Education, Audiovisual and Culture Executive Agency

Erasmus Mundus and External Cooperation

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Brussels, 13/08/2010
EACEA/P4/JF/SM/dm D (2010) 303675

Re: Erasmus Mundus Action 1.A - Joint Doctorate Programmes – Call for Proposals EACEA/29/09
Title: Joint European Doctoral Programme in Advanced Materials Science and Engineering
Ref.: 512225-1-2010-1-DE-ERA MUNDUS-EMJD
(Please quote this number in all correspondence)

Dear Sir/Madam,

You have submitted a proposal under Action 1.B in the framework of the Erasmus Mundus Call for proposals EACEA 29/09.

I am pleased to inform you that your above-mentioned proposal has been selected.

The Agency received 148 proposals under Action 1.B – Joint Doctorate Programmes. 9 of these proposals were selected for funding, and a further 3 are on the reserve list.

All proposals were assessed with the assistance of independent academic experts. Enclosed you will find the consolidated version of the experts' assessments of your proposal. Please take account of the fact that most of the assessments were written by non-native speakers and that the Agency cannot comment on these independent assessments.

The selection decision is based on the quality of the proposal, its relative position in comparison with the other proposals received, the budget available as well as the extent to which it addresses the priorities indicated in the Call for proposals.

As mentioned in our email of 13 July, a description of your project will be published on the Erasmus Mundus website. This description will correspond to the summary sheet of your project as provided in your application or amended as a result of our 13 July email.

EACEA – "Education, Audiovisual and Culture" Executive Agency
Avenue du Bourget, 1 (BOUR 02/31) – 1140 Brussels – Belgium - Office : Rue Colonel Bourg, 135-139 - BE-1140 Brussels
Telephone : direct line (32-2)295.96.92 – fax (32-2)292.13.28
http://eacea.ec.europa.eu Email: joachim.fronia@ec.europa.eu

A Framework Partnership Agreement will be sent to you by separate mail within due time. If you have not done it yet, please complete a "Legal Entity" form (http://ec.europa.eu/budget/execution/legal_entities_en.htm) and a "Financial Identification" (http://ec.europa.eu/budget/execution/ftiers_en.htm) form. Originals signed by your institution's legal representative should be returned as soon as possible to the Agency.

Furthermore, we kindly remind you that we are organising a meeting for the coordinators of newly selected Erasmus Mundus projects. This will take place in Brussels on 15 October 2010. Therefore, please book this date in your diary. We will come back to you later in the summer with more information about the event and how to register.

Please do not hesitate to contact us should you have any further questions.

Sincerely Yours,

J. Fronia

Joachim Fronia
Head of Unit

Annex: Comments and recommendations from the academic experts who assessed your proposal.

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EACEA
Education, Audiovisual & Culture Executive Agency

Joint Doctorate Programme
Evaluation Report

Proposal number:	512225-EM-1-2010-1-DE-ERA MUNDUS-EMJD
Proposal title:	Joint European Doctoral Programme in Advanced Materials Science and Engineering
Coordinator:	Prof. Dr.-Ing. Frank Mücklich
Applicant organisation:	Universität des Saarlandes

Award Criteria

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

The present programme is a follow-up of the existing EMMC in Advanced Materials Science and Engineering. The project has clear objectives with explicit reference to the specificities of material science and engineering. The employability of doctorates in these domains, and the need for researching new materials with improved characteristics, is discussed. The existence of other joint doctorates in the field is addressed and the uniqueness of the proposed programme is justified. The added value to European education, research, excellence and competitiveness is sufficiently outlined but challenges to be tackled, in terms of scientific education and training, should have been identified.
The innovative character is discussed in terms of teaching and learning methodologies, the inclusion of complementary skills, access to different research facilities and expertise, and links to industry. That curricular programme contents and training is not discussed.
The candidates' option to select an academic, or an industrial, track is very promising, underlying the project's objectives to design a tailor made education and training programme. As far as innovation and originality is concerned, the development of intercultural and complementary skills and the organization of summer schools and workshops, is recognised.
While the listed research projects are classified according to the proposed topics, classification according to track selection is missing.
The inter-organizational and inter-sectorial relations inside the project are described. Concrete evidence regarding active industry participation is provided with endorsement letters. Relations with other professional organizations should have been foreseen, having in mind improvement of doctorates' employability. In fact graduates' employability issues are not addressed.
The nature and quality of the expected educational and technological outcomes are thoroughly presented and justified. The new doctorates professional competences are characterized showing that highly qualified staff will be trained but the scientific education is not discussed in detail.

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

The consortium comprises five universities from four different countries, covering a wide geographical range and cultures. The 20 associated partners are industries, research centres and academies from EU and third-countries (USA, Japan and Australia). All partners have the expertise and capacities required to accomplish the objectives of the project, including the supervision of PhD students and they show a high degree of complementarity in terms of education, training and research. The active collaboration of the consortium members with distinguished research centres highlights the enhanced scientific research potential of the applicants.
The contribution of each partner, to complement the consortium overall expertise in each one of the targeted scientific domains, is described. The contributions for employability should have been discussed.
All partners present long experience of participation in international education and research projects, with a pronounced international orientation in terms of educational and scientific research in the AMASE EM Master Course, where four of the partners have been involved, and in the EEIGM joint programme, which has been offered since 1991.
The role of the industrial sector in the proposed EMJD is sufficiently presented. The participating companies will provide placements for the students and will collaborate in the project's Advisory Board. The contribution of the academic associated partners should have been discussed.
The reference provided regarding the agreements, covering issues such as co-funding, co-supervision,

intellectual property rights, publishing possibilities, and quality assurance, is generic and not focused on this specific programme.
B.3 European integration and functioning of the programme (20% of the max. score)
The organization of the joint programme is structured in a well integrated way. The timing and form of co-tutelle supervision arrangements are clearly described and justified but the details regarding supervisors' responsibilities are missing. The management structure and the collaboration in the delivery of the curricular modules are not properly addressed. The candidates' mobility is facilitated by the interdisciplinary nature of materials research. A mandatory mobility period of at least 6 months, complemented by the attendance of two compulsory summer schools is planned. Placements in the industry are also mandatory for two weeks but this period is short and the rationale that combines mobility with the structure of the curricular programmes is not developed. The common standards and mechanisms, developed by the consortium for the application, selection, admission and examination of doctoral candidates, are thoroughly addressed and clarified. The details of the application form and the selection criteria are identified. Gender balance and equity issues are properly addressed. Promotional activities, aiming at female participation in the programme, are foreseen. The admittance to the programme is not restricted to those receiving EM scholarships. The financing conditions for the fourth year of the programme, should be clearly stated in the admission and selection criteria. Eight EU and eight third-countries candidates will be admitted. The proposed EMJD is classified as a lab-based education and training programme, which is justified by the research field. The participation costs are correctly set to 600 euro/month. This is acceptable, considering the need for maintenance of equipment and the use of consumables. The support and services covered by the participation costs are outlined but not in detail. Besides the co-tutelle by two institutions, the workshop organized each year and the publication of papers, will serve as means of supervision and monitoring. The procedures for joint assessment of candidates' activities are very well described and justified. The participation of external examiners is foreseen. Both double and joint degrees can already be awarded, except in the case of the Swedish partners where joint degrees are not allowed. A Joint European Excellence Certificate will be included also.
B.4 Provisions for EMJD candidates and fellowship holders (15% of the max. score)
The promotion strategy is based on that existing for the EM Master Course. It is strongly based on the large number of associated partners and convincingly proven by their letters of support. The specific information, and means for reaching third-country students, is not provided but the high number of participating third-country universities is likely to ensure the effective promotion of the programme. An extensive list of services is presented, which is already available in the consortium universities. These include support for students with special needs, for maternity, and for candidates with a family. The official working language is English but compulsory courses on local languages and intercultural skills will be offered free of charge. ECTS credits will be awarded. The inclusion of these modules in the curricular programme should have been foreseen. The administrative arrangements, to address candidates' rights, are well addressed. A single employment contract form EUSMAT is correctly proposed. The candidate's rights include health insurance, social security and contribution for pensions. A draft of the employment contract, showing all its details should have been included in the application. Students' career prospects are introduced in the curricular structure. Academic and industrial specializations tracks are available, which should strengthen students' career chances in both cases. These should have been described in detail to show their appropriateness. A DocMASE alumni association will be created. The Doctoral Candidate Agreement will be issued in two forms, an agreement between the candidate and the consortium and an employment contract between the candidate and the host institution. The structure and contents of these agreements are not detailed. Draft versions of these documents were not included in the application.
B.5 Programme Management and Quality Assurance (15% of the max. score)
The organizational arrangements of the project are well described. A proper managing structure (comprising Central Management Office, Steering Committee, Local Coordinators, and Advisory Board) is foreseen. The role of each partner is clearly defined and justified and there are figures for human effort and resources allocated for the management provided. The communication links are not

identified.
The development and sustainability plan is clear but should include initiatives, scientific and technological aspects. Concrete initiatives regarding the involvement of external actors are sufficiently outlined. The actions proposed to raise funds from industry, national authorities and EU are properly addressed. Further scholarships are foreseen to be which will allow for increasing the number of students but only the diversity of sources of scholarships is described. Different funding sources are identified but it is not certain that all these will be available. Other initiatives to enhance the scientific and technological development and sustainability of the programme should be foreseen.
A specific need for complementary funding derives from the programme lasting 4 years. The financing conditions of the fourth year are described for both students with and without EM grants.
Financing of the fourth year for each candidate will be ensured by the host institution. This is a prerequisite for the appointment of doctoral candidates. For candidates without EM scholarships, normal financing practices used by the partners will be applied. Complementary funding will be sought from industry, national authorities and EU research projects.
Both internal and external quality evaluation procedures will be implemented. The proposed quality charter is very clear, convincing and corresponds to standard practice. Each university describes the procedures that are already available on this matter. A scheme, with three levels of evaluation including external quality assurance, is proposed and justified. The Advisory Board will comprise independent members from industry, international renowned academics and associated partners. Visiting professors will also take part in the process. Doctorate students and alumni will be invited to complete questionnaires to evaluate employability.

Global Comments

The DocMASE project on Advanced Materials Science and Engineering is proposed as an outcome of the existing AMASE Masters Course. In particular, the applicants aim to improve graduates' professional competences to ensure better employability. The four year laboratory based programme proposed is well organized, reliable, coherent in terms of content, organizational and structural issues and addresses different aspects common to a third-cycle of studies. The objectives of the project reveal its multidisciplinary and inter-sectorial character. The programme has a strong innovation, academic and research character capable of providing high employment potential to the enrolled students, both in research and industrial careers.
The staff experience ensures that the four specific targeted scientific topics will provide relevant outcomes in terms of graduates' competences and complementary skills. The level and quality of resources (human, financial, technical), allocated by each partner to the implementation of the project, is well addressed. The staff experience ensures that the four specific targeted scientific topics will provide relevant outcomes in terms of graduates' competences and complementary skills. The programme has a strong innovation, academic and research character, capable of providing high employment potential to the enrolled students, both in research and industrial careers.
A long list of associated members is presented, which will provide placements in industry and in research centres. The participation of third-country universities provides the establishment of good information and promotion links.
Both internal and external evaluations and other monitoring mechanisms, involving all consortium members as well as external evaluators, will be implemented. A joint degree will be awarded where possible; otherwise a double degree is awarded. Additionally a Joint European Excellence Certificate will be provided by the partner universities.
The main weaknesses of the project are a lack of efficient sustainability and development plan, particularly as far as scientific and technological aspects are concerned, and the definition of employment contracts and Doctorate Candidate Agreement contents. Conditions, relating to the funding of the fourth year, should be made clear for all applying students.