

Luxembourg, 8 April 2005

To: researchers in public-sector bodies,  
departments and establishments  
authorized to undertake research and  
development and/or technology transfer

Dear Madam,  
Dear Sir,

The National Research Fund (FNR) is pleased to announce the **2<sup>nd</sup> call** for of its  
multiannual research programme

### New materials and nanotechnology proposals (NANO)

which has been adopted by the Council of Government in the year 2000. The second  
call of the programme has a total budget of 700.000 EUR and will cover the period  
2005 to 2008.

The FNR is hereby launching its **second call for research project proposals** and  
invites **all public sector bodies, departments and establishments** which are  
authorized, in their areas of competence, to undertake research and development and  
technology transfer work aimed at promoting scientific progress or technological  
innovation to submit project proposals to the FNR in the various areas covered by the  
NANO programme. Projects selected will receive financial assistance from the FNR.

Proposals must be submitted **to the FNR by 30 June, 2005** in accordance with the  
terms of the information dossier attached. The Fund encourages applications which are  
submitted in English.

For any enquiries about your proposal please contact Mrs Christiane Kaell (Tel: +352  
26 19 25-34; e-mail: [christiane.kaell@fnr.lu](mailto:christiane.kaell@fnr.lu)).

Yours faithfully,

Raymond Bausch  
Secretary General

#### Annexes:

1. Procedure and timetable for the 2nd call for research project proposals under the  
NANO programme
2. Criteria used to select research projects

## Annex 1

### Procedure and timetable for the 2<sup>nd</sup> call for research project proposals under the NANO Programme

#### **Introduction**

In accordance with the provisions of Article 3 of the Law of 31 May 1999 setting up a public-sector national research fund, requirements for the presentation, selection and conduct of research work are laid down in the *Règlement grand-ducal* of 27 July 2000 (see Annex 4).

The phases and timetable outlined below are based on experience gained from the first calls for research project proposals issued by the Fund in the years 2001-2003. The information is given as an indication only. The Fund secretariat will be happy to update you on actual progress in processing the proposals received.

#### **Call for project proposals**

The FNR is addressing its second call for research project proposals under the multiannual NANO Programme to all researchers in public-sector bodies, departments and establishments authorised, in their areas of competence, to undertake research and development and technology transfer work aimed at promoting scientific progress or technological innovation.

The FNR invites them to submit project proposals to it. The earliest possible start of the projects is January 2006. The duration of the projects is limited by the end of the NANO programme, which is 31 December 2008 (Latest possible end of the contract with the FNR is 31 December 2008).

The FNR also invites the industry sector to collaborate with public research bodies in the implementation of research projects within the areas covered by this programme.

#### **Receipt of research project proposals by 30 June, 2005.**

The FNR is confident that all public-sector research bodies will work together to submit innovative and multidisciplinary projects involving several bodies based in Luxembourg.

- Project proposals should be addressed to the Fund with the signature of the directors of these bodies.
- Project descriptions must be detailed enough to enable projects to be evaluated before, during and following completion of the work.
- Projects given funding will be selected on the basis of the criteria set out in Annex 2.
- Applicants for funding undertake to share the results of their projects with other interested public-sector research bodies.

It is understood that under the terms of the Law of 31 May 1999 setting up the FNR, the Fund can only provide funding for public-sector research bodies (up to 100% of eligible expenditure). Any other partners must fund their participation themselves or apply to the appropriate authorities for funding.

- 8 April 2005:** Launch of the 2<sup>nd</sup> call for ‘NANO’ research project proposals on the basis of a form and an information dossier (Call documents can be found on [www.fnr.lu](http://www.fnr.lu))
- 30 May 2005:** Receipt of indicative project summaries by the Fund secretariat, enabling the secretariat to prepare the assessment procedure
- 30 June 2005:** **Closing date for receipt of research project proposals**
- Assessment of project proposals by independent experts: on the basis of the proposals received, independent experts will conduct an in-depth evaluation of projects.
- 19 September 2005:  
Or 18 November 2005** Recommendation of the Scientific Council
- A rapporteur, assisted by independent experts and appointed by the Scientific Council, will prepare a report on the opinions delivered on each project proposal. On the basis of these opinions and reports the Scientific Council will deliver an opinion on whether or not funding is appropriate and if so, on what terms.
- 30 September 2005:  
Or 2 December 2005** Decision of the Fund’s Administrative Board
- Drawing on the opinion of its Scientific Council, the Fund’s Administrative Board will decide on the funding to be provided and the terms to be set when projects are carried out.
- Thereafter:** Preparation and signature of agreements and payment of first advances
- If the applicants for funding concur, an agreement will be signed between the Fund and the partner(s) in the research project and a financial advance will be paid.
- 1 January 2006:** Earliest possible start of the projects

*Please feel free to contact the FNR with any suggestions or comments or for further information on the Fund or this call for proposals. In order to have a brief discussion on your project submission we kindly ask you to schedule a meeting with the FNR. Please contact Mrs Christiane Kaell Tel. +352-26 19 25-34).*

**Contact details:** Fonds National de la Recherche  
Mrs. Christiane KAELL  
6, rue Antoine de Saint-Exupéry ; B.P. 1777 ; L-1017 Luxembourg  
Tel.: +352 261925-34; Fax: +352 261925-35; email: [christiane.kaell@fnr.lu](mailto:christiane.kaell@fnr.lu)

# **Annex 2**

## **Criteria used to select research projects**

### **1. Scientific Quality**

- creativity
- novelty and innovation
- scientific methods used
- production of new expertise
- coherence of the project
- project's ability to encourage interdisciplinary working
- projects must aim to achieve an internationally recognized level of expertise

### **2. Socio-economic value**

- How well does the activity advance discovery and understanding while promoting teaching, training, and learning?
- To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships?
- Will the results be disseminated broadly to enhance scientific and technological understanding?

### **3. Cost-effectiveness**

### **4. Consistency with the objectives and priorities set out in the text of the programme: New materials and nanotechnology (NANO)**

### **5. Realistic nature of project within the Luxembourg context**

- realistic in terms of financial resources
- on-the-spot scientific/technological potential (Are there enough skilled human resources which can be deployed within the time constraints of the project?)
- support capability for the beneficiary establishments involved

### **6. Mobilisation of national resources:**

- cooperation by multiple research establishments based in Luxembourg
- involvement of multiple establishments, businesses and industrial firms and groups based in Luxembourg which are potential users of the project's results

## 7. Budget breakdown

The budget for a project must show a balanced breakdown between the :

- acquisition of expertise
- actual research work
- dissemination and exploitation of the research findings
- other supporting measures

## 8. National and international collaboration

- the value added by the proposed national collaboration in materials research.
- the value added by the proposed international collaboration in materials research.
- extent to which the collaboration integrates research and education and promotes diversity.
- preference will be given to proposals students and junior researchers participate.

## **SPECIFIC CRITERIA FOR THE 2<sup>nd</sup> CALL:**

**Information:** The University of Luxembourg (UdL), not in place for the first NANO call, is a fully eligible applicant and partner.

**The present call is focussed on the following main strands (point 2 on page 3 of the full programme description, see [www.fnr.lu](http://www.fnr.lu)):**

### 2) *The programme's main strands*

1. **Research in the area of developing analytical methods operating on the nanometre scale, including:**
  - SIMS with a lateral resolution of 30 nm,
  - nanoindentation (nanomechanics of surfaces),
  - methods capable of measuring individual cells, such as bioimpedance.
2. **Use of analytical tools at nanoscale** to the CRPs (Luxembourg's Public Research Centres), to the University of Luxembourg, to Luxembourg industry and for developing collaborations with European universities (in the Saar-Lor-Lux region and elsewhere).
3. **Training of scientists** in the analytical techniques.
4. **Research on specific topics in the fields of:**
  - **innovative materials, in collaboration with Luxembourg-based industries**
  - **medical and biological tissues**, in collaboration with medical research in Luxembourg

**In addition to the above criteria each project must also meet the following conditions:**

- ♦ Projects must make **efficient use of the skills and equipment available** in Luxembourg and in the network of collaborating and cooperating establishments. Shared use of equipment is preferable, wherever possible, to the acquisition of new equipment. Any investment in equipment must be as generally applicable as possible (i.e. able to be used for a number of different applications). **The maximum eligible expenditures for equipment has been fixed to 20.000 EUR per project. A detailed list of the consumables must be added to the proposal.**
  
- ♦ Active involvement of **students working on their PhD and postgraduate theses as well as experienced researchers**. An important point will be the provision of **training** in the country's public research centres, in the University of Luxembourg, in laboratories and business and industry and the inclusion of knowledge transfer measures in specific types of training.
  
- ♦ **National and international cooperation** with other laboratories **is strongly recommended** as a way of acquiring new expertise in Luxembourg from the projects as quickly as possible.
  
- ♦ **The active involvement of private-sector institutions, business and industry will deserve special attention**. These organizations cannot (by law) be financed by the Fund. Their contribution may be financial or in kind. Their involvement may not only enable the project to benefit from outside services, but also facilitate technology transfer and the provision of samples or equipment.