

Rettorato e Direzione Generale Sezione Ricerca e Dottorati Ripartizione Dottorati

ATTACHMENT 3

LAST REVISED 12/06/2015

PhD IN CHEMISTRY (under the agreement with the University Ca' Foscari Venezia) OVERVIEW

IN BRIEF						
		Biocrystallography				
		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				
Lines of research	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				
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 of Ca' Foscari Venezia					
Partner University Department	Department of Molecular Sciences and Nanosystems					

Duration		3 years				
Maximum number of months to be spent abroad by all PhD students		3				
Official language		Italian				
Language (alternative to Italian) partially used in PhD activities		Some seminars and courses are held in English. If non Italian speaking students are admitted to the PhD, all courses are may be held in English.				
	main area	03	CHEMISTRY			
Subject Areas	other areas	05	BIOLOGY			
		09	INDUSTRIAL AND INFORMATION ENGINEERING			
	main field	03/A	ANALYTICAL AND PHYSICAL CHEMISTRY			
	other fields	03/B	INORGANIC CHEMISTRY AND APPLIED TECHNOLOGIES			
Macro Research		03/C	ORGANIC, INDUSTRIAL AND APPLIED CHEMISTRY			
Fields		03/D	MEDICINAL AND FOOD CHEMISTRY AND APPLIED TECHNOLOGIES			
		05/G	EXPERIMENTAL AND CLINICAL PHARMACOLOGY			
		09/D	CHEMICAL AND MATERIALS ENGINEERING			
		CHIM/01	ANALYTICAL CHEMISTRY			
		CHIM/02	PHYSICAL CHEMISTRY			
		CHIM/03	GENERAL AND INORGANIC CHEMISTRY			
0		CHIM/04	INDUSTRIAL CHEMISTRY			
Scientific Disciplinary		CHIM/06	ORGANIC CHEMISTRY			
Sector		CHIM/08	PHARMACEUTICAL CHEMISTRY			
		CHIM/12	ENVIRONMENTAL CHEMISTRY AND CHEMISTRY FOR CULTURAL HERITAGE			
		BIO/15	PHARMACEUTIC BIOLOGY			
		ING-IND/24	PRINCIPLES OF CHEMICAL ENGINEERING			
Domain European Research Council		PE	PHYSICAL SCIENCES AND ENGINEERING			
ERC Panels		PE4	PHYSICAL AND ANALYTICAL CHEMICAL SCIENCES: ANALYTICAL CHEMISTRY, CHEMICAL THEORY, PHYSICAL CHEMISTRY/CHEMICAL PHYSICS			
		PE5	SYNTHETIC CHEMISTRY AND MATERIALS: MATERIALS SYNTHESIS, STRUCTURE-PROPERTIES RELATIONS, FUNCTIONAL AND ADVANCED MATERIALS, MOLECULAR ARCHITECTURE, ORGANIC CHEMISTRY			
		PE8	PRODUCTS AND PROCESSES ENGINEERING: PRODUCT DESIGN, PROCESS DESIGN AND CONTROL, CONSTRUCTION METHODS, CIVIL ENGINEERING, ENERGY SYSTEMS, MATERIAL ENGINEERING			
		LS9	APPLIED LIFE SCIENCES AND BIOTECHNOLOGY: AGRICULTURAL, ANIMAL, FISHERY, FORESTRY AND FOOD SCIENCES; BIOTECHNOLOGY, CHEMICAL BIOLOGY, GENETIC ENGINEERING, SYNTHETIC BIOLOGY, INDUSTRIAL BIOSCIENCES; ENVIRONMENTAL BIOTECHNOLOGY AND REMEDIATION			
Erasmus		06.3	CHEMICAL ENGINEERING			
Subject Area		13.1	BIOLOGY			
Codes		13.3	CHEMISTRY			

WHO'S WHO

under the agreement with the University Ca' Foscari Venezia				
Chair	Prof Mauro Stener – Department of Chemical and Pharmaceutical Sciences - Università degli Studi di Trieste – Via L. Giorgeri, 1 - tel. 040/558.3949; fax 040/558.3903; e-mail stener@units.it			
Vice	Prof. Maurizio Selva – Department of Molecular Sciences and Nanosystems - Università Ca' Foscari Venezia - tel. 041/234.8687; tel. Lab. 041/234.8982; email selva@unive.it			
Web site	http://web.units.it/dottorato/chimica/en			
Email	dottorato.chimica@units.it			
Learning outcomes	The primary goal of the Ph.D course in chemistry is the training in order to obtain proper skills in the chemistry field, to carry on an 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 be trained with all 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. First 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 need to manage and carry on research or complex problems solving are necessary to be performed 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	 University of Castilla La Mancha, Spagna University of Sidney, Australia University of Bordeaux, Francia University of Madrid, Spagna 			
	5 University of Zürich, Svizzera			