

PhD program name:
PHOTOINDUCED PROCESSES AND TECHNOLOGIES
(NATIONAL INTEREST PhD)

Duration	3 years			
Positions	30			
Scholarships	30 scholarships subject to the accreditation by the MUR of the doctoral course, to the assignment of scholarships valid on DD.MM. 351 and 352 of 9.04.2022, and the completion of third party loans, of which 3 grants financed by the University of Perugia and the remaining 27 as detailed below			
In agreement with	N. position with scholarship financed	D.M. 351/2022	D.M. 352/2022	Topic title
UNIVERSITA' DEGLI STUDI DI PERUGIA	3			1) Nanostructured materials for the conversion of radiation in energy vectors. 2) Tuning the luminescence properties of molecular systems. 3) Photoactive materials for controlled color effects.

UNIVERSITA' DEGLI STUDI DI MESSINA	3	3		<p>1 Artificial photosynthesis. Supramolecular systems for the chemical conversion of solar energy.</p> <p>2) New photo- and/or redox-active materials for applications in biological and environmental fields</p> <p>3) Titolo progetto: Environmental impact in the use of graphenic platforms as potential carriers for gene/drug delivery and luminescence imaging studies.</p>
UNIVERSITA' DEGLI STUDI DI BARI "ALDO MORO"	1			1) Sustainable Materials for Light-Driven Processes
UNIVERSITA' DEGLI STUDI DI BOLOGNA	2	1		<p>1) Molecular devices and machines powered by light</p> <p>2) ERC-LEAPS CREDI "Light effected autonomous molecular pumps: towards active transporters and actuating materials (LEAPS) – J32F16000450006.</p>
UNIVERSITA' DEGLI STUDI DI MILANO	1	1		1) Development of photoactive systems
UNIVERSITA' DEGLI STUDI DI TORINO	3	1	1	<p>1) Innovative materials for the production of solar fuels for energy and transport</p> <p>2) Studies of the environmental impact of microplastics and nanoplastics in the environment</p> <p>3) New technologies for the synthesis of high added value intermediates for the chemical industry through photoredox catalysis</p>
UNIVERSITA' DEGLI STUDI DI FIRENZE	1	1		1) Advanced solutions for preventing the photodegradation of Cultural Heritage

UNIVERSITA' DELLA CALABRIA	1	1		1) "Interactions between molecular photophysical processes and plasmonic field generated by metal nanoparticles"	
UNIVERSITA' DEGLI STUDI DI SIENA	1			1) From photons to neurons and genes: development and applications of computational photochemistry and photobiology tools for optogenetics	
UNIVERSITA' DEL SALENTO	1		1	1 Photochemical characterization of organized systems based on organic units and / or nanoparticles with applications in photoinduced phenomena	
UNIVERSITA' DEGLI STUDI DI SALERNO	1			1) Photochemical and photophysical processes in organic solar cells and oled	
UNIVERSITA' DEGLI STUDI DI PADOVA	1		1	1) Photochemical processes for applicatyions in energy, health and the fields	
UNIVERSITA' DEGLI STUDI DI CAGLIARI	1		1	1) Monitoring of environmental parameters in the workplace and development of new photocatalytic materials for the reduction of indoor pollutants	
POLITECNICO DI TORINO	2		1	1 1	1) Advanced photo-sensitive materials 2) Development and characterization of a printable organic transistor with field effect for sensing in medical diagnostic applications.
UNIVERSITA' DEGLI STUDI DI ROMA "TOR VERGATA"	1		1		1) Photophysical and photochemical processes in biological and bioinspired systems
UNIVERSITA' DEGLI STUDI DI PALERMO	1		1		1) Development of photocatalytic processes for energy conversion and environmental applications
UNIVERSITA' DEGLI STUDI DI SASSARI	1				1) New generations of fluorescent OD materials for nanobiotechnologies
CONSIGLIO NAZIONALE DELLE RICERCHE	1				1) Semi-artificial photosynthesis for the conversation of solar energy
CONSORZIO INTERUNIVERSITARIO PER LO SVILUPPO DEI SISTEMI A GRANDE INTERFASE	2				1) Innovative materials as protective against the photochemical degradation of Cultural Heritage 2) Advanced luminescent materials for diagnostics and conservation of cultural heritage

ISTITUTO DI RICERCHE FARMACOLOGICHE "MARIO NEGRI" - IRCCS	2		1) EU-FET OPEN: Imaging of nanomaterial covered with extracellular vesicle membranes 2) Fondo Istituzionale: Multicolor flow cytometry characterization of lymphocyte phenotype in autoimmune renal disease
Curricula	1) Transition to renewable energy sources 2) Protection and respect for the environment and cultural heritage 3) Diagnostic and treatment methods for the development of personalized medicine 4) Sustainable procedures and innovative materials		
Coordinator	LATTERINI LOREDANA		

Degrees required for admission

Any Master's degree ('Laurea Specialistica') in accordance with the ministerial decree D.M. 509/1999;

Any Master's degree ('Laurea Magistrale') in accordance with the ministerial decree D.M. 270/2004;

Any University diploma ('Laurea Vecchio ordinamento') according to the regulations in place before the ministerial decree D.M. 509/1999 came into force.

Selection procedure

The selection procedure will be carried out as follows:

Evaluation of qualifications and interview (out of a total of sixty: 30 + 30)

Evaluation of qualifications will be performed with regard to the candidate's university education, further education, training and research experience as well as to any scientific publication (candidates are advised to attach and/or declare all of their qualifications, along with all the elements that can help in their evaluation, thereby including grades obtained within each course).

The evaluation will also include the drafting, by the candidate, of a research project that is to be developed during the three-years on themes pertaining exclusively to one of the PhD course curricula.

All qualifications must be presented according to the conditions described in article 3 of the Call for Applications ("Bando") and in Appendix 2 to avoid non evaluation; **the research project must be presented together with the application to participate in the selection.**

The minimum score in the evaluation of qualifications for admission to the interview is **18/30**.

Before the interview, the list of candidates admitted to interview, with scores obtained will be published on the website <https://www.unipg.it/didattica/percorsi-post-laurea/dottorati-di-ricerca/bandi-avvisi-e-modulistica>

Candidates who do not achieve the above minimum score will not be admitted to the interview.

The interview will concern the topics of the curricula of the doctorate and on the discussion of the research project, which the candidate will illustrate. The interview will also be aimed at verifying the aptitude for research, availability to undertake experiences abroad, and his/her scientific interests. For that purpose, the candidate will illustrate, in the course of the interview, the research project presented together with his/her application. The candidate may choose to be interviewed in English. For interviews held in Italian, the candidate's knowledge of the English language will also be verified

The interview will be carried out in videoconference, unless the Commission decides to carry it out in presence, evaluating requests from the candidates to hold the interview in videoconference considering the reasons given.

Il punteggio minimo per il superamento del colloquio è pari a **18/30**.

In reference to the place reserved for graduates of foreign universities , the selection procedure will be carried out in the same manner: **evaluation of qualifications and interview (out of a total of sixty: 30+30; please refer to everything described above in this regard.**

Eligibility for admission shall be attained with an overall evaluation of at least 36/60.

Examination date:

Please be reminded that, as per art. 4 of the Call, on the **11th of July 2022** a notice will be posted on the University webpage <https://www.unipg.it/didattica/percorsi-post-laurea/dottorati-di-ricerca/bandi-avvisi-e-modulistica> and on the University online bulletin board, which will communicate **the procedures, dates and hours of the convocation**, and any other information concerning the present selection. **Such notice shall have the value of a formal convocation and personal communications in this regard will not be sent.** All candidates for this doctoral course are, therefore, strongly advised to check the **notice of the 11th of July 2022**.