarship beneficiaries.

All doctoral students enrolled in the programs shall be required in any case to pay €16.00 per year as revenue stamp duty and €140.00 per year as the Regional tax for the right to study.

As a result of termination of studies the installment paid for the registration is not refundable.

The amounts of the tuition fee for enrollment in the following years and their deadlines are determined annually by the competent Academic Bodies and published on the University web page at: [http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca](http://www.unipr.it/didattica/post-laurea/dottorati-di-ricerca).

**ARTICLE 13 - ACHIEVEMENT OF THE DEGREE**

The research doctor degree, also referred to as: "Dott. Ric." or "Ph.D.", shall be achieved upon sitting and passing the final exam. For all information on the appointment of Examination Boards for the final exams and on the procedures and requirements relating to the doctoral thesis, reference is made to the "Regolamento dei Corsi per il conseguimento del Dottorato di Ricerca dell'Università degli Studi di Parma" [Regulation of the University of Parma concerning the Programs for Research Doctorate degrees].

UNIVERSITÀ DI PARMA
Via Università, 12 - 43121 Parma
www.unipr.it
16
ARTICLE 14 - COMPATIBILITY REGIME

Doctoral students shall undertake to ensure attendance of the doctorate program based on the instructions given by the Program Board.
The admission to research doctorate programs shall require full-time and exclusive commitment.
The Program Board shall have the power to include any extra-curricular activities to be performed along with the academic educational, training and research activities of the doctorate program.

The regimes of compatibility and incompatibility with the frequency of doctoral courses are governed by Arts. 6 and 7 of the Regulations concerning PhD courses, to which reference should be made.

ARTICLE 15 - APPLICABLE REGULATION

For anything not expressly provided for herein, reference is made to the "Regolamento dei Corsi per il conseguimento del Dottorato di Ricerca dell’Università degli Studi di Parma" [Regulation of the University of Parma concerning the Programs for Research Doctorate degrees], issued by Rector’s Decree no. 2275 of the 27.06.2013, as amended.

ARTICLE 16 – PERSON IN CHARGE OF THE PROCEEDING

Pursuant to Italian Law No. 241 of 7 August 1990, as amended and integrated, the person in charge of the proceeding dealt with herein shall be Ms. Sonia Rizzoli – Head of the Postgraduate Training Sector] - P.le S. Francesco, 3 - 43121 Parma, Italy, phone +390521 – 034214 fax +390521/347042 and e-mail dottorati@unipr.it.

The provisions set down herein and intended to ensure transparency in all phases of the proceeding, the criteria and procedures for the appointment of examination boards and persons in charge of the proceeding implement Italian Law No. 241 of 7 August 1990, as amended.

ARTICLE 17 – PERSONAL DATA PROTECTION

Personal and sensitive data provided by candidates will be used for administrative purposes and for possible proceedings for the management of the academic career of the winners only.
The treatment of the personal data according to art. 13 of EJ art. 2016/679 – General Data Protection Regulation.
The communication regarding the request for personal data is obligatory in order to evaluate the prerequisites for participation, or exclusion of the candidate from the selection process. The personal data provided can be communicated to the Administration of the Università di Parma and to related external structures within the framework of the University of Parma authorised to manage personal data under the direct control of the Owner of the Service of the Data Protection officer, exclusively for the above-mentioned purposes.
The e-mail of Data Controller at the Università degli Studi di Parma, dpo@unipr.it or dpo@pec.unipr.it.
ARTICLE 18 – OTHER INFORMATION

This announcement of a competitive examination, written in Italian and in English, is published on the website of the University of Parma, [http://www.unipr.it](http://www.unipr.it); the relating notice is available on the website of the Italian Ministry of Education, University and Research and on the EU Euraxess website.

Additional information and regulation details may be asked to the Postgraduate Training – Ph.D Office, P.le San Francesco, 3 - 43121 Parma, Italy Phone: +390521/034214 [dottorati@unipr.it](mailto:dottorati@unipr.it).

Parma, Italy 27th June 2018

f.to THE GENERAL MANAGER

Silvana Ablondi

f.to THE RECTOR

Paolo Andrei

<table>
<thead>
<tr>
<th>U.O.R. - Unità Organizzativa Responsabile (Relevant Organizational Unit)</th>
<th>Area Dirigenziale Didattica e Servizi agli Studenti (Relevant Organizational Management - Teaching Area and Students' Services)</th>
<th>Ms. Anna Maria Perta</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.P.A. Responsabile del Procedimento Amministrativo (Person in charge of the proceeding)</td>
<td>U.O Formazione Post Lauream (Head in charge of the administrative proceeding of the Postgraduate Training)</td>
<td>Ms. Sonia Rizzoli</td>
</tr>
</tbody>
</table>
"ADMISSION TO RESEARCH DOCTORATE COURSES"
(Articles 4, 19, 46 and 47 of Italian Presidential Decree No. 445 of 28 December 2000)

I, the undersigned
SURNAME __________________________________________________________
NAME __________________________________________________________
Birth Place _______________________________________________________ 
Date of birth (gg/mm/yyyy) _________________________________________
Tax ID ___________________________________________________________
Citizenship ________________________________________________________
Phone number ____________________________________________________
E-mail for correspondence _________________________________________

DECLARE to participate in the public competition for admission to the PhD cycle XXXIV:

_______________________________________________________________
(INCLUDE THE CORRECT COURSE)

RESEARCH TOPIC: _______________________________________________
(It must indicate the research topic if expressly provided for in the schedule for the chosen course of Ph.D.)

also DECLARE admission to a reserved position (if provide in the form attached to the notice of the course) for:

☐ Industrial Doctorate (pursuant to Article 11 paragraph 2 of Italian Ministerial Decree No. 45 of del 2013)
☐ Holders of scholarships funded by foreign States or recipients of specific international mobility programs (pursuant to Article 8 paragraph 2 of Italian Ministerial Decree N. 45 of 2013)
☐ Graduates holding a foreign academic degree
☐ Holders of Research Grant

aware of the forfeiture by any obtained benefits and penalties provided for by Articles 75 and 76 of Italian Presidential Decree No. 445 of December 28, 2000 for the alleged false declarations regarding education or use of false documents

DECLARE under my responsibility:

a) Possess a degree (fill in one):
☐ Master Degree (Ministerial Decree No. 270/04) in ___________________________ Class: ____
☐ Master Degree (Ministerial Decree No. 509/99) in ___________________________ Class: ____
☐ Degree (ante Ministerial Decree No. 509/99 – system previously in force to the one introduced by Ministerial Decree No. 509/99) in: ___________________________
obtained at the University of ______________ ________ on ______ on the final vote ______
(or to obtain it on ______________ ________ at the University of ______________ ________)

□ Degree obtained abroad: ______________ ________ on ______ on the final vote ______
(also DECLARES, in order to allow the recognition of the only purpose of participating in the qualification to the PhD program, attach the necessary documents to enable the declaration of equivalence, as required by art. 3 of the announcement).

b) that I undertake to hand in a self-certification relating to my academic degree to the Chair of the Examination Board at the competitive examination, if possible, or later to the Office "Dottorati di Ricerca" (for candidates that do not have an academic degree);

c) that I undertake to attend, on a full-time basis, the doctorate program, in accordance with the procedures to be set by the Program Board;

d) that I undertake to promptly notify any change in my residence or contact details;

e) to know the following foreign languages: ________________________________

f) that I am not enrolled in postgraduate Specialty Schools or in courses of studies for Laurea or Laurea Specialistica/Magistrale, in University Master's Degree courses or, in case I am enrolled in the above courses, that I undertake to suspend attendance, or that I am enrolled in the ______ YEAR of the Postgraduate Medical Specialty School in ________________________, with training center at the same training center of the Research Doctorate Course (in the latter case, attaching a copy of the authorization issued by the School Board to enrol in the specific Doctorate Program);

g) that presently I do not hold any doctorate degree and that I have not been nor am I currently the recipient of any scholarship for doctorate programs, or that I hold a doctorate degree in

University of ______________ ________ obtained at the ______________ ________

I, the undersigned ____________________________, also state that I am aware of the provisions of Article 7 of the announcement of the competitive examination, concerning the procedures to convene candidates for the relevant examinations, as well as of the relevant forms; I state also that I undertake, where applicable, to check whether I have been admitted to the oral exams.

I, the undersigned ____________________________, state that I am aware of the date set for enrolment in the Doctorate Program.

I, the undersigned ____________________________, state that I consent to the use by the University of Parma of my personal data provided by myself, for institutional purposes and for the competitive examination procedure, pursuant to Italian Legislative Decree No. 196 of 30 June 2003.

finally DECLARE

which as indicated in the documents accompanying an application on-line admission is true in accordance with articles. 46 and 47 of Presidential Decree 445/2000.

Place and date, ______________

Signature
Competitive examination for admission to Research Doctorate Programs

FORM TO REQUEST AN INTERVIEW VIA VIDEOCONFERENCE
(Article 7 of the Announcement)

NOTE: filling in this document shall not amount on its own to registration for the competitive examination. This form shall be filled in, signed and attached, together with a photocopy of an identity document, to the application for admission to the competitive examination.

I, the undersigned

<table>
<thead>
<tr>
<th>Surname:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Name:</td>
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<tr>
<td>Sex:</td>
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<td>Birth:</td>
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<td>Town</td>
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<td></td>
<td>Country</td>
</tr>
<tr>
<td>STUDY</td>
<td>WORK</td>
</tr>
</tbody>
</table>

HEREBY SUBMIT THIS APPLICATION
to be allowed to sit the oral exam for admission to the Research Doctorate Program in ________________ (name of the Doctorate program) via videoconference, as provided in the form relating to the above program and attached to the Announcement of the competitive examination. For this purpose, I give the following data:
Platform used for web connection: ____________________________________________
(e.g. Skype, Adobe Connect etc.)
Address for connection: ____________________________

HEREBY STATE
that I am aware of the rules set down in the Announcement of competitive examination, specifically, those set down in Article 5 "Applications for admission" and in Article 7 "Admission exam".

____________________  __________/________/________  ______________________
(place)              (date)     (Candidate's signature)
EVOLUTIONARY BIOLOGY AND ECOLOGY

Cycle | XXXIV
---|---
Coordinator | Prof. Pierluigi VIAROLI  
Department of Chemistry, Life Science and Environmental Sustainability  
email: pierluigi.viaroli@unipr.it

Duration | 3 years
Starting date of the PdD programme | 01/11/2018
Partner Institution | University of Ferrara and University of Firenze

Research Topics
- Plant Biology and biotechnology
- Ecology and ethology
- Evolution

Training Objectives
Evolutionary Biology and Ecology are an integrated area of research which in many prominent scientific institutions belong to the same Department. The graduate program in Evolutionary Biology and Ecology focuses on the study of biological diversity and its evolution, of animal behavior, and of the relationships of all living organisms, including humans, among them and with the environment. By integrating information ranging from the molecular level to the levels of the organism, the population and the community, graduate students are encouraged to develop their research in both basic and applied fields of investigation. Innovative methods are given a central role, both in fieldwork and in the laboratory and numerical analyses, the latter based on state-of-the-art biostatistical and simulation methods. Therefore, the holder of a Ph.D. in Evolutionary Biology and Ecology will be a highly qualified expert in the analysis and interpretation of biological processes and in the management of natural resources, who will be able to independently plan and conduct empirical research, to thoroughly exploit public bioinformatic resources, to develop quantitative models and to in-depth analyse biological data.

Admission requirements
Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- an academic Master's degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>9</td>
</tr>
</tbody>
</table>

Positions with University Scholarship

| N° | Funding entity | Research Topic |
3 Scholarship University funds
3 Scholarship funded by University of Ferrara
3 Scholarship funded by University of Firenze

For information on the topics in the competition, please refer to the PhD web page https://scvsu.unipr.it/it/node/2948

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 60 points
(a minimum score of 36 points shall be required to be admitted to the Oral Exam)
ORAL EXAM: up to 60 points
Minimum score for ELIGIBILITY: 70/120

Foreign Language
Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.
The evaluation of the knowledge of this language will be oral and will consist in translating a scientific text.

Possibility of videoconference for candidates residing or temporarily abroad
(the relevant request shall be submitted using the form attached to the competitive examination announcement)

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

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- Certificates and academic transcript of records for both the Bachelor’ and the Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  o University that granted the degree
  o Type of degree (first cycle/second cycle/single cycle)
  o Name of the degree programme
  o Date of graduation
  o Final mark
  o List of exams and corresponding scores (academic transcript of records)
  o 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)

- Research Project: The research project shall consist of a maximum of 4 pages, be written in Italian or in English, be focussed on an original research topic. It shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation; 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 of the Doctorate programme;
- Statement of Research Interest: Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD and at describing the specific research interests;
- Scientific Publications: Articles on national and international journals with peer reviewing, papers presented at conferences or symposia, book chapters, abstracts of papers or posters presented at conventions or meetings;
- **Reference Letters**: 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 institutions;
- **Academic qualifications**: other Master’s and/or specialization degree in subjects consistent with the research topics of this PhD programme
- **Mobility experience abroad** (e.g. Erasmus or similar);
- **Any other document** certifying the applicant’s training and abilities (scholarship, grants, university career awards, etc.)

### EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Consistency of the Master’s Degree or equivalent with the research topics of the PhD course. Further qualifications and academic experiences consistent with the objectives of the PhD program: language skills, any professional experience, study abroad, awards on the training path</td>
<td>Up to 20 points</td>
</tr>
<tr>
<td>Graduation mark (for graduates)</td>
<td>Score related to the final mark</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>Average of the exam marks (if the candidate will attain the degree no later than 31 October 2018)</td>
<td>Attribution of a score based on the credit weighted mean mark</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Relevance of the thesis topics with the themes of the doctorate course</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Research Project</td>
<td>Relevance with the PhD topics, with specific reference to:</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td></td>
<td>o Scientific value and originality of the proposal</td>
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<tr>
<td></td>
<td>o experimental design and methodology</td>
<td></td>
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<tr>
<td></td>
<td>o proposal feasibility</td>
<td></td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td>Relevance with the PhD topics</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Publications with peer reviews ISI / SCOPUS indexed, non-indexed journals, conference proceedings and abstracts of conference presentations. The score will be normalized for the duration of the post-graduate scientific career.</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Reference Letters</td>
<td>Relevance with the doctorate and prestige of the institution or the signer of the letter</td>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>

### ORAL EXAMINATION

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ORAL EXAM includes the presentation of the research project and 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</td>
<td>Up to 60 points</td>
</tr>
<tr>
<td><strong>ORAL EXAM</strong></td>
<td><strong>OTHER INFORMATIONS</strong></td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------</td>
</tr>
</tbody>
</table>
| **ORAL EXAM DATE:** 18 September 2018  
**TIME:** 09:30am  
**PLACE:** Bioscience Building  
Department of Chemistry, Life Sciences and Environmental Sustainability  
Parco Area delle Scienze, 11/A – 43124 PARMA - ITALY | For foreign candidates, the oral exam may be held in English at the candidate’s choice. |
# Biotecnology and Life Sciences

**Cycle**

XXXIV

**Coordinator**

Prof. Simone OTTONELLO  
Department of Chemistry, Life Sciences and Environmental Sustainability  
email: simone.ottonello@unipr.it

**Duration**

3 years

**Starting date of the PdD programme**

01/11/2018

## Research Topics

(The candidate **MUST** indicate one research topic)

- Environmental
- Genetic
- Biomolecular

## Training Objectives

The PhD in Biotechnology and Life Sciences aims to train experts capable of performing (and be in charge of) advanced research activity in multiple and diverse fields of biology and biotechnology. The main focus will be on the study of the function, organization, and expression of microbial, plant and animal genomes (including the human genome) from a basic science but also a translational point of view, in order to gain insights on possible biotechnological and biomedical applications. The experimental methodology will be centred on the investigational tools of genetics, molecular biology, biochemistry and applied biology. Starting from these shared objectives, in order to train PhDs with highly qualifying skills in specific fields of Biotechnology and Life Sciences, three main research areas have been identified: 1) environmental; 2) genetic; 3) biochemical-molecular. PhD students will be involved, on a full-time basis, in a research project, to which they will contribute in a highly critical and constructive transformative manner. This will allow them to achieve scientific and management independence, also taking advantage of the national and international scientific collaborations in which they will be involved.

## Admission requirements

Applicants who have one of the following degrees may participate to the selection:

- Laurea specialistica or Laurea magistrale (second cycle degree)  
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);  
- an academic Master’s degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may apply with the obligation of getting their degree by **October 31st 2018**.

## Positions put out to competition

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
<td>7</td>
</tr>
<tr>
<td>Without Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Reserved to employees of companies having an “Industrial Doctorate” arrangement</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
### Positions with University Scholarship

<table>
<thead>
<tr>
<th>№</th>
<th>Funding entity</th>
<th>Research Topic</th>
</tr>
</thead>
</table>
| 3 | Scholarship funded by the Ministry of Education, University and Research | - Environmental  
- Genetic  
- Biomolecular |
| 1 | Scholarship funded by the University of Parma              | - Biomolecular                                      |
| 1 | Scholarship co-funded by Fondazione Cariparma             | - Genetic                                            |
| 1 | POSITION WITHOUT SCHOLARSHIP                              | - Biomolecular: "Proteome analysis in preclinical models of pulmonary diseases" |

### Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

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

<table>
<thead>
<tr>
<th>№</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
</table>
| 1 | Funded by the Department of Chemistry, Life Sciences and Environmental Sustainability (Project "DIPARTIMENTI DI ECCELLENZA") | - Environmental: "The potential of applied biology in limiting urban air pollution and preventing its effects on human health and on the environment"  
The project will be conducted as part of a co-tutorship agreement with a European University where the student will have to spend a period of at least 6 months and may provide for the award of a double PhD degree. |
| 1 | Chiesi Farmaceutici S.p.A.                                                     | - Biomolecular: "Transcriptome profiling of hyperoxia induced lung-injury"                                                    |

### Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)

<table>
<thead>
<tr>
<th>№</th>
<th>Company/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to employees of Chiesi Farmaceutici S.p.A.</td>
</tr>
</tbody>
</table>

### ADMISSION PROCEDURES

- **Assessment of QUALIFICATIONS:** up to 40 points
- **ORAL EXAM:** up to 80 points
- **Minimum score for ELIGIBILITY:** 70/120

### Foreign Language

Language the fluency of which will be assessed during the Oral Exam: **ENGLISH**. The evaluation of the knowledge of the above language will be performed on an oral basis and may include the reading and translation of a scientific text.

### Possibility of videoconference for candidates residing or temporarily abroad (appropriately documented)

(the relevant request shall be submitted using the form attached to the competitive examination announcement)

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

- **ANNEX A** (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications)
- Abstract/Summary of the second cycle master’s degree thesis. (10,000 characters including spaces)
- Certificates and academic transcript of records for both Bachelor' and Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)
- **Statement of Research Interest**: Short text – maximum 3,000 characters, including spaces – in Italian or in English, aimed at explaining the candidate's reasons for applying to this particular PhD and at describing his/her specific research interests; also specify the interest for one of the three main research topics.

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)

- **Scientific Publications/communications at conferences or symposia**: attach a list of articles published in peer-reviewed international scientific journals, articles published in indexed national journals; book chapters, abstracts of oral communications or posters presented at national or international scientific conferences;
- **Academic qualifications**: other Master’ and/or specialization degrees in subjects related to the research topics of this PhD programme;
- **Mobility experience abroad** (e.g. Erasmus or similar appropriately documented experiences);
- **Any other document** certifying the applicant’s training and abilities (grants, awards, etc.).

**EVALUATION CRITERIA**

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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.</td>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>
| Graduation mark                   | Score related to the final mark:  
  - 110 with honours (magna cum laude): 20 points;
  - 110: 18 points;
  - From 101 to 109: 2 points for each mark unit (0-16 points)                                                                                                    | Up to 20 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2018) | Score related to the average of the exam marks:                                 
  - 30/30: 18 points;
  - From 21/30 to 29/30: 2 points for each mark unit (0-16 points)                                                                                                 | Up to 18 points |
<table>
<thead>
<tr>
<th>Graduation thesis</th>
<th>Relatedness of the Master’s Degree thesis with the doctoral programme research topics, as deduced from the Abstract/Summary of the thesis.</th>
<th>Up to 4 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement of Research Interest</td>
<td>Short text – maximum 3,000 characters, including spaces – in Italian or in English, aimed at explaining the candidate's reasons for applying to this PhD course; the possible candidate's interest for one of the proposed 'bound research topics' may also be specified, if applicable.</td>
<td>Up to 2 points</td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Publications in peer-reviewed international scientific journals: 2 points for each publication (for evaluation purposes it is mandatory to attach a copy of each publication to the application).</td>
<td>Up to 6 points</td>
</tr>
<tr>
<td>Communications to conferences, publications in indexed national journals, book chapters</td>
<td>1 point for each conference abstract, publication in indexed national journals or book chapters (for evaluation purposes it is mandatory to attach a copy of each item to the application).</td>
<td>Up to 3 points</td>
</tr>
<tr>
<td>ORAL EXAMINATION</td>
<td>EVALUATION CRITERIA</td>
<td>POINTS</td>
</tr>
<tr>
<td>The ORAL EXAM meant to assess the suitability of the applicant to pursue scientific research as well as his/her general knowledge of scientific topic related to the PhD course</td>
<td>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 interview, knowledge of the English language will also be evaluated.</td>
<td>Up to 80 points</td>
</tr>
</tbody>
</table>

**SCHEDULE OF THE ADMISSION EXAMS**

| ORAL EXAM | ORAL EXAM DATE: September 23, 2018  
TIME: 09:00am  
PLACE: ROOM A – Podere "La Grande"  
Parco Area delle Scienze, 173/A – 43124 PARMA - ITALY |
|-----------|-----------------------------------------------------|
| OTHER INFORMATIONS | The applicant MUST indicate in the application his/her preference for one of the three main research topics proposed in the selection announcement (Environmental, Genetic, 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. |
ECONOMICS & MANAGEMENT OF INNOVATION AND SUSTAINABILITY

Cycle

XXXIV

Coordinator

Prof. Stefano AZZALI
Department of Economics and Management
email: stefano.azzali@unipr.it

Duration

3 years

Starting date of the PdD programme

01/11/2018

Partner Institution

University of Ferrara

Research Topics

- Normative aspects and the effects of agricultural and agribusiness policy
- Accounting & Auditing
- Environmental and natural resource economics
- Knowledge, organization, human capital and labor economics
- Cultural economics: politics and management
- Economics and industrial and development policy
- Economics and public sector management
- Finance and risk management
- Health care and health care management
- Brand and value creation
- Performance evaluation, balance analysis and business management auditing
- New entrepreneurship, company strategies and managerial development
- Intangible resources and management systems, evaluation and reporting according to financial and non-financial indicators
- Economic decisions in the presence of risks
- Consumer Behavior & Marketing Management
- Regional and Territorial Systems
- Circular economy innovations and business sustainability management

Training Objectives

The program is designed to train Ph.D research candidates who possess analytical skills in business economics, and theoretical and quantitative economics; while it integrates basic economic tools, business economics, and statistics in a way unique to this curriculum. Research topics are ample but circumscribed in their inter-relation and specific characteristics, and allow for the introduction of analytical factors related to information systems, business management and organizational processes, as well as the management of complex socio-economic and policy phenomena on regional and macro-economic levels. Regional issues are emphasized with the aim of efficiently cooperating with local businesses and institutions while keeping with the thematic research areas and specific expertise of department faculty. Complementarity between thematic areas (economics, business economics, and within the lines that define these macro-areas) and levels of analysis (micro-macro, business-public institutions) is directed towards fostering skills which are highly applicable on the regional, Italian, and European job market.
Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

### POSITIONS PUT OUT TO COMPETITION

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
<td>5</td>
</tr>
<tr>
<td>Without Scholarship</td>
<td>2</td>
</tr>
<tr>
<td>With Scholarship reserved for candidates that have achieved degree abroad</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

### Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>Scholarship funded by University of Ferrara</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>

### Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Scholarship funded by University of Ferrara – Department of Economics and Management</td>
<td>Circular economy innovations and business sustainability management</td>
</tr>
</tbody>
</table>

### ADMISSION PROCEDURES

- **Assessment of QUALIFICATIONS**: up to 80 points
  (a minimum score of 30 points shall be required to be admitted to the Oral Exam)
- **ORAL EXAM**: up to 40 points
- **Minimum score for ELIGIBILITY**: 70/120

### Foreign Language

Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH**.

### Possibility of videoconference for candidates residing or temporarily abroad

(The relevant request shall be submitted using the form attached to the competitive examination announcement)

**YES**

**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:

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle master's degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- Certificates and academic transcript of records of both the Bachelor’ and the Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)
- Research Project: 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. A description of the thematic areas is available at the following link: [https://sea.unipr.it/it/dottorato_EMIS](https://sea.unipr.it/it/dottorato_EMIS)

## EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| Curriculum Vitae et studiorum      | - Graduation mark or Average of the exam marks for the candidate will attain the degree no later than 31 October 2018  
                                         - Other qualifications  
                                         - Any publications     | Up to 35 points |
| Graduation thesis                 | Consistency of the Master’s Degree thesis with the doctoral programme research topics | Up to 15 points |
| Research Project                  | Points relating to the research project shall be allocated on the basis of the following criteria:  
                                         - Scientific value and ground-breaking nature of the proposal: 10 points  
                                         - Description and structure of the proposal: 10 points  
                                         - Proposal feasibility: 10 points                                                                 | Up to 30 points |
<p>| ORAL EXAMINATION                  | The ORAL EXAM will focus on the discussion of the research project presented by the candidates, their experience in the field of scientific research (including thesis) and on motivation towards his PhD | Up to 40 points |</p>
<table>
<thead>
<tr>
<th>SCHEDULE OF THE ADMISSION EXAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORAL EXAM</strong></td>
</tr>
<tr>
<td>ORAL EXAM DATE: 19 September 2018</td>
</tr>
<tr>
<td>TIME: 10:00am</td>
</tr>
<tr>
<td>PLACE: Department of Economics and Management</td>
</tr>
<tr>
<td>Via J.F. Kennedy, 6 – 43125 PARMA - ITALY</td>
</tr>
<tr>
<td><strong>OTHER INFORMATIONS</strong></td>
</tr>
<tr>
<td>For foreign candidates, the admission examinations may be held in English at the candidate’s choice.</td>
</tr>
</tbody>
</table>
## PHYSICS

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>
| Coordinator   | Prof. Cristiano VIAPPIAN  
Department of Mathematical, Physical and Computer Sciences  
email: cristiano.viappian@unipr.it |
| Duration      | 3 years       |
| Starting date of the PhD programme | 01/11/2018 |
| Participation with positive results in international calls | Progetto UE H2020 – MSCA ITN "Innovative Training Networks"  
ITN-ETN EuroPLEX  
- Thimble regularisation of Lattice Gauge Theories  
- Phase structure of quantum gauge theories on compact manifolds at finite temperature |

### Research Topics

- Muon site and couplings in superconductors, magnets, and molecular nanomagnets
- Epitaxial growth and study of wide bandgap oxide semiconductors
- Carbon based nanostructured materials for energy storage
- Synthesis and characterization of nanostructures for medicine
- Development of molecular systems for the delivery of photosensitizers and for applications in super-resolution microscopy
- Molecular probes for photoacoustic microscopy
- Fluorescent proteins as biosensors for single cell nitric oxide imaging
- The gauge/gravity correspondence and its QFT realizations
- Implications on the physics of fundamental interactions from cosmological observations
- Dynamic processes on Time Evolving Networks
- Quantum transport of ultracold atoms

A detailed description of the themes is available at the address: [http://smfi.unipr.it/it](http://smfi.unipr.it/it) along with the contact person for each of the proposed themes.

### Training Objectives

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 careers 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.
Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31\textsuperscript{st} 2018.

<table>
<thead>
<tr>
<th>POSITIONS PUT OUT TO COMPETITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
</tr>
<tr>
<td>Reserved to holders of scholarship funded by foreign States</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

Positions with University Scholarship

<table>
<thead>
<tr>
<th>N\textsuperscript{*}</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>

Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N\textsuperscript{*}</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INFN – The Italian Nationale Institute of Nuclear Physics</td>
<td>• Implications on the physics of fundamental interactions from cosmological observations</td>
</tr>
<tr>
<td>2</td>
<td>Fondazione IIT – Istituto Italiano di Tecnologia</td>
<td>• Development of molecular systems for the delivery of photosensitizers and for applications in superresolution microscopy • Molecular probes for photoacoustic microscopy</td>
</tr>
</tbody>
</table>

Position reserved to holders of scholarship funded by foreign States

<table>
<thead>
<tr>
<th>N\textsuperscript{*}</th>
<th>University or Foreign State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to holders of Albert-Ludwigs-Universität Freiburg (Germany) Research topic: Quantum transport of ultracold atoms</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 50 points
ORAL EXAM: up to 70 points
Minimum score for ELIGIBILITY: 70/120

ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign States

Assessment of QUALIFICATIONS: up to 120 points
Minimum score for ELIGIBILITY: 70/120
Foreign Language | Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH**.
---|---

**Possibility of videoconference for candidates residing or temporarily abroad**
( the relevant request shall be submitted using the form attached to the competitive examination announcement)

**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**

- **ANNEX A** (art. 5 of the Call for Applications)
- Scanned Copy of a **valid identification document** with photo
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications)
- **Abstract of the second cycle master's degree thesis.** Undergraduate applicants may submit the draft of the thesis countersigned by their supervisor.
- **Certificates and academic transcript of records for both the Bachelor' and the Master' degrees** containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- **Research Project and Statement or Research Interest**: 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 outline 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 [http://smff.unipr.it/it](http://smff.unipr.it/it).
  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;
- **Any other document** certifying the applicant’s training and abilities. Publications, awards, presentations to scientific meeting, stages, fellowships, reference letters, etc.

**EVALUATION CRITERIA**

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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.</td>
<td>Up to 25 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the Master's Degree thesis with the doctoral programme 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.</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Research Project and Statement of Research Interest</td>
<td>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</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>Other qualifications</td>
<td>Publications, awards, presentations to scientific meetings, stages, fellowships etc...</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td><strong>ORAL EXAMINATION</strong></td>
<td><strong>EVALUATION CRITERIA</strong></td>
<td><strong>POINTS</strong></td>
</tr>
<tr>
<td>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</td>
<td>o preparation on the issues related to the Master's degree thesis o research project presentation o general knowledge of issues connected to the PhD course o knowledge of foreign languages</td>
<td>Up to 70 points</td>
</tr>
</tbody>
</table>

**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT – Positions reserved to holders of scholarship funded by ALBERT-LUDWIGS-UNIVERSITÄT FREIBURG**

| Curriculum Vitae et studiorum and other qualifications | 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 | Up to 60 points |
| Graduation thesis | Consistency of the Master's Degree thesis with the doctoral programme 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. | Up to 30 points |
| Other qualifications | Publications, awards, presentations to scientific meetings, stages, fellowships etc. | Up to 30 points |

**SCHEDULE OF THE ADMISSION EXAMS**

| ORAL EXAM | ORAL EXAM DATE: 17 September 2018  
TIME: starting from 10:00 am in accordance with the schedule to be published on the website of the Department of Mathematical, Physical and Computer Sciences [http://smfi.unipr.it/it](http://smfi.unipr.it/it)  
PLACE: Department of Mathematical, Physical and Computer Sciences – Physics Building  
Parco Area delle Scienze, 7/A – 43124 PARMA - ITALY |

**UNIVERSITÀ DI PARMA**
Via Università, 12 - 43121 Parma
www.unipr.it
**OTHER INFORMATIONS**

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 [http://smfi.unipr.it/it](http://smfi.unipr.it/it).

In the application to participate in the competitive examination, the candidate must choose and specify one research. The candidate may indicate a second priority choice. The above choice will be binding with regard to the winner’s research activity.

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
CIVIL ENGINEERING AND ARCHITECTURE

Cycle
XXXIV

Coordinator
Prof. Andrea CARPINERI
Department of Engineering and Architecture
email: andrea.carpinteri@unipr.it

Duration
3 years

Starting date of the PdD programme
01/11/2018

Research Topics
- Infrastructure and Environmental Engineering
- Structural and Geotechnical Engineering
- Architecture and Urban Planning

Training Objectives

To develop specialized skills in the following fields:
(1) 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 groundwaters;
(2) Structural and Geotechnical Engineering: mechanical behaviour of materials, structural components and structures; behaviour of soils and geotechnical structures;
(3) 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.

Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

POSITIONS PUT OUT TO COMPETITION

| With Scholarship | 6 |
| Without Scholarship | 1 |
| Reserved to holders of Research Grant | 1 |
| **TOTAL** | **8** |
### Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Scholarship University funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>

**Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)**

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by EMILIA-ROMAGNA REGION</td>
<td>• Analysis of seismic damage mechanisms and definition of vulnerability curves for special buildings of cultural heritage: new information tools for territorial planning of prevention measures</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EMILIA-ROMAGNA REGION</td>
<td>• RobuStruPre: the strength of the prefabricated structures</td>
</tr>
</tbody>
</table>

**Position reserved to holders of Research Grant**

<table>
<thead>
<tr>
<th>N°</th>
<th>Subject area of the research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&quot;Development of a Smoothed Particle Hydrodynamics numerical model for hydraulic turbine&quot;</td>
</tr>
</tbody>
</table>

**ADMISSION PROCEDURES**

**Assessment of QUALIFICATIONS:** up to 70 points

(a minimum score of 40 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 50 points

Minimum score for **ELIGIBILITY:** 70/120

**Foreign Language**

Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH**

The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.

**Possibility of videoconference for candidates residing or temporarily abroad**

(the relevant request shall be submitted using the form attached to the competitive examination announcement)

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:

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
— Abstract of the second cycle master’s degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)

— Certificates and academic transcript of records for both the Bachelor’ and the Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  o University that granted the degree
  o Type of degree (first cycle/second cycle/single cycle)
  o Name of the degree programme
  o Date of graduation
  o Final mark
  o List of exams and corresponding scores (academic transcript: of records)
  o 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)

— Research Project: The research project shall consist of a maximum of 3 pages, be written in Italian or in English, on the subject of research specified by the candidate in the application form (ANNEX A), 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;
To identify the topic of the aforementioned Project, the Candidate is advised to contact one of the Academic Board Members for the research topic specified in the application form: http://www.dottingcivarch.unipr.it
The Research Project 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;
— Scientific Publications: Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.

**EVALUATION CRITERIA**

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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</td>
<td>Up to 30 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the Master’s Degree thesis with the doctoral programme research topics (Abstract of the second cycle master’s degree thesis or the draft of the thesis approved by supervisor)</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>Research Project</td>
<td>Points relating to the research project on the subject of research specified by the candidate in the online application form</td>
<td>Up to 20 points</td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Articles on national and international journals, papers presented at conferences or symposia, book chapters: a copy of each article must be mandatorily attached to the online application</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td><strong>ORAL EXAMINATION</strong></td>
<td><strong>EVALUATION CRITERIA</strong></td>
<td><strong>POINTS</strong></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------</td>
<td>------------</td>
</tr>
</tbody>
</table>
| 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 | o knowledge of foreign languages  
 o research project presentation  
 o general knowledge of issues connected to the PhD course | Up to 50 points |

**SCHEDULE OF THE ADMISSION EXAMS**

**ORAL EXAM**

**ORAL EXAM DATE:** 19 September 2018  
**TIME:** 09:30am  
**PLACE:** Department of Engineering and Architecture  
Parco Area delle Scienze, 181/A - 43124 PARMA - ITALY

**OTHER INFORMATIONS**

The Oral Exam must be taken in Italian or in English.

For the Applicants who will take the Oral Exam in Italian, the knowledge of English language will be evaluated orally, and the test will consist in reading and translating a scientific text.

The Applicants who will take the Oral Exam in English (in presence or in videconference using the platform of Skype for the connection via web), if they will be in the list of winners of the present competitive examination, will have to mandatorily learn Italian during the 1st year of the Doctorate Course, attending a Course by the University of Parma (http://www.lass.unipr.it/en/teaching/italian-courses-foreigners) and passing the final exam, in order to be able to attend (at the 2nd year) the 'Preparatory Course' (by the Doctorate School in Engineering and Architecture) which is held in Italian.
# INDUSTRIAL ENGINEERING

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>
| Coordinator | Prof. Gianni ROYER CARFAGNI  
Department of Engineering and Architecture  
email: gianni.royer@unicr.it |
| Duration | 3 years |
| Starting date of the PdD programme | 01/11/2018 |

## Research Topics
- Theoretical and applied mechanics, mechanics of materials and structures, construction of machinery
- Economic, organizational, managerial, plants and legal aspects in the field of engineering
- Energetic systems, thermos-fluid dynamics, machinery and energy systems, technical physics

## Training Objectives

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.

## Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31\textsuperscript{st} 2018.

## POSITIONS PUT OUT TO COMPETITION

| With Scholarship | 7 |
| Without Scholarship | 2 |
| Reserved to holders of scholarship within specific international mobility programs | 1 |
| Reserved to employees of companies having a “Industrial Doctorate” arrangement | 1 |
| **TOTAL** | **11** |

## Positions with University Scholarship

<table>
<thead>
<tr>
<th>N\textsuperscript{*}</th>
<th>Funding entity</th>
<th>Research Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by Casappa S.p.A.</td>
<td>Development of mathematical models and experimental methodologies to increase the performance of fluid power systems and machines.</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>ATT-HiFood: Advanced Thermal Treatments for High quality Food products</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>Microstructure and properties of metallic components produced by additive manufacturing</td>
</tr>
</tbody>
</table>

Reserved to holders of scholarship within specific international mobility programs

<table>
<thead>
<tr>
<th>N°</th>
<th>Agreements/Cooperations/Mobility Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to holders under the mobility program UE H2020 &quot;PBNv2&quot;</td>
</tr>
</tbody>
</table>

Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)

<table>
<thead>
<tr>
<th>N°</th>
<th>Company/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to employees of SUPSI– University of Applied Sciences and Arts of Southern Switzerland</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 70 points
(a minimum score of 40 points shall be required to be admitted to the Oral Exam)

ORAL EXAM: up to 50 points

Minimum score for ELIGIBILITY: 70/120

ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign States and/or scholarship holders within specific international mobility programs

Assessment of QUALIFICATIONS: up to 120 points

Minimum score for ELIGIBILITY: 70/120

Language the fluency of which shall be assessed during the Oral Exam: ENGLISH

The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.

Possibility of videoconference for candidates residing or temporarily abroad

(22) the relevant request shall be submitted using the form attached to the competitive examination announcement)

Il candidato potrà utilizzare la piattaforma Skype per il collegamento web. Per organizzare operativamente il collegamento si prega di inviare almeno una settimana prima della data del concorso una mail a barbara.bigliardi@unipr.it

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

- **ANNEX A** (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications)
- **Abstract of the second cycle master’s degree thesis.** Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- **Certificates and academic transcript of records for both the Bachelor’ and the Master’ degrees** containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- **Research Project:** Project related to the research topic specified by the Candidate in the application form: 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; **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. To identify the topic of the aforementioned project, the candidate may contact one of the Members of the Academic Board (available at: [https://dia.unipr.it/it/file/4216](https://dia.unipr.it/it/file/4216)) for the research topic specified in the application form.

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)

- **Scientific Publications:** Articles on national and international journals, contributions presented at conferences or symposia, book chapters
- **Reference Letters:** 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;
- Any other document certifying the applicant’s training and abilities (grants, awards, etc.)

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUALIFICATION</strong></td>
<td><strong>EVALUATION CRITERIA</strong></td>
</tr>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>For reserved position to Project UE</td>
</tr>
</tbody>
</table>
| Graduation mark      | 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 95 to 99: 0 points  
  The scores will be proportionally renormalized in case of equivalent evaluations | Up to 10 points |
|                      | For reserved position to Project UE | |
|                      | Up to 20 points | |
### Average of the exam marks (the candidate will attain the degree no later than 31 October 2018)

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

### Graduation thesis

Abstract of the second cycle master’s degree thesis (max 10,000 characters including spaces). The graduate candidates can also attach the complete thesis work

### Research Project

SEE ABOVE

### Scientific Publications

Articles on national and international journals, contributions presented at conferences or symposia, book chapters

### Reference Letters

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

### Other qualifications

Grants, awards, training etc

### ORAL EXAMINATION

#### EVALUATION CRITERIA

- Research project presentation
- General knowledge of issues connected to the PhD course
- Knowledge of foreign languages

#### POINTS

Up to 50 points

### SCHEDULE OF THE ADMISSION EXAMS

**ORAL EXAM**

**ORAL EXAM DATE:** 14 September 2018  
**TIME:** 10:00am  
**PLACE:** Department of Engineering and Architecture - Building 8  
Parco Area delle Scienze, 181/A – 43124 PARMA - ITALY

**OTHER INFORMATIONS**

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
# MOLECULAR MEDICINE

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinator</td>
<td>Prof. Stefania CONTI</td>
</tr>
<tr>
<td></td>
<td>Department of Medicine and Surgery</td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:stefania.conti@unipr.it">stefania.conti@unipr.it</a></td>
</tr>
<tr>
<td>Duration</td>
<td>3 years</td>
</tr>
<tr>
<td>Starting date of the PdD programme</td>
<td>01/11/2018</td>
</tr>
</tbody>
</table>

## Research Topics

- Anatomy
- Clinical Biochemistry
- Maxillofacial Surgery
- Cardiac Pathophysiology
- Oral Diseases
- Translational Oncology
- General Pathology
- Relationships among Periodontology/Implant Dentistry, Systemic Diseases and Biomaterials
- Forensic Toxicology

## Training Objectives

The objectives of the PhD program in Molecular Medicine are to provide the students with the best available intellectual and technological expertise needed for the implementation of advanced research projects in the integrated context of specific bio-medical scientific disciplines. On the basis of the cultural formation and the methodological experience achieved, it is expected that the Ph.D. in Molecular Medicine will accomplish high-rank positions in Research and Technological Development activities performed in Universities, research centers and industries engaged in the medical, biological and biotechnological fields.

## Admission requirements

Applicants who have one of the following degrees may participate in the selection:

- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

## POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>Wth Scholarship</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Scholarship</td>
<td>2</td>
</tr>
<tr>
<td>Reserved to employees of companies having a &quot;Industrial Doctorate&quot; arrangement</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>
Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship University funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>

Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

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

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by University Center of Dentistry</td>
<td>• Laser biostimulation in tissue repair</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EURAC Research</td>
<td>• Myocardial tissue engineering: development of a multidimensional/multicellular model to investigate cardiac function</td>
</tr>
<tr>
<td>1</td>
<td>Funded by Azienda USL/IRCCS Reggio Emilia</td>
<td>• Metabolomics in Biomedicine</td>
</tr>
<tr>
<td>1</td>
<td>Funded by Svolta re onlus</td>
<td>• Evaluation of the correlation between use of psychoactive substances and DNA methylation, and oxidative damage on nucleic acids in stressed population</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>• Preclinical development of theranostic and immunotherapeutic agents intended for the treatment of solid tumours of high socio-economic impact</td>
</tr>
</tbody>
</table>

Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)

<table>
<thead>
<tr>
<th>N°</th>
<th>Company/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to employees of Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori (IRST)</td>
</tr>
<tr>
<td>2</td>
<td>Reserved to employees of Fondazione IRCCS Istituto Nazionale dei Tumori di Milano</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 60 points
(a minimum score of 10 points shall be required to be admitted to the oral exam)

ORAL EXAM: up to 60 points
Minimum score for ELIGIBILITY: 70/120

Language the fluency of which shall be assessed during the oral exam: **ENGLISH**.

Possibility of videoconference for candidates residing or temporarily abroad **NO**
# LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

<table>
<thead>
<tr>
<th>Mandatory documents to be attached to the on-line application</th>
</tr>
</thead>
<tbody>
<tr>
<td>- ANNEX A (art. 5 of the Call for Applications)</td>
</tr>
<tr>
<td>- Scanned Copy of a valid identification document with photo</td>
</tr>
<tr>
<td>- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)</td>
</tr>
<tr>
<td>- Abstract of the second cycle master's degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)</td>
</tr>
<tr>
<td>- Certificates and academic transcript of records for both the Bachelor' and the Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):</td>
</tr>
<tr>
<td>o University that granted the degree</td>
</tr>
<tr>
<td>o Type of degree (first cycle/second cycle/single cycle)</td>
</tr>
<tr>
<td>o Name of the degree programme</td>
</tr>
<tr>
<td>o Date of graduation</td>
</tr>
<tr>
<td>o Final mark</td>
</tr>
<tr>
<td>o List of exams and corresponding scores (academic transcript: of records)</td>
</tr>
<tr>
<td>o Translation into Italian or English (only for degrees issued in languages other than Italian or English)</td>
</tr>
</tbody>
</table>

Further qualifications that may be attached to the application, if in possession of the applicant (only qualifications attested by documents drawn up in Italian or in English):

- **Research Project:** 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, perspectives; it does not represent a constraint with respect to the subsequent choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board;

- **Statement of Research Interest:** Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD programme and at describing her/his specific research interests;

- **Scientific Publications:** Articles on national and international journals, contributions presented at conferences or symposia, book chapters etc.;

- **Reference Letters:** 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 of the PhD programme working in public or private research facilities;

- **Academic qualifications:** other Master and/or specialization degreee in subjects consistent with the research topics of this PhD programme;

- **Mobility experience abroad** (e.g. Erasmus or similar);

- **Any other document** certifying applicant’s traning and abilities (grants, awards, scholarships, etc.).

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| Curriculum Vitae et studiorum | 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 | Up to 10 points |
<p>| Graduation mark     | Up to 5 points                                                  |         |</p>
<table>
<thead>
<tr>
<th>Average of the exam marks (for conditionally enrolled candidates who will attain the degree no later than 31 October 2018)</th>
<th>Score related to the average of the exam marks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- &gt; 28/30: 5 points;</td>
<td></td>
</tr>
<tr>
<td>- &gt; 27/30: 3 points;</td>
<td></td>
</tr>
<tr>
<td>- &gt; 25/30: 1 point</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Congruity of the Master’s Degree thesis with the doctoral programme research topics</td>
</tr>
<tr>
<td>Research Project</td>
<td></td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td></td>
</tr>
<tr>
<td>Scientific publications</td>
<td></td>
</tr>
<tr>
<td>Reference Letters</td>
<td></td>
</tr>
<tr>
<td>Other qualifications</td>
<td>Academic qualifications/experience abroad/grants, scholarships and awards</td>
</tr>
</tbody>
</table>

**ORAL EXAMINATION**

The ORAL EXAM focuses on the discussion of the Degree Thesis and of a subject related to the chosen research topic (the subject will be drawn by the candidate).

**EVALUATION CRITERIA**

- discussion of the thesis
- knowledge of chosen topic
- proficiency in the foreign language

**POINTS**

Up to 60 points

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**SCHEDULE OF THE ADMISSION EXAMS**

**ORAL EXAM**

**ORAL EXAM DATE:** 14 September 2018  
**TIME:** 09:30 am  
**PLACE:** Meeting Room - TOWER B  
Integrated Biotechnological Plexus  
Via Volturno, 39 – 43125 PARMA - ITALY

**OTHER INFORMATIONS**

For foreign candidates, English may be used during the examination, at the candidate’s choice.
# PSYCHOLOGY

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>

| Coordinator | Prof.ssa Luisa MOLINARI  
Department of Humanities, Social Sciences and Cultural Industries  
email: luisa.molinari@unipr.it |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>3 years</td>
</tr>
<tr>
<td>Starting date of the PdD programme</td>
<td>01/11/2018</td>
</tr>
</tbody>
</table>

## Research Topics
- Basic psychological processes
- Psychosocial processes in complex societies
- Learning and developmental processes
- Clinical and social intervention

## Training Objectives
Training researchers able to project and realize studies in basic or applied psychology, with a special emphasis on social, educational and clinical contexts.

## Admission requirements
Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31\(^{st}\) 2018.

## POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>POSITIONS PUT OUT TO COMPETITION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
<td>2</td>
</tr>
<tr>
<td>Without Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Covered by High Internship and Research Agreements</td>
<td>1</td>
</tr>
<tr>
<td>Reserved to employees of companies having a “Industrial Doctorate” arrangement</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>5</strong></td>
</tr>
</tbody>
</table>

## Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>
# Positions covered by High Internship and Research Agreements

<table>
<thead>
<tr>
<th>N°</th>
<th>Company/institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TICE COOPERATIVA SOCIALE</td>
</tr>
</tbody>
</table>

**Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)**

<table>
<thead>
<tr>
<th>N°</th>
<th>Company/institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to employees of TICE COOPERATIVA SOCIALE</td>
</tr>
</tbody>
</table>

## ADMISSION PROCEDURES

- **Assessment of QUALIFICATIONS**: up to 60 points
  - (a minimum score of 31 points shall be required to be admitted to the Oral Exam)
  - **ORAL EXAM**: up to 60 points
  - **Minimum score for ELIGIBILITY**: 70/120

### Foreign Language

- Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH**
- The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text

### Possibility of videoconference for candidates residing or temporarily abroad

- (the relevant request shall be submitted using the form attached to the competitive examination announcement)

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**
  - ANNEX A (art. 5 of the Call for Applications)
  - Scanned Copy of a **valid identification document** with photo
  - Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
  - Abstract of the second cycle master’s degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
  - Certificates and academic transcript of records for both the Bachelor’ and the Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
    - University that granted the degree
    - Type of degree (first cycle/second cycle/single cycle)
    - Name of the degree programme
    - 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)
  - Research Project: 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 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);
  - 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;
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)

- **Scientific Publications**: Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.
- **Academic qualifications**: other Master's and/or specialization degree in subjects consistent with the research topics of this PhD programme;
- **Mobility experience abroad** (e.g. Erasmus or similar);
- **Other qualifications**: mobility experience abroad, awards, grants and research

### EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The candidate's Curriculum Vitae et Studiorum will be evaluated based on the following qualifications and scores:</td>
<td>Up to 10 points</td>
<td></td>
</tr>
<tr>
<td>Graduation mark</td>
<td>Score related to the final mark:</td>
<td></td>
</tr>
<tr>
<td>Average of the exam marks (if the candidate will attain the degree no later than 31 October 2018)</td>
<td>Up to 10 points</td>
<td></td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency with the research themes of the PhD course and quality of the research methodology</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Research Project</td>
<td>Scientific value and internal consistency: 15 points</td>
<td>Up to 25 points</td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Articles on national and international journals, papers presented at conferences or symposia, book chapters etc</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>Academic qualifications</td>
<td>Master's and/or specialization degree in subjects consistent with the research topics of this PhD programme</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Other qualification</td>
<td>mobility experience abroad, awards, grants and research</td>
<td></td>
</tr>
<tr>
<td>ORAL EXAMINATION</td>
<td>knowledge of foreign languages (English): 10 points</td>
<td>Up to 60 points</td>
</tr>
<tr>
<td></td>
<td>discussion and argumentation of the project: 25 points</td>
<td></td>
</tr>
<tr>
<td></td>
<td>knowledge on at least one of the themes of the PhD program: 25 points</td>
<td></td>
</tr>
</tbody>
</table>
| ORAL EXAM                                    | ORAL EXAM DATE: 13 September 2018  
TIME: 09:30am  
PLACE: Aula C – Polo Didattico - Via del Prato - 43121PARMA - ITALY |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OTHER INFORMATIONS</td>
<td>For foreign candidates, the admission examinations may be held in English at the candidate’s choice.</td>
</tr>
</tbody>
</table>
# MATERIALS SCIENCE AND TECHNOLOGY

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>
| Coordinator| Prof. Enrico DALCANALE  
Department of Chemistry, Life Sciences and Environmental Sustainability  
email: enrico.dalcanale@unipr.it |
| Duration   | 3 years             |
| Starting date of the PdD programme | 01/11/2018 |
| Partner Institution |  
- The Italian National Research Council (C.N.R.)  
- Cape Town University (South Africa) |
| Partner Institution for University Cooperation Agreements |  
- Kazan University (Russia)  
- Stockholm University (Sweden) |

### Participation with positive results in international calls
- Progetto UE H2020 – MSCA ITN "Innovative Training Networks"  
  ITN-ETN "LOGIC LAB"  
  Excited state engineering of thermally activated delayed fluorescence: environmental effects  
  From isolated molecules to materials: relaxation of excited states

### Research Topics
- Photovoltaic devices  
- Functional materials  
- Strongly correlated systems  
- Nanodiagnostics  
- Nanostructured materials  
- Supramolecular sensors and devices  
- Semiconductive massive crystals  
- Low dimensionality semiconductive structures  
- Self-healing and self-diagnostic polymers  
- Surface supported molecular materials  
- Magnetic materials and magneto-refrigeration  
- Ceramic and composite materials  
- Materials and devices for memristic devices and for bioelectronics

### Training Objectives
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.
Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

<table>
<thead>
<tr>
<th>POSITIONS PUT OUT TO COMPETITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>5</td>
<td>Funded by The Italian National Research Council (C.N.R.)</td>
<td>---</td>
</tr>
</tbody>
</table>

Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by Fondazione IIT – Istituto Italiano di Tecnologia</td>
<td>• Electron crystallography to explore solid state transformations triggered by electric field</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>• Biologically inspired processes for the development of nanostructured biomaterials in regenerative medicine</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 60 points
(a minimum score of 10 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 60 points

**Minimum score for ELIGIBILITY:** 70/120

**Foreign Language**

Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH.**

The evaluation of the knowledge of this language will be oral and will consist in translating of a scientific text.

**Possibility of videoconference for candidates residing or temporarily abroad**

(the relevant request shall be submitted using the form attached to the competitive examination announcement)

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

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle master’s degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- Certificates and academic transcript of records for both the Bachelor’ and the Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- Final mark of graduation
- List of exams and corresponding scores (academic transcript of records)
- Statement of Research Interest: Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD and at describing the specific research interests;
- Scientific Publications: Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings

EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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</td>
<td>Up to 20 points</td>
</tr>
<tr>
<td>Graduation mark</td>
<td>Score related to the final mark:</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td></td>
<td>- 110 with honours (magna cum laude): 10 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 110: 8 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 105 to 109: 6 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 100 to 104: 4 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 95 to 99: 2 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Under 95: 0 points</td>
<td></td>
</tr>
<tr>
<td>Average of the exam marks (if the candidate will attain the degree no later than 31 October 2018)</td>
<td>Score related to the average of the exam marks:</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td></td>
<td>- 30/30: 10 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 28/30 to 29/30: 8 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 26/30 to 27/30: 6 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 25/30: 4 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 24/30: 2 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Under 24/30: 0 points</td>
<td></td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the Master's Degree thesis with the doctoral programme research topics</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td>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</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td><strong>ORAL EXAMINATION</strong></td>
<td><strong>EVALUATION CRITERIA</strong></td>
<td><strong>POINTS</strong></td>
</tr>
</tbody>
</table>
| 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. | - Knowledge of foreign languages: 10 points  
- General knowledge of issue connected to the Master thesis: 25 points  
- General knowledge of issues connected to the PhD course: 25 points | Up to 60 points |

**SCHEDULE OF THE ADMISSION EXAMS**

| ORAL EXAM | ORAL EXAM DATE: 19 September 2018  
TIME: 09:30am  
PLACE: Department of Chemistry, Life Sciences and Environmental Sustainability - Chemical Building  
Parco Area delle Scienze, 27/A – 43124 PARMA - ITALY |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OTHER INFORMATIONS</td>
<td>For foreign candidates, the admission examinations may be held in English at the candidate's choice.</td>
</tr>
</tbody>
</table>
CHEMICAL SCIENCES

Cycle | XXXIV
---|---
Coordinator | Prof. Roberto CORRADINI  
Department of Chemistry, Life Sciences and Environmental Sustainability  
email: roberto.corradini@unipr.it

Duration | 3 years
Starting date of the PhD programme | 01/11/2018

Research Topics

a) Development of innovative materials and analytical methods for environmental applications;
b) Multi-catalytic approaches towards molecular complexity;
c) Porous functional materials for the activation of small molecules;
d) Development of analytical methodologies for the characterization of environmental, food and biological matrices;
e) Development of new catalytic methods to access high value aced products starting from biomass sources;
f) Bio-inspired materials and metal complexes for agrochemical and zootechnical applications;
g) Interaction of metal ions with biomolecules in neurodegenerative disorders (within the project PRIN2015 "Metal Ions, dopamine, and oxidative stress in Parkinson’s disease" PRIN2015T773WJ, CUP D96J16001220001).

h) Biosensing with PNA and aptamers

Training Objectives

The aim of the training program is to enable the PhD in Chemistry to acquire the necessary skills to propose and manage research projects in advanced fields of Analytical Chemistry, General and Inorganic Chemistry, Physical Chemistry, Industrial Chemistry and Organic Chemistry. The Doctorate in Chemistry requires that each PhD student work within one of the active research groups at the of Chemistry Units of the of the Department of Chemistry, Life Sciences and Environmental Sustainability (SCVSA), and follow a specific training course in the frame of the chosen sector, through the participation in research activities at qualified centers both in Italy and abroad, at schools and national and international conferences, and by publishing the scientific results achieved in journals with international relevance. Interdisciplinary training activities are also planned to develop the PhD students’ ability to expose, discuss and disseminate the subjects covered by their work both in academic and industrial contexts and in general in the entire society.

Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.
# POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserved to holders of scholarship funded by foreign States</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

## Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Scholarship Ministerial funds</td>
<td>see topics at points a) – f) above</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>see topics at points a) – f) above</td>
</tr>
<tr>
<td>2</td>
<td>Funded by Department of Chemistry, Life Sciences and Environmental Sustainability</td>
<td>see topics at points a) – f) above</td>
</tr>
<tr>
<td>1</td>
<td>Funded by Department of Chemistry, Life Sciences and Environmental Sustainability (co-financing the project PRIN2015T778JW, CUP D96J16001220001)</td>
<td>topic g): &quot;Interaction of metal ions with biomolecules in neurodegenerative disorders&quot;</td>
</tr>
</tbody>
</table>

## Position reserved to holders of scholarship funded by foreign States

<table>
<thead>
<tr>
<th>N°</th>
<th>University or Foreign State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Reserved to holders of fellowship of Austrian Institute of Technology for the topic &quot;Biosensing with PNA and aptamers&quot;</strong></td>
</tr>
</tbody>
</table>

## ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 40 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 80 points

Minimum score for ELIGIBILITY: 70/120

## ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign States

**Assessment of QUALIFICATIONS:** up to 120 points

Minimum score for ELIGIBILITY: 70/120

### Foreign Language

Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH.**

The evaluation of the knowledge of this language will be oral and will be evaluated at the level of discussion of research topics and / or understanding of scientific texts.

### Possibility of videoconference for candidates residing or temporarily abroad

(the relevant request shall be submitted using the form attached to the competitive examination announcement)

THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

## LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

- **ANNEX A** (art. 5 of the Call for Applications)  
- Scanned Copy of a valid identification document with photo  
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications): including the academic career as well as postgraduate experiences, with relative certifications and accompanied by candidates who still have to obtain the Master's degree, by the substitutive declaration of the certification of the exams taken and the relative marks  
- **Abstract of the second cycle master's degree thesis.** Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- Certificates and academic transcript of records for both the Bachelor' and the Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- Statement of Research Interest: Short text – maximum 2 pages – in Italian or in English, aimed at:
  1) explaining the candidate’s reasons to enrol in the PhD; 2) research interests, with particular reference to the topics of interest for the specific themes proposed; 3) skills possessed that can contribute to a research project in the field of Chemical Sciences.

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)

- Scientific Publications: Articles on scientific journals with referees, communications presented at conferences or symposia, book chapters etc.

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUALIFICATION</td>
<td>EVALUATION CRITERIA</td>
</tr>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Relevance of the academic career as well as postgraduate experiences and other research activities in the chemical field</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the Master’s Degree thesis with the doctoral programme research topics</td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td>Motivation and competence proved in the text presented</td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Impact and relevance of the publications presented relevant to the Chemical Sciences</td>
</tr>
</tbody>
</table>

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT
Position reserved to holders of fellowship of Austrian Institute of Technology

- Curriculum Vitae et studiorum
  - 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.
  - The candidate must attach the certificate confirming the award of the scholarship or equivalent contract by the Austrian Institute of Technology and the eventual judgment expressed at the time of attribution.
  - Up to 50 points

- Graduation thesis
  - Abstract of the dissertation work (even if not yet discussed and in this case countersigned by the thesis supervisor).
  - Consistency of the Master’s Degree thesis with the doctoral programme research topics.
  - Up to 30 points

- Statement of Research Interest
  - Motivation and competence proved in the text presented
  - Up to 30 points
<table>
<thead>
<tr>
<th>Scientific Publications</th>
<th>Impact and relevance of the publications presented relevant to the Chemical Sciences</th>
<th>Up to 10 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL EXAMINATION</td>
<td><strong>EVALUATION CRITERIA</strong></td>
<td><strong>POINTS</strong></td>
</tr>
</tbody>
</table>
| 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 his scientific preparation and of his design skills. | o knowledge of the subject and preparation of the candidate for the proposed research activities.  
  o knowledge of English is assessed at the level of discussion of topics of research and understanding of scientific texts. | Up to 80 points |
| SCHEDULE OF THE ADMISSION EXAMS | **ORAL EXAM DATE:** 13 September 2018  
**TIME:** 02:30pm  
**PLACE:** ROOM A - Chemistry Building  
Department of Chemistry, Life Sciences and Environmental Sustainability  
Parco Area delle Scienze, 17/A - 43124 PARMA - ITALY | |
| OTHER INFORMATIONS      | For foreign candidates, the admission examinations may be held in English at the candidate’s choice. | |
# FOOD SCIENCE

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>
| Coordinator    | Prof. Furio BRIGHENTI  
Food and Drug Department  
email: furio.brighenti@unipr.it |
| Duration       | 3 years |
| Starting date of the PdD programme | 01/11/2018 |

### Research Topics

- Bioactive compounds from lactic acid bacteria: beneficial effects of fermented foods
- Lactic acid fermentation as a strategy to produce high-value compounds from plant matrices
- Investigating biomarkers of polyphenol intake: a metabolomics approach
- In silico methods for discovering endocrine disruptors in food
- Antibiotic resistance in Pig-based value chains
- A 3D Databank for the control of food-contact materials using nuclear receptors (ER and AR) as biological tumour markers
- Enhancing the value of food by-products through insects farming: extraction, characterization, properties and potential applications of lipids, proteins and chitin
- Food habits, diet quality and body composition: innovative approaches

### Training Objectives

Gaining high theoretical and experimental competence to answer innovation needs in the field of food sciences, with particular focus on mastering interdisciplinary topics (food chemistry, food microbiology, food technologies, human nutrition and food safety).

### Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

### POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserved to employees of companies having a “Industrial Doctorate” arrangement</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>
Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Scholarship Ministerial funds</td>
<td>- Food microbiology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Food microbiology &amp; Food Chemistry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Human Nutrition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Chemistry</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>- Animal Food Inspection</td>
</tr>
</tbody>
</table>

Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
</table>
| 1    | Funded by EMILIA ROMAGNA REGION                     | - BIG DATA: "A 3D Databank for the control of food-contact materials using nuclear receptors (ER and AR) as biological tumour markers"
| 1    | Funded by EMILIA ROMAGNA REGION                     | - ORGANIC & FOOD CHEMISTRY: "Enhancing the value of food by-products through insect farming: extraction, characterization, properties and potential applications of lipids, proteins and chitin"

Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)

<table>
<thead>
<tr>
<th>N°</th>
<th>Company/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to employees of Azienda USL – IRCCS di Reggio Emilia</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 30 points
ORALE EXAM: up to 90 points
Minimum score for ELIGIBILITY: 70/120

Foreign Language

Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.
The evaluation of the knowledge of this language will be oral and will consist in reading and translating and commentary of a scientific text.

Possibility of videoconference for candidates residing or temporarily abroad

| NO |

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

Mandatory documents to be attached to the on-line application

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
Abstract of the second cycle master's degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)

- Certificates and academic transcript of records for both the Bachelor’ and the Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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 English)

- Statement of Research Interest: Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD and at describing the specific research interests;
- Scientific Publications: Articles on national and international journals, papers presented at conferences or symposia, book chapters, abstracts of papers or posters presented at conventions or international meetings;
- Reference Letters: 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;
- Academic qualifications: other Master’s and/or specialization degree in subjects consistent with the research topics of this PhD programme
- Mobility experience abroad (e.g. Erasmus or similar);
- Any other document certifying the applicant’s training and abilities (grants, awards, etc.)

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Including academic career and postgraduate experience (example grants, awards, mobility experience abroad, specialization degree) 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</td>
<td>Up to 8 points</td>
</tr>
<tr>
<td>Graduation mark</td>
<td>Score related to the final mark:</td>
<td>Up to 4 points</td>
</tr>
<tr>
<td></td>
<td>- 110 with honours (magna cum laude): 4 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 110: 3 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 105 to 109: 2 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 99 to 104: 1 point;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Under 99: 0 points</td>
<td></td>
</tr>
<tr>
<td>Average of the exam marks (if the candidate will attain the degree no later than 31 October 2018)</td>
<td>Score related to the average of the exam marks:</td>
<td>Up to 4 points</td>
</tr>
<tr>
<td></td>
<td>- 30/30: 4 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 28/30 to 29.9/30: 3 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 26/30 to 27.9/30: 2 points;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- From 24/30 to 25.9/30: 1 point;</td>
<td></td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the thesis subject with the training objectives of the PhD program</td>
<td>Up to 4 points</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td>Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD and at describing the specific research interests</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Scientific Publications</td>
<td>Articles on national and international journals, papers presented at conferences or symposia, book chapters, abstracts of papers or posters presented at conventions or international meetings</td>
<td>Up to 7 points</td>
</tr>
<tr>
<td>Reference Letters</td>
<td>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</td>
<td>Up to 2 points</td>
</tr>
</tbody>
</table>

**ORAL EXAMINATION**

**EVALUATION CRITERIA**

- **POINTS**
  - knowledge of the written and oral foreign language: points 30
  - ability to argue on the interpretation of the scientific impact of the research described in the text: points 20
  - critical capacity in identifying the strengths and weaknesses of the research described in the text: points 20
  - ability to identify future research prospects opened by the research described in the text: points 20
  - Up to 90 points

**SCHEDULE OF THE ADMISSION EXAMS**

- **ORAL EXAM DATE:** 17 September 2018
- **TIME:** 10:00am
- **PLACE:** ROOM A – Didactic Center of Food and Drug Department
  (Padiglione 19 Food Project of the University)
  Parco Area delle Scienze, 47/A – 43124 PARMA - ITALY

**OTHER INFORMATIONS**

For foreign candidates it is possible to carry out the admission examination exclusively in English. For Italian candidates it will be possible to take the admission examination in Italian or in English at the candidate’s choice.
DRUGS, BIOMOLECULES AND HEALTH PRODUCTS

Cycle | XXXIV
--- | ---
Coordinator | Prof. Marco MOR  
Food and Drug Department  
email: marco.mor@unipr.it
Duration | 3 years
Starting date of the PdD programme | 01/11/2018

Research Topics
- Biochemistry and Molecular Biology
- Biopharmaceutics – Pharmacokinetics
- Experimental Pharmacology and Toxicology
- Design and Synthesis of Bioactive Compounds

Training Objectives
The PhD programme "Drugs, Biomolecules and Health Products" 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 biomolecules. 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.

Admission requirements
Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>6</td>
</tr>
</tbody>
</table>

Positions with University Scholarship

<table>
<thead>
<tr>
<th>Nº</th>
<th>Funding entity</th>
<th>Research Topic</th>
</tr>
</thead>
</table>
| 4 | Scholarship Ministerial funds | • n. 1 Biochemistry and Molecular Biology  
• n. 1 Biopharmaceutics – Pharmacokinetics  
• n. 1 Experimental Pharmacology and Toxicology  
• n. 1 Design and Synthesis of Bioactive |
| 1 | Scholarship co-funded by Fondazione Cariparma | • Biopharmaceutics - Pharmacokinetics |
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by Food and Drug Department</td>
<td>• Functional characterization of serum lipoprotein pro- and antiatherogenic activities</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 50 points
(a minimum score of 30 points shall be required to be admitted to the Oral Exam)

ORAL EXAM: up to 70 points
Minimum score for ELIGIBILITY: 70/120

Language the fluency of which shall be assessed during the Oral Exam:
**ENGLISH.**
The evaluation of the knowledge of this language will be oral and will consist in translating of a scientific text.

Possibility of videoconference for candidates residing or temporarily abroad **NO**

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

Mandatory documents to be attached to the on-line application

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle master's degree thesis for the Graduates
- Draft of the thesis approved and countersigned by their supervisor (10,000 characters including spaces) for the Undergraduates
- Certificates and academic transcript of records for both the Bachelor' and the Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- **Research Project:** The research project shall consist of a maximum of 2 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, execution of the research, expected results; 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;
Scientific Publications: Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings.

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Including academic career, 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, and postgraduate experiences, including any awards.</td>
<td>Up to 20 points</td>
</tr>
<tr>
<td>Graduation thesis Or Draft of the thesis</td>
<td>Consistency of the Master’s Degree thesis with the doctoral programme research topics (briefly describe the topics in the curriculum)</td>
<td>Up to 10 points</td>
</tr>
</tbody>
</table>
| Research Project | Points relating to the research project shall be allocated on the basis of the following criteria:  
  o Scientific value and ground-breaking nature of the proposal: 5 points  
  o description and structure of the proposal: 5 points  
  o consistency with the themes of the doctorate: doctorate proposal feasibility: 5 points | Up to 15 points |
| Scientific Publications | Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings | Up to 5 points |

**ORAL EXAMINATION**

The ORAL EXAM will focus on an interview aimed at ascertaining the preparation of the candidates with particular regard to the research topics of reference of the present PhD course.

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| o knowledge of foreign languages: 10 points  
  o research project presentation: 30 points  
  o general knowledge of issues connected to the PhD course: 30 points | Up to 70 points |

**SCHEDULE OF THE ADMISSION EXAMS**

**ORAL EXAM**

**ORAL EXAM DATE:** 17 September 2018  
**TIME:** 09:30am  
**PLACE:** Food and Drug Department  
Parco Area delle Scienze, 27/A – 43124 PARMA - ITALY

**OTHER INFORMATIONS**

For foreign candidates, the admission examinations may be held in English at the candidate’s choice.
EARTH SCIENCES

Cycle | XXXIV
--- | ---
Coordinator | Prof. Fulvio CELICO
 | Department of Chemistry, Life Sciences and Environmental Sustainability
 | email: fulvio.celico@unipr.it

Duration | 3 years
Starting date of the PdD programme | 01/11/2018

Research Topics

- Alterations of the hydrological cycle in agricultural irrigated areas and their impact on ground- and river-water quality: the case of the Po watershed
- Bioremediation of contaminated sites: potential of soil invertebrates to accelerate removal of contaminants from soil and aquifers.
- The geomorphological evolution of large complex landslides as response to the changes in the physical and cinematic behaviour of the displaced mass.
- Development of a procedure to transpose time-lapse electrical and electro-magnetic properties of soils onto hydraulic and geotechnical parameters.
- Sin- to post-rift tectonic evolution of Rio do Peixe basin, Brazil
- Crustal recycling processes in the convective mantle: evidence from natural samples and implications for the sources of oceanic basalts

Training Objectives

The main goal of the PhD course in Earth Sciences is the scientific and professional growth in different geological disciplines, taking into consideration possible interdisciplinary approaches.

Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>5</td>
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</tbody>
</table>
### Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>

**Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)**

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by Department of Chemistry, Life Sciences and Environmental Sustainability</td>
<td>- Alterations of the hydrological cycle in agricultural irrigated areas and their impact on ground- and river-water quality: the case of the Po watershed</td>
</tr>
<tr>
<td>1</td>
<td>Funded by Department of Chemistry, Life Sciences and Environmental Sustainability</td>
<td>- Bioremediation of contaminated sites: potential of soil invertebrates to accelerate removal of contaminants from soil and aquifers</td>
</tr>
</tbody>
</table>

### ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 40 points  
(a minimum score of 20 points shall be required to be admitted to the Oral Exam)  
**ORAL EXAM:** up to 80 points  
**Minimum score for ELIGIBILITY:** 70/120

**Foreign Language**

- Language the fluency of which shall be assessed during the Oral Exam:  
  **ENGLISH**  
- The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.

Possibility of videoconference for candidates residing or temporarily abroad  
(the relevant request shall be submitted using the form attached to the competitive examination announcement)

**YES**

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
- ANNEX A (art. 5 of the Call for Applications)  
- Scanned Copy of a valid identification document with photo  
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)  
- Abstract of the second cycle master's degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10.000 characters including spaces)  
- Certificates and academic transcript of records for both the Bachelor' and the Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
- **Research Project:** 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, experimental procedure, expected results; *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;
- **Statement of Research Interest:** Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD and at describing the specific research interests;
- **Scientific Publications:**
  - Articles on national and international journals, papers presented at conferences or symposia, book chapters
  - Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings
- **Reference Letters:** 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
- **Academic qualifications:** other Master's and/or specialization degree in subjects consistent with the research topics of this PhD programme
- **Mobility experience abroad** (e.g. Erasmus or similar);
- **Any other document** certifying the candidate’s training and abilities (grants, awards, etc.)

## EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum Vitae et studiorum</strong></td>
<td>Including academic career and postgraduate experience, including possible scientific Publicationss, Master’s and/or specialization degree, mobility experience abroad</td>
<td>Up to 15 points</td>
</tr>
<tr>
<td><strong>Graduation mark</strong></td>
<td>Score related to the final mark: - 110 and 10 with honours (magna cum laude): 10 points; - From 107 to 109: 9 points - From 105 to 106: 7 points - From 100 to 104: 5 points - From 95 to 99: 2 points - Under 95: 1 point</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td><strong>Average of the exam marks</strong> (if the candidate will attain the degree no later than 31 October 2018)</td>
<td>Score related to the average of the exam marks: - From 28 to 30: 10 points - From 27 to 27.99: 9 points - From 26.5 to 26.99: 7 points - From 26 to 26.49: 5 points - From 25 to 25.99: 2 points - Under 25: 1 point</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Consistency of the Master’s Degree thesis with the doctoral programme research topics</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| Research Project  | Points relating to the research project shall be allocated on the basis of the following criteria:  
|                   | o Scientific value and ground-breaking nature of the proposal: 1 point  
|                   | o description and structure of the proposal: 1 point  
|                   | o proposal feasibility: 1 point | Up to 3 points |
| Reference Letters | 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 | Up to 2 points |

<table>
<thead>
<tr>
<th>ORAL EXAMINATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| 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 | o knowledge of foreign languages: 5 points  
|                                       | o research project presentation: 50 points  
|                                       | o general knowledge of issues connected to the PhD course: 25 points              | Up to 80 points |

**SCHEDULE OF THE ADMISSION EXAMS**

| ORAL EXAM | ORAL EXAM DATE: 19 September 2018  
|           | TIME: 09:00am  
|           | PLACE: Plexus of Earth Sciences  
|           | Parco Area delle Scienze, 157/A – 43124 PARMA - ITALY |

| OTHER INFORMATIONS | For foreign candidates, the admission examinations may be held in English at the candidate’s choice. |
PHILOLOGICAL-LITERARY, HISTORICAL-PHILOSOPHICAL AND ARTISTIC STUDIES

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>
| Coordinator   | Prof.ssa Beatrice CENTI  
Department of Humanities, Social Sciences and Cultural Industries  
email: beatrice.centi@unipr.it |
| Duration      | 3 years |
| Starting date of the PdD programme | 01/11/2018 |

Research Topics

- Greek and Latin Philology
- Philosophy
- Italian Studies and Romance Philology
- Foreign Languages and Literatures
- History
- History of Art and Spectacle

Training Objectives

The doctoral course aims to provide both a sound cultural formation and the methodological skills that are necessary for carrying out research in a specific thematic area. Doctoral students will develop skills to pursue an original research project and to elaborate a highly qualified critical study in the form of a final doctoral dissertation.

The thematic area of Greek and Latin Philology aims to deepen the linguistic, literary and philological skills of the doctoral students and particularly to train them in academic research towards the development of a scientific study, particularly in the form of a critical edition, commentary or essay concerning the texts of ancient literatures (Greek and Latin).

The thematic area of Philosophy aims to deepen both logical and critical skills of the doctoral students and their knowledge of the history of philosophy. Doctoral students will be qualified to carry out research projects requiring conceptual analysis, historical and philological competence, and ability in developing argumentations in the fields of theoretical philosophy, aesthetics, philosophy of language, and in the fields of the history of medieval, modern and contemporary philosophy.

The thematic area of Italian Studies and Romance Philology aims to develop researchers who are competent in linguistics and philology, as well as in the theory of literature. They will be able to edit critical and commented editions of the texts of Romance and Italian literature, and to carry out innovative historical-literary and thematic analyses in various chronological areas.

The thematic area of Foreign Languages and Literatures focuses on the study of European foreign languages and literatures (English, French, German, Spanish, Russian) and, where appropriate, of their postcolonial developments. Its aim is to promote original and innovative research projects based on the most recent theoretical and methodological approaches in the disciplines of linguistics (translation, discourse analysis, the study of corpora, lexicography) and the historical and critical analysis of literature and culture from the early modern age to the contemporary period.
The thematic area of History aims at training brilliant and young Phd-students in the field of Historical Sciences, providing them with appropriate methodological skills and critical insights into the various branches of historical research. Doctoral students will be tutored in order to develop original and innovative research projects from Classical Antiquity to Contemporary Age and to face with fresh approaches different kinds of documents and theoretical problems dealing with politics, religious studies, history of ideas, social and economic analysis.

In the thematic area of the History of Art and History of Spectacle doctoral students are required to develop critical tools to be able to deal with research in the history of medieval art, or modern art or contemporary art, art critic and museology, but also in the fields of theatre history and the history of cinema. Doctoral candidates will acquire skills in reconstructing critical debates, reading different available sources and especially applying the tools for a philological reading of the image.

**Admission requirements**

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

<table>
<thead>
<tr>
<th>POSITIONs PUT OUT TO COMPETITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
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<tr>
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**Positions with University Scholarship**

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
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<tbody>
<tr>
<td>4</td>
<td>Scholarship Ministerial funds</td>
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</tr>
<tr>
<td>1</td>
<td>Scholarship University funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>---</td>
</tr>
</tbody>
</table>

**Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)**

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>Design Archives: enhancing cultural memory through creative proposals and new narratives (Research topic: History of Art and Spectacle)</td>
</tr>
</tbody>
</table>

**ADMISSION PROCEDURES**

**Assessment of QUALIFICATIONS:** up to 80 points
(a minimum score of 30 points shall be required to be admitted to the Oral Exam)

**ORAL EXAM:** up to 40 points
Minimum score for ELIGIBILITY: 70/120

Foreign Language

Language the fluency of which shall be assessed during the Oral Exam: FRENCH, ENGLISH, GERMAN (at the candidate’s choice).

The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a short passage.

Possibility of videoconference for candidates residing or temporarily abroad (the relevant request shall be submitted using the form attached to the competitive examination announcement)

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

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract and PDF of the second cycle master’s degree thesis (10,000 characters including spaces). Undergraduate applicants may submit the abstract and the draft of the thesis approved by their supervisor through a short statement attached to the draft
- Certificates and academic transcript of records for both the Bachelor’ and the Master’ degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- Research Project: The research project shall consist of a maximum of 10 pages, including reference bibliography, written in Italian or in English; 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;
- Scientific Publications: Monographs, articles in scientific journals, chapters of books, convention proceedings;
- Academic qualifications: other Master’s and/or specialization degree in subjects consistent with the research topics of this PhD programme
- Experience abroad for post-graduate research activities;
- Any other document certifying the applicant’s training and abilities (post lauream scholarship, awards, etc.)

EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| Graduation mark          | Score related to the final mark:
                           - 110 with honours (magna cum laude)                                               | 1 point|
| **Average of the exam marks (if the candidate will attain the degree no later than 31 October 2018)** | Score related to the average of the exam marks: - 30/30 | 1 point |
| **Graduation thesis** | Consistency of the Master’s Degree thesis with the doctoral programme research topics, methodological rigor, knowledge of critical literature | Up to 25 points |
| **Research Project** | Points relating to the research project (originality, articulation, feasibility of the proposal) | Up to 25 points |
| **Scientific Publications** | Monographs, articles in scientific journals, chapters of books, convention proceedings | Up to 15 points |
| **Other qualifications** | Post lauream scholarship, experience abroad, award, etc. | Up to 14 points |
| **ORAL EXAMINATION** | **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 regarding the chosen research topic; it also include the verification of the knowledge of the chosen foreign language | o knowledge and methodology necessary for the realization of the project: max 35 points | Up to 40 points |
| | o knowledge of chosen foreign language: max 5 points | |

**SCHEDULE OF THE ADMISSION EXAMS**

**ORAL EXAM**
- **ORAL EXAM DATE:** 20 September 2018
- **TIME:** 09:00am
- **PLACE:** ROOM "EX PRESIDENZA"
  Department of Humanities, Social Sciences and Cultural Industries
  Via D’Azeglio, 85 – 43125 PARMA - ITALY

**OTHER INFORMATIONS**
For foreign candidates, the admission examinations may be held in English.
JURIDICAL SCIENCES

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>
| Coordinator    | Prof. Alberto CADOPPI  
Department of Law, Politics and International Studies  
email: alberto.cadoppi@unipr.it |
| Duration       | 3 years |
| Starting date of the PdD programme | 01/11/2018 |
| Partner Institution | University of Modena e Reggio Emilia |

Research Topics

The doctoral course has a single curriculum on juridical sciences, characterised by multidisciplinary and international research.

Training Objectives

To provide doctoral candidates with the abilities they need to perform high level juridical research. The course is finalized to train high level legal practitioners as well.

Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- "Laurea Magistrale" LMG-01 Law, 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;
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
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<tbody>
<tr>
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Positions with University Scholarship

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<tbody>
<tr>
<td>2</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>Scholarship funded by University of Modena e Reggio Emilia</td>
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</tr>
<tr>
<td>1</td>
<td>Scholarship funded by University of Modena e Reggio Emilia entitled to the memory of &quot;GIULIO REGENI&quot;</td>
<td>Labor Law</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
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</tbody>
</table>
# ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 60 points  
(a minimum score of 30 points shall be required to be admitted to the Oral Exam)  
**ORAL EXAM:** up to 60 points  
**Minimum score for ELIGIBILITY:** 70/120

### Foreign Language

Language the fluency of which shall be assessed during the Oral Exam:  
**ENGLISH, FRENCH, GERMAN, SPANISH.**  
The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.

### Possibility of videoconference for candidates residing or temporarily abroad

(If the relevant request shall be submitted using the form attached to the competitive examination announcement)

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**

- **ANNEX A** (art. 5 of the Call for Applications)  
- Scanned Copy of a **valid identification document** with photo  
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications)  
- **Abstract of the second cycle master's degree thesis.** Undergraduate applicants may submit the draft of the thesis approved by their supervisor (maximum 10,000 characters including spaces)  
- **Certificates and academic transcript of records for both the Bachelor' and the Master' degrees** containing the following details for each degree held: (art. 4 of the Call for Applications):  
  - University that granted the degree  
  - Type of degree (first cycle/second cycle/single cycle)  
  - Name of the degree programme  
  - 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)  
- **Research Project**  
- **Scientific Publications**  
- **Any other document certifying the applicant's training and abilities**

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**EVALUATION CRITERIA**

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<tr>
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</tr>
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<tbody>
<tr>
<td><strong>Curriculum Vitae et studiorum</strong></td>
<td>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</td>
<td>Up to 15 points</td>
</tr>
<tr>
<td><strong>Graduation thesis</strong></td>
<td>The abstract, with a maximum of 10,000 characters, spaces and notes included, excluding bibliography, must be broken down into the following points: the thesis's motivation, the survey method, the results obtained.</td>
<td>Up to 15 points</td>
</tr>
<tr>
<td>Research Project</td>
<td>Up to 20 points</td>
<td></td>
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<td>------------------</td>
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</tr>
<tr>
<td>The Research Project, with a maximum of 10,000 characters, spaces and notes included, excluding bibliography, written in Italian or English, will have to focus on one of the disciplinary sectors (SSD) that is the subject of the oral examination, to be indicated in the title of the project. The research project must have as its subject an original research topic and be structured as follows: introduction of the problem in the scientific context, relevance of the problem, expected results, arguments. It does not represent a constraint with respect to the following choice of the doctoral thesis.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Scientific Publications</th>
<th>Up to 5 points</th>
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</thead>
<tbody>
<tr>
<td>Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.</td>
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<table>
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<tr>
<th>Other qualifications</th>
<th>Up to 5 points</th>
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</thead>
<tbody>
<tr>
<td>Awarding of Scholarships, prizes, trainings, etc</td>
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<table>
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<tr>
<th>ORAL EXAMINATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
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</thead>
<tbody>
<tr>
<td>The ORAL EXAM includes the presentation of the research project</td>
<td></td>
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</tr>
<tr>
<td>The exam is aimed at verifying the candidate's scientific research aptitude and his general preparation, related to one of the following disciplinary scientific fields, already the object of the research project:</td>
<td></td>
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</tr>
<tr>
<td>- Administrative Law (SSD IUS/10)</td>
<td></td>
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<tr>
<td>- Civil Law (SSD IUS/01)</td>
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<tr>
<td>- Constitutional Law (SSD IUS/08)</td>
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<tr>
<td>- Labor Law (SSD IUS/07)</td>
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<tr>
<td>- Criminal Law (SSD IUS/17)</td>
<td></td>
<td></td>
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<tr>
<td>- Institutions of Roman Law (SSD IUS/18)</td>
<td></td>
<td></td>
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<tr>
<td>Up to 60 points</td>
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<table>
<thead>
<tr>
<th>SCHEDULE OF THE ADMISSION EXAMS</th>
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</thead>
<tbody>
<tr>
<td>ORAL EXAM DATE: 20 September 2018</td>
</tr>
<tr>
<td>TIME: 10:00am</td>
</tr>
<tr>
<td>PLACE: Department of Law, Politics and International Studies</td>
</tr>
<tr>
<td>Via Università, 12 – 43121 Parma - ITALY</td>
</tr>
<tr>
<td>Cycle</td>
</tr>
<tr>
<td>-------</td>
</tr>
</tbody>
</table>
| Coordinator | Prof. Carlo FERRARI  
Department of Medicine and Surgery  
email: carlo.ferrari@unipr.it |
| Duration | 3 years |
| Starting date of the PhD programme | 01/11/2018 |

**Research Topics**

1. Stem cells in diagnosis and treatment of neoplasms, chronic and degenerative disorders, cardiovascular diseases and bone, joint and muscle diseases;
2. Translational medicine in the immune dysregulation of respiratory, digestive, skin, infectious, endocrine, and kidney diseases and of vasculitides;
3. Plasticity, function and theranostics of genomic, transcriptomic, proteomic and metabolomic platforms in cells, tissues and organs, for prevention or in presence of neoplasms, infections, chronic, dysmetabolic and degenerative diseases, of ob-gyn and neonatal diseases, or for study of the response to environmental and/or lifestyle factors and to pharmacologic agents;
4. Development and theranostics of technologically advanced imaging and phenotyping in prevention or in presence of neoplasms, infections, chronic, dysmetabolic and degenerative diseases, of ob-gyn and neonatal diseases, or for study of the response to environmental and/or lifestyle factors and to pharmacologic agents;
5. Development and application of technologically advanced devices and/or biological tools, to measure and/or to support and/or to replace the function of cells, tissues or organs in medical and/or surgical diseases;
6. Advanced and innovative strategies of functional recovery and rehabilitation in prevention or in presence of neoplasms, infections, chronic, dysmetabolic and degenerative diseases, of ob-gyn and neonatal diseases, or for study of the response to environmental and/or lifestyle factors and to pharmacologic agents;
7. Roles of governance and organization in health care organizations and systems in the prevention and care of socially and economically highly relevant disorders, including, but not limited to, environmental and professional diseases;
8. Role of microbiota and microbiome in translational medicine and surgery;
9. “Big data”: their extraction and their role in translational medicine and surgery;
10. Role of advanced technologies, including robotics, in translational surgery.

**Training Objectives**

The PhD Program in Translational Medical and Surgical Sciences is a typical multidisciplinary PhD program, in which the common denominator among most diverse research pathways is the critical transition from bench to bedside, i.e. clinical application in real patients. This close link between bench research and clinical research will expedite the transferal of experimental discoveries and methods to clinical practice. The close contact with clinical activity will allow the PhD students to face also real problems in the clinical arena, ranging from diagnosis to treatment and from prevention to rehabilitation, all of which are deeply involved in human disease and in patient care.  
The fast, two-way exchange between clinics and lab will bring back to the lab the results of clinical and epidemiological observations, closely linking experimental research to questions and goals stemming directly from real world data and unmet needs of the patient.  
The final goal of the PhD Program in Translational Medical and Surgical Sciences, therefore, is to provide a highly qualifying PhD educational pathway, offering the students top notch opportunities, know-how and technological tools and enabling them to carry out cutting edge translational research in national or foreign, public or private Institutions, including, but not limited to, Universities, Research Centers and PharmaMed Industries.
Admission requirements

Applicants who have one of the following degrees may participate in the selection:
- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master’s degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

<table>
<thead>
<tr>
<th>POSITIONS PUT OUT TO COMPETITION</th>
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<tbody>
<tr>
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<tr>
<td>Without Scholarship</td>
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<td><strong>TOTAL</strong></td>
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### Positions with University Scholarship

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<td>Scholarship Ministerial funds</td>
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<td>Scholarship University funds</td>
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<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
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</table>

Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Written Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
</table>
| 2  | Funded by the Department of Medicine and Surgery | - Optimization of endoscopic control of chronic inflammatory bowel diseases after biological therapy induction and in long-term follow-up of patients with intestinal mucosa dysplasia
- Technological and experimental applications in plastic surgery: use of mesenchymal cells derived from adipose tissue in plastic and reconstructive surgery |
| 1  | Funded by the Department of Medicine and Surgery with founds from the "Feliciani-Ferretti" legacy | reserved for graduates of the Faculty of Medicine and Surgery and Faculty of Pharmacy |
| 1  | Associazione Italiana contro le Leucemie, Linfomi e Mieloma onlus AIL – sezione di Parma | - Tolerance induction in haploidentical transplant                                  |

### ADMISSION PROCEDURES

- **Assessment of QUALIFICATIONS**: up to 30 points
- **WRITTEN EXAM**: up to 60 points
- **ORAL EXAM**: up to 30 points
- **Minimum score for ELIGIBILITY**: 70/120
Foreign Language

Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH**.
The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.

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

Mandatory documents to be attached to the on-line application

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a **valid identification document** with photo
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- **Abstract of the second cycle master's degree thesis**. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- **Certificates and academic transcript of records for both the Bachelor' and the Master' degrees** containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- **Research Project**: 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; 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;
- **Scientific Publications**: Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.;
- **Reference Letters**: 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;
- **Academic qualifications**: other Master's and/or specialization degree in subjects consistent with the research topics of this PhD programme
- **Mobility experience abroad** (e.g. Erasmus or similar);
- **Any other document** certifying the applicant's training and abilities (grants, awards, etc.).

**EVALUATION CRITERIA**

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
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</tr>
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<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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</td>
<td>Up to 7 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Abstract della tesi di laurea</td>
<td>Up to 5 points</td>
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<td>----------------</td>
</tr>
<tr>
<td>Research Project</td>
<td>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</td>
<td>Up to 8 points</td>
</tr>
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<tr>
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<td>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</td>
<td>Up to 3 points</td>
</tr>
<tr>
<td>Other qualifications</td>
<td>Awarding of Scholarships, prizes, trainings, etc.</td>
<td>Up to 2 points</td>
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</table>

<table>
<thead>
<tr>
<th>WRITTEN EXAMINATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| The WRITTEN EXAM will focus on a research project compatible with this PhD Program; it must include an English abstract. | o good argument about the project: up to 10 points  
 o scientific relevance: up to 15 points  
 o Experimental design: up to 15 points  
 o Translationality: up to 10 points  
 o Feasibility: up to 10 points | Up to 60 points |

<table>
<thead>
<tr>
<th>ORAL EXAMINATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| The ORAL EXAM will focus on the Research Project presented to the written exam. | o knowledge of the foreign language: up to 6 points  
 o good argument about the project: up to 6 points  
 o Discussion of the critical points of the project: up to 6 points  
 o Framing of the project in the field of knowledge of the sector: up to 6 points  
 o Ability to mitigate risks deriving from unexpected results: up to 6 points | Up to 30 points |

<table>
<thead>
<tr>
<th>SCHEDULE OF THE ADMISSION EXAMS</th>
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</tr>
</thead>
</table>
| WRITTEN EXAM | WRITTEN EXAM DATE: 18 September 2018  
 TIME: 09:00am  
 PLACE: Department of Medicine and Surgery  
 Building 26 – Internal Medicine CLASSROOM  
 Via A. Gramsci, 14 43126 PARMA - ITALY |
| ORAL EXAM | ORAL EXAM DATE: 18 September 2018  
 TIME: 04:00pm  
 PLACE: Department of Medicine and Surgery  
 Building 26 – Internal Medicine CLASSROOM  
 Via A. Gramsci, 14 43126 PARMA - ITALY |
# VETERINARY SCIENCES

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinator</td>
<td>Prof. Gaetano DONOFRIO</td>
</tr>
<tr>
<td></td>
<td>Department of Veterinary Sciences</td>
</tr>
<tr>
<td></td>
<td>email: <a href="mailto:gaetano.donofrio@unipr.it">gaetano.donofrio@unipr.it</a></td>
</tr>
<tr>
<td>Duration</td>
<td>3 years</td>
</tr>
<tr>
<td>Starting date of the PdD programme</td>
<td>01/11/2018</td>
</tr>
</tbody>
</table>

## Research Topics

- Pathological Sciences
- Clinical Sciences
- Basic Sciences
- Animal Production Sciences and Technologies
- Food inspection and Public Health

## Training Objectives

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.

## Admission requirements

Applicants who have one of the following degrees may participate in the selection:

- "Laurea Magistrale" LM-42 Veterinary Medicine
- "Laurea Magistrale" LM-9 Medical Biotechnology, Veterinary and Pharmaceutica
- "Laurea Magistrale" LM-89 Zootechnical Sciences and Animal Technologies

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, or equivalent academic degree achieved abroad.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2018.

## POSITIONS PUT OUT TO COMPETITION

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## Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma &quot;Carlo Gabbi&quot;</td>
<td>---</td>
</tr>
</tbody>
</table>
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by Department of Veterinary Sciences</td>
<td>• Development of a new TGF-beta mediated pulmonary fibrosis model</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 40 points
ORAL EXAM: up to 80 points
Minimum score for ELIGIBILITY: 70/120

Foreign Language
Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.
The evaluation of the knowledge of this language will be oral and will consist in translation and comprehension of a scientific text.

Possibility of videoconference for candidates residing or temporarily abroad (the relevant request shall be submitted using the form attached to the competitive examination announcement) NO

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

Mandatory documents to be attached to the on-line application

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle master's degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- Certificates and academic transcript of records for both the Bachelor' and the Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - 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)

- Research Project: 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; 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;
- **Statement of Research Interest**: Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD and at describing the specific research interests;
- **Scientific Publications**: Articles published in journals indexed in databases WoS and Scopus;
- **Reference Letters**: 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;
- Any other document certifying the applicant's training and abilities (grants, awards, etc.)

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Abstract of thesis</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Research Project</td>
<td>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</td>
<td>Up to 10 points</td>
</tr>
<tr>
<td>Statement of Research Interest</td>
<td>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</td>
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</tr>
<tr>
<td>Scientific Publications</td>
<td>Articles published in journals indexed in databases WoS and Scopus</td>
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<tr>
<td>Reference Letters</td>
<td>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</td>
<td>Up to 5 points</td>
</tr>
<tr>
<td>Other qualifications</td>
<td>Awarding of Scholarships, prizes, trainings, etc.</td>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>

**ORAL EXAMINATION**

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ORAL EXAM will consist of an interview on scientific or aptitude also based on topics of previously published research if any</td>
<td>Up to 80 points</td>
</tr>
</tbody>
</table>

**SCHEDULE OF THE ADMISSION EXAMS**

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>ORAL EXAM DATE: 19 September 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME: 10:00am</td>
<td></td>
</tr>
<tr>
<td>PLACE: Department of Veterinary Sciences</td>
<td>Via del Taglio, 10 – 43126 PARMA - ITALY</td>
</tr>
</tbody>
</table>

**OTHER INFORMATIONS**

For foreign candidates, the admission examinations may be held in English at the candidate's choice.
# INFORMATION TECHNOLOGIES

<table>
<thead>
<tr>
<th>Cycle</th>
<th>XXXIV</th>
</tr>
</thead>
</table>
| Coordinator | Prof. Marco LOCATELLI  
Department of Engineering and Architecture  
email: marco.locatelli@unipr.it |
| Duration    | 3 years |
| Starting date of the PdD programme | 01/11/2018 |

## Research Topics
- Electronics instrumentation and electrical drives
- Computer systems and automatic control
- Telecommunications and electromagnetic fields

## 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
Applicants who have one of the following degrees may participate in the selection:
- Laurea Specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master's degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31<sup>st</sup> 2018.

## POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>Positions with Scholarship</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Scholarship</td>
<td>2</td>
</tr>
<tr>
<td>Reserved to holders of scholarship funded by foreign States</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
</tr>
</tbody>
</table>

## Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Scholarship Ministerial funds</td>
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</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
<td>--</td>
</tr>
</tbody>
</table>

Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. 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.
<table>
<thead>
<tr>
<th>No.</th>
<th>Funding entity</th>
<th>Bound Research Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by the Department of Engineering and Architecture</td>
<td>• Theoretical and experimental development of statistical, predictive and machine learning-based modelling methods for predictive maintenance applications</td>
</tr>
<tr>
<td>1</td>
<td>Funded by Adidas AG</td>
<td>• Product image similarity for fashion industry through computer vision and machine learning techniques</td>
</tr>
<tr>
<td>1</td>
<td>Funded by Adidas AG</td>
<td>• Machine learning and pattern recognition for automatic text analysis in fashion industry</td>
</tr>
<tr>
<td>1</td>
<td>Funded by the Department of Engineering and Architecture</td>
<td>• Applications for vehicles Artificial Vision For Autonomous Driving</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>• Femtosecond laser-induced two-photon polymerization</td>
</tr>
<tr>
<td>1</td>
<td>Funded by EMILIA ROMAGNA REGION</td>
<td>• IoT-based Systems for Efficient Data Collection and Processing in Smart and Sustainable Agriculture (AgriIoT)</td>
</tr>
</tbody>
</table>

Position reserved to holders of scholarship funded by foreign States

<table>
<thead>
<tr>
<th>No.</th>
<th>University or Foreign State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reserved to holders scholarship from the country of origin (EGYPT)</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 70 points  
(a minimum score of 30 points shall be required to be admitted to the Oral Exam)

ORAL EXAM: up to 50 points  
Minimum score for ELIGIBILITY: 70/120

ADMISSION PROCEDURES for positions reserved to holders of scholarship funded by foreign States

Assessment of QUALIFICATIONS: up to 120 points  
Minimum score for ELIGIBILITY: 70/120

Foreign Language  
Language the fluency of which shall be assessed during the Oral Exam:  
ENGLISH.  
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).

Possibility of videoconference for candidates residing or temporarily abroad  
(the relevant request shall be submitted using the form attached to the competitive examination announcement and it is also necessary to indicate the Skype account in the curriculum vitae)  
YES

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

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle master's degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10,000 characters including spaces)
- Certificates and academic transcript of records for both the Bachelor' and the Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
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  - Name of the degree programme
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  - 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)

- Research Project: 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; 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;
- Scientific Publications: Articles on national and international journals, papers presented at conferences or symposia, book chapters etc;
- Reference Letters: Maximum 2 letters and must be sent directly by the signer to the address e-mail: marco.locatelli@unipr.it (The candidate, therefore, must not uploading them through the procedure of the competition online registration);
- Any other document certifying the applicant's training and abilities (grants, test GRE, awards, apprenticeships etc.).

EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>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. It will also be evaluated the congruence of the degree obtained with the PhD themes.</td>
<td>Up to 25 points</td>
</tr>
<tr>
<td>Graduation thesis</td>
<td>Abstract of the master's degree thesis (even if not yet discussed as long as countersigned by the supervisor). It will also be evaluated the consistency of the Master's Degree thesis with the doctoral programme research topics.</td>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>
Research Project
Max 3 pages, either in Italian or English. It must present an original research topic and be structured as follows:
- introduction of the problem within the scientific framework,
- relevance of the topic, expected results, motivations.
The candidates are strongly invited to browse the research topics of the Ph.D. program at the website phd.dii.unipr.it in order to prepare a research project compatible with them.

It does not represent a constraint with respect to the following choice of the doctoral thesis.

Scientific Publications
Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.

Reference Letters
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.
They must be sent directly by the signers to the address e-mail: marco.locatelli@unipr.it

Other qualifications
Grants, test GRE, awards, apprenticeships etc.

ORAL EXAMINATION
**EVALUATION CRITERIA**
- knowledge of foreign languages: 5 points
- research project presentation: 25 points
- general knowledge of issues connected to the PhD course: 20 points

**POINTS**
Up to 50 points

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**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT**
*Positions reserved to holders of scholarship funded by Foreign States (EGYPT)*

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Up to 45 points</td>
</tr>
<tr>
<td>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. It will also be evaluated the congruence of the degree obtained with the PhD themes.</td>
<td></td>
</tr>
</tbody>
</table>

| Graduation thesis                      | Up to 10 points |
| Abstract of the master's degree thesis (even if not yet discussed as long as countersigned by the supervisor). It will also be evaluated the consistency of the Master's Degree thesis with the doctora programme research topics. |
Max 3 pages, either in Italian or English. It must present an original research topic and be structured as follows: introduction of the problem within the scientific framework, relevance of the topic, expected results, motivations. The candidates are strongly invited to browse the research topics of the Ph.D. program at the web site phd.dii.unipr.it in order to prepare a research project compatible with them.

*It does not represent a constraint with respect to the following choice of the doctoral thesis*

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<tr>
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<td>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. They must be sent directly by the signer to the address e-mail: <a href="mailto:marco.locatelli@unipr.it">marco.locatelli@unipr.it</a></td>
<td>Up to 5 points</td>
</tr>
</tbody>
</table>

**SCHEDULE OF THE ADMISSION EXAMS**

**ORAL EXAM**

**ORAL EXAM DATE:** 13 September 2018  
(with possible extension to 14 September 2018)  
**TIME:** 09:30am  
**PLACE:** Meeting Room – Building 4 - Scientific Branch of Engineering  
Parco Area delle Scienze, 181/A – 43124 PARMA - ITALY

**OTHER INFORMATIONS**  
For foreign candidates, the admission examinations may be held in English at the candidate’s choice.