

MATERIALS SCIENCE AND TECHNOLOGY		
Cycle	XXXI	
Duration	3 years	
Partner Entities	<ul style="list-style-type: none"> • The Italian The National Research Council -CNR (Istituto IMEM of Parma, Istituto IMAMOTER of Ferrara and Istituto ISTEC of Faenza) • Cape Town University (South Africa) 	
Supervisor	Prof. Enrico Dalcanale – Department of Chemistry E-mail: enrico.dalcanale@unipr.it	
Research Topics	<ol style="list-style-type: none"> 1) Photovoltaic devices 2) Functional materials 3) Strongly correlated systems 4) Nanodiagnostics 5) Nanostructured materials 6) Supramolecular sensors and devices 7) Semiconductive massive crystals 8) Low dimensionality semiconductive structures 9) Self-assembled polymers 10) Surface supported molecular materials 11) Magnetic materials 12) Ceramic and composite materials 	
Training objectives	<p>The PhD program in Materials Science aims at the preparation of PhDs equipped with strong scientific background and wide research experience in materials science. Enrollment is open to MS laureates in Materials Science, Chemistry, Physics, Industrial Chemistry, Engineering and Biological Sciences.</p> <p>The Board of teaching offers and organizes courses and seminars in different scientific areas, with particular focus on all aspects of materials science (synthesis, characterization, functions and devices). The PhD program offers an interdisciplinary preparation through research activity, also in collaboration with foreign Institutions.</p>	
Academic degree required	Laurea pursuant to the previous university system, laurea specialistica or laurea magistrale, or a foreign academic qualification that has been recognized as equivalent	
Positions put out to competition		
With scholarship	7	
Without scholarship	2	
Without scholarship reserved for graduates in foreign universities	1	
Reserved to holders of scholarships funded by foreign States and/or scholarship holders within specific international mobility programs	3	
TOTAL	13	
Scholarship types	No.	Description (funding entity and research topic, if any)
	2	Scholarships of the University of Parma
	4	Funded by the Italian National Research Council - CNR

	1	Co-funded by Fondazione Cariparma	
Positions reserved to holders of scholarships funded by foreign States	No.	Position reserved to holders of scholarships funded by foreign States:	
	1	Holder of a scholarship funded by Universities or Foreign State	
Positions reserved to scholarship holders within specific international mobility programs	No.	Position reserved to scholarship holders within specific international mobility programs :	
	2	Within the Project UE SUPRABARRIER (H2020 EID)	
Admission procedures	Assessment of QUALIFICATIONS: up to 50 points ORAL EXAM: up to 70 points Minimum score for ELIGIBILITY: 70/120		
Admission procedures for positions reserved to graduates in foreign universities, holders of scholarships funded by foreign States and/or scholarship holders within specific international mobility programs	Assessment of QUALIFICATIONS: up to 120 points Minimum score for ELIGIBILITY: 70/120		
Interview via teleconference for candidates residing abroad	<p style="text-align: center;">THE ORAL EXAM MAY BE HELD VIA VIDEOCONFERENCE FOR CANDIDATES RESIDING ABROAD. THE INTERVIEW MAY BE HELD ALSO IN ENGLISH. (the relevant request shall be submitted using the form attached to the competitive examination announcement)</p>		
List of QUALIFICATIONS to be submitted and their assessment	Graduation thesis	Abstract of the graduation thesis (mandatory qualification)	Up to 12 points For position reserved Up to 30 points
	Curriculum Vitae et studiorum	Covering the candidate's university career and postgraduate experience, accompanied with a statutory declaration in lieu of the certification of the exams sat and passed, with the relevant marks, as well as the final graduation mark (mandatory qualification)	Up to 25 points For position reserved Up to 50 points
	Statement of Research Interest	Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the doctorate program and at describing his/her specific research interests	Up to 5 points For position reserved Up to 20 points

	Scientific publications	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings	Up to 5 points For position reserved Up to 10 points
	Reference letters	a maximum of 2 written by University Teachers, Researchers, Heads of Italian and foreign Research Centers, persons in charge of research/tutoring activities	Up to 3 points For position reserved Up to 15 points
Foreign language	Language the fluency of which shall be assessed during the Oral Exam: ENGLISH. The evaluation of the knowledge of this language will be oral and will consist in translating of a scientific text		
Schedule of the admission exam	ORAL EXAM DATE: 17 September 2015 TIME: 09:00am PLACE: Department of Chemistry Parco Area delle Scienze 37/A – 43124 PARMA, ITALY		
Oral Exam topics	Oral exam will focus on the reasons for the candidate to attend the PhD program on outlining specific research interests, and a discussion of the qualifications presented by the candidate.		