UNIVERSITÀ
DEGLI STUDI DI TRIESTE

Area dei Servizi Istituzionali
Unità di staff Dottorati di ricerca

ATTACHMENT 4 LAST REVISED 05/05/2021

PhD IN CHEMISTRY (in partnership with the University Ca' Foscari Venezia) OVERVIEW

IN BRIEF		
Lines of research	1	Biocrystallography
	2	Pharmaceutical biology
	3	Inorganic, bio-inorganic and organometallic chemistry
	4	Organic and bio-organic chemistry
	5	Homogeneous and heterogeneous catalysis and bio-catalysis
	6	Supramolecular chemistry and catalysis
	7	Theoretical and computational chemistry
	8	Medicinal chemistry
	9	Analytical and environmental chemistry
	10	Chemistry for Cultural Heritage
	11	Electrochemistry and sensors
	12	Green and sustainable chemistry
	13	Chemical engineering
	14	Advanced materials and thin films
	15	Nanosciences and nanotechnologies
	16	Molecular spectroscopy
	17	Pharmaceutical Technologies
	18	Physical chemistry
	19	Industrial chemistry
Administrative location	University of Trieste	
Organizing Department	Department of Chemical and Pharmaceutical Sciences	
Participating Departments	Department of Engineering and Architecture	
	Department of Life Sciences	
Partner University	University Ca' Foscari Venezia	
Partner University Department	Department of Molecular Sciences and Nanosystems	
Duration	3 years	

Attendance abroad that entitles to a scholarship increase - min. max. of months for each PhD student (over 3 years)	2 - 18	
Official language	Italian	
Language (alternative to Italian) partially used in PhD activities	The training activity is partially performed in English: some classes and most of the seminars are in English. Also those classes that are normally taught in Italian are given in English on demand (if attended by foreign students). At the annual meetings both the plenary lectures given by the invited speakers and the oral presentations given by the students are in English. The annual projects and reports, and the large majority of the theses are also in English.	
Subject Areas *(in alphabetical code order)*	02	PHYSICS
	03	CHEMISTRY
	05	BIOLOGY
	09	INDUSTRIAL AND INFORMATION ENGINEERING
Macro Research Fields *(in alphabetical code order)*	02/B	PHYSICS OF MATTER
	03/A	ANALYTICAL AND PHYSICAL CHEMISTRY
	03/B	INORGANIC CHEMISTRY AND APPLIED TECHNOLOGIES
	03/C	ORGANIC, INDUSTRIAL AND APPLIED CHEMISTRY
	03/D	MEDICINAL AND FOOD CHEMISTRY AND APPLIED TECHNOLOGIES
	05/E	EXPERIMENTAL AND CLINICAL BIOCHEMISTRY AND MOLECULAR BIOLOGY
	05/G	EXPERIMENTAL AND CLINICAL PHARMACOLOGY
	09/D	CHEMICAL AND MATERIALS ENGINEERING
Scientific Disciplinary Sectors *(in alphabetical code order)*	BIO/11	MOLECULAR BIOLOGY
	BIO/14	PHARMACOLOGY
	CHIM/01	ANALYTICAL CHEMISTRY
	CHIM/02	PHYSICAL CHEMISTRY
	CHIM/03	GENERAL AND INORGANIC CHEMISTRY
	CHIM/04	INDUSTRIAL CHEMISTRY
	CHIM/06	ORGANIC CHEMISTRY
	CHIM/08	PHARMACEUTICAL CHEMISTRY
	CHIM/09	PHARMACEUTICAL AND TECHNOLOGICAL APPLICATIONS OF CHEMISTRY
	FIS/01	EXPERIMENTAL PHYSICS
	ING-IND/24	FUNDAMENTALS OF CHEMICAL ENGINEERING
Domain European Research Council	PE	PHYSICAL SCIENCES AND ENGINEERING
	LS	LIFE SCIENCES
ERC Panels	PE4	PHYSICAL AND ANALYTICAL CHEMICAL SCIENCES: ANALYTICAL CHEMISTRY, CHEMICAL THEORY, PHYSICAL CHEMISTRY/CHEMICAL PHYSICS
	PE5	SYNTHETIC CHEMISTRY AND MATERIALS: NEW MATERIALS AND NEW SYNTHETIC APPROACHES, STRUCTURE-PROPERTIES RELATIONS, SOLID STATE CHEMISTRY, MOLECULAR ARCHITECTURE, ORGANIC CHEMISTRY

	PE8	PRODUCTS AND PROCESSES ENGINEERING: PRODUCT AND PROCESS DESIGN, CHEMICAL, CIVIL, ENVIRONMENTAL, MECHANICAL, VEHICLE ENGINEERING, ENERGY PROCESSES AND RELEVANT COMPUTATIONAL METHODS
	LS9	APPLIED LIFE SCIENCES AND BIOTECHNOLOGY: BIOTECHNOLOGY USING ALL ORGANISMS, BIOTECHNOLOGY FOR ENVIRONMENT AND FOOD APPLICATIONS, APPLIEDPLANT AND ANIMAL SCIENCES, BIOENGINEERING AND SYNTHETIC BIOLOGY, BIOMASS AND BIOFUELS, BIOHAZARDS

WHO'S WHO

In partnership with the University Ca' Foscari Venezia

Chair	Prof Enzo Alessio - Department of Chemical and Pharmaceutical Sciences – University of Trieste - phone +39 040.558.3961; email alessi@units.it
Vice	Prof. Elisa Moretti – Department of Molecular Sciences and Nanosystems – University Ca' Foscari Venezia - phone +39 041 234 6745; email elisam@unive.it
PhD Academic Board	List of members
Web site	http://web.units.it/dottorato/chimica/en
Email	dottorato.chimica@units.it
Course description and objectives	The primary goal of the Ph.D course in chemistry is that of obtaining appropriate skills in the chemistry field through training and performing independent and autonomous research activity. Such skills will be important to be spent in many different situations and institutions, in particular public research institutions (like Universities and Research Institutes) or private companies. In this respect Ph.D students will be trained with a continuous and intense experimental research activity as well as specific high level courses, in order to be competitive at the international level. The future PhD will have the experimental and theoretical tools necessary to manage general problems which will be encountered when developing new chemical compounds or processes, as well as their industrial implications. Special care will be devoted to the international mobility opportunities and to the ability to present and rationalize the results in an effective manner.
Job placement opportunities	The job placement opportunities of a future PhD will be rather wide. The most adequate job opportunity would be that of a researcher in public institutions or private companies. In particular the PhD title would be important when special capabilities are requested to manage and carry on research or complex problems solving in an independent, autonomous and creative way. Also special responsibility positions in industries or large companies would be suitable for PhD.
Main cooperating international Universities and Research Institutions	1 University of Sidney, Australia 2 University of Bordeaux, France 3 University of Malaga, Spain 4 University of Wien, Austria 5 University of Groningen, Netherlands