



N.º 7/2012 1 de abril de 2012/15 de abril de 2012 Acuerdo del Consejo de Gobierno de 28 de marzo de 2012, por el que se aprueban las propuestas de participación de la UPO en programas "ERASMUS MUNDUS".



Innovative Technologies for Protection of Monuments

Award Criteria

B - Erasmus Mundus Joint Doctorate Programmes (EMJDs)

The information below provides guidance on the type and scope of information to be provided by applicants under each of the five EMJD award criteria. Applicants should provide full but concise information on each point. Answers to the questions in italics should form part of this information. The information provided by applicants on the five EMJD award criteria should *not exceed 25 pages in total (Font 11 - Times New Roman)*.

B.1 Academic and Research quality (25% of the max. score)

Under this award criterion applicants will have to present the objectives of their EMJD proposal from an academic and research point of view and its possible contribution to the excellence, innovation and competitiveness of the European Higher Education and Research areas.

B.1.1 Describe the EMJD **objectives** (including in scientific and socio-economic terms) in relation with the **needs analysis** in the field(s) concerned.

To what extent is the EMJD offer justified (notably in terms of inter/multi-disciplinary, intersectorial and/or newly emerging fields), and how is it linked to identified needs in a European and worldwide context?

The Protection of Monuments EMJD program aims:

- to promote European higher education, enhancing quality, on science and engineering of innovative conservation and restoration materials and techniques for the protection of monuments
- to improve accessibility of European higher education at international level and attractiveness for third country nationals and citizens of the European union
- to enhance the career prospects of students and promote intercultural understanding through cooperation within European context as well as with third countries in the field of cultural heritage protection, towards the creation of specialised professionals in the new autonomous scientific field of the protection of monuments, capable of creating new knowledge
- to promote the European Union as a centre of excellence in learning around the world through the collaboration and exchange of expertise among the Institutions of the member countries
- to diffuse, apply and evaluate the advanced research results, the existing know-how and the best
 practices in the field of the protection of monuments (advanced diagnosis, non destructive
 techniques, strategic planning of conservation restoration interventions, compatibility of applied
 materials and techniques, integrated environmental management, scientific support to decision making), ensuring international competitiveness in the field
- **B.1.2** Justify the joint programme's **added value and distinctiveness** compared with existing programmes at national, European and international level.

To what extent will the joint programme contribute to the shaping of a European Doctorate model? How does it provide concrete added value to European education, research, excellence and competitiveness?

The proposed doctorate program provides added value to European education, research, excellence and competitiveness, as, despite the importance of the subject it focuses, no relevant ERASMUS MUNDUS programs exist. Cultural heritage is approached only by the humanistic aspect, and this way it is presented in the two following programs:

- INTERZONES - Cultural Studies in Literary Interzones: The program focuses on the thematic

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 1/67

ERASMUS MUNDUS JOINT DOCTORATE IN BIOMEDICAL REGENERATION

Categoría: Salud (Health and Wellfare)

Título: Doctorado en Biomedicina Regenerativa

Consorcio:

Miembros	Responsable	País	website
Department of Biomedical Sciences and Medicine, University of Algarve	José Belo	Portugal	http://www.cbme.ualg.pt/mem_c bme.html
Andalusian Centre for Molecular Biology and Regenerative Medicine (UPO/CABIMER)	Manuel Alvarez-Dolado	España	http://www.cabimer.es/web/en/dept/ctrm/cell-therapy-for-neuropathologies
Centre for Materials and Coastal Research, University of Postdam	Andreas Lendlein	Alemania	http://www.hzg.de/index.htm l.en
Leiden University medical Centre	Christine L. Mummery	Holanda	http://www.lumc.nl/con/3090/46 189/902201040032533?setlangua ge=English&setcountry=encontact o
Centre for Regenerative Medicine, University of Edinburg	Josh Brickman	Inglaterra	http://www.crm.ed.ac.uk/resear ch/group/embryonic-patterning

Objetivo:

Establecer el primer programa de doctorado Erasmus Mundus en Medicina Regenerativa. Este programa, con el marchamo de la mas alta calidad europea, tendrá un carácter internacional, multi-disciplinar y orientado hacia la inserción de doctorandos en el mercado de trabajo, particularmente en empresas farmacéuticas y el creciente campo de la biotecnología biomédica.

El doctorado tenderá un mínimo de 3 años, de los cuales al menos 6 meses tendrán que realizarse en otro país miembro del consorcio. Así, el alumno obtendrá un título de Doctor reconocido por los dos países en los que ha desarrollado su trabajo.

Además de formación científica en las varias temáticas de la Medicina Regenerativa, los alumnos recibirán formación en áreas complementarias tales como: desarrollo de proyectos, técnicas experimentales, propiedad industrial, ensayos clínicos, asuntos regulatorios...

Un aspecto único y estratégico del programa son los 2 meses de practicas en empresas de biotecnología/farmacéuticas que facilitaran una eventual transición de los alumnos del la Universidad para la Industria.

Código Seguro de verificación:bh5IT6upCTioA567N2wFxw==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es bh5IT6upCTioA567N2wFxw== PÁGINA 1/2					



Apoyo de la Universidad Pablo Olavide:

Antes de la aprobación del Doctorado:

- Firma de acuerdo entre los miembros en donde se expresa el interés de la Universidad Pablo Olavide en formar parte del programa de doctorado Erasmus Mundus (primer deadline)
- Tener el acuerdo Erasmus entre las varias instituciones del consorcio

• Firma de acuerdo entre el Consorcio formado por los miembros y la Agencia Europea. (segundo deadline, a nivel Rector)

Después de la aprobación del doctorado:

- Creación y registro del programa doctoral Erasmus Mundus en Medicina Regenerativa
- Apoyo con las matrículas de los alumnos
- Apoyo con la gestión burocrática del programa doctoral
- Emisión de títulos de doctorado conjuntos en Biomedicina Regenerativa (entre la Universidad Pablo Olavide y la/s otra/s universidad/es donde el alumno haya desarrollado su trabajo)
- Facilitar el acceso de los alumnos del programa doctoral a clases de idiomas (español para extranjeros y ingles)
- En la eventual admisión de alumnos discapacitados en el programa doctoral la Universidad dará apoyo para su adecuada inserción.

Código Seguro de verificación:bh5IT6upCTioA567N2wFxw==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es bh5iT6upCTioA567N2wFxw== PÁGINA 2/2					



area of humanities and is designed to promote research in the field of comparative literatures, visual culture and anthropology, in a dynamic, multi-centre and cosmopolitan environment.

- **TEEME** - **Text and Event in Early Modern Europe**: the program focuses on the thematic area of humanities and fosters intercultural dialogue and disseminates the best research in history, literature and culture to the wider community.

Protection of Monuments is a major concern nowadays for decision-makers, researchers and the broader European Community, as well. The involvement of professionals of different scientific background and experiences, the interdisciplinary approaches and studies performed, the recent advances on innovative conservation and restoration materials, techniques and methodologies, the orientation of research and technological activities in national and european funding level, the outcome of international declarations and charts for the modulation of the ethics in the protection of monuments, the adoption of a common European strategy are some characteristic examples proving the tendency towards the interdisciplinary and global development of the "Protection of Monuments" into an autonomous scientific field.

Many courses are offered throughout Europe at undegraduate, graduate, or post-graduate level, as well as specialized seminars. However, most of them are offered on a national level, or they involve limited exchange of scholars and students. Such an educational approach hinders the exchange of know-how and leads to a fragmentation of the European competitiveness in the field.

The existing know-how and experience in the field of the Protection of Cultural Heritage can be diffused more efficiently with courses of high standard. Such an exchange of experience is invaluable considering the superabundance of successful undergraduate and postgraduate programs in the field, many of them augmented by collaboration with significant relevant companies and end users.

The proposed project will decisively contribute, disposing high added value, to the modulation of international scientific field of cultural heritage protection, as well as to the socio-economic development of the countries involved in relation to their cultural heritage in terms of sustainability.

B.1.3 Present the education, training and research programme, including its **originality, innovative aspects and scientific quality** notably as regards research methodologies and approaches.

How is the relevance between education / training activities and the research part articulated? What are the training activities in terms of core and transferable skills?

The taught lessons available for the PhD Candidates per University. The lessons that each student will have to attend will be defined according to the subject of his/her thesis, as well as, the University of his/her origin.

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

KNOWING THE BUILT HERITAGE

DECAY AND ENVIRONMENT

A. Historic materials and structures – pathology and decay deteriorating cultural heritage

Historic materials (10 ECTS)

- Building Materials of Historic Constructions: Principles, Decay, Protection
- Properties of Building Materials. Evaluation of their susceptibility to decay
- Environmental Impact on Building Materials Decay

Pathology & decay deteriorating CH (2 ECTS)

Phenomena and causes of monuments' decay

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 2/67



Instrumental and non destructive methods for in situ diagnosis (5 ECTS)

- Methodology and diagnostic techniques
- Diagnosis, analysis and mapping methodology for building materials and their decay at architectural monuments
- Techniques and methods for the characterization of building materials and for the decay diagnoses

Lab

- Methods and techniques of materials characterization and decay diagnosis
- Analysis and mapping methodology for materials and decay in monuments

THE CONSERVATION PROCESS

B. Compatible and effective conservation materials and interventions

How to select conservation materials (5 ECTS)

How to plan conservation interventions (10 ECTS)

- Conservation materials and techniques
- Science and engineering of conservation restoration protection interventions
- Materials selection and design, selection criteria and planning for the conservation interventions
- Materials and intervention methods
- Examination methods of several interventions efficiency
- Monuments conservation and protection specific techniques
- Pilot applications of conservation interventions in monuments
- Specific techniques and technologies on conservation and preservation of cultural heritage

C. Earthquake protection of monuments

Reverse engineering for effective repair materials (5 ECTS)

- Integrated project for the design and production of restoration materials for earthquake protection of monuments (5 ECTS)
- Seismic protection of monuments. compatible materials (hagia sophia, et al.)

Lab

Science and engineering of conservation – restoration - protection interventions

MANAGEMENT AND USE

D. Sustainable preservation of cultural heritage

Strategic planning for sustainable preservation of cultural heritage - Historic cities as open labs of research and education (10 ECTS)

Management of urban and industrial pollution and preservation of an archaeological site

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 3/67



(Acropolis, Eleusis)

- Land planning for the protection of cultural heritage (Medieval City of Rhodes, Venetian Fortifications of Herakleion)
- Strategic planning of conservation interventions and materials on monuments, according to diagnosis and mapping data of materials decay
- GIS management of documentation data of cultural heritage historic buildings, cities and sites
- Monuments protection environmental management
- Management of materials and decay mapping data in integrated geographical information system
 (gis)
- Specific topics of planning the environmental management for historic complexes

Lab

Monuments protection - environnemental management

All the above mentioned courses are offered via the Interdisciplinary Post Graduate Program « Protection of Monuments ».

PABLO DE OLAVIDE UNIVERSITY

Non-destructive techniques and instrumental techniques.

- 1. Science and Technology in CH. 4 ECTS. On-line.
- 2. Non Destructive Techniques for the Study of Cultural Heritage I. NDT-I. 6 ECTS. On-line.
- 3. Non Destructive Techniques for the Study of Cultural Heritage II. NDT-II. 6 ECTS. On-line.
- 4. Spectroscopy techniques applied to the diagnosis of Cultural Heritage. 3 ECTS. On-line.
- 5. New Image and mapping Technologies Applied to Cultural Hertiage (GIS and image analysis). 2 ECTS. On-line.

Characterization and Diagnosis of different material in Cultural heritage

- 1. Techniques of diagnosis applied to the study of metal. 2 ECTS. On-line.
- 2. Techniques of diagnosis applied to the study of Paper. 2 ECTS. On-line.
- 3. Techniques of diagnosis applied to the study of Stone and Mortar. 2 ECTS. On-line.
- 4. Techniques of diagnosis applied to the study of Glass and Ceramics. 2 ECTS. On-line.
- 5. Techniques of diagnosis applied to the study of wall painting, canvas and polychrome. 2 ECTS. On-line.
- 6. Techniques of diagnosis applied to the study of organic materials. 2 ECTS. On-line.
- 7. Biology of the restauration. 2 ECTS. On-line.
- 8. Restoration. 3 ECTS. On-line.
- 9. New materials (plastics, photography). 2 ECTS. On-line.
- 10. Techniques of diagnosis applied to the study of tissues. 2 ECTS. On-line.
- 10. Practice. 6 ECTS.

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 4/67					



Cultural Heritage intervention

- 1. Restoration and Rehabilitation. 3 ECTS. On-line.
- 2. Environment and Preventive Conservation. 2 ECTS. On-line.
- 3. Laser applications to Diagnosis and processing. 3 ECTS. On-line.

Humanistic view of the materials: Cultural, historical, artistic, archaeological and architectural value of heritage.

- 1. Cultural Heritage: theory and restoration. Definition of Cultural Heritage. Protection and instruments. 3 ECTS. On-line.
- 2. Archaeological analysis of building systems. 3 ECTS. On-line.
- 3. Heritage Management and Archaeological Musealisation. 3 ECTS. On-line.
- 3 The role of Art history in the conservation of cultural Heritage.3 ECTS. On-line.

All the above mentioned courses are offered via the Interdisciplinary Master « Diagnosis of Conservation Degree in Cultural heritage ».

The analytical program of these courses can be found on the website of the University.

Polytechnico di Milano

Durability of masonry to Salt Crystallisation (2 ECTS)

NDT (sonic, thermography, radar, etc.) used to investigate masonry buildings (2 ECTS)

There are more courses available for the students according to their academic program.

Technion University

The (series of) 4 lectures:

- 1. The deterioration of architectural design in historic buildings Architectural aesthetics versus material deterioration and structural behaviour of historic buildings in the conservation of architectural heritage -3 hours.
- 2. Conservation heritage The influence of the historic metamorphoses of conservation theory and practice on contemporary conservation and restoration projects in selected countries 3 hours.
- 3. The heralds of the conservation charters The forerunners of some modern tendencies of the contemporary conservation in the conservation practice of the past selected case studies 4 hours.
- 4. Artistic versus precise In the documentation of architectural heritage past and present 4 hours.

Comments:

The series will be total 14 hours of lectures in the class, and an equal amount of hours for the homework required for the preparation of the final paper by the students = 1 ECTS credit

Courses offered by **University of Minho** and the relevant ECTS units of its course, which PhD Candidates can attend in the Joint Doctorate Program

Advanced structural analysis (5 ECTS)

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 5/67



- Conservation and inspection of structures (5 ECTS)
- Strengthening of structures (5 ECTS)
- Advanced structural dynamics (5 ECTS)

These are courses from the PhD programme in Civil Engineering

Ca Foscari University of Venice

- Techniques and products for the restoration and preservation of Cultural heritage (6 ECTS)
- Monitoring and control of architectural surfaces of historic buildings (6 ECTS)
- Non-invasive techniques for the diagnostic of CH (6 ECTS)
- Management systems and environmental impact assessment (6 ECTS)

University of Ljubljana

Courses to be offered in the framework of joint doctorate programme

- RENOVATION OF IMMOVABLE CULTURAL HERITAGE, 5 ECTS, 125 hours, lectured by Prof. Roko Žarnić, PhD
- ADVANCED MORTARS AND CONCRETE TEHNOLOGIES, 5 ECTS, 125 hours, lectured by Assoc. Prof. Violeta Bokan Bosiljkov, PhD
- EXPERIMENTALLY SUPPORTED DESIGN OF MASONRY BUILDINGS, 5 or 10 ECTS, 125 or 250 hours, lectured by Assist. Prof. Vlatko Bosiljkov, PhD

The Program will support the creation of the new professional profile for scientists and engineers of widerange scientific background and experiences (architects, chemical, civil, rural and surveying, materials', mining and metallurgy engineers, archaeologists, conservators, physicists, chemists, biologists) for the scientific support to the field of Cultural Heritage protection and specifically in the sector of Conservation Materials and Techniques, which will respond to the needs for:

- advanced diagnosis, monitoring and control of decay mechanisms on architectural surfaces of historic buildings
- environmental impact assessment and mapping in real scale real time
- selection, application and evaluation of appropriate, effective and compatible conservation restoration materials and techniques
- strategic planning of conservation restoration interventions
- reduction of environmental loads environmental management for the protection of monuments and historic complexes

for the creation of specialised personnel who will perform integrated conservation, restoration, environmental management actions for the protection of monuments and the safeguarding of Cultural Heritage.

The Program will lead to the establishment of common qualifications and experience in the field of the protection of monuments among students within the European Union. The Program will encourage the participation of Third Countries scholars, establishing the cooperation between European and Third

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 6/67



Countries Institutions and will enhance the accessibility of Third Countries students to doctorate level courses, providing them with equal opportunities to European students.

The Program will aid to sharpening of a common strategy within Europe in the field of the Protection of Monuments.

B.1.4 To what extent does the programme include inter-sectorial and inter-organisational collaboration

How does this collaboration provide added value for the candidate during his/her EMJD activities and for his/her future professional career ?How does it address societal and economical needs as well the issue of graduate employability?

The development of interdisciplinary and inter-universities research field of national research teams competitive in the strategic area of protection of Cultural Heritage, as well as of cooperation between research groups from various Universities and Research Institutions. In this way the project is expected to result in multiplying phenomena of added value in the levels of produced knowledge and expertise, to achieve economies of scale, to improve the dissemination of produced knowledge and expertise in national and European level, as well as to develop permanent intra-European research and educational cooperation as well as with third countries. Moreover scientists from different backgrounds like engineers, archaeologists, conservators will develop a common strategy regarding the issues of Protection of Monuments. In addition the public as well as the private sector (Ministries of Culture, end users) will benefit from this program.

B.1.5 Describe the nature and quality of the expected **outcomes** from the innovative, educational, scientific and technological points of view, including in terms of skills and competences acquired.

Within international context, the proposed program becomes a strategic approach to inter-sectoral linkages among research, education and application of the produced integrated strategy for cultural heritage protection.

The dissemination of the produced integrated strategy will lead to common good practice in monuments protection not only to Academia, but also to the application sectors that lack relevant expertise and specialization. This will trigger new actions that will contribute to broad development. Therefore, the program can foster creative inputs to international productivity and growth.

The development of interdisciplinary and inter-institutional research among Consortium members will create permanent European as well as third countries' cooperation in research and education, reinforcing scientific competitiveness in international level.

The produced know-how is an "exportable product" of high importance in scientific, educational and technological terms, delivered by the highly qualified graduates to relevant carriers and end – users.

Código Seguro de verificación:RfALRq1fEokrgaZzUfDnfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 7/67					



B.2 Partnership experience and composition (25% of the max. score)

This award criterion will be used to assess the adequacy of the partnership to the objectives of the programme and in particular the scientific excellence of the consortium partners as well as their education, research and innovation capacities.

B.2.1 Justify the relevance of **the consortium composition** and the expertise of the key **academic and research staff** involved to achieve the EMJD objectives.

Justify the expertise (in terms of capacity, expertise and experience) of individual partners (understood as both the institutions and the key academic, research and administrative staff); how are these of added value in the context of a joint and international doctorate programme? Present the key actors (administrative, research and academic staff) for the EMJD implementation (provide short and targeted information).

In the Consortium Universities of the Mediterranean Region are participating in this integrated efforts. International Academic Staff from Greece, Italy, Spain, Portugal, Slovenia and Israel.

The Protection of Cultural Heritage, and of course of Monuments from the engineering point of view. More specifically in terms of materials, architecture and earthquake engineering from the National Technical University of Athens where the Schools of Chemical Engineering, Architecture, Civil Engineering, Rural and Surveying Engineering are participating. The Universities of Italy i.e. Polytechnico di Milano and Ca Foscari of Venice dealing with structural problems of monuments as well as conservation interventions and monitoring. The contribution of Slovenian University in the field of using innovative techniques for materials conservation and decay assessment, and its contribution to an integrated methodology regarding Protection of Monuments. University Pablo Olavide with great experience in teaching and research not only in Spain but also in Spanish speaking countries, regarding risk assessment using Non Destructive Techniques. University of Minho (Portugal) is contributing with its experience in advanced diagnosis, monitoring and control of decay mechanisms on architectural surfaces of historic buildings and selection, application and evaluation of appropriate, effective and compatible conservation - restoration materials and techniques.

The third country University (Technion from Israel) with great experience in the protection of Cultural Heritage especially building environment and earthquake protection and monitoring of monuments.

The integration of all these Universities will provide to the students an interdisciplinary approach of the Protection of Monuments, teaching them how to coop with different specialists to solve a complex problem. Moreover knowing the techniques and the methods for solving such problems the student can form an integrated of how different aspects can be searched and how different specialist can contribute to the development of a common methodology regarding Protection of Monuments issues. The outcome is an International Forum in the area/region (Mediterranean) on the field of Protection of Monuments.

Moreover in all participating Universities Undergraduate, Post Graduate and Doctoral Studies Programs are active, with laboratories for education and research, with in-situ research as well. The results of these research activities are presented in International Conferences all over the World, but also published in all the relevant International Scientific Journal (Engineering, Materials, and Protection of Cultural Heritage). In addition administrative staff, with experience in European Programs as well as ERASMUS Programs is in position to confront all the administrative work needed for the project.

The courses for the students will be given by International recognized Professors from all Universities participating in the Program. The students will attend courses and the relevant laboratories and by this way they will develop an integrated approach for all the taught courses. Moreover the examination of these integrated lessons and labs, by the presentation of essays, will help for the development of a common methodology and a common approach in the field of the Protection of Monuments. On the other hand, new professional profiles will be formed, creating the interdisciplinarity as the main key to deal with the problems of Protection of Monuments.

B.2.2 Describe the complementarity (in terms of education, training, research or dissemination/valorisation activities) of the consortium members and their diversity (in terms of countries / regions, types of organisation, etc.).

As mentioned in the above paragraph, all participating Universities have many research achievements to present in the field of Protection of Monuments. From decay diagnosis, and pathology of structural

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 8/67

buildings to materials characterization and analysis, and from earthquake engineering and Protection of Monuments to the use of all the high technology techniques and methods to deal with complex problems of monuments. All participating organizations are experienced in international cooperation, already coexisting in European Programs, in the educational and research field, regarding Protection of Monuments and Cultural Heritage in general. There are countries from West Mediterranean (Spain and Portugal) which have to present great monuments of human civilization, and International activities and relations with Latin America countries, countries like Italy and Greece from Central and East Mediterranean which both have to present monuments throughout the European and World History, Slovenia and Greece from the Balkan region as well, and of course Israel and Turkey representing Minor Asia and Middle East, having also many of the greatest monuments of human history, since these countries where crossroads of civilizations and religions.

B.2.3 Present the partnership track records in terms of **networking and cooperation** activities (through their joint involvement in EU/international research and/or education projects).

Demonstrate the level of internationalisation in terms of concrete international experience and activities; if relevant, justify the added value of third-country organisations to the EMJD objectives and content.

The Institutions in the project, are already participating in Networks and European Programs. The NTU-Athens along with Technion University of Israel and Ca Foscari University of Venice are already participating in an educational program regarding the teaching of Cultural Heritage in non professionals (ELAICH). On the other hand University of Minho is the coordinator of an EMMC Program in Structural Analysis of Monuments and Historical Construction, while University Pablo de Olavide is a University with International relations especially with Latin America countries. Moreover NTU-Athens and University of Ljubljana are partners in EUCHIC program, a program regarding the identity card of Cultural Heritage which will allow the development of common strategies and planning for the Protection of Monuments. On the other hand University of Minho already running an EMMC program.

B.2.4 Where applicable, justify the role and appropriateness of the **professional/non-academic** (/economic/scientific/cultural) sector participation in terms of activities and responsibilities.

How are associated partners involved? How is this involvement formalised in specific arrangements and agreements covering issues such as co-funding, co-supervision, intellectual property rights, publishing possibilities, quality assurance, etc?

In their research activities all Universities participating the Consortium are in close relation with non academic professionals, dealing with the Protection of Monuments and the Protection of Cultural Heritage in general. In most of the countries all University laboratories are in collaboration with Ministries of Culture, regarding the Protection of Monuments in each country, as well as in close relation with scientists of all specialties archaeologists, architectures, civil engineers, chemical engineers, conservators etc, conducting applied research in the field. Moreover, industries in materials sector and their R&D laboratories are often have as guests students for their research. By these terms specialists non academics will participate to the help team of students, participating actively in the program. On these cases all the national and European laws, regarding issues of intellectual property rights will be applied and special contracts will be signed is necessary. The non academic specialists can only participate in the support group of a PhD thesis and not as supervisor. Finally the internal rules of Universities will ensure the quality of their participation.

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.					
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012				
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 9/67				



B.3 European integration and functioning of the programme (20% of the max. score)

This criterion will focus on issues related to the way the EMJD will be implemented in and between the partner institutions as concerns the delivery of the doctoral programme itself.

B.3.1 Describe the extent to which the EMJD programme is organised in a structured and integrated way.

How does the EMJD programme plan to exploit current good practices in terms of doctoral/graduate/research schools or co-tutelle arrangements? What are the measures foreseen in order to provide a strong research environment capable of enhancing excellence and international collaboration? How does the programme ensure full recognition - through ECTS or other built-in mechanisms – for all the training and research activities performed by the candidates?

This is an interdisciplinary EMJD. Throughout the three years of the degree, the curriculum balances research, coursework and critically-creative practice. The consortium is harmonized in its educational and scholarly outlook, favoring broad interdisciplinary approaches over narrow specializations. It sets high standards in research supervision.

The concept of the program prioritize independent and original thinking, the capacity for critical analysis, a broad knowledge of the field including its most recent methodologies, and the ability to situate research in wider contexts and make connections with the work of others.

The mobility built into the program is essential to its objectives. No single institution could offer the different skills and specialism which the combined consortium makes available. The overall coherence of the program is ensured through the structured training and mobility paths, the sharing of work in progress, and the interconnection of all partners through an electronic platform (web site).

The whole program is divided into six 6 consecutive semesters, while the academic year is divided into two semesters. Training and coursework are fully integrated in the organization of the program. All training and research activities will receive full recognition in the form of ECTS credits. The credit allocation for Doctoral level studies refers mainly to courses taught while research represents the relevant Doctoral students' workload.

Within this framework and through the selection and attendance of several optional lessons at the various partner's universities, a total of 120 E.C.T.S. credits will be gained progressively for research activities and work on the thesis (6 semesters x 20 E.C.T.S.) and 60 credits for skills training, curricular elements and the work placement. The Ph.D. thesis does not carry any credits associated with it.

The Joint Doctoral Program "Protection of Monuments" coordinated by NTUA is structured as follows: The doctoral candidate in order to be eligible must fulfil certain selection criteria, the main being the prerequisite of 300 credit units, or a master of science.

The main concept of the Program is that the doctoral student will have the opportunity to attend a variety of taught lessons offered by the partner's universities. These lessons can either be specially formed within the framework of this Joint Doctorate Program, or from already existing and running Master Courses in the above mentioned universities.

Within this context and through the selection and attendance of several optional lessons at the various partners's universities, a total of 180 E.C.T.S. credits will be gained progressively for training and research activities for the support of the Doctorate Thesis, while the Ph.D. thesis does not carry any credits associated with it.

This structure covers the demands of the European space for higher education and is served by this Joint Doctorate Program, optimizing, within the framework of interdisciplinarity, several scientific fields and expertise, of the participating universities that offer master courses lessons or taught lessons.

The main thematic fields of the taught lessons offered per universities (for example) are:

 National Technical University of Athens, Greece: Materials and Conservation Interventions, Conservation and Restoration of Historic Buildings and Complexes.

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 10/67

- University of Ljubljana, Slovenia: Advanced Materials for Repair and Revitalization of Historical Buildings Laboratory and in-situ experimental methods for masonry structures.
- Polytechnico di Milano, Italy: Masonry decay diagnosis, Monitoring and Control of effectiveness and compatibility of conservation interventions
- Ca' Foscari University of Venice, Italy: Decay and Restoration Interventions, Management Systems and Environmental Impact Assessment
- University of Minho, Portugal: Structural Engineering
- University of Pablo de Olivade, Spain: Methods and Techniques for the Protection of Cultural Heritage
- Technion University of Israel: Architecture, Urban and Regional Planning

The whole program covers 6 consecutive semesters, for a total of 180 E.C.T.S. credits, including 120 credits gained progressively researching and writing their thesis in each research centre (6 semesters x 20 E.C.T.S.) and 60 for secondary Ph.D. portfolio activities carried out at any given moment during the mobility period.

The Ph.D. thesis does not carry any credits associated with it. It is only after 5 semesters of active and successful research activities (as validated by the supervisors in the different institutions) that the student is envisaging the thesis defence, after approval by the Academic Council. After a successful viva, the student is declared eligible for the award of the Ph.D. degree.

The PROMON academic year is divided into two semesters. Adjustments will be made to harmonize local academic calendars from one country to another and students are required to consult the appropriate university websites and to communicate with the PROMON local Co-ordinator. The language of tuition is English. Besides these two, a good knowledge of a modern European language (among the following: Greek, Spanish, Italian, Portuguese, Slovenian) is required from the candidates in order to make them truly competitive.

Semester 1: Sept. 1st / Feb. 28th Semester 2: March 1st / August 31st

The academic plan of doctoral students comprises the following activities:

- a) Semester 1 must be spent by all students at the National Technical University of Athens to attend the basic methodological seminars on "Protection of Monuments".
- b) Semesters 2 and 3 must be spent at the first of the two degree-awarding Partner universities. Here the student chooses a corpus and topic for research, under the guidance of a first Supervisor. He/she will also begin the secondary activities.
- c) Semester 4 must be spent at another university, generally located on a different continent, in line with the guidelines and limitations specified. Here the student will draw on his/her knowledge of the literature to consult references, relying on locally available databanks and libraries and enjoy pastoral care and regular exchanges with local professors whose own research activities are relevant to the student's thesis. (The choice of university must be consistent with both the student's linguistic skills AND research project and is subject to the Academic Council's approval).
- d) Semesters 5 and 6 must be spent by each student at the second degree-awarding university. This period will be used to write the doctoral thesis. Students must also improve their written/oral communication skills. By the end of the last semester a total of 60 E.C.T.S. worth of extra curricular activities must have been gained during the 6 semesters of their doctoral studies.

We explicitly invite innovative, project proposals which are prepared to strike out into new territories. Within the program, we can provide expert supervision and academic accompaniment in a wide variety of fields and their interconnections arising from the fields of the courses offered and the subjects of the PhD Candidates.

The definition of the Ph.D. topic is carried out in several stages: the research project for which the candidate student has been selected is subject to remarks and suggestions in May by the Academic Council. When the mobility options are confirmed by the doctoral student upon final registration in June, the latter is invited to take advantage of the summer vacations to develop and fine-tune his/her doctoral project. Early in Semester 1 in NTUA, the student is invited to get in touch electronically with three (max.) potential supervisors from their Sem. 2-3 university. During the first half of Semester 2, at the latest (March of year N+1), the student is encouraged to delineate his/her PhD topic more precisely; they find their first supervisor locally, and write with him/her a definitive research proposal which they send to the Academic Council before March of year N+1.

Before April 1st N+1, the Academic council having received the research proposal either accepts or refuses the research proposal with documented justification. If they do not accept the research proposal, they

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 11/67

impose a new deadline for re-submission of the Ph.D. proposal. In the next couple of weeks, the Supervisors' Co-ordinator (elected by the AC) will then liaise with the various students, supervisors, and other A.C. members to circulate academic information (research proposal, activities report and reports from the local Coordinator in NTUA) about every doctoral student to the other potential supervisors or Ph.D. tutors in the next Universities (depending on the mobility of the students).

During Semester 4, students will be invited by the Academic Council to get in touch electronically with three (max.) potential supervisors from their Sem. 5/6 university.

Requests regarding a change in subject and/or supervisor are to be made formally in writing by the student and are to be addressed to the General Co-ordinator and Supervisors' Co-ordinator, who will consequently liaise with all members of the Academic Council and the various Universities involved.

B.3.2 Justify the relevance and appropriate organisation of the mandatory mobility periods of the candidates in the participating institutions.

Describe the structure of the EMJD for what concerns the relevance and appropriateness of the mandatory mobility component. In what way is the coherence with the overall content of the programme ensured?

The mobility built into the program is essential to its objectives and to the students' benefit, who gains credit units from the attendance of lessons that receive full recognition in the participating universities through the ECTS, as well as a basket of excellence and cultural influences that help the student formulate a significant background towards the completion of his PhD Thesis.

Within the joint program the benefits for the participating universities are multiple. The interdisciplinary cooperation favours the formulation of a network of excellence, where universities have the opportunity of consolidating their expertise on specific fields as well as broaden it through synergy with the other universities.

The commitment deriving from the program, for the doctorate student to spend at least 6 months at the universities of his choice (besides NTUA in which a mobility period of 9 months, i.e. 1 academic year is obligatory as the coordinator institution) provides the university and the students with a respectable time for fruitful interaction, which will be proved mutually profitable.

More particularly the mobility option table below enables the candidate student to express his/her preferences at application stage. The choice of Universities is only validated after approval by the Academic Council and once the selected student has signed the doctoral candidate agreement in June before the academic year starts.

Between the last selection stage and the final signature of the Doctoral Candidate Agreement in late August/early September, a formal Acceptance letter they will be sent by the central Office of the EMJD (in May) to each selected student (with or without an EM scholarship), notifying in writing the Academic Council's latest recommendations (in terms of mobility and research orientations) to be confirmed and agreed upon by the candidate.

The doctoral mobility plan requires that all students spend Semester 1 of their program at the National Technical University of Athens, after which they must opt for a specific mobility respecting the rules stated below.

Mobility options for doctoral students

Semester 1

Greece (all students)

Semester 2

Category A students: Greece/Slovenia/Portugal/ Italy/Spain Category B students: Greece/Slovenia/Portugal/ Italy/Spain/Israel

Semester 3 Continuation of Sem. 2

Semester 4

Any Partner (except the two degree-awarding institutions)*

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una ste documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica FIRMADO POR FRANCISCO OLIVA BLAZQUEZ **FECHA** 10/04/2012 ID. FIRMA **PÁGINA** juno.upo.es RfALRq1fEokrgaZzUfDNfQ==



Semester 5

Category A students: Greece/Slovenia/Portugal/ Italy/Spain Category B students: Greece/Slovenia/Portugal/ Italy/Spain/Israel

Semester 6 Continuation of Sem. 5

* Each doctoral student must spend at least two thirds of his/her mobility track in Europe. The university chosen for Semester 4 depends therefore on the choice of the two degree-awarding Partner universities:

a) If two European universities are chosen, the student can opt for any other Partner University. If the student has spent more than 12 months in Europe during the 5 years prior to his/her application, he/she must choose a university outside Europe, which limits the choice.

b) If Israel is chosen as one of the two degree-awarding Partner universities,

the student must choose between another European university. Non-European students will thus spend at least 5 (or a maximum of 6) semesters in European institutions, whereas European students will spend at least 1 semester (or a maximum of 2 semesters) outside Europe.

Remarks:

- I. Doctoral students who choose the National Technical University of Athens as one of the two degree awarding Partner universities must spend Semesters 5 and 6 in NTUA.
- II. European doctoral students cannot choose the European University of their last Degree as one of the two degree-awarding universities. The only exception to this rule would be for a category B student who would apply for a mobility track entirely spent in EU countries. They can however choose universities in such locations for their Semester 4 mobility if Israel is one of the two degree-awarding universities.
- III. Non-European doctoral students cannot choose Israel as one of the two degree-awarding universities.
- B.3.3 Describe the common standards and mechanisms developed by the consortium for the application, selection, admission and review of doctoral candidates (European and third-country).

What measures are proposed to ensure the recruitment of the best candidates? How does the consortium ensure that these mechanisms are transparent, fair and objective? What are the provisions to take into account the equity issues and gender balance? How does the consortium explore alternative ways of recruitment considering the Life Long Learning requirements?

The standards and mechanisms developed by the Consortium should ensure attracting excellent European and third countries' students to apply for the joint doctoral program, in the face of international competition.

The application process should start early enough, giving the opportunity for on time preparation of the interested applicants.

The selection criteria should be clearly indicated in the website to be developed especially for the Program.

More specifically, the criteria for students' selection are:

- **Study record [25%]**: University degree / diploma on Conservation, Restoration, Architecture, Engineering (Chemical, Civil, Rural and Surveying, Materials, Mining and Metallurgy, Land and Urban Planning, Informatics, Environmental), Archaeology, Chemistry, Physics, Biology or any other relevant field & overall grade obtained
- Language skills [20%]: Fluency in English language
- **Relation to thematic area** [25%]: Relevant practical / research / professional experience publications in scientific journals and conferences in the field
- Recommendation letters [15%]: Two references, testifying the relevant studies or expertise of the
 applicant to the conservation restoration materials and techniques for the protection of
 monuments
- Motivation and experience letter [15%]: Justification of intent for participation to the specific

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 13/67

program

An easily accessible website will provide all the necessary information to the interested candidates, providing the timeframe (application and selection process deadline, initiation of the program, mobility periods, detailed curriculum etc.). The needed forms to be filled in by the candidates will be designed in a friendly, easy to use environment. The students will be able to submit their application on line, either by filling in an online form or downloading the necessary forms and sending them via e-mail. Support will be provided to students during the application and recruitment process by the Consortium partners.

In order to access easily the third countries students, who may not have the web facilities offered in European countries, the website will not be heavily designed, but will provide all the necessary info in detail but ensuring in parallel easy access to everyone.

The selection will be based on the predefined set of qualifications and criteria, the results from the database-multicriteria analysis application, and the suggestions of the Scientific Committee members, aiming at the interdisciplinary participation and the equal third country students representation in the Program. The names of the selected students will be published via the web and the successful applicants will be further contacted personally in order to complete and deliver their letter of acceptance.

Special care will be given to students from third countries, through:

- support for obtaining visas quickly and easily, by initiating the mobility support process as soon as the student is recruited
- providing personal support concerning travel, accommodation, living and working in a new environment, along with specific proposals provided at the website.

B.3.4 Explain how the **participations costs** in the joint programme have been calculated; if differences exist between third-country and European candidates, what are the reasons for such differences?

Taking into account the needs and means of each individual partner, provide a detailed description of the estimated implementation costs of the joint programme and, out of these, the doctoral candidate participation costs (fees and other costs). How will these costs be distributed among the participating institutions? Additionally, provide a justification for having (or not) laboratory costs (e.g. What do these costs consist of?)

Students not specifically selected for PROMON might be able to participate and follow the program as well, but on an individual basis. These students need to pay all the fees and participation costs requested by the respective universities, while stipends or employment contracts might be offered if the funding situation of the individual supervisors involved allows.

Category A student:

These PhD candidates come from a country other that an "eligible applicant country", and who are not resident nor have carried out their main activity (studies, work, etc) for more than a total of 12 months over the last five years in one of these countries. The only exception to this rule applies to Third-Country doctoral candidates who have previously received an Erasmus Mundus master scholarship in order to follow an Erasmus Mundus Master Course/Program.

Note that also students from EEA-EFTA states, except Norway, (i.e. Iceland, Lichtenstein), as well as Turkey, Switzerland, and the Western Balkan countries (i.e. Albania, Bosnia-Herzegovina, Croatia, Kosovo, Macedonia, Montenegro and Serbia) belong to this category A at present (this might, however, change soon if these countries sign an agreement).

Category B student:

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 14/67					
	ID. FIRMA JUNO. upo. es REALRETE OR 1922 2010 N.Q== PAGINA 14/67					

RfALRq1fEokrgaZzUfDNfQ==

These are the doctoral candidates who do not fulfill the Category A critera defined above.

Only candidates who have applied to and have been accepted by the PROMON consortium, in accordance with its specific students' application and selection criteria, are eligible for a scholarship. Both category A and B students are welcome to apply to the PROMON PhD program.

The PROMON PhD program will provide:

- 6 scholarships category A (129.900 €) (779.400 €)
 - 3 scholarships category B (125.400€) (376.200€)
 - Total 1.155.600 € / year, plus the 50.000€ administrative costs.

Monthly allowances in the form of stipends or employment contracts, depending on the rules at the particular university, will be provided to all successful PROMON candidates during the first 3-4 years. This applies to both category A and B students.

In addition, contribution to e.g. travels to the yearly workshop, and some other types of participation costs (e.g. tuition fees, bench fees, insurances), are provided for up to a certain limit. All students selected for the PROMON program should thus be able to participate, independent of the personal financial situation.

Fees and other required participation costs to study for a PhD differ between the consortia partner universities. However, for PhD candidates selected for the PROMON program, participation costs and tuition fees will be provided for and thus waived. This applies in general for both category A and B students. All PhD's in PROMON program are laboratory PhDs. This is proved by the courses of the Studies Program. In each topic, either there is laboratory techniques which need to be applied for the research, either computer programs to be used in order to have the results of the research. In most cases that means consumables (chemical, electronic devices and programs, materials etc), as well as electricity and other relevant expenses.

B.3.5 Justify the appropriateness and the **quality of <u>joint</u>** supervision and monitoring of the candidate activities (including the exams for the taught part and the assessment and defence of the thesis) to ensure the highest quality of the outcomes.

To what extent do assessment committees include external representation chosen at international level and/or non-academic experts? To what extent do the assessment criteria include compulsory publication requirements and/or an evaluation of the potential contribution of the candidate's work to innovation?

Students will be assigned an advisor - scientific responsible from each Consortium partner where they carry out their research work. Regular meetings and scientific collaborations will be arranged.

This person will not necessarily be a member of the Scientific Committee set for the student's PhD Thesis. During the implementation of the PhD Thesis, students will be in close cooperation with the PhD Thesis Scientific Committee members.

The Academic Council set the standards that doctoral students must attain and approves for each student an academic plan and a mobility program aimed at developing the skills needed for highly-qualified research work. For this, the Academic Council appoints tutors in NTU-Athens during the first induction semester, whose duty is to oversee the student's progress, in the first months of the program, and to guide him/her to the preparation of a final Research Outline. The tutor will in particular help the student in the choice of supervisors in the universities of his/her mobility track, and in the adoption of the most appropriate

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 15/67					
	ID. FIRMA JUNO. upo. es REALRQITEOREGAZZUIDNEQ== PAGINA 15/67					

RfALRq1fEokrgaZzUfDNfQ==

methodology to carry out his/her research successfully.

Each doctoral student will have two main-supervisors, one in each of the two degree-awarding Universities, to guide him/her in the necessary research and drafting of a final thesis. The doctoral student will also benefit from other forms of peer-monitoring in the other research centres visited. Specific guidelines and deadlines will be decided for every student individually according to his/her academic plan.

Students and supervisors shall be conversant with the recommendations to be found in the "The European Charter for Researchers" (and Code of Conduct for the Recruitment of Researchers).

The various members of staff in the several Universities of the Consortium have an expertise and a longterm teaching experience that are invaluable to doctoral students. Although the program is somewhat complex and innovative, especially because of its multi-centre structure, the researchers and supervisors should first know who the local Co-ordinator is, even if he/she belongs to another department and have the same expectations for the outside of the hosting University students as for the local ones. PROMON is not an exchange program, but an elite joint doctorate for students who have proved to be the best in their category (through a world-wide competition). They will approach various professors to find a potential supervisor for their co-tutelle thesis, but also to carry out some extra-curricular activities or simply to meet them and benefit from their teaching. The associated benefits that such an innovative Erasmus Mundus Joint Doctorate brings to every research laboratory involved are huge. At the end of a semester professors will have to assess the participation or the research activities of these students, and the local Co-ordinator is there to explain and facilitate the validation system of the period of study and/or collaboration. In order to enhance the students' employability, the Academic Council can add extra-curricular activities so that the future doctors are also fully operational as global academics. All the activities below are strongly recommended to the PROMON doctoral students, but only 60 E.C.T.S. worth of activities will be validated for their degree; this can be done at any stage during the 6 semesters of the Doctorate.

Producing an article for publication in a recognized journal, 20 E.C.T.S.

Organising a conference, round table or symposium, 20 E.C.T.S.

Co-editing an article in a journal, 20 E.C.T.S.

In-depth review of a critical essay, 10 E.C.T.S.

Teaching experience at higher-education level, 20 E.C.T.S.

Webmastering activities (a website or online journal linked to PROMON issues), 20 E.C.T.S.

Participation in a Doctoral Seminar with predefined assignments, 10 E.C.T.S.

Postgraduate training programme, 10 E.C.T.S.

Each student will be assigned a minimum of two main supervisors upon which he/she will depend for academic guidance and to whom they may turn for pastoral care. Moreover, four to five additional academics in the various Universities of the Consortium will act as tutors and peer colleagues to follow and guide them in their activities.

Moreover, the achievements of the students at every stage of the mobility, will be recorded. The new technologies can provide the connection of all supervisors in a network which will facilitate the consultation, exchange and analysis of information amongst students, professors and the Academic Council.

At Consortium level a Supervisors' Co-ordinator will be appointed by the Academic Council to guarantee that supervision mechanisms are in place across the consortium and that pastoral care is provided at every level. Every partner member institution is represented by a local Co-ordinator who has been present since the earliest stages of the implementation of the Doctoral programme. Their specific role consists in the following:

- Careful and full briefing of potential supervisors and local colleagues in the various Universities involved
- Monitoring the performance of the Supervisors and assisting them as and when necessary
- Welcome and briefing of incoming student(s)
- -Liaising with the Central Office in Bergamo (on administrative and technical issues) and with the Supervisors' Co-ordinator in particular
- Ensuring that assessment and reporting have been done correctly and on time.

Assignments and their assessment - Credit System

The table below explains the overall criteria applied for the award of grades on the E.C.T.S. scale for certain activities to be graded in the PROMON EMJD context. Please note that in some universities, there is no grading as such for research activities, but only credits being validated or not.

GRADE GUIDELINES

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 16/67



Documento publicado en fecha: 16/4/2012

Distinction (GRADE A)

- an excellent overview of the topic;
- a clear ability to contextualise the topic;
- detailed knowledge and analytical understanding of the
- thorough and informed engagement with critical and other secondary material;
- highly independent thought;
- relevant application to the question set;
- logical structuring of argument;
- fluent and persuasive expression;
- excellent scholarly presentation of all sources

Clear Pass (GRADES B, C)

- a good overview of the topic and its context;
- good knowledge and analytical understanding of the material;
- sound engagement with critical and other secondary material;
- some independent thought;
- relevant application to the question set;
- logical structuring of argument;
- fluent and persuasive expression;
- good scholarly presentation

Ph.D Degree Pass (GRADE D)

- a solid knowledge and understanding of the primary materials of the course;
- a solid capacity to respond to the question set;
- a solid capacity to develop an argument;
- some engagement with secondary material;
- fluent expression;
- solid scholarly presentation

Diploma Pass (GRADE E)

- failure to meet the criteria for Ph.D. degree pass, but shows some knowledge and understanding, and ability to respond to the question set;
- some fluency of expression;
- some attempt at scholarly presentation

Fail (GRADES FX, F)

- major shortcomings in knowledge and/or ability to respond to the question;
- major shortcomings in expression and/or presentation

No diploma is awarded at the end of the first or second year of study of the PROMON EMJD programme.

The whole programme covers 6 consecutive semesters, for a total of 180 E.C.T.S. credits, including 120 credits gained progressively in each University (6 semesters x 20 E.C.T.S.) and 60 for secondary Ph.D. portfolio activities carried out at any given moment during the mobility period.

The Ph.D. thesis does not carry any credits associated with it. It is only after 5 semesters of active and successful research activities (as validated by the supervisors in the different institutions) that the student is envisaging the thesis defence, after approval by the Academic Council. After a successful viva, the student is declared eligible for the award of the Ph.D. degree.

B.3.6 What is the kind and nature of the **degree(s)** awarded? If applicable, what are the measures taken or envisaged by the consortium to deliver a fully accredited and recognised **joint degree**?

How the joint programme is integrated within the partners' doctoral programmes catalogues? What is the

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma electrónica.

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 17/67



recognition status in each of the partner institutions? If applicable, describe the ongoing recognition/accreditation process in the relevant countries and the actions taken to award a joint degree on behalf of the consortium partners. If available, provide a copy of the proposed degree(s)

All the European Universities are conducting research in all the fields of the Protection of Cultural Heritage and Protection of Monuments. Their Diplomas are fully recognised and accepted by their states, as well as in European level. In all participating countries there are laws which allows the joint degrees and these laws will be applied with arrangements between the parties.

B.4 <u>Provisions for EMJD candidates and fellowship holders (15% of the max. score)</u>

This criterion will address aspects such as the overall promotion and marketing strategy, the existence of arrangements for the administration of the fellowships, the recruitment conditions and the support to the candidates as regards linguistic aspects, career prospects and services.

B.4.1 Present the **information and promotion strategy** envisaged by the consortium to reach out potentially interested **candidates**, in particular those from third countries?

What type of promotion / visibility mechanisms will be implemented (e.g. via professional/academic associations, media, newsletters, conferences, fairs, etc.). How will the EMJD's dedicated website be promoted?

The Consortium will offer an effective array of mechanisms to reach out potentially interested candidates. More specifically, the actions to be made are the following:

- 1. Preparation and support of a website, that will describe clearly the Program objectives, the Curriculum, admission requirements, necessary documents for application to the Program and other useful information
- 2. Preparation and distribution (by post and e-mail) of an announcement brochure to various Universities, Ministries of Education, Ministries of Culture, Research Institutes and other relevant organisations
- 3. Distribution of the announcement brochure in selected Conferences related to the field to the Protection of Monuments
- 4. Personal contacts of the Consortium partners with potentially interested applicants and Universities with an already established cooperation.

Special consideration will be taken for third countries' participants through already established contacts and cooperation of Consortium partners with the respective countries.

B.4.2 Present the **services** that will be provided by the partner institutions **to host doctoral candidates**.

Which services will be offered (housing facilities, coaching, activities aimed at social integration, assistance with visas and social insurance, etc.)? To what extent are specific services available for doctoral candidates with a family or with special needs?

The Consortium will provide the following benefits and services to students that will include the following:

- 1. International office: This office is established in the Hosting Universities and supports all services related to foreign students.
- 2. Housing Facilities: Depending on the institution and provided there is a vacancy, students may make use of the Student Residence. If this is not feasible, the International office will provide a short list of hotels and shared accommodation in apartments, and will help the students find a suitable and reasonably priced accommodation.
- 3. Full catering facilities: These include the use of a meal card that provides two free meals a day in the

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma
Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 18/67

restaurants.

- 4. Language courses: Since the Program will be offered exclusively in English, and since the competence in the English language will be a prerequisite for admission to the Program, no english language courses will be offered in the Consortium's institutions. However, the Linguistic Services of each consortium partner will offer foreign students the option of attending courses on the local language during the entire academic year, free of charge. The courses are intended to provide students with the basic linguistic tools, so that they can understand and communicate efficiently with people in the host country.
- 5. Full medical and hospital care: Students from the EU under the ERASMUS program are entitled to receive the same health services as students from their country of origin, provided that they have with them the Form E111 (by the Social Security Department of in their country of origin). Students from non EU countries must have medical insurance covering before coming to the host country or must draw a contract with a private insurance company when arriving, in order to cover any liabilities during their period of stay.
- 6. Reduced Students' Fare (Pass Card) for students at N.T.U.A.: All students without exception are liable to a Pass Card, which is valid for one year and is renewed annually. Fairs and tickets for buses, trains, ships, museums, theatres, concerts and several festivities are reduced by about 35% with use of the pass. All foreign students under ERASMUS-Socrates programme are entitled to a Pass Card
- 7. Sporting activities: A wide variety of sporting activities will be offered to the students. They will take place in the well equipped University facilities.

B.4.3 Describe the **language policy** of the consortium.

How does the consortium address the linguistic aspects of candidates' mobility (e.g. training facilities, mentorship, local language learning, etc.)? What are the arrangements in place regarding language courses in the joint programme (e.g. integration, availability, costs coverage, recognition of the language courses in the joint programme). How does the consortium intend to meet the objective to offer candidates the possibility to use at least two different European languages?

The official language of the program is English and fluency in it is a prerequisite for the students to be selected.

The lectures will be available in the native language of the Hosting University as well, provided optionally to interested participants. In this framework, students will have the chance to learn the local language during their mobility periods at each partner country if they wish so.

Additionally, students are encouraged to use any other language to communicate with fellow students or members of the community.

Finally, there is also the possibility of taking lessons of other languages, as well. For example, National Technical University of Athens disposes Centre of Foreign languages, where English, French, Italian and German language lessons are offered to students and tele-teaching in English and Italian language. In all participating Universities lectures in English besides the national language are offered, assuring the quality of studies and the smooth communication with the students.

B.4.4 What administrative arrangements are foreseen for the **award of the fellowships** (including health care, social security and pension rights) and the **distribution** of the fellowship holders among the EMJD partners?

What are the concrete actions and steps the consortium plans to take for the appointment of Doctoral candidates under **employment contracts** (including among other aspects the use of single or multiple contracts, provisions of research posts, issuing of work permits etc.)? What are the measures taken to deliver the **fellowship scheme** (distribution of grantees among institutions, the financial management of fellowships and consortium lump sum)?

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 19/67



There are two types of Fellowships, Category A and Category B.

Category A: These Fellowships are awarded to doctoral candidates who come from a country other than an EU member state or associated countries (see note at the end of this paragraph) and who are not residents nor have carried out their main activity (studies, work, etc.) for more than a total of 12 months over the last five years in the EU. The only exception to this rule applies to doctoral candidates who have previously received an Erasmus Mundus master's scholarship in order to follow an EMMC - such students are eligible under this Category. (Note: 'EU member state or associated countries', for the purposes of this Category, includes all EU member states, the EEA-EFTA states Norway, Liechtenstein, Iceland, plus Turkey, Switzerland, and the Western Balkan countries: Albania, Bosnia-Herzegovina, Croatia, Kosovo, Macedonia, Montenegro and Serbia).

Category B: These Fellowships are awarded to doctoral candidates who do not fulfil the Category A criteria listed above.

All Erasmus Mundus Fellowship holders on the PROMON program will benefit from Fellowship contracts covering monthly allowance, holidays, parental leave, social security and pension rights. Health insurance will be provided free of charge by the consortium for all doctoral candidates on the program.

Details of the Fellowship contracts, including the amount of the monthly allowance, will be available as soon as the program starts. Fellowship holders can expect a monthly net contribution towards their living expenses of approximately 1400€.

It is understood that every student selected to join the PROMON Doctoral program (with or without an Erasmus Mundus scholarship) must be physically present at the beginning of every semester to fulfill his/her obligations as regards registration, both administrative and academic. Precise dates will be communicated to the students in writing and electronically. He/she must contact and introduce her/himself to the PROMON local Co-ordinator and follow the procedures as indicated locally. Failure to do so will result in no award of E.C.T.S. credits from the university in question and will disqualify the student from the award of a PROMON Ph.D. Degree. In case of overlapping semesters between the universities of the Consortium, the student must write to the local Co-ordinator.

Candidates to the PROMON Joint Doctorate are invited to join the worldwide competition (starting every autumn for an Erasmus Mundus Fellowship, as all fellowships holders will benefit from an employment contract with the PROMON Consortium.

As soon as a candidate is selected (May at the latest), he/she shall do the necessary investigation in his/her country of residence to get a visa permit (if non-EU resident), and collect all the information needed (a visa support letter will be sent to the selected students). The formal Acceptance letter which will be sent by the central PROMON office in Athens will guide students through the preparation of these documents. For instance, a fiscal residence certificate will be mandatory to avoid double taxation in Greece. Selected students will receive a template to help them ask their fiscal authorities for the right paper.

The following documents are required to prepare the three-year employment contract once the selected students arrive in Bergamo, when they will sign it:

- photocopy of Photo ID or passport and visa
- Residence permits are to be required within 8 days of arrival in Greece, but will not be issued immediately. Upon arrival, the people of NTUA (ERASMUS Office), will assist doctoral students in filling the special papers needed. The receipt of this document will be sufficient for the time being ,and the actual residence permit will be issued later.
- a fiscal residence certificate will be mandatory to avoid double taxation in Greece. Students will receive a template to help them ask their fiscal authorities for the right paper.

Before attending the programme, non-Erasmus Mundus fellowship candidates must pay the following tuition fees: Non-European students: 3,600,00 Euros/year, European students:

2,400.00 Euros/year. These costs include registration fees and general administration costs.

Erasmus Mundus fellowship holders will not have to pay those fees as participation costs are included in the fellowship. These costs include opening of a bank account in Athens, included in the fellowship.

included in the fellowship. These costs include opening of a bank account in Athens, insurance policy, registration fees and general administration costs.

The fellowship scheme will follow the PhD Candidate, on his/her track. The management of the fellowship will be contacted by a board with a representative from every University, with the coordination of NTUA. It depends on the countries that the student will perform his/her thesis for a single or multiple contracts.

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 20/67

B.4.5 Describe the measures taken by the consortium to ensure the candidate's **career prospects** and to monitor his/her career development once graduated.

The candidates will gain significant experience and know-how in edge innovation technologies, comprising highly-skilled human resources, becoming the workforce of cultural heritage owners and stake-holders.

The research results will be promoted to end-users, industry, construction sector and stake-holders, ensuring the interaction and communication between the candidates and these target groups, enhancing the implementation possibilities.

Dialogue meetings, apart from project results dissemination, are expected to support the implementation of the produced integrated strategy, by the above mentioned target groups, incorporating possible new proposals by them.

Moreover,

- placement programme and life-long job employment service
- industry and institutional networking
- collaboration and integration with alumni associations, in particular with the Erasmus Mundus Alumni Association

B.4.6 Describe the nature and comprehensiveness of the **Doctoral Candidate Agreement.**

What are the joint course implementation rules and mechanisms, mutual rights, obligations and responsibilities of the two parties as concerns the academic, administrative and financial aspects of the student's participation in the EMJD? Specify in what way the consortium adheres to and implements the European Charter for Researchers and the Code of Good Conduct for the Recruitment of Researchers.

Doctoral Candidate Agreement

§1. The National Technical University of Athens, located in Greece, 9, Iroon Polytechneiou St. Zografou Campous, 15780 Athens Greece, Coordinating Institution of the Erasmus Mundus Joint Doctorate *Protection of Monuments*, represented by Professor Antonia Moropoulou, Co-ordinator on the one part,

_
_
, the student , on the other part,

- HAVE AGREED to the following terms and conditions.
- **§2.** The student hereby commits him/herself on his/her honour to duly attend the *PROMON* program and the prescribed lectures and examinations.
- **§3.** The student understands that he/she will be excluded from the *PROMON* EMJD:
- a) in the case of non-attendance of the course (lectures, practical sessions, field trips, informative and official meetings...) that the student cannot justify with medical certificates, or for which permission has not been granted by the *Interzones* staff (to ensure permission, the student should ask in
- advance), b) If the student fails to validate a semester of study,
- c) If the student is the object of disciplinary measures leading to his/her exclusion from an *PROMON* Partner University,
- d) If the student is the object of legal prosecutions that prevent him/her from attending the *PROMON* programme,
- e) If the student withdraws from the *PROMON* programme, by his/her own decision or by force majeure.
- **§4.** In such an event, the student hereby makes the commitment on his/her honour to reimburse the *PROMON* Coordinating Institution (NTU-Athens, Greece) the excess funding from the grant(s) allocated to him/her, i.e., any *PROMON* funds received covering the period following the date of exclusion, except for the sums stipulated in §6 and §7.
- **§5.** Upon exclusion, the student shall in due time and before his/her departure pay for the following:
- the rent of his/her accommodation, for the month of the day of his/her exclusion,
- the bank fees corresponding to his/her accommodation insurance, for the month of the day of his/her exclusion,

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma
Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 21/67

Documento publicado en fecha: 16/4/2012

- the bank fees to pay for his/her bank account and his/her visa card, for the year of the day of his/her exclusion.
- the remaining tuition fees for the *PROMON* program: tuition fees amount to 3600 € peryear for non-European students, 2400 € for European students.
- **§6.** The *PROMON* Coordinating Institution (NTU-Athens, Greece) shall allocate the student funds and instructions enabling him/her to fulfil his/her commitments. The funds consist in the grant allocated for the month of the day of his/her exclusion,
- **§7.** In addition, the *PROMON* Coordinating Institution (NTU-Athens, Greece) shall reimburse the student funds to cover the cost of travel back to his/her country of origin.
- **§8.** Following the exclusion or the withdrawal of a student from the program, the Framework Partnership Agreement (FPA) between the *PROMON* Coordinating Institution (NTU-Athens, Greece) and the Education, Audiovisual & Culture Executive Agency (EACEA) of the Commission of the European Communities which funds the *PROMON* program, requires that the *PROMON* Coordinating Institution (NTU-Athens, Greece),
- i) make the remainder of the grant allocated to that student available to a new applicant,
- ii) return to the Education, Audiovisual & Culture Executive Agency (EACEA) of the

Commission of the European Communities the remainder of the grant allocated to that student if no new applicant is enrolled as a replacement, except for funds mentioned in §6 and §8, and for the prescribed use only (§6 and §8).

On behalf of the *PROMON* EMJD Consortium,

Professor Antonia Moropoulou, General Co-ordinator,

I,	, born on	in	hereby certify that I
have read and understood the PRO	MON Doctoral Stude	nt Handbook, and	commit
myself to abide to its rules and regu	ulations during the en	tire duration of my	y doctoral studies with the
PROMON EMJD.	· ·	•	•

Should I fail to do so, I am fully aware that I might be expelled from the program and (if applicable) my Employment Contract with the University of Bergamo (and the Erasmus Mundus fellowship from which I benefit) could cease immediately.

Place, Date,

Signature,

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.					
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012				
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 22/67				
	III. I I I I I I I I I I I I I I I I I				



B.5 Programme Management and Quality Assurance (15% of the max. score)

This criterion will explore the overall organisational arrangements and cooperation mechanisms within the consortium and will also look into the foreseen evaluation and sustainability plans as well as the existence of complementary funding.

B.5.1 Describe the quality of the **organisational arrangements and cooperation mechanisms** within the consortium and the specific role played by each of its members.

What is the degree of institutional commitment of the consortium's partners, and what financial and human resources are allocated to the programme? Is there a management and supervision board? How clearly defined and active is the role of all partners? How will a feed-back system be established and used? Does the consortium foresee detailed partnership agreements covering the academic, scientific and administrative aspects of the programme and how are they going to be used?

The PROMON governance structure will comprise a Management Board, an Advisory Board, and an Academic Board of Studies, each with written terms of reference (which will be published in due course).

The Management Board will consist of one senior member of each partner institution, representing the Head of their institution, and will be chaired by one of its members. It will meet twice a year to oversee all aspects of delivery of the program; monitor progress against targets; approve reports to the European Commission; make strategic long-term decisions on the program of study; receive and consider input from associated members; and act as first level of arbitration in disputes (if any) among partners.

The Advisory Board will meet once a year and comprise four external members (one nominated by each institution), four representatives of the placement-offering institutions (one from each country), the Chair of the Academic Board of Studies, one student representative, and, after year three, one alumnus.

The Academic Board of Studies will comprise academic leads from each institution and one student representative. Both the Advisory and the Academic Boards will report once a year to the Management Board on the basis of formal evaluations and feedback received from students and academic staff on the program.

B.5.2 Describe how the consortium's **development and sustainability plan** is designed in order to ensure the proper implementation and continuity of the joint programme beyond Community funding.

What strategies have been envisaged, and over which period? What are the enrolment projections and the mid/long-term benefits for the partners? If applicable, are associated members involved in this sustainability plan and what degree of commitment can they provide?

All participating Universities have ongoing Program Studies either in Post Graduate, or in PhD level. Each participating University is expert at a certain field regarding the Protection of Monuments, and all combined have an integrated and interdisciplinary approach regarding the Protection of Monuments. On the other hand the ongoing cooperation of most of the universities in European Programs regarding the Protection of Cultural Heritage in relation with Education such as ELAICH program, ensures the development of a networking, in terms of organizing conferences, participating in exchange of students, academic staff and know-how, helping students all over the Mediterranean region and not only to develop an integrate approach and follow an interdisciplinary methodology regarding the confront the problems of Protection of Monuments. The dissemination of the results of the EMJD Program will work as a multiplier in terms of attracting students in the field.

B.5.3 To what extent have **complementary funding** possibilities been explored and/or secured?

How do these possibilities provide additional (full or partial) fellowships to additional doctoral candidates

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma
Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 23/67

and, if applicable, top up the difference between the fixed programme contribution to the candidates' participation costs and the actual cost for the consortium?

In Greece and in Spain at first stage, industries related to materials science, have been explored for complementary funding. In addition in all participating countries, all the Universities participating in the Consortium are in cooperation with research institutes or industries. In many cases, some of the research is conducted at industrial laboratories. The academic staff from all participating Universities is in close relation with companies and enterprises via European and National programs.

B.5.4 Describe the nature of the **internal evaluation** (by the institutions themselves? through candidates/scholars feed-back systems? etc.) and **external quality assessment** (by e.g. national, international or professional bodies) envisaged.

How (and with what periodicity) will these evaluation exercises be organised (by the institutions themselves, through an integrated approach agreed by all partner institutions, with questionnaires and feed-back systems, etc.)? What will the roles of the national, international or professional quality assurance bodies be, if any? How will the actors (Doctoral candidates / professors) be involved in this exercise? Will external experts be recruited for this purpose and - if yes - on what basis and how often? What methodology will be followed? If applicable, will associated members be involved in this exercise? How will the assessment outcomes be used to monitor, upgrade and improve the quality of the course?

The PROMON consortium respects the Standards and Guidelines for Quality Assurance in the European Higher Education Area[1] as agreed by the Ministers in the Bologna Process Communiqué in 2005. The program will be subject to annual monitoring and review on the basis of specific performance indicators and feedback from academic staff and students participating in the program, as well as from the program's associated members. The monitoring will include quantitative and qualitative data to provide reliable indicators of historic development and evaluation as the program enters subsequent phases. A formal report on the review will be presented annually to the relevant academic bodies in each of the partner institutions as well as to the PROMON Advisory and Management Boards. There will be a formal response to doctoral candidate feedback which will indicate any changes to be made as a result of this input. In addition, all institutions are subject to the evaluation and review procedures of their own national quality assurance agencies which will be respected and followed.

The annual monitoring reports will be compiled with a view to ensuring the continuous quality of the provision. They will evaluate the academic standards achieved, consider any possible enhancement of quality, and measure the performance of staff and students against national and international benchmarks. Specifically, they will consider comments by the Advisory Board and any associated partners (who will be formally invited to comment on an annual basis); consider student feedback and any actions to be undertaken as a result of this feedback; contain statistical data on student progression and achievement, as well as on applications and admissions; include a commentary on the adequacy of learning resources at all four sites; consider any issues raised on disabled access to the curriculum; and comment on proposed changes to the program.

Formal student evaluation procedures will be central to the operation of the program. All mandatory elements of the program – training skills courses and workshops, introductory and elective modules, special skills courses, conferences, etc – will contain an internal anonymous feedback mechanism designed to enhance the quality of the learning experience. The work placements will be evaluated separately.

All PROMON doctoral students will be asked once a year to complete a questionnaire, measuring student experience against the following themes: quality of supervision, academic standards, skills development, research environment including infrastructure and intellectual climate, thesis examination, professional development and career, roles and responsibilities, personal factors, meeting expectations, completion. In addition, staff/student liaison committees will meet once a year at each site. Their membership will include at least one student from each stage of the program and at least one member of the PROMON teaching and supervisory staff. Agendas and minutes of these meetings will be made available to the Academic Board and to all students through publication on the program website.

At the end of three years the program will be subject to external review by a body consisting of at least one external expert nominated by each of the partner institutions. These experts will not be members of the

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 24/67					
	ID.TINWA JUNIU.Upu.es REALIZITEORI 92221DN Q== PAGINA 24/01					

RfALRq1fEokrgaZzUfDNfQ==

27 de 69

Documento publicado en fecha: 16/4/2012

Advisory Board. The Review Group will be chaired by one of its members and will be provided with administrative support by the coordinating institution. Outcomes will be considered by the Management Board as well as by individual institutions as part of a systematic process of review.

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ			10/04/2012		
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 25/67					







ERASMUS MUNDUS



Application Form ERASMUS MUNDUS 2011 Call for proposals

Joint Master Courses / Joint Doctorate Programmes

Before you begin completing this eform:

- Try the test eForm. This is a very brief eForm to help you become familiar with how the fields and tables work and to test that your software and internet connection allow an application to be submitted.
- Check that you have the latest available version of the eForm. In the event of a significant eForm problem arising, the Agency may decide to publish an updated i.e. corrected version of the eForm. Please check to see if a later version is available and to see details of any problems that have arisen and their impact.

Click on the following link to go to the webpage to try the test eForm and to check for the latest version of the eForm:

http://eacea.ec.europa.eu/eforms/index_en.php

Programme	ERASMUS MUNDUS
Sub-programme *:	Action 1 Erasmus Mundus Joint Programmes
Programme guide / Call for proposals	EACEA 41/10
Action *:	EMJD
Sub-action *:	N/A
Deadline for submission	29/04/2011 12:00 midday CET
Project title *:	ERASMUS MUNDUS JOINT DOCTORATE PROGRAM IN "PROTECTION OF MONUMENTS"
Project acronym *:	PROMON
Language used to co	emplete the form *: English

YOU MUST COMPLETE ALL FIELDS ON THIS FIRST PAGE BEFORE COMPLETING ANY OTHER PARTS OF THE FORM. SELECTIONS YOU MAKE ON THIS FIRST PAGE, DICTATE THE APPEARANCE AND BEHAVIOUR OF THE REST OF THE FORM.

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 1 of 42

Conigo Seguro de verinicacion: RTALEGITE ORTGAZZUTUNIÇEE - Perfinite la verinicación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR FRANCISCO OLIVA BLAZQUEZ			FECHA	10/04/2012		
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 26/67					







ERASMUS MUNDUS

Part A. Identification of the applicant and if applicable other organisation(s) participating in the project.

Parts A and B must be completed separately by each organisation participating in the project.

A.1 Organisation					
Partner number Role in the application		P1			
		Applicant Organisation	Applicant Organisation		
Full name of the organisation *: Full name of the organisation in latin characters		NATIONAL TECHNICAL	UNIVERSITY OF ATHENS		
Acronym *:		NTUA			
Erasmus University Charte	r number	31683-IC-1-2007-1-GR-	31683-IC-1-2007-1-GR-ERASMUS-EUC-1		
Department / Faculty					
Registered address					
Street * :				Number	
IROON POLYTECHNEIOU				9	
Post code *:	Town *:				
15780	ZOGRAFO	U, ATHENS			
Country *:		Region *:			
GREECE		Attiki			
Internet address:		www.ntua.gr			
Telephone 1 * :		Telephone 2	Fax		
+302107722050			+302107721960		
nission number: 252-EM-1-2011-1-GR-ERA M	UNDUS-EMJD				
		http://eacea.ec.euro	pa.eu		
		Page 2 of 42			

	Código Seguro de verificación:RfALRq1 copia de este documento electr Este documento incorpora firma electrónica reco	.fEokrgaZzUfDNfQ==. Permite la verificación de la intónico en la dirección: https://portafirmas.upo.es/verifica nocida de acuerdo a la Ley 59/2003, de 19 de diciembr	egridad de una rfirma e, de firma electrónica.	
FIRMADO POR	OR FRANCISCO OLIVA BLAZQUEZ			10/04/2012
ID. FIRMA	juno.upo.es	PÁGINA	27/67	
	*** ***********************************	ALRq1fEokrgaZzufDNfQ==		





ERASMUS MUNDUS

ītle * :	Family name *:	First name *:
PROFESSOR	MOROPOULOU	ANTONIA
Role in the organisat	ion*: E-	mail address * :
/ICE RECTOR	an	noropul@central.ntua.gr
Check this box if the a he address provided	iddress is different from in section A.1	
Address		
Street *:		Numbe
ROON POLYTECHNE	ilou	9
Post code * :	Town *:	
5780	ZOGRAFOU, ATHENS	
Country * :	Region *:	
GREECE	Attiki	
elephone 1 * :	Telephone 2	Fax
-302107722050		+302107721960
sponsible for the mai	gal representative is different from the person nagement rised to represent the organisation	
legal representa - Title * :	tive) Family name * :	First name * :
PROFESSOR	SIMOPOULOS	SIMOS
-mail * :		
ector@mail.ntua.gr		

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.					
FIRMADO POR	FRANCISCO OL	FECHA	10/04/2012		
ID. FIRMA	juno.upo.es	PÁGINA	28/67		
ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PAGINA 28/67 RfALRq1fEokrgaZzUfDNfQ== RfALRq1fEokrgaZzUfDNfQ==					





ERASMUS MUNDUS

Role in the organisation *:						
RECTOR						
Check this box if the address is different from the address provided in section A.1						
Address:	Address:					
Street *:			Number			
IROON POLYTECHNEIOU	IROON POLYTECHNEIOU					
Post code *:	Town *:					
15780	ZOGRAFOU, ATHENS					
Country *:	F	Region * :				
GREECE		Attiki				

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 29/67







ERASMUS MUNDUS

Part B. Organisation and activities

B.1 Structure

Status *:	Public		
Type of organisation	University or higher education institution (tertiary level)		

B.2 Aims and activities of the organisation*

Please provide a short presentation of your organisation (key activities, affiliations etc.) relating to the domain covered by the project. (Max. 1000 characters)

The N.T.U. of Athens is the first Technical University of Greece. With history of more than 170 years provides studies at 9 Schools. Civil, Mechanical, Electrological and Electronic Engineering along with Architecture, Chemical Engineering Surveying, Metal and Naval Engineering along with studies at Applied Mathematics and Physics. Moreover provides Post – Graduates studies at 17 Interdisciplinary Masters Programs which cover all the aspects of an Engineer. From Protection of Monuments to Environment and Development, from Marine studies to Information Systems. At NTUA's facilities and laboratories with high technology equipment more than one thousand PhD candidates, under the supervision of the more than 600 Professors with affiliations all over the world, are contacting research, basic and applied, with an outcome recognized from the International Scientific Community, published at all the Scientific Journals, and presented at Congresses in European and International level.

Please describe the role of the organisation in the project. (Max. 1000 characters)

The N.T.U. of Athens is the coordinator of the project. Already in cooperation with most of the universities participating in the project can assure the management of the project. Already managing hundreds of European Projects, as well as, having a high qualified ERASMUS office ready to provide all the necessary help, information and management of the project. Within the University already established Post Graduate Master Courses are running in all the Laboratories, providing all the necessary equipment and facilities for the potential PhD candidates participating the program. The interdisciplinary with all the Universities participating and the already established cooperation ensures that the students under the coordination of NTUA take all the necessary supplies for their research. NTUA will also provide many courses and laboratory research in its Schools (Architecture, Chem. Engineering, Civil Engineering and through the participation of Professors at all University Schools)

B.3 Other EU grants

Please list the projects for which the organisation, or the department responsible for the management of this application, has received financial support from the EU Programme during the last three years.

Programme or initiative Reference number Beneficiary Organisation Title of the Project

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 5 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 30/67







ERASMUS MUNDUS

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project	
E.C	63174700	NTUA	GOALDS : GOAL BASED DAMAGE STABILITY	X
E.C	63174300	NTUA	EXPERI-EFFICIENT EXPLOITATION OF EU PERLITE RESOURCES FOR THE DEVELOPMENT OF A NEW GENERATION OF INNOVATIVE AND HIGH ADDED VALUE MICRO- PERLITE BASED MATERIALS FOR THE CHEMICAL, CONSTRUCTION AND MANUFACTURING	X
E.C	63172200	NTUA	ATHENA - ACCESS TO CULTURAL HERITAGE NETWORKS ACROSS EUROPE	X
EUROPAID	63171000	NTUA	ELAICH - EDUCATIONAL LINKAGE APPROACH IN CULTURAL HERITAGE	X
E.C	63171100	NTUA	EU-CHIC - EUROPEAN CULTURAL HERITAGE IDENTITY CARD	X
		Add a p	roject	

Please list other grant applications submitted by your organisation, or the department responsible, for this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Programme concerned	Amount requested
Add a project	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 6 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 31/67







ERASMUS MUNDUS

Part A. Identification of the applicant and if applicable other organisation(s) participating in the project.

Parts A and B must be completed separately by each organisation participating in the project.

A.1 Organisation				
Partner number Role in the application *:		P2		X
		Partner		
Full name of the organisation		Universidade do Minho		
characters				
Acronym *:		UMINHO		
Erasmus University Charter	number	29238-IC-1-2007-1-PT-ERASMUS-EUCX-1		
Department / Faculty		Department of Civil Engi	neering (DEC)	
Registered address				
Street *:				Number
Largo do Paço				
Post code *:	Town *:			
P-4704-553	Braga			
Country *:		Region *:		
PORTUGAL		Norte		
Internet address:		www.uminho.pt		
Telephone 1 *:		Telephone 2	Fax	
+351 253 510108				
mission number: 1252-EM-1-2011-1-GR-ERA MU	INDUS-EMJD			
		http://eacea.ec.europa	1.eu	
		Page 7 of 42		

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FRANCISCO OLIVA BLAZQUEZ		FECHA	10/04/2012		
ID. FIRMA	juno.upo.es	RfALRqlfEokrgaZzUfDNfQ==	PÁGINA	32/67		
RfALRq1fEokrgaZzUfDNfQ==						





ERASMUS MUNDUS

A.2 Person responsible for the management of the application (contact person)

Title *:	Family name * :	First name *:	
Prof.	Lourenço	Paulo	
Role in the organisation	on*:	E-mail address * :	
Head of Research Center		pbl@civil.uminho.pt	
Check this box if the ac the address provided i			
Address			
Street *:			Number
Azurém			
Post code * :	Town *:		
P-4800-058	Guimarães		
Country *:	Region *:		
PORTUGAL	Norte		
Telephone 1 * :	Telephone 2	Fax	
+351 253 510200			

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu
Page 8 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 33/67







ERASMUS MUNDUS

Part B. Organisation and activities

B.1 Structure

Status *:	Public
Type of organisation $*$:	HE research centres

B.2 Aims and activities of the organisation*

Please provide a short presentation of your organisation (key activities, affiliations etc.) relating to the domain covered by the project. (Max. 1000 characters)

The University of Minho (UMINHO) is a Public Institution dedicated to higher education and research in all fields of knowledge. UMINHO offers 39 1st cycle degrees, 13 integrated MSc, around 150 MSc programmes and over 50 PhD programmes (2 international programs involving MIT or CMU, USA). Internationalisation is a priority and UMINHO has a long and sound-based experience in coordinating and participating in several EU programmes. With more than 400 cooperation agreements with HEI worldwide, it sends over 450 students within several mobility schemes and hosts about the same number. An average of 65 teachers performs a teaching assignment abroad per academic year. Besides 2 EMMCs, within the Erasmus Mundus, UMINHO participates in 7 EMECW and 1 Action 4. UMINHO is also very active in: ALBAN (85 grant holders); Asia Link and Edulink (1 Co. each); UE-India (Co); Co. 1 Marie Curie Network and 1 Network of Excellence under FP6. UMINHO applies ECTS to LLL and holds both ECTS and DS Labels

Please describe the role of the organisation in the project. (Max. 1000 characters)

University of Minho will act as partner of project, with management tasks and educational tasks, namely supervision of students. The main contribution of UMINHO is in the fields of "advanced diagnosis, monitoring and control of decay mechanisms on architectural surfaces of historic buildings" and "selection, application and evaluation of appropriate, effective and compatible conservation - restoration materials and techniques".

B.3 Other EU grants

Please list the projects for which the organisation, or the department responsible for the management of this application, has received financial support from the EU Programme during the last three years.

Programme or initiative	Reference number	Beneficiary Organisation Title of the Project	
		Add a p	roject

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 9 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 34/67







ERASMUS MUNDUS

Please list other grant applications submitted by your organisation, or the department responsible, for this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Programme concerned	Amount requested
Add a project	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 10 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 35/67





ERASMUS MUNDUS

Part A. Identification of the applicant and if applicable other organisation(s) participating in the project.

Parts A and B must be completed separately by each organisation participating in the project.

A.1 Organisation				
Partner number		Р3		X
Role in the application * :		Partner		
Full name of the organisation *: Full name of the organisation in latin characters		Universidad Pablo Olavid	de	
Acronym * :		UPO		
Erasmus University Cha	arter number	66782-IC-1-2002-1-ES-ER	ASMUS-EUC-1	
Department / Faculty		Dpt.Physical,Chemical &	Natural Systems	
Registered address				
Street * :				Number
Utrera Road, Km 1				
Post code *:	Town *:			
41001	Sevilla			
Country *:		Region *:		
SPAIN		Andalucía		
Internet address:		www.upo.es		
Telephone 1 * :		Telephone 2	Fax	
+34-954349526			+34-954349814	
nission number:				
252-EM-1-2011-1-GR-ER	A MUNDUS-EMJD			
		http://eacea.ec.europa Page 11 of 42	1.eu	

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.					
FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012				10/04/2012	
ID. FIRMA juno.upo.es RfALRqlfEokrgaZzUfDNfQ== PÁGINA 36/67					
	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PAGINA 36/67 RfALRq1fEokrgaZzUfDNfQ== RfALRq1fEokrgaZzUfDNfQ==				





ERASMUS MUNDUS

A.2 Person responsible for the management of the application (contact person)

Title * :	Family name *:	First name *:
Prof.	Ortiz	Pilar
Role in the organisa	ntion * :	E-mail address * :
Head of Area		mportcal@upo.es
Check this box if the the address provided	address is different from 1 in section A.1	
Address		
Street *:		Number
Utrera Road, Km 1		
Post code * :	Town *:	
41001	Sevilla	
Country *:	Regio	n*:
SPAIN	Anda	lucía
Telephone 1 * :	Telephone 2	? Fax
+34-954349526		+34-954349814

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 12 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 37/67







ERASMUS MUNDUS

Part B. Organisation and activities

B.1 Structure

Status *:	Public
Type of organisation *:	University or higher education institution (tertiary level)

B.2 Aims and activities of the organisation*

Please provide a short presentation of your organisation (key activities, affiliations etc.) relating to the domain covered by the project. (Max. 1000 characters)

Pablo Olavide University (UPO) is a public institution of higher education and research in all fields of knowledge. UPO offers 39 1st cycle degrees, more than 150 in-house postgraduates programmes (in collaboration with public and private organisations) and around 40 Phd and Msc programmes. UPO applies ECTS.

UPO manages six different international mobility programs and two cooperation programs. Europe:Erasmus with fifteen countries. EE.UU/Canada/Australia:Atlanticus. Latin America;Anuies-Crue with Mexico. PIMA:Chile, Costa Rica, Uruguay, Peru, Colombia, Argentina, Brazil and Mexico, UPO/PUCP with Perú. Ireland/Canada/Australia. UPO also promotes research through cooperation projects, funded by PCI, Spanish Agency for International Development Cooperation, UPO has partners in Latin American and Sub-Saharan Africa and Mediterranean countries. UPO has an own Development Cooperation Program (CUD) which funds teaching and research projects.

Please describe the role of the organisation in the project. (Max. 1000 characters)

University Pablo Olavide will act as partner of project, with management tasks and educational tasks, namely supervision of students. The main contribution of UPO is in the fields of advanced diagnosis, use of non-destructive techniques and evaluation of risks in Cultural Heritage. Our group of professors has a lot of experience in teaching to students from other universities as some of our subjects are open to Andalusia or every country of Spanish language. We are specialist in teaching innovation and use of IT in the University.

B.3 Other EU grants

Please list the projects for which the organisation, or the department responsible for the management of this application, has received financial support from the EU Programme during the last three years.

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
		Add a p	roject

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 13 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 38/67







ERASMUS MUNDUS

Please list other grant applications submitted by your organisation, or the department responsible, for this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Programme concerned	Amount requested
Add a project	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 14 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 39/67







ERASMUS MUNDUS

Part A. Identification of the applicant and if applicable other organisation(s) participating in the project.

Parts A and B must be completed separately by each organisation participating in the project.

Partner number		P4		X	
Role in the application *:		Partner	Partner		
Full name of the organisa Full name of the organisat characters		Ca' Foscari University Ver	nice		
Acronym * :		UNIVE	UNIVE		
Erasmus University Charte	r number	29189-IC-1-2007-1-IT-ER/	ASMUS-EUC-1		
Department / Faculty		Env. Sciences, Informatics	and Statistics		
Registered address					
Street *:				Number	
Dorsoduro				2137	
Post code * :	Town *:				
30123	VENICE				
Country * :		Region *:			
ITALY		Veneto			
Internet address:		www.unive.it			
		Telephone 2	Fax		
Telephone 1 * :					

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.					
FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012			10/04/2012		
ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 40/67					
	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PAGINA 40/67 RfALRq1fEokrgaZzUfDNfO==				





ERASMUS MUNDUS

A.2 Person responsible for the management of the application (contact person)

Title *:	Family name *:	First name *:	
Prof.	Biscontin	Guido	
Role in the organisati	on * :	E-mail address *:	
Head of Research Cer	nter	bisco@unive.it	
Check this box if the active address provided	ddress is different from in section A.1		
Address			
Street *:		Num	nber
Dorsoduro		2137	7
Post code *:	Town *:		
30123	VENICE		
Country *:	Region *	: :	
ITALY	Veneto		
Telephone 1 *:	Telephone 2	Fax	
+39 0412348509		+39 041 2346729	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu
Page 16 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 41/67







ERASMUS MUNDUS

Part B. Organisation and activities

B.1 Structure

Status *:	Public
Type of organisation *:	University or higher education institution (tertiary level)

B.2 Aims and activities of the organisation*

Please provide a short presentation of your organisation (key activities, affiliations etc.) relating to the domain covered by the project. (Max. 1000 characters)

Ca' Foscari University of Venice, established on August 6th 1868 as a Royal Business College, was the first educational institution in Italy to offer higher education in business and economics.

Today Ca' Foscari counts about 20,000 students and 1,700 staff, and offers 4 main subject areas: economics, humanities, languages and sciences, each offering First Cycle and Second Cycle Degree Programmes, Specialist Master's Programmes and Research Doctorate Programmes

Over 200 international cooperation agreements with partners from all over the world give a strong international outlook to the University.

The department of Environmental Sciences, Informatics and Statistics of the university has a valuable practice in the conservation of cultural heritage, environmental impact assessment and advanced diagnosis, monitoring and control of decay of historic buildings.

Please describe the role of the organisation in the project. (Max. 1000 characters)

Since many years, Ca' Foscari University of Venice has been actively involved in many research projects involving the conservation and restoration of architectures, archeological artifacts and artworks. The experience acquired during these years has brought to the institution of a degree in chemistry for the conservation and restoration of cultural heritage. The course is active since more than 10 years and has many collaborations with national and international collaborations for the development of important projects of restoration and valorization of cultural heritage sites. The participation and collaboration in the academic course of experts coming from different scientific fields, as in the cultural heritage as in the environmental field, has allowed the development of a new approach to the conservation of the architectural and environmental heritage.

B.3 Other EU grants

Please list the projects for which the organisation, or the department responsible for the management of this application, has received financial support from the EU Programme during the last three years.

Programme or initiative Reference number Beneficiary Organisation Title of the Project

Add a project

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 17 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 42/67







ERASMUS MUNDUS

Please list other grant applications submitted by your organisation, or the department responsible, for this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Programme concerned	Amount requested
Add a project	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> bttp://eacea.ec.europa.eu Page 18 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 43/67







ERASMUS MUNDUS

Part A. Identification of the applicant and if applicable other organisation(s) participating in the project.

Parts A and B must be completed separately by each organisation participating in the project.

4.1 Organisation				
Partner number		P5		X
Role in the application *:		Partner		
Full name of the organisation *: Full name of the organisation in latin characters		Politecnico di Milano		
Acronym * :		POLIMI		
Erasmus University Charter n	umber			
Department / Faculty		Department of Structur	al Engineering	
Registered address				
Street *:				Number
piazza Leonardo da Vinci				32
Post code *:	Town *:			
20133	MILAN			
Country *:		Region *:		
ITALY		Lombardia		
Internet address:		www.polimi.it - http://	www.stru.polimi.it/EN/	
Telephone 1 * :		Telephone 2	Fax	
+39-02-23994386			+39-02-23994220	
mission number: 252-EM-1-2011-1-GR-ERA MUN	IDUS-EMJD			
		http://eacea.ec.euroj	òa.eu	
		Page 19 of 42		

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.					
FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012			10/04/2012		
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 44/67				
	REALRGITECKTGAZZUTDNIQ== PAGINA 44/67				





ERASMUS MUNDUS

A.2 Person responsible for the management of the application (contact person)

Title *:	Family name * :	First name *:	
Prof.	di Prisco	Marco	
Role in the organisati	on*:	E-mail address * :	
Head of Department		mdiprisco@stru.polimi.it	
Check this box if the ac the address provided i			
Address			
Street *:			Number
piazza Leonardo da V	inci		32
Post code * :	Town *:		
20133	MILAN		
Country *:	Region * :		
ITALY	Lombardia		
Telephone 1 * :	Telephone 2	Fax	
+39-02-23994386	+39-02-23994208	+39-02-23994220	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 20 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 45/67







ERASMUS MUNDUS

Part B. Organisation and activities

B.1 Structure

Status *:	Public
Type of organisation *:	University or higher education institution (tertiary level)

B.2 Aims and activities of the organisation*

Please provide a short presentation of your organisation (key activities, affiliations etc.) relating to the domain covered by the project. (Max. 1000 characters)

POLIMI (since 1863) is a scientific-technological university for engineers, architects and designers with over 1,200 professor & researcher and about 40,000 students in 7 campuses. It aims at the quality and innovation of teaching and research, by developing a fruitful relationship with the economic and productive reality through experimental research and technology transfer. Research is increasingly more related to teaching and represents a key commitment enabling POLIMI to achieve results of high international profile while creating a meeting place between university and the business world. This commitment develops in three main directions: Strengthening of leading researchers to ensure a strong international presence. Developing co-ops with businesses, to fuel research with real-life problems & facilitate the transfer of research results into applications.

Updating the educational offer in parallel with Sci & tech advances, to guarantee state-of-the-art education.

Please describe the role of the organisation in the project. (Max. 1000 characters)

POLIMI will act as a partner of the project, with management tasks and educational tasks, namely supervision of students. The main contribution of POLIMI is in the fields of "experimental study of masonry decay evolution, non destructive advanced diagnostic techniques for monitoring and control on site of decay mechanisms on masonry surfaces of historic buildings" and "monitoring and control of effectiveness and compatibility of materials and techniques used for repair and protection of masonry surfaces".

The involved group from POLIMI has a long expertise in the technical issues of the preservation of the historic buildings. Laboratory facilities and the access to on site case histories could support the education tasks.

B.3 Other EU grants

Please list the projects for which the organisation, or the department responsible for the management of this application, has received financial support from the EU Programme during the last three years.

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
	•		

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 46/67







ERASMUS MUNDUS

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project	
ENV Collaborative project	244123	POLIMI with 18 partners coordinator University of Padova - Ita	NIKER - NEW INTEGRATED KNOWLEDGE BASED APPROACHES TO THE PROTECTION OF CULTURAL HERITAGE FROM EARTHQUAKE-INDUCED RISK FP7-ENV-2009-1	X
STREP	044251	POLIMI with 11 partners coordinator BAM - Germany	CHEF - Cultural Heritage Protection against Flooding FP6 - 8.1 B.3.6 The protection of cultural heritage and associated conservation strategies	Х
				1

Add a project

Please list other grant applications submitted by your organisation, or the department responsible, for this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Programme concerned	Amount requested
Add a project	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu
Page 22 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 47/67







ERASMUS MUNDUS

Part A. Identification of the applicant and if applicable other organisation(s) participating in the project.

Parts A and B must be completed separately by each organisation participating in the project.

A.1 Organisation			
Partner number	P6		X
Role in the application * :	Partner		
Full name of the organisation * :	UNIVERZA V LJUBLJANI		
Full name of the organisation in latin characters	UNIVERZA V LJUBLJANI		
Acronym * :	UL FGG		
Erasmus University Charter number	65996-IC-1-2007-1-SI-ER	ASMUS-EUCX-1 (extended)	
Department / Faculty	Faculty of Civil & Geodet	ic Engineering	
Registered address			
Street * :			Number
JAMOVA			2
Post code *: Town *:			
1000 LJUBLJANA	A		
Country *:	Region *:		
SLOVENIA	Zahodna Slovenija		
Internet address:	http://www2.fgg.uni-lj.si	/	
Telephone 1 * :	Telephone 2	Fax	
+386 1 476 8500		+386 1 425 0681	
nission number:			
252-EM-1-2011-1-GR-ERA MUNDUS-EMJD	h		
	http://eacea.ec.europa Page 23 of 42	i.eu	

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.				
FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012			10/04/2012	
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 48/67			
REALRQITECKTGGZZUIDNIQ== PAGINA 40/0/				





ERASMUS MUNDUS

A.2 Person responsible for the management of the application (contact person)

Title *:	Family name * :	First name *:	
Assoc. Prof.	BOKAN BOSILJKOV	VIOLETA	
Role in the organisation	*:	E-mail address *:	
Head of the UL FGG Cha	nir	vbokan@fgg.uni-lj.si	
Check this box if the addr the address provided in s			
Address			
Street *:			Number
JAMOVA			2
Post code *:	Town *:		
1000	LJUBLJANA		
Country *:	Region *	:	
SLOVENIA	Zahodna	Slovenija	
Telephone 1 *:	Telephone 2	Fax	
+386 1 476 8663			

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu
Page 24 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 49/67







ERASMUS MUNDUS

Part B. Organisation and activities

B.1 Structure

Status *:	Public
Type of organisation *:	University or higher education institution (tertiary level)

B.2 Aims and activities of the organisation*

Please provide a short presentation of your organisation (key activities, affiliations etc.) relating to the domain covered by the project. (Max. 1000 characters)

The University of Ljubljana (1919) encompasses 26 faculties, academies and colleges with about 56.000 students. The Faculty of Civil and Geodetic Engineering has 190 employees, 90 academics and researchers with about 1800 undergraduate and 150 postgraduate students. The Chair of Research in Materials and Structures has 5 permanently employed members (3 PhD, 2 BSc), 3 temporarily employed PhD candidates and 1 associated researcher (PhD degree). Members of the chair lecture in Building Materials, Experimental Methods in Structural Engineering, Retrofitting of Structures, Decay of Building Materials and Solid Waste Management. Research focuses among others on development of methods for retrofitting of reinforced concrete and masonry buildings, including cultural monuments, on evaluation of existing and development of new laboratory and in-situ testing methods for lime-based materials and components of heritage buildings and monitoring of microclimatic conditions in heritage buildings.

Please describe the role of the organisation in the project. (Max. 1000 characters)

The Faculty of Civil and Geodetic Engineering implements doctoral programme "Build environment". The goal of the programme is to qualify the graduates for solving scientific problems, as well as for cooperation in solving demanding practical problems with interdisciplinary approach. Graduates will be qualified to approach problems in scientific way by using the latest scientific methods, to critically assess the research results, to develop new research methods and to transfer new technologies and knowledge into practice. Field of Cultural Heritage Protection, conservation materials and techniques is covered in the following courses, lectured by the members of the Chair of Research in Materials and Structures: Experimentally supported design of masonry buildings (10 ECTS), Advanced mortars and concretes technologies (5 ECTS) and Renovation of immovable cultural heritage (5 ECTS). These three courses are eligible to be included in the frame of the EM Joint Doctorate Programme.

B.3 Other EU grants

Please list the projects for which the organisation, or the department responsible for the management of this application, has received financial support from the EU Programme during the last three years.

Programme or initiative Reference number Beneficiary Organisation Title of the Project

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 25 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 50/67







ERASMUS MUNDUS

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project	
6th Framework Programme	TST5- CT-2006-031522	Faculty of Civil and Geodetic Engineering, Chair in Materials	HP FUTURE BRIDGE; High performance composite bridges for rapid infrastructure renewal	X
7th Framework Programme	205987	Faculty of Civil and Geodetic Engineering, Chair in Materials	REG CON; Support action for innovation driven clusters in constructions regional approaches, multi stakeholders engagement and cross regional cooperation	X
7th Framework Programme	226995	Faculty of Civil and Geodetic Engineering, Chair in Materials	EU-CHIC; European Cultural Heritage Identity Card	X
7th Framework Programme	226973	Faculty of Civil and Geodetic Engineering, Chair in Materials	CLIMATE FOR CULTURE; Damage risk assessment, economic impact and mitigation strategies for sustainable preservation of cultural heritage in the times of climate change	X
7th Framework Programme	244229	Faculty of Civil and Geodetic Engineering, Chair in Materials	PERPETUATE; Performance based approach to the earthquake protection of cultural heritage in European and Mediterranean countires	X
	1		1	

Please list other grant applications submitted by your organisation, or the department responsible, for this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Add a project

Programme concerned	Amount requested
Add a project	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 51/67







ERASMUS MUNDUS

Part A. Identification of the applicant and if applicable other organisation(s) participating in the project.

Parts A and B must be completed separately by each organisation participating in the project.

A.1 Organisation				
Partner number	P7	X		
Role in the application * :	Partner	Partner		
Full name of the organisation Full name of the organisation characters		ite of Technology		
Acronym *:	IIT			
Erasmus University Charter nu	ımber			
Department / Faculty	Architecture and Town	Planning		
Registered address				
Street *:		Number		
Technion City				
Post code *:	Town *:			
32000	Haifa			
Country *:	Region *:			
Israel	N/A			
Internet address:	http://www1.technion.	ac.il/en		
Telephone 1 *:	Telephone 2	Fax		
+972-4-8294001		+972-4-8294617		
mission number: 252-EM-1-2011-1-GR-ERA MUNI	DUS-EMJD			
	http://eacea.ec.euro	ра.еи		
	Page 27 of 42			

	Código Seguro de verificación:RfALRq1 copia de este documento elect Este documento incorpora firma electrónica reco	.fEokrgaZzUfDNfQ==. Permite la verificación de la inte rónico en la dirección: https://portafirmas.upo.es/verificar nocida de acuerdo a la Ley 59/2003, de 19 de diciembre	egridad de una firma e, de firma electrónica.		
FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012			10/04/2012		
ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 52/67					
RfALRq1fEokrgaZzUfDNfQ==					





ERASMUS MUNDUS

A.2 Person responsible for the management of the application (contact person)

Title * :	Family name *:	First name *:	
Dr.	Lobovikov-Katz	Anna	
Role in the organisati	on *:	E-mail address *:	
Senior Researcher		lokatz@netvision.net.il	
Check this box if the active address provided	ddress is different from in section A.1		
Address			
Street *:			Number
Technion City			
Post code * :	Town *:		
32000	Haifa		
Country *:	Region	*:	
Israel	N/A		
Telephone 1 * :	Telephone 2	Fax	
+972-4-8294001		+972-4-8294617	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 28 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 53/67







ERASMUS MUNDUS

Part B. Organisation and activities

B.1 Structure

Status *:	Public
Type of organisation *:	University or higher education institution (tertiary level)

B.2 Aims and activities of the organisation*

Please provide a short presentation of your organisation (key activities, affiliations etc.) relating to the domain covered by the project. (Max. 1000 characters)

The Technion, I.I.T. is a science and technology research university, of world class, dedicated to the creation of knowledge and the development of human capital and leadership. The Faculty of Architecture and Town Planning is the oldest (1924) and most prestigious in Israel, and has always maintained a very high level of scholarship and professional training, emphasizing creativity, technical skill and social and environmental consciousness. It is the only Faculty in Israel with graduate programs (Masters and Doctorate) in architecture, including a special program and a research laboratory in Green architecture. Its researchers, of world esteem, developed the Israeli regulation on sustainable architecture. In addition there has been much research activity on architectural education, teaching, learning and design studies.

Please describe the role of the organisation in the project. (Max. 1000 characters)

The Technion has participated in several Erasmus Mundus programs, among which the current one is a Master Course offers an original qualification in the highly innovative domain of molecular photonics for telecommunications and biology, with a strong multidisciplinary approach (in association with the Russell Berrie Nanotechnology Institute at the Technion). Technion's Architectural Heritage Research Centre conducts research aimed at the study and documentation of Israel's built environment. Israel's architectural heritage is of international importance, and was recently recognized by UNESCO, in declaring Masada, Old City of Acre and Tel Aviv as World Heritage Sites. The input of the Faculty of Architecture and Town Planning at the Technion will focus at the technological versus aesthetical issues in the conservation of architectural heritage. The Technion will contribute to the review of the selected modern tendencies in contemporary conservation of architectural heritage.

B.3 Other EU grants

Please list the projects for which the organisation, or the department responsible for the management of this application, has received financial support from the EU Programme during the last three years.

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project	
Euromed - ENPI	226995		EU CHIC—European Cultural Heritage Identity Card	X

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 29 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 54/67







ERASMUS MUNDUS

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
		Add a p	roject

Please list other grant applications submitted by your organisation, or the department responsible, for this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.

Programme concerned	Amount requested
Add a project	

Number of organisations to add	*:	1
--------------------------------	----	---

Add organisation(s)

List of partner organisations

Partner no	Role	Organisation Name	City	Country
P1	Annlicant ()rganisation	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	ZOGRAFOU, ATHENS	GREECE
P2	Partner	Universidade do Minho	Braga	PORTUGAL
P3	Partner	Universidad Pablo Olavide	Sevilla	SPAIN
P4	Partner	Ca' Foscari University Venice	VENICE	ITALY
P5	Partner	Politecnico di Milano	MILAN	ITALY
P6	Partner	UNIVERZA V LJUBLJANI	LJUBLJANA	SLOVENIA
P7	Partner	Technion - Israel Institute of Technology	Haifa	Israel

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 30 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 55/67







ERASMUS MUNDUS

	f the project			
C.1 STATISTICAL DATA				
The EMJD will last *:		3	years	
The EMJD will be mainly labo	oratory based * :	Yes		
Doctoral candidates will be e	enrolled under * :			
☐ Stipends				
Is the EMJD directly linked to A running EMMC?	:			
A Marie Curie Initial Tra	aining Network (ITN)?			
Has this application been the	e subject of a proposal under pro	evious EM calls for រុ	proposals? *: No	
During their EMJD period, the	e candidates will visit at least * :	3	different c	ountries.
The taught part of the EMJD	will be provided in the following	g language(s) * :		
Language to add				
33		////////////		Clear All
	Add >> EN			Clear Last
applies to all doctorals candidates	al candidates planned to be enro			Clear Last
	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates	al candidates planned to be enro			
applies to all doctorals candidates	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates EU Doctoral candidates *:	al candidates planned to be enro		Doctoral candidates * :	
applies to all doctorals candidates EU Doctoral candidates * :	al candidates planned to be enro		Doctoral candidates * :	

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.						
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012					
ID. FIRMA	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 56/67					
	ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PAGINA 56/67					





ERASMUS MUNDUS

C.2 THEMATIC FIELD

Main Area:	
Level 1 *:	Code
Engineering, Manufacturing and Construction	5
Level 2	Code
Architecture and building (others)	589
Please specify *:	
Protection of Monuments	
	Clear Main Area
Second Area:	
Level 1	Code
Level 2	Code
	Clear Second Area
Third Area:	
Level 1	Code
Level 2	Code
	Clear Third Area

520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu Page 32 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica. FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012 ID. FIRMA PÁGINA 57/67 juno.upo.es







ERASMUS MUNDUS

C.3 SUMMARY DESCRIPTION OF THE PROJECT * (Max. 3000 characters)

All partners Universities offering continuously advanced education and specialization in the field of the protection of monuments to architects, engineers and other scientists relevant to the field and responding to the needs of Cultural Heritage:

☑ Advanced diagnostics and monitoring of deterioration process in architectural surfaces of historic and traditional buildings, Environmental impact assessment and mapping on real scale-real time production, Selection, application and evaluation of proper, effective and compatible conservation materials and techniques for restoration interventions, Strategic planning of conservation interventions, environmental management for the protection of monuments, complexes and sites, preservation management of monuments, complexes and sites.

The MsC holders and the Doctors that graduated have formed a critical mass of people all over Europe, but also in third countries with high skills in the field. The necessary step in order to form a common approach in the Protection of Monuments is to Upgrade this education to a European level.

Several attempts help in this road. Integrated EU Projects which provide courses and seminars to professionals and non-professions are already implemented, developing a common methodology regarding the Protection of CH & the Protection of Monuments.

The next step is the development of a EMJD which will allow the mobility of PhD Candidates, in order to have an interdisciplinary knowledge of methods and techniques, and finally a methodology in order to confront issues of Protection of Monuments.

The dissemination of advanced study courses in the Mediterranean partner Countries connecting Europe, Africa and Asia and encouraging the accessibility to the knowledge of CH will develop the above mentioned objective.

Hence the emerging autonomous scientific field on science and engineering of materials and technologies for the protection of CH is pointed out and articulated in postgraduate educational level.

The safeguarding of our CH is of major concern to the European community as it is an important part of our living environment, of our past, and of our future. The European experience and priorities indicate the need for the creation of an EMJD in protection of monuments, materials, techniques and conservation interventions for the protection of monuments able to:

☑ offer scientific specialization and education in European Universities, on the methods and techniques of integrated interdisciplinary approach, research, cooperation and handling of complex problems in restoration, preservation and protection of monuments

🛮 offer in-depth education and development of research skills for engineers and other scientists so that they produce new knowledge

☑ develop interdisciplinary procedures for postgraduate courses at the level of cooperation between Dpts & Institutions for the first time in Europe

☑ provide the Public Sector and the open market with scientists specialized on Conservation.

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 58/67







ERASMUS MUNDUS

Part D. Technical Capacity

D.1 Consortium experience of the area of joint programmes and the specific discipline(s) of the project

Provide a list of projects/activities implemented by the consortium organisations in relation with the proposal

Title	Duration	Funding	Programme	Partners involved	
ELAICH - EDUCATIONAL LINKAGE APPROACH IN CULTURAL HERITAGE	3 YEARS	998 460 00 €	Euromed Heritage Programme 4	National Technical University of Athens, Technion University, Ca' Foscari University of Venice,	X
EU-CHIC - EUROPEAN CULTURAL HERITAGE IDENTITY CARD	3 YEARS	1 056 498,00 €	FP7-ENV-2008-1 "Cultural heritage"	University of Ljubliana, National Technical University of Athens, Technion University	X

Add Project / Activity

D.2 Skills and expertise of key staff involved in the project

Summary of the relevant skills and experience, including where relevant a list of the (main) publications related to the domain of the project (Maximum 750 characters). Maximum 3 CV's per partner institution.

Organisation	number

P1

Organisation name

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

Name of Key Person*	Summary of relevant skills and experience*	
ANTONIA MOROPOULOU	Professor, Vice Rector of NTUA, Director of Studies in the interdisciplinary Masters Program "Protection of Monuments" on the second Direction "Materials and Conservation Interventions. She is the author of more than 300 scientific publications, i.e.: 90 original papers published in International Scientific Journals, 82 papers in books and book chapters, 130 papers in Proceedings of International, as well 60 papers in Proceedings of National Conferences (in full length) and has participated in more than 160 International Conferences, in 73 of which as invited key-note speaker. She is the editor of 13 Books.	X

Add a Staff Member

Submission number:

520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 59/67







ERASMUS MUNDUS

Organisation number P2	Organisation name Universidade do Minho	
Name of Key Person*	Summary of relevant skills and experience*	
PAULO LOURENCO	Paulo Lourenço is a professor in the Department of Civil Engineering, University of Minho. Professor Lourenço is experienced in the fields of NDT, advanced experimental and numerical techniques, innovative strengthening techniques and earthquake engineering. He is a specialist in structural restoration and has worked as consultant on more than forty monuments, including World Heritage sites: Cathedral of Porto, Monastery of Jeronimos (Lisbon), Qutb Minar (New Delhi). Prof. Lourenço is the coordinator of the European EMMC in Structural Analysis of Monuments and Historical Constructions. Supervisor of 26 PhD students (13 concluded) and coordinator of national and international projects. more than 400 technical and scientific publications	x
	Add a Staff Member	
Organisation number	Organisation name Universidad Pablo Olavide	•
Name of Key Person*	Summary of relevant skills and experience*	
PILAR ORTIZ	The research activity (18 years) has focused on four research lines: a) Mineralogy applied to study the environmental influence in conservation of historical heritage. b) Construction materials, c) Agrochemical Formulations d) innovation in science teaching, especially on Applied Mineralogy and Cultural Heritage Diagnosis. Scientific production can be summarized in 23 books and / or book chapters, 12 publications, 23 congress/conferences, 24 Participation in projects funded by the European Union, Ministry, Autonomous Communities, Public and Private Companies, 14 as principal research. Technology transfer to companies of agrochemical formulations has resulted in more than 20 records of the Ministry of Agriculture, Fisheries and Food.	X
	Add a Staff Member	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu
Page 35 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 60/67







ERASMUS MUNDUS

Organisation number P4	Organisation name Ca' Foscari University Venice	
Name of Key Person*	Summary of relevant skills and experience*	
GUIDO BISCONTIN	Teaching Chemistry of Restoration since 1986 and currently leads the "Restoration and Conservation Technologies" degree course at Ca' Foscari UniVe. He designed and coordinated many professional courses for architects, restoration professionals in Italy and abroad. His specific topic is diagnostic as well as products and technologies development for painted surfaces and buildings restoration. He usually collaborates with private industries in order to develop new materials for cultural heritage conservation. He coordinated the analysis of many buildings, among them the Amenophis IV (Luxor) temple, the Teatro Municipal of Rio de Janeiro, the walls of Rhodes, the Nazareth site. His bibliography includes more than 20 books & about 200 articles	X
	Add a Staff Member	
Organisation number P5	Organisation name Politecnico di Milano	
Name of Key Person*	Summary of relevant skills and experience*	
	Add a Staff Member	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 61/67







ERASMUS MUNDUS

Organisation number P6	Organisation name UNIVERZA V LJUBLJANI	
Name of Key Person*	Summary of relevant skills and experience*	
ROKO ZARNIC	Prof. Dr. Roko Žarnić, Civ. Eng., is Full Professor in the field of building materials at the University of Ljubljana, Faculty of Civil and Geodetic Engineering (UL FGG). The results of his research have been published in three monographs, nine chapters in books, fifty three contributions to national and eighty seven to international conferences and thirty four articles in national and international journals. In the ISI database there are 46 citations of his work and even more in contributions at conferences and in books by foreign authors. He has participated in more than ten committees of scientific conferences, as documented in their journals. He is a reviewer of project proposals for the Italian Ministry of Science and Higher Education	x
VIOLETA BOKAN BOSILJKOV	Associate Professor at the Faculty for Civil and Geodetic Engineering at Chair for Research in Materials and Structures at the University of Ljubljana. She is author of more than 90 papers published in both national and international magazines, congresses and symposia (COBISS bibliography code 10379). She was responsible researcher in Eureka project E! 1992 Ancient Renders and in bilateral projects Advanced Masonry (Slovenian-Portugal; 2001-2004), Lime Based Mortars for Restoration of Historic Buildings (Slovenian-Czech Republic; 2004-2006) and Historical Mortars (Slovenian-Portugal; 2004-2006).	x
	Add a Staff Member	
Organisation number	Organisation name Technion - Israel Institute of Technology	•
Name of Key Person*	Summary of relevant skills and experience*	
ANNA LOBOVIKOV KATZ	Faculty of Architecture and Town Planning, Technion – Israel Institute of Technology Haifa, Israel. Conservation of historic buildings and sites: deterioration and conservation of stone; urban conservation; conservation technology; interdisciplinary research in conservation; correlation between material-technological and aesthetical aspects of architectural conservation; study, documentation, mapping and analysis of historic buildings and sites. Education methods in conservation. Integrating heritage education and heritage conservation. She is author of more than 60 papers published in international magazines, congresses and symposia, as well as author of chapters in scientific books.	x
	Add a Staff Member	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 37 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 62/67







ERASMUS MUNDUS

PART E. Degree(s) awarded

The joint programme will res	ult in the award of a*:
------------------------------	-------------------------

- ☐ Double degree (i.e. more than one official degree)
- Multiple degree (i.e. more than two official degrees)
- ☑ Joint degree i.e. a single diploma officialy recognised in at least two of the European consortium countries

Organisation number Name of the Degree Awarding Organisation

P1 NATIONAL TECHNICAL UNIVERSITY OF ATHENS

Official name of the degree in		Type*	Recogn	nition status	
National language*	English		Already recognised?*	Expected recognition date OR validity end date (/ next review date) if applicable	Function of the degree signatory

Add a Degree

Organisation number Name of the Degree Awarding Organisation

P2 Universidade do Minho

Official name o	f the degree in	Type*	Recogn	ition status	
National language*	English		Already recognised?*	Expected recognition date OR validity end date (/ next review date) if applicable	Function of the degree signatory

Add a Degree

Organisation number Name of the Degree Awarding Organisation

P3 Universidad Pablo Olavide

Official name o	f the degree in	Type*	Recognition status			
National language*	English		Already recognised?*	Expected recognition date OR validity end date (/ next review date) if applicable	Function of the degree signatory	

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Page 38 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.							
FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012							
ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 63/67							







ERASMUS MUNDUS

Add a Degree

Organisation number Name of the Degree Awarding Organisation

Ca' Foscari University Venice

Official name of	f the degree in	Type*	Recogn	nition status		
National language*	English		Already recognised?*	Expected recognition date OR validity end date (/ next review date) if applicable	Function of the degree signatory	

Add a Degree

Organisation number Name of the Degree Awarding Organisation

P5 Politecnico di Milano

Official name o	of the degree in	Type*	Recognition status			
National language*	English		Already recognised?*	Expected recognition date OR validity end date (/ next review date) if applicable	Function of the degree signatory	

Add a Degree

Organisation number Name of the Degree Awarding Organisation

P6 UNIVERZA V LJUBLJANI

Official name o	f the degree in	Type*	Recogn	ition status		
National language*	English		Already recognised?*	Expected recognition date OR validity end date (/ next review date) if applicable	Function of the degree signatory	

Add a Degree

PÁGINA

10/04/2012

64/67

Organisation number Name of the Degree Awarding Organisation

P7 Technion - Israel Institute of Technology

Official name of the degree in Type* Recognition status

Submission number:

ID. FIRMA

520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

nttp://eacea.ec.europa.e Pave 39 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma

Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA







ERASMUS MUNDUS

National language*	English	Already recognised?*	Expected recognition date OR validity end date (/ next review date) if applicable	Function of the degree signatory	
			Add a Degree		

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

> http://eacea.ec.europa.eu Page 40 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.							
FIRMADO POR	FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012						
ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 65/67							

RfALRq1fEokrgaZzUfDNfQ==



ERASMUS MUNDUS





Attachments

European Commission

Declaration of Honour. JPEG document (jpeg, jpg) or PDF document(pdf).

Document: Declaration of Honour_NTUA PROMON.pdf

Award Criteria. Word document (doc,docx), PDF document (pdf) or RTF document (rtf).(maximum 25 pages - Times New Roman - Font 11)

Document: Award_Criteria EMJD Protection of Monuments.docx

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu Page 41 of 42

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012

ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 66/67







European Commission

ERASMUS MUNDUS

520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

Submission number

Submission number: 520252-EM-1-2011-1-GR-ERA MUNDUS-EMJD

http://eacea.ec.europa.eu

Código Seguro de verificación:RfALRq1fEokrgaZzUfDNfQ==. Permite la verificación de la integridad de una copia de este documento electrónico en la dirección: https://portafirmas.upo.es/verificarfirma
Este documento incorpora firma electrónica reconocida de acuerdo a la Ley 59/2003, de 19 de diciembre, de firma electrónica.

FIRMADO POR FRANCISCO OLIVA BLAZQUEZ FECHA 10/04/2012
ID. FIRMA juno.upo.es RfALRq1fEokrgaZzUfDNfQ== PÁGINA 67/67

