



EUROPEAN COMMISSION
RESEARCH DIRECTORATE-GENERAL

Directorate B - European Research Area: research programmes and capacity
The Director

Brussels, 12 July 2007
RJS/HP/BW (2007) D 531457

Prof. Jean-Pierre Locquet
Katholieke Universiteit Leuven
Solid State Physics and Magnetism Section
Oude Markt 13
3000 - Leuven

Dear Prof. Locquet,

Subject: Initial information on the outcome of the evaluation of proposals

**Ref.: Programme "Research Infrastructures" –
Call ID "FP7-INFRASTRUCTURES-2007-1" – Proposal N° 213126**

The Commission services, with the help of independent experts, have recently evaluated the proposals submitted in the context of the above-mentioned call. This includes the proposal entitled: "**Laboratory compact light sources**", for which you are the coordinator.

Your proposal was evaluated against the criteria published for the call. The attached evaluation summary report (ESR) records the views of the expert evaluators and the scores that your proposal achieved.

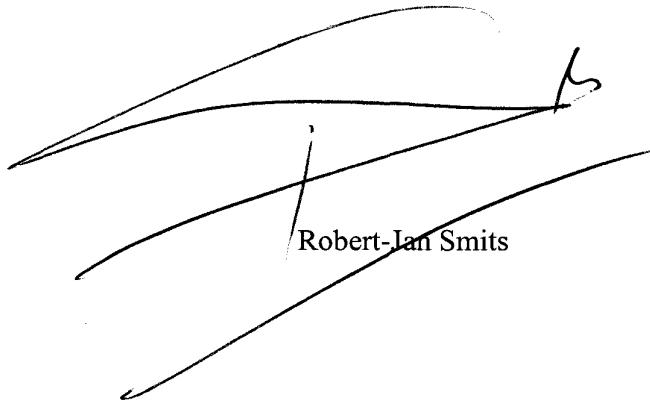
Based on this evaluation by independent experts, the Commission services will rank the proposals in priority order and will then take a decision on the lists of proposals for which negotiations of the grant agreement can proceed. For this particular call (and for DG RTD), it is estimated that funds will be available to support around 50 projects out of the 71 that have passed all evaluation thresholds.

You will therefore understand that this letter cannot be regarded as prejudging the outcome of the project selection process and may not be construed as an offer of funding for your project. You will be informed in due course of the outcome of the Commission's decision on your project.

I would be grateful if you could inform the other participants in this proposal of the content of this letter. If you have any questions, please do not hesitate to contact the coordinators of this call, brigitte.weiss@ec.europa.eu and christian.kurrer@ec.europa.eu before the end of July 2007.

Finally, please note that the redress procedure referred to in the Commission's rules for submission and evaluation¹ is described at the following website http://cordis.europa.eu/fp7/fp7_redress_en.html. Any such request must be received at the latest one month from the date of this letter.

Yours sincerely



A handwritten signature consisting of three curved lines forming an arc, with a small vertical line and a small mark resembling a 'J' or 'L' at the end of the top curve. Below the signature, the name "Robert-Jan Smits" is written in a printed font.

Annex: Evaluation Summary Report: LABSYNC / 213126

¹ Rules for the submission of proposals and the related evaluation, selection and award procedures,
30.3.2007, (C/2007/1390) ²

Evaluation Summary Report

Proposal number: 213126
Call: FP7-INFRASTRUCTURES-2007-1
Funding Scheme: CP Collaborative project
Proposal acronym: LABSYNC
Proposal title: Laboratory compact light sources
Duration (Months): 36

N.	Proposer Name	Country	Total Cost (euros)	%	Grant Requested	%
1	Katholieke Universiteit Leuven	BE	466.280	19,58	360.780	19,93
2	Institut Néel, Grenoble, Centre National	FR	355.996	14,95	269.372	14,88
3	Bestec GmbH	DE	382.120	16,05	288.740	15,95
4	SPECS GmbH	DE	463.150	19,45	349.550	19,31
5	University of Ferrara	IT	365.500	15,35	277.500	15,33
6	Ritsumeikan University	JP	347.900	14,61	264.300	14,60
Total			2.380.946,00	99,99	1.810.242,00	100,00

Abstract:

The need for advanced light sources is well documented by the creation of new facilities such as SOLEIL, DIAMOND, MAX IV and the upgrades of older facilities. The applications of light sources encompass all aspects of sciences spanning the fields of physics, chemistry, biology, material science, electronics and medicine. An option to provide "more light" to this community is to develop small laboratory sources beyond the standard and rotating anodes. Recently, several "small scale synchrotron" sources were proposed, whereby the most advanced system is the Mirrorcle® developed by Prof. Yamada (Japan) with three functioning systems. In this project, we will design a complete small facility around the Mirrorcle® source.

The Mirrorcle® is based on two RF klystron driven microtrons to accelerate the electrons first and second to obtain a electron storage ring with constant energy (6 MeV or 20 MeV) and high current (3A). The relativistic electrons produce intense far infrared radiation (FIR) and when targets are inserted in the electron path intense soft and hard X-rays can be produced from 90 eV up to the electron energy.

The first goal of this project is to complete the characterization of the full radiation spectrum generated by the Mirrorcle® . This includes parameters such as the brilliance, the beam divergence, polarization and monochromacy. The second goal is to design a specific Mirrorcle® ring with four output ports, namely a FIR port, a soft X-rays port, a hard X-rays port and one port where the full spectrum is available. This includes designing the required targets as well as internal mirrors configurations. The third goal is to design specific beam-lines for these four ports that take into account the source. Finally, two specific user stations will be designed that make use of the unique abilities offered by such a small scale source, namely a multi-diagnostic in-situ, real-time nano-material synthesis system and a medical imaging and therapy station.

ESR- Evaluation Summary Report
Collaborative project

SCORING

Scores must be in the range 0-5. Half marks may be given.

<u>Interpretation of the scores:</u>

0 -The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information

1 -Very poor. The criterion is addressed in a cursory and unsatisfactory manner.

2 - Poor. There are serious inherent weaknesses in relation to the criterion in question.

3 -Fair. While the proposal broadly addresses the criterion, there are significant weaknesses that would need correcting.

4 -Good. The proposal addresses the criterion well, although certain improvements are possible.

5 -Excellent. The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

IMPORTANT

We believe this proposal is relevant ("in scope") because it addresses, fully or partially, a topic that is open in the call: It conforms to any special conditions set out in those parts of the relevant work programme, and it corresponds to an eligible funding scheme:

IF YES. The consensus scores and comments are given below under each criterion.

IF NO. This proposal is "out of scope" because:

Yes

Evaluation Summary Report

Proposal number: 213126

1. Scientific and/or technological excellence (relevant to the topics addressed by the call)

(Threshold 3,00/5,00)

The development of prototype beam lines and user stations for a prototype version of a compact beam source which could be used in any institution is extremely appealing. The central radiation source, which the project is based on, is already existing and is claimed to be unique and state of the art. The performance of the proposed system at the level of second generation synchrotrons and at reasonably low costs carries a lot of potential for a wide range of laboratory activities. The suggested scientific approach appears appropriate for the scientific tasks. The objectives are ambitious: fully characterize the Japanese Mirricle prototype source, design prototype beam lines allowing FIR-FT analyses, soft X-ray XPS experiments, hard X-ray imaging and diffraction and dedicated user stations. The scientific methodology and the scientific work plan are well developed. However, the work plan lacks a thorough study of the needs of the expected end users and shows no actions focussed on aiding the transfer of the outcome to a broader range of end users, leaving the commercial availability as the sole means for the transfer.

Mark: 4,5
Weight: 1,00

Note: when a proposal only partially addresses the topics, this condition will be reflected in the scoring of this criterion.

- Soundness of concept, and quality of objectives
- Progress beyond the state-of-the-art
- Quality and effectiveness of the S/T methodology and associated work plan

2. Quality and efficiency of the implementation and the management (1)

(Threshold 3,00/5,00)

The management structure is simple and the chain of responsibilities is clear. However, due to the IPR situation in the project, detailed IPR management should be included in a consortium agreement signed at an early stage.

Mark: 4,5
Weight: 1,00

The appointment of external experts should be mandatory and not optional, especially because external reviewing is part of the quality control of the project. The presence of the expected end users brought in through partner 1 cannot replace a proper study of the needs of potential user groups. The participation of the Japanese partner in this project is essential, since this partner developed the Mirricle prototype. The previous collaboration between the coordinator and the Japanese partner is in the benefit of this project. The multidisciplinary aspect of the consortium is clear and well balanced. The combination in the partnership of 2 SMEs and 4 public laboratories is remarkable. The project is based on a close European-Japanese collaboration with the construction in Europe of the first user facility while the main expertise on the compact radiation source is in Japan. It is therefore important to maintain the travel budget at the level suggested in the proposal.

- Appropriateness of the management structure and procedures
- Quality and relevant experience of the individual participants
- Quality of the consortium as a whole (including complementarity, balance)
- Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment)

(1)For the purposes of any subsequent negotiation, an above-threshold score for this criterion is regarded as an indication that the consortium has the operational capacity to carry out the work.

3. Potential impact through the development, dissemination and use of project results

(Threshold 3,00/5,00)

This project is focussed on the development of prototype beam lines and user stations for the compact beam source prototype, strongly anchored in the idea to use small scale equipment to cover needs that are normally sought to be covered by large facilities or are left uncovered. The impact of the availability of such a compact multicolour facility with a cost below 3 MEuro is enormous for a wide range of users. Eight European Laboratories have already shown considerable interest in the concept described in the project.

Mark: 4,5
Weight: 1,00

The exploitation of results would benefit directly to both Japanese and European industries. The two SMEs who are partners of the proposal would directly exploit the results and commercialise the beam lines and other equipments. Other industries, hospitals, museums, and public laboratories who would have the opportunity to purchase the whole facility for their own use, would also be beneficiaries. This relies on the existence of an industrialist acting as an integrator and on a general market study to be made to ensure a good correspondance between product and user needs.

- Contribution, at the European and/or international level, to the expected impacts listed in the work programme under relevant topic/activity

Note: Refer to the applicable list of impacts specified in the work programme.

- Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.

Evaluation Summary Report

Proposal number: 213126

TOTAL	(Threshold 10,00/15,00)
	Total: 13,5

Any other remarks

e.g. recommendations for negotiation, only if the proposal is above threshold

Partner 6 is in the proposal referred to as Mirrorcle, as Ritsumeikan University and as an individual person. For this partner a clarification of the legal entity and of the relation between the company, the university, the individual person and the consortium would be appropriate.

The financial support of the Japanese partner seems duly justified.

Does this proposal raise ethical issues?

(If so please complete an ethical issues report form (EIR)

No