

**INTERDISCIPLINARY
MASTER OF SCIENCE THESIS PROGRAMME**
Rules of participation for CALL 2010
February 2010

1. Mission of BiR&D

BiR&D is the association of international industrial companies with major operations and R&D activity in Belgium. They are all well known names in the Belgian industry: **AGC Glass Europe, Alcatel-Lucent, Atlas-Copco, Bekaert, GSK-Bio, Johnson & Johnson, OCAS-ArcelorMittal, P&G, Recticel, Solvay, Total Petrochemicals, UCB** and **Umicore**.

Together, they employ approximately 60000 people in their operations in Belgium, of which more than 8000 are in leading R&D centers. They are present in 7 industrial sectors and in 3 regions of this country.

The funding of the association is ensured by the annual contribution of the member companies.

The activities are supported by the structural associated partners: **Agoria** (The Federation for the Technology Industry), **Essenscia** (Belgian Federation for Chemistry and Life Sciences Industries, and **GRD** (Groupe Permanent de Recherche et Développement de Louvain).

The mission of BiR&D is to stimulate the attractiveness and effectiveness of industrial R&D in Belgium. This includes the facilitation of the recruitment of R&D talent, the improvement of the image of industrial R&D, the facilitation of cooperation with universities and other research centers, and the benchmarking on best practices for industrial R&D.

The board of BiR&D, being composed of R&D- and innovation managers of the member companies, deploys several actions to fulfill this mission, such as this Interdisciplinary Master of Science Thesis programme. From last year's Call 2009, 6 projects have been selected amongst the proposals from several universities. They are currently being sponsored by BiR&D.

Further information on BiR&D can be found on: www.birdbelgium.com.

Contact with BiR&D can be made by email to info@birdbelgium.com

or by postmail to: BiR&D, p/a Agoria, Diamantbuilding, Bvd. Reyerslaan 80, 1030 Brussels

2. BiR&D's Master of Science Thesis Programme CALL 2010

Comparable to the 2009 programme, BiR&D has reserved for this second call a total budget of 65000 € to financially support up to 6 projects and to provide awards to students participating in up to 3 winning projects.

The goals of this programme are to stimulate a multidisciplinary approach to R&D themes, to create awareness among students for industrial and societal challenges, to promote cooperation between faculties and universities and to enhance the R&D networking between universities and industry.



3. Requirements for participation in BiR&D MsC programme CALL 2010

The BiR&D's Master of Science Thesis programme calls for an interdisciplinary approach for all eligible theses. Hence it requests the involvement of students from technical as well as non-technical disciplines at one or more Belgian universities.

One integrated thesis is preferred, but interconnected Master Theses are also accepted so as to fully respect applicable university rules.

3.1. Two levels of theses are possible:

- for a so called basic project the involvement of two (or more) different faculties, out of the categories described below, from one university in Belgium is sufficient;
- for a so called large project it is mandatory to involve a minimum two faculties, out of the categories described below, from a minimum of 2 different universities in Belgium².

3.2. Categories of faculties:

To ensure a full multidisciplinary aspect of the programme, projects to be eligible must include at least one faculty (or institute) out of each of the two following categories or knowledge areas (terminology acc EC-DOC CAREERS):

- Cat 1. A coordinating faculty in the area of Science, Engineering and Technology, Biotechnology or Medical and Life Sciences
- Cat 2. One (or two) participating faculty(ies) in the area of Economics, Social Sciences, or Art Sciences³

3.3. The coordinating faculty is leading the project and is sole contact for BiR&D.

3.4. **The subjects** of the theses should be of both industrial and societal value, with following societal focus fields: Ecology, Energy, Information Technology, Healthcare, Wellbeing.

BiR&D expects the combination of a significant scientific or technological component on one side, with a significant economical and/or societal component on the other side. BiR&D explicitly welcomes topics associated with the deployment of a new technology into a market.

4. Submission of proposals and theses

The **submission of proposals** have to be made exclusively in English, in electronic format, using the Word Formats A and B, joint to this website www.birdbelgium.com. They are to be posted in Adobe pdf-format to the appropriate confidential site of this website as per instructions, by the coordinating university institute. It should be signed by the Professor who is expected to lead and coordinate the projects. Questions on this procedure can be asked to info@birdbelgium.com.

The deadline for submission of proposals is May 31, 2010.

BiR&D reserves the right to invite the submitting parties for a discussion in case clarifications are judged to be necessary for a careful selection.

² Different Universities as well as University Clusters

³ A faculty from Cat 1 can also operate as participating faculty, but only when another faculty of Cat 2 is participating

The selection of the projects to be sponsored is made through voting by a jury, composed of all the members of BiR&D. (see point 7). The selected participants commit to collaborate in a **mid-term project review** by an ad hoc team of BiR&D-representatives at the coordinating institute.

The **final Master Thesis** (or theses) can be written in either English, French or Dutch, in full respect of the applicable university regulations. It should be posted in electronic format to the confidential part of www.birdbelgium.com , after the expected submission to the University of July 2011 to September 2011. It is understood that exceptions are to be made for theses that might take 2 years.

5. Master of Science Thesis Award and Ceremony

A dedicated Master of Science Thesis Award jury will select up to three winning teams. The students of the winning teams are expected to present their project at the Award Ceremony, planned for December 2011.

For this occasion, the members of BiR&D and the associated partners will also invite representatives of the management of the universities, the scientific coworkers of the participating faculties, representatives of science & technology related institutions as well as other dignitaries.

At this occasion, each of the students of these selected teams will personally receive an award.

6. Financials

For the **basic projects** a **fixed allowance of 8000€** will be paid by bank transfer to the coordinating institute of the selected teams to cover the costs associated with execution and management of the projects. The coordinating institute will share this allowance with the collaborating institutes.

For the **large project** the allowance can be increased to a maximum of **16000€**, depending on the size of the project, upon judgment of BiR&D.

These grants will be paid as a lump sum in two equal parts, the first half when the project is starting up, the second half after the mid term review by a dedicated BiR&D team.

Each member of an award winning team will get a cheque of 2000€, but only up to a cumulative maximum of 10000€ for all students participating in a project.

7. Selection process

7.1 Jury

The jury for the selection of the Master of Science Thesis projects will be composed of relevant top experts and research managers from the BiR&D member companies. They will evaluate the written electronic standard submission forms and might call for an interview session with the candidates. For these interview sessions some BiR&D member representatives might come to visit the coordinating institute. This jury will select up to six projects.

The jury for the selection of the Master of Science Thesis Awards will be composed of relevant top experts, research managers and/or BiR&D board members, all exclusively from the member companies. They will evaluate the submitted written Master of Science Thesis to make their selection of up to three award winning teams.

7.2 Master of Science Thesis Project selection criteria

The members of the jury at their sole discretion will base their decision on several selection criteria. These criteria are (not in order of importance):

- Fit of the project target with the defined focus domains (Ecology, Energy, Information Technology, Healthcare, Wellbeing)
- Level of “inter-disciplinarity”
- Degree of societal and industrial relevance
- Relevance for BiR&D member companies
- Degree of innovation and scientific excellence
- Quality of the project structure (work packages, timeline,...)
- Quality of the submission documents
- Quality of presentation & debate during the reviews with the follow up team

7.3 Award selection criteria

The members of the jury at their sole discretion will base their decision on the following additional selection criteria (not in order of importance):

- Quality of the work done
- Editorial quality of the Master of Science thesis
- Level of adherence to the original presented project scope & structure
- University ratings given to the finished Master of Science thesis

8. Confidentiality and reference to BiR&D

In order to protect all strategic information, jury members and all other people taking part in the selection processes are ready to engage in Non Disclosure Agreements where needed.

The reference to BiR&D is subject to the mutual agreement of the BiR&D board and the collaborating institutes.

For general contact and official correspondence on this Call, please refer to www.birdbelgium.com or ask for info to info@birdbelgium.com.

Key Steps of the BiR&D Master of Science Thesis Programme

<p>February 2010</p> <p>Call launch</p>	<p>Pre-launch at raising awareness event, followed by effective launch via website www.birdbelgium.com</p>
<p>March 2010 – May 2010</p> <p>Projects preparation by students and supervisors</p>	<p>A period of 12 weeks is foreseen to allow the students of the different faculties and possibly universities to prepare the proposals together with their supervisors.</p>
<p>31st of May, 2010</p> <p>Submission deadline</p>	<p>The submissions can be done only in electronic version pdf version to the website www.birdbelgium.com, signed by coordinating professor, deadline 31 May 2010.</p>
<p>May 2010 – September 2010</p> <p>Jury deliberation process</p>	<p>The jury takes four weeks to select the maximum six projects. The exact timing respects the faculty specifics. The coordinator of the participating teams will be notified on the jury decision through email by the BiR&D secretariat, followed by a contact from the project follow-up leader, member of BiR&D..</p>
<p>July 2010 – October 2010</p> <p>Start of the selected project, and first payment</p>	<p>Exact timing respects the university specifics.</p> <p>Payment of the first allocation (50% of total grant = 4000€), after check of the effective start-up by BiR&D follow-up team.</p>
<p>February 2011</p> <p>Midterm review and second payment</p>	<p>Progress review by a BiR&D follow-up team with the students and university supervisors, followed by second payment of 4000€</p>
<p>July 2011 – September 2011</p> <p>Submission of the finished theses</p>	<p>Submission of the written theses, after being released by the faculties, in electronic form to the same confidential part of www.birdbelgium.com by the coordinating professor.</p> <p>It is understood that a thesis can take two years to complete</p>
<p>September 2011 – November 2011</p> <p>Evaluation by BiR&D of the submitted Master of Science Theses and selection of the award winners</p>	<p>A jury composed of representatives from the BiR&D member companies will evaluate the submitted Master of Science Theses and select the Awards winners.</p>
<p>December 2011</p> <p>Master of Science Thesis Award ceremony</p>	<p>Master of Science Thesis Award ceremony in Belgium in presence of dignitaries and representatives of Universities and BiR&D-members.</p>