







Italia**domani**

PhD Course: MOLECULAR SCIENCES in agreement with CONSIGLIO NAZIONALE DELLE RICERCHE (CNR) CHEMICAL SCIENCES Curricula PHARMACEUTICAL SCIENCES **Department** SCIENZE CHIMICHE - DISC **Duration** 3 years 1 scholarship funded by Consiglio Nazionale delle Ricerche (CNR) - Dipartimento di Scienze chimiche e tecnologie dei materiali (DSCTM) - Istituto di Chimica Biomolecolare (ICB); Referente: Alessia Ligresti; Sede: Pozzuoli (NA) - Topic: Development of small molecules based on cannabinoids for the restoration of bioenergetic balance in complex pathological conditions (curriculum: CHEMICAL SCIENCES); 1 scholarship funded by Consiglio Nazionale delle Scholarships Ricerche (CNR) - Dipartimento di Scienze chimiche e funded by the tecnologie dei materiali (DSCTM) - Istituto di Chimica n. 3 partner Institution della Materia Condensata e di Tecnologie per l'Energia (ICMATE); Referente: Filippo Agresti; Sede: Padova -Topic: Materials for energy applications and thermal energy storage (curriculum: CHEMICAL SCIENCES); 1 scholarship funded by Consiglio Nazionale delle Ricerche (CNR) - Dipartimento di Scienze chimiche e tecnologie dei materiali (DSCTM) - Istituto per la Tecnologia delle Membrane (ITM); Referente: Alberto Figoli; Sede: Rende (CS) - Topic: Development of thin film composite membranes for CO2 capture and conversion (curriculum: CHEMICAL SCIENCES); 1 scholarship funded by Amethyst Lab S.r.l. -Number of **Topic:** Development of sustainable polymers through positions controlled polymerization processes (curriculum: CHEMICAL SCIENCES); 1 scholarship funded by Dipartimento di Scienze Chimiche - DiSC su fondi del Progetto Potenziamento e Sviluppo delle Attività di Ricerca - Responsabile scientifico Prof.ssa Collini - Topic: Design, synthesis, and characterization of the photophysical properties of

Scholarships funded by external public or private bodies/Departments

positions

e Sviluppo delle Attività di Ricerca - Responsabile scientifico Prof.ssa Collini - **Topic**: Design, synthesis, and characterization of the photophysical properties of excitonic and plexcitonic systems, in solution and solid-state matrices (**curriculum**: CHEMICAL SCIENCES); **1** scholarship funded by Dipartimento di Scienze Chimiche - DiSC su fondi Progetto UE HE-ERC-2021-STG SYNPHOCAT CT. 101040025 "Synthetic Bimodal Photoredox Catalysis: Unlocking New Sustainable Light-Driven Reactivity – CUP C95F21010080006 – Resp. Prof. Dell'Amico e MSCA-SoE nell'ambito del PNRR Funding - "Young Researchers 2024" – Acronym: PHOTODATA (D.D. n. 201/2024 del 03/07/24) – CUP C93C24006170006 Resp. Dott. Rosso - **Topic**: Development of novel photocatalytic

Total number of n. 6 (curriculum: CHEMICAL SCIENCES);

n. 3

Selection criteria

PRESELECTION ON THE BASIS OF EVALUATION OF QUALIFICATIONS AND ORAL EXAMINATION

systems for organic synthesis

Oral examination via remote interview:	Applicants who have requested it in the application form will take the oral exam via remote interview using the ZOOM videoconference tool.			
Evaluation criteria	Qualifications: points max 40 Oral examination: points max 60			
Documents to be submitted	Thesis:	Points: max 4	Applicants already holding the entrance qualification: submit the master thesis. Applicants waiting to be awarded the entrance qualification: those waiting to be awarded the entrance qualification by 30th September 2025 will submit a summary of the master thesis project (max. 4 pages) signed by the applicant and the supervisor	
	Curriculum:	Points: max 24	1) CV, preferably but not mandatorily prepared following the template available at the webpage: https://phd.chimica.unipd.it/cdsm/admission/general-admission-procedure that includes: a. weighted average of all exam grades obtained during the Bachelor b. weighted average of all exam grades obtained during the Master c. Starting date of the academic study (specify any leave period demonstrated by certificates) d. Final examination mark (for candidates that have already graduated) e. Relevant study or work experiences abroad (with indication of the duration in months) f. Awards/prizes received as a result of academic accomplishments 2) List of all exams (including marks) passed during the academic study (both BSc and MSc). For candidates with a foreign degree also the scoring scale has to be provided.	
	Scientific publications:	Points: max 1	Only scientific publications on journals indexed in WoS/Scopus and that are accepted for publication in final version (with DOI) will be taken into consideration. Abstracts of conferences will not be considered.	
	Other documents:	Points: max 1	Up to 2 reference letters by Italian or foreign faculties/experts in molecular sciences	
	Research project:	Points: max 10	Original research project to be carried out during the PhD (max. 2 pages), relevant to at least one of the topics of the scholarships offered	
Publication of the results of the evaluation of the preselection	Within 09 SEPTEMBER 2025 the evaluating Commission will publish the results of the evaluation of the qualifications in the following website: https://phd.chimica.unipd.it/cdsm/admission/results-ranking			
	In order to be admitted to the examination, the candidate must get a score of at least 7/10 in the preselection.			

Publication of the timetable of remote interviews and instructions on how to use the ZOOM video conferencing	By 09 SEPTEMBER 2025 the commission will publish on the course website https://phd.chimica.unipd.it/cdsm/admission/results-ranking the timetable of the remote interviews and the instructions on how to use the ZOOM video conferencing for those applicants who have chosen in the application form to take the oral examination via remote interview and who have passed the preselection on the basis of the qualifications with a pass-mark of at least 7/10.		
Oral examination	15 SEPTEMBER 2025 08:30 - The exam may continue: 16 September - Sala Riunioni ex-Biblioteca - Dipartimento di Scienze del Farmaco, via Marzolo 5, 35131 Padova		
Language/s	Foreign language/s assessment at the oral examination: At the oral examination the commission will assess the knowledge of the following language/s: English Admission exam:		
	The admission exam will be taken in: English		
Examination topics	Organic Chemistry, Physical Chemistry, Inorganic Chemistry, Analytical Chemistry, Pharmaceutical Science, Biotechnology. For detailed information on the exam and the contents (including examples): phd.chimica.unipd.it/cdsm/admission During the written admission exam (multiple choice questions), to be taken in person, the use of a calculator is permitted.		
PhD Course Website:	https://phd.chimica.unipd.it/cdsm/		
Further information	Department: SCIENZE CHIMICHE - DiSC Address: Via Marzolo - N. 1, 35131 Padova (PD) Contact person: Menna Anna telephone: +39 0498275657 e-mail: dottorati.chimica@unipd.it		
How to apply	The application must be submitted only via the online procedure available at: https://pica.cineca.it/unipd/dottorati41luglio The documents must be attached in pdf format. The application and the attached documents are submitted authomatically by closing the online procedure, so no hard copy of the application and of the documents must be sent to the office.		
Deadlines	Publication of the ranking lists and enrollment from 24 September 2025 Beginning of PhD courses 1 November 2025		