

PHD DEPARTMENT OFFICE

Rector's Decree

Classification: V/2

No of Annex(es): 0

# PHD IN "CHEMICAL AND PHARMACEUTICAL SCIENCES" CALL FOR APPLICATIONS TO THE XXXIII CYCLE

#### THE RECTOR

- Having regard to the Charter of the University of Siena;
- having regard to the University Regulations of the University of Siena issued by R. D. no 227 dated 18 February 2013 and subsequent amendments;
- having regard to Law no 210 dated 3 July 1998, in particular to art. 4;
- having regard to Law no 240 dated 30 December 2010 "Standards concerning the organisation of universities, academic staff and recruitment, as well as the delegation of powers to the Government to promote the quality and efficiency of the university system";
- having regard to the Decree by the Ministry of Education, University and Research no 45/2013 "Rules and regulations concerning the accreditation of PhD courses and seats and the criteria for the provision of PhD courses by accredited bodies;
- having regard to Ministerial Decree no 681/2014 and subsequent amendments, which provides for the ministerial accreditation of the PhD programs activated by the University of Siena for the XXX, XXXI and XXXII cycles, acting on the assent of the ANVUR;
- having regard to the University Regulations issued by R.D. no 1332/2016 dated 26.09.2016;
- having regard to the Rules and Regulations for determining and paying the fees and contributions due for enrolling in University of Siena courses for the academic year 2017/2018;
- having regard to the resolution by the Board of Directors dated 29 March 2017 concerning the activation of the
   XXXIII PhD cycle: Accreditation and allocation of scholarships;
- having regard to memorandum no 11677 dated 14 April 2017 of the Department for Higher Education and Research
  of the Ministry of Education, University and Research concerning the accreditation of the PhD courses of the XXXIII
  cycle;
- having regard to memorandum no 12311 dated 21 April 2017 of the Department for Higher Education and Research
  of the Ministry of Education, University and Research concerning the operational procedures for accreditation of the
  PhD courses of the XXXIII cycle;
- having regard to the favourable opinion of the Board of Evaluation for activating the PhD XXXIII cycle, expressed on
   6 June 2017;
- whereas, as stated in the MIUR memorandum no 12311 dated 21/04/2017 and in the ANVUR memorandum 44351 dated 04/05/2017 that previously accredited courses, should they have undergone no changes such as the change of coordinator or of more than 20% of the Board as a whole, will not be subjected to new accreditation for 2017/18;



- whereas the PhD in Chemical and Pharmaceutical sciences has undergone no significant changes and therefore the accreditation for the XXXIII, XXXIV and XXXV cycles shall be considered as renewed;
- having regard to the guidelines by the Coordinator of the PhD course in question concerning selection procedures,
   the type of call for applications, the maximum educational capacity, the categories of places to be awarded,

## **DECREES AS FOLLOWS**

1. The public tender for applications for admission to the PhD degree in **Chemical and Pharmaceutical Sciences** activated at the University of Siena for the XXXIII cycle, is now called.

| PHD COURSE IN  | CHEMICAL AND PHARMACEUTICAL SCIENCES                           |  |   |  |
|--|--|--|---|--|
| COORDINATOR  | Stefano Mangani  |  |   |  |
|  | stefano.mangani@unisi.it                                       |  |   |  |
| Department of  | Biotechnology, Chemistry and Pharmacy                          |  |   |  |
| Selection method   | Pre-selection + interview                                      |  |   |  |
| Total number of places   | 13 SEVERAL APPLICATIONS MAY BE SUBMITTED FOR THE SAME PHD CALL |  |   |  |
| of which:  |  |  |   |  |
| Places with scholarships funded by external bodies and co-funded by the University | N. 9   | Financial institution  | Research subject  |  |
|  | 1  | CNR ICCOM – University   | Design and synthesis of new photoactive molecules for the exploitation and conversion of solar energy                           |  |
|  | 1  | CNR ICCOM – University   | Synthesis, functionalisation and characterisation of bidimensional phosphorousbased materials                                   |  |
|  | 1  | CNR ICCOM – University   | Synthesis and characterisation of nanostructured materials for the realisation of permanent magnets with low-content rare earth |  |
|  | 1  | Dep. Biotechnology, Chemistry<br>and Pharmacy (Director of<br>Research, Prof Olivucci) -<br>University | Engineering of genetically encodable light-powered molecular motors   |  |
|  | 1  | Dep. Biotechnology, Chemistry<br>and Pharmacy (Director of<br>Research, Prof Botta) - University       | Synthesis of types of cancer therapies (glioblastoma)   |  |
|  | 1  | Dep. Biotechnology, Chemistry<br>and Pharmacy (Director of<br>Research, Prof Botta) - University       | Synthesis of DDX3 inhibitors  |  |



|  | 1   | Dep. Biotechnology, Chemistry<br>and Pharmacy (Director of<br>Research, Prof Botta) - University      | Design of DDX3 inhibitors  |  |
|--|---|---|--|--|
|  | 1   | Dep. Biotechnology, Chemistry<br>and Pharmacy (Director of<br>Research, Prof Pogni) - University      | Use and characterisation of free or immobilised enzymatic systems for the synthesis and functionalisation of new materials   |  |
|  | 1   | Dep. Biotechnology, Chemistry<br>and Pharmacy (Director of<br>Research, Prof Manetti) -<br>University | Identification and development of active principles from plant sources   |  |
| Places with scholarships funded by external bodies, of which:                    | no 2  |   |  |  |
|  | 1   | COSVIG Scrl   | Study of sustainability elements, including through LCA analysis, in geothermal crops with particular regard to the study of the resource's characteristics and for identifying the most appropriate technological solutions in order to minimise environmental impact |  |
|  | 1   | ISVEA SrI (cofounded from the University of Siena)  | Development of new analytical methodologies in the agri-food sector  |  |
| Discourse and for any discourse  |   |   |  |  |
| Places reserved for graduate students from foreign universities                  | 0   |   |  |  |
| Places reserved for foreign exchange scholars                                    | 0   |   |  |  |
| Places reserved for scholars of international mobility projects                  | 0   |   |  |  |
| Places reserved for research fellows   | 0   |   |  |  |
| Places without scholarships  | 2 - Free research subject   |   |  |  |
| Type of ranking  | - ONE SINGLE RANKING LIST   |   |  |  |
| Documents required for the evaluation (to be attached to the online application) | a - Curriculum vitae et studiorum (which must be signed at the bottom and must state "I declare that what is stated in this curriculum corresponds to the truth pursuant to Presidential Decree no 445/2000"), including a list of any publications.  Applicants who have obtained (or who will obtain by 31 October 2017) their degree from an Italian university must specify all the details of their university courses and of the access qualification in the curriculum, in particular:  1. The University issuing the qualification; |   |  |  |



|  | l | 2. The type of degree | - old university s | vstem/Master | (old system) | /Master: |
|--|---|-----------------------|--------------------|--------------|--------------|----------|
|--|---|-----------------------|--------------------|--------------|--------------|----------|

- 3. the name of the degree programme;
- 4. the list of exams taken with the relevant marks;
- 5. the date of obtaining the degree and the final mark or the expected date for obtaining the degree (before 31 October 2017).

Applicants who have obtained (or will obtain by 31 October 2017) **their foreign** academic qualification (lasting at least four years) must specify in the curriculum:

- 1. The University issuing the qualification;
- 2. the type of degree (at least four years) Bachelor's degree / Master's degree
- 3. the date of obtaining the degree and the final mark or the expected date for obtaining the degree (before 31 October 2017). Applicants who have obtained (or will obtain by 31 October 2017) their foreign academic qualification must also submit and upload in the online registration procedure for the call:
- **transcript** with the list of exams and marks with its translation into Italian or into English;
- Diploma supplement, if possessed

All applicants must also submit and upload:

- a. The research project (written in English);
- **b Reference letters** (not more than two) from Italian and international university professors and/or professional researchers;
- c The abstract of the dissertation for the Master/Master (old system)/Old university system or equivalent foreign qualification.
- **d**. The level B2 English knowledge certificate, if acquired;
- **e.** copy of any other document deemed useful for assessing the eligibility of the qualification;
- f. declaration of acceptance to study abroad for 3 months;
- g. declaration of acceptance to attend European Soft Skills courses.

The compliance of the foreign qualification is verified by the Selection Board for admission in accordance with the relevant legislation in force and with the international agreements concerning the recognition of qualifications for the purpose of continued education

The knowledge of B2 level English, if not certified, will be verified by the Selection Board.

Exam execution procedures

**Pre-selection (Evaluation of the qualifications):** the candidates' presence is not required.

Minimum score to be admitted to the oral exam: 20/40.

The list of candidates admitted to the oral exam can be consulted on the web page <a href="www.unisi.it/ricerca/dottorati-di-ricerca">www.unisi.it/ricerca/dottorati-di-ricerca</a>, by selecting the PhD of reference. Admitted candidates will not receive any convocation.

**Oral exam**: The oral test aims at verifying the applicant's research capability on the topics of interest of the PhD.

Applicants resident/domiciled abroad, in case of proven impossibility to appear on the date of the interview, can arrange for an interview in videoconferencing. In this case, the University of Siena is not responsible for failing to complete the test due to technical impediments, however determined. The Selection Board will make sure that the necessary conditions are met to ensure the regularity of the test (assessment of



| identity and correctness of the interview) Minimum score to pass the oral exam: 40/60  |
|--|
| Eligibility: Minimum score: 60/100 Candidates who have obtained a total score of at least 60/100, given by the sum of the results achieved in the single tests, will be eligible in the final merit ranking. |

#### ART. 1 - University Scholarships

# In the case of external sponsors, PhD degree scholarships will be awarded following the pertinent funding.

The number of scholarships may be increased as a result of additional funding which must actually be acquired by the University of Siena within one month from the beginning of the teaching activities. These scholarships may only be awarded after completion of the necessary acts for acquiring the resources envisaged for their activation.

The total number of places, however, may not exceed the maximum receptive capacity of each PhD course. Any scholarship increase as well as any consequent addition to this decree will be announced by publishing the relevant acts on the web page <a href="https://www.unisi.it/ricerca/dottorati-di-ricerca">www.unisi.it/ricerca/dottorati-di-ricerca</a> by selecting the PhD course of reference. Any movement within the ranking list must take place by 31 December 2017 at the latest.

#### **ART. 2 - Admission requirements**

Applications to the call for admission to the PhD degree, may be submitted by candidates in possession of qualifications giving access to the doctoral degree or by those who will obtain this by 31 October 2017, without limitation of age and citizenship. The eligible academic qualifications are:

- a degree awarded pursuant to decrees prior to M. Decree no 509/99 or a Master degree (old system) obtained pursuant to M. Decree no 509/99 or a Master degree obtained pursuant to M. Decree no 270/04
- an analogous academic qualification obtained abroad. The academic qualification obtained abroad, of at least four years, must be qualified as second level based on the university system in the Country where it was achieved and enable access to the PhD course in the Country of achievement. Its level, nature, duration, content and academic rights (access to further courses) must be comparable to the Italian degree.
  - Should the foreign qualification have already been recognised as equivalent, the applicant must indicate in his/her application as the date of obtainment of the qualification, the date of issue of the measure relating to its equivalence and the Italian university which issued it.
  - Should the qualification, however, not have already been declared equivalent, its suitability will be verified by the PhD Selection Board, in accordance with the relevant Italian legislation and with the international treaties or agreements concerning the recognition of qualifications for the purpose of further education.

Applicants with a foreign academic qualification must attach the following to the online application: a. their qualification certificate with the list of exams and marks - the "transcript" - with its translation into Italian, English or French;

- b. Diploma supplement, if possessed;
- c. copy of any other document deemed useful for assessing the eligibility of the qualification.

The applicant may at any time be required to supplement the documentation submitted in order to verify the eligibility of the qualification. Candidates with foreign academic qualifications are eligible for selection subject to confirmation and will be excluded from the PhD program should the degree, after verification, not comply with the requirements necessary to enrol in the PhD course.



The University management may exclude applicants from the selection at any time, subject to justified reasons given by the lack of the requirements envisaged by this call for applications.

# ART. 3 - Applications

The application for admission to the selection must be filed by 8 August 2017 at 2.00 pm, exclusively through the on-line registration procedure available at <a href="https://segreteriaonline.unisi.it">https://segreteriaonline.unisi.it</a> and in accordance with the various tutorials and compilation guides.

An applicant who is already registered can enter the system with his/her user name and password or if not previously registered, he/she may use the access credentials that are provided and supplied by the system itself.

The "Documents required for evaluation" must be uploaded in PDF format.

To confirm the application has been registered, the system will automatically issue a "Competition application reminder". When closed, the online procedure is no longer editable.

Therefore, no delivery or shipping of documentation to our Offices must be made.

#### ART. 4 - Admission tests

The dates of the examinations and the composition of the committee responsible for evaluating the candidates will be published on the web page <a href="https://www.unisi.it/ricerca/dottorati-di-ricerca">www.unisi.it/ricerca/dottorati-di-ricerca</a>, by selecting the PhD of reference.

The criteria for evaluating the envisaged tests are established in advance by the Commission with plenary resolution.

All information and communication concerning this call for applications will be published on the university website. No convocations will be sent to applicants. The selection dates can be consulted on the web page at <a href="https://www.unisi.it/ricerca/dottorati-di-ricerca">www.unisi.it/ricerca/dottorati-di-ricerca</a> at least 15 days beforehand by selecting the PhD of reference.

## ART. 5 - Admission and enrolment to the courses:

The merit ranking lists will be published on <a href="www.unisi.it/ricerca/dottorati-di-ricerca">www.unisi.it/ricerca/dottorati-di-ricerca</a> by selecting the PhD of reference. Said publication must be considered official. Therefore, winning applicants will not receive any personal notification of their final ranking.

Places will be awarded on the basis of the merit ranking list. Should any entitled person withdraw from the call, the same number of candidates will enter the list, according to the ranking order. A candidate included in more than one PhD course ranking list, must choose a single PhD Course.

The PhD course lasts three years beginning on 1 October 2017.

Entry to the PhD course is incompatible with the simultaneous enrolment in Degree programmes, Master Degrees (old system)/Master Degrees, Specialisation Schools, PhD programmes, University Masters where provided for, Active Internship Courses.

For any other incompatibility not defined in this article, please refer to the applicable legislation.

The winning applicants (with or without a scholarship) must submit their registration application, within the terms that will be indicated on the web page <a href="https://www.unisi.it/ricerca/dottorati-di-ricerca">www.unisi.it/ricerca/dottorati-di-ricerca</a> (by selecting the PhD of reference) only through the appropriate online registration procedure available at <a href="https://segreteriaonline.unisi.it">https://segreteriaonline.unisi.it</a> following the "Registration instructions" available at <a href="https://www.unisi.it/ricerca/dottorati-di-ricerca">www.unisi.it/ricerca/dottorati-di-ricerca</a>.

Before completing the procedure, the system generates the payment form of the single instalment of the university and regional fees. Enrolment is completed by paying the fees.

After the MAV is generated, the on-line procedure can no longer be modified.

At the end of the online procedure, the registration reminder is printable.

Admitted candidates who do not comply with the above requirements within the aforementioned mandatory term will be considered *ipso iure* withdrawn.

The definitive completion of the enrolment is conditional to verifying possession of the requirements for admission to the course. Until then, enrolment must be understood to be subject to confirmation.

Places which are not covered may be made available to applicants occupying subsequent positions in the ranking.



These applicants will need to confirm their intention to enrol and to finalise their enrolment, under penalty of exclusion, within five days of receipt of the e-mail from the PhD Office. The University management accepts no liability for non-receipt of this e-mail arising from third party responsibility or from technical causes.

#### Applicants with a foreign academic qualification

Applicants with the right to enrol who are in possession of a minimum four-year foreign academic qualification, not yet recognised as equivalent by an Italian university, must also enclose the following in an electronic format to the online enrolment form:

- a copy of the original diploma of the degree obtained or the certification of the diploma issued by the university where it was obtained;
- a copy of any other document deemed useful for assessing the eligibility of the qualification.

In the case of a qualification **obtained outside the European Union,** a copy of the certificate of equivalence of qualification issued to the competent Italian Diplomatic Authority abroad must also be submitted. The **Certificate of equivalence of qualification** must clearly show that the academic qualification allows access to the PhD course in the Country where it was obtained.

The original or a certified copy of the aforementioned documentation must be submitted to the PhD Office of the University of Siena within six months of the official start of the courses. Applicants who do not submit the documentation concerning the foreign qualification are admitted "subject to confirmation" and will be excluded from the PhD programme should they not submit such documentation within six months from the official start of the courses. They will also be excluded if, following verification, the qualification does not comply with the requirements of this call for applications.

Should the aforementioned documentation not be submitted or should it attest the non-validity of the qualification in the Country for an academic degree analogous to the PhD, the candidate concerned will forfeit his/her entitlement and must return any possible scholarship received.

## **Non-Community applicants**

Non-EU applicants who are eligible for enrolment will be admitted to the courses provided they comply with the current provisions concerning entry and stay in Italy and are legally residing in Italy (Article 39, paragraph 5 of L. Decree no 286 dated 25.07.1998, as modified by Article 26 of Law no 189 dated 30 July 2002) and must therefore deliver a copy of their valid passport and residence permit issued by the competent authorities. If residing abroad, instead, they must provide a copy of the passport, of the entry visa and a copy of the residence permit for study purposes issued by the competent Police Authority.

#### **Civil servants**

Civil Servants admitted to PhD programmes enjoy, for the entire normal duration of the course, a leave of absence as laid down in the National Labour Collective Agreement, or, in the case of employees governed by public law, an extraordinary leave for study purposes, in accordance with the administration's requirements, pursuant to Article 2 of Law no 476 dated 13 August 1984 and subsequent modifications, paid or unpaid and subject to explicit waiver, only if this is the first time they are enrolled in a PhD course and regardless of the chosen discipline.

In the event of admission to a PhD course without a scholarship, or of its waiver, the party concerned, while on leave, keeps his/her salary, pension and retirement contributions from the public administration with which an employment relationship is in place (Law no 448/2001).

## ART. Art. 5 - Scholarships

The annual scholarship is equal to € 13,638.47 and subject to the separate (INPS) social security contribution account. Scholarships will be awarded after a comparative evaluation of merit.

In the case of a scholarship funded by public or private bodies outside the university, the scholarship will be awarded only in the presence of the corresponding funding.

Scholarships involving specific research bind the assignees to carry out this activity and to comply with the requirements.

The duration of the scholarship covers the entire duration of the course and will be paid by deferred monthly instalments. Should the PhD applicant waive the scholarship or the PhD programme, the University will simultaneously



interrupt the payment of the scholarship.

PhD scholarships cannot be combined with other scholarships awarded for any purpose, except with those awarded by national or international institutes granted in order to integrate the educational or research activities of scholarship holders.

Those who have already used even part of a scholarship for a PhD course cannot benefit a second time.

## **ART. 6 - Taxes and Contributions**

PhD students without a scholarship are required to pay the annual regional tax of  $\le$  140.00 for the Right to University Education and to pay the electronic stamp duty of  $\le$  16.00, to be paid when registering using the specific form downloaded during the on-line procedure or by credit card.

PhD scholarship holders are required to pay the annual university Regional Tax of € 340.00, the annual regional tax of € 140.00 for the Right to University Education and the electronic stamp duty of € 16.00, to be paid when registering using the specific form downloaded during the on-line procedure or by credit card.

Tax and contribution exemptions

Students with recognised disabilities equal to or greater than 66% and students awarded or eligible for a scholarship for the 2017/2018 academic year granted by the Tuscan Region for the Right to Education are exempted from paying the university fees and the regional tax.

## ART. 7 - PhD students Compulsory attendance

Rights and duties of doctoral students during the courses are governed by art. 21 of the Rules and Regulations concerning PhD programmes of the University of Siena.

# ART. 8 - Obtaining the degree

The PhD qualification is granted after passing the final examination referred to in art. 18 of the Rules and Regulations of the PhD Programme.

PhD dissertations must be filed directly by the interested parties, via computer, in the University Repository: USiena-air http://usiena-air.unisi.it/, in order to ensure automatic filing in the National Libraries, as provided by the CRUI Guidelines for filing PhD dissertations in open archives.

# ART. 9 - False declarations

Pursuant to art. 75 of Presidential Decree no 445 dated 28/12/2000, without prejudice to the provisions laid down in art. 76 of the criminal code, should the sworn affidavit inspection reveal the non-veracity of its contents, the declarant forfeits all benefits which may have been obtained on the basis of his/her false declaration.

# ART. 10 - Person in charge of the procedure and personal data processing

In accordance with Articles 4, 5 and 6 of Law no 241/1990 and subsequent modifications, the Person in charge of the procedure is Mrs Alessandra Rillo, head of the PhD Department Office. All personal data provided by the applicants will be collected at the University of Siena for the purposes of managing the call for applications and will also be processed in an automated manner in accordance with current legislation, to which reference should be made for anything not specified in this call for applications.

# ART. 11 - Final regulations

All matters not included in the present call will be governed by the University Regulations and the Rules and Regulations on PhD Programmes of the University of Siena and the relevant national legislation.

Siena, date of the digital signature

The Rector

Francesco Frati



Endorsed by
The Coordinator of the PhD Department Office
Chiara Roscino

Endorsed by
Acting General Manager
Giovanni Colucci