

**Joint call for proposals in the field of Green Chemistry**  
**Department of Science and Technology (DST) and Academy of Finland**  
**(Deadline for Submitting Proposals: 29 January 2010)**

The Department of Science and Technology (DST) and the Academy of Finland launch a joint call for proposals, the aim of which is to promote Indo-Finnish cooperation in the field of Green Chemistry.

The focus is in the development of environmentally friendly products and processes from renewable raw materials to replace petroleum based products or to replace processes involving harsh chemical stages or reactants by greener alternatives. For example the projects can cover following topics:

- agrobiomass valorization processes (pretreatment, conversion) to chemicals or materials (focus on non-food by-products),
- hybrid technologies combining chemical and biochemical reaction routes to replace more hazardous process concepts,
- development of green catalysts,
- product recovery and purification ,
- process concept evaluation and modelling, and
- sustainability assessment.

The aim is to support long-term systematic research collaboration as well as to establish and strengthen research collaboration networks between Finland and India.

## **2. Research funding**

The successful projects will be funded in India by the DST and in Finland by the Academy of Finland. The joint projects must meet the criteria of the funding agencies. The research projects are funded for a maximum of three years.

## **3. Review process and evaluation**

The applications submitted to the Department of Science and Technology (DST) and to the Academy of Finland will arrange the evaluation according to their own rules, regulations and practices. The DST and the Academy of Finland will form a mutual understanding on the projects to be funded.

The evaluation criteria of the Academy and Department of Science and Technology are:

- scientific quality and innovativeness of the research plan
- added value of the Indo-Finnish research collaboration
- feasibility of the research plan
- scientific merits and results of the Finnish and Indian researchers/research teams
- support for careers of young researchers.

## **4. Application procedure**

The Finnish and Indian co-applicants will develop one joint research plan that will be sent to both the DST and the Academy of Finland using the forms of each organisation, respectively. The applications must include a statement on how the proposed collaboration brings added value for both countries.

The project budget must clearly delineate justified Finnish and Indian costs. The costs of the Finnish partner must be eligible as per the guidelines of the Academy of Finland. Accordingly, the costs of the Indian partner must be eligible as per the guidelines of the DST. Applicants are reminded to include sufficient budget for travel between Finland and India to ensure successful collaboration.

When drawing up their budget, applicants shall take into account that the Finnish partner pays the travels of the visiting Indian researcher in Finland as well as his/her accommodation, and per diem allowances. Correspondingly, the Indian partner pays the travels in India of the Finnish researcher as well as his/her accommodation and per diem allowances. As the joint research projects are funded in bilateral mode the researcher mobility between the two countries should be balanced.

Applications addressed to the Academy of Finland shall be submitted no later than 29 January 2010 at 16:15. The Finnish and Indian partners apply for funding from their national funding agencies in accordance with the practices of the organisation concerned.

### **5. (a) Applications addressed to the Department of Science and Technology (DST)**

The Indian research team applies for funding from the DST in accordance with the DST's guidelines. The Academy advises applicants to make sure that their cooperation partner is eligible to apply for funding from the DST.

The Indian researchers can download the proposal formats from websites [www.dst.gov.in](http://www.dst.gov.in) and [www.stic-dst.org](http://www.stic-dst.org) and submit 6 hard copies (1 original + 5 copies) and 1 digital copy on CD to DST not later than 29 January 2010 through proper channel. One advance copy (in single MSword file) is also to be sent by e-mail to [rajivdst@nic.in](mailto:rajivdst@nic.in).

### **5. (b) Applications addressed to the Academy of Finland**

In this call, the full cost model is applied to the calculation of the costs of the Finnish research project. The costs of the Indian research project are given only in the research plan. Applications shall be written so as to ensure that the Academy's contribution to funding comes to no more than 80 per cent of the full costs of the Finnish project. See the guidelines on how to enter the costs in the application form on the Academy's website at [www.aka.fi/eng](http://www.aka.fi/eng) > For researchers > How to apply > Full cost model.

### **Appendices**

Appendices addressed to the Academy of Finland shall include the following appendices:

- abstract, no more than one page
- research plan, no more than 15 pages, including
  - a clear description of the planned research and research collaboration (distribution of work and methods of implementation) and of the added value to be generated
  - joint budget and separate budgets for both partners
  - justification for the funding applied for
  - description of any researcher training to be carried out within the project
- curriculum vitae for the Finnish applicant, no more than four pages, and curriculum vitae for the Indian applicant, no more than four pages, both combined as one document
- list of publications of the Finnish and of the Indian applicant (combined as one document),
  - in both of which the ten most important publications in terms of the research plan are clearly indicated
- progress report on Academy-funded research projects for which no final report has been submitted
- statement by the executive director of the Strategic Centre for Science, Technology and

- Innovation, if relevant, confirming that the applicant's project is affiliated with the CSTI and justifying the significance of the project for the CSTI's operations
- statement by an ethics committee or the Committee on Animal Experimentation, if relevant. Ethical aspects shall be described in the research plan.
  - invitation from a foreign university or research institute, if the research or part of it will be conducted abroad.

Only the requested appendices are appended to the application. The appendices shall be drafted in accordance with the Academy's guidelines, see [www.aka.fi/eng](http://www.aka.fi/eng) > For researchers >How to apply > Appendices.

Applications are drafted at [www.aka.fi/eng](http://www.aka.fi/eng) > For researchers > Log in to online services and by selecting *New application* > Joint call in Green Chemistry (Academy of Finland and Indian DST).

#### **6. Further information**

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- Programme Manager Saira Karvinen (Academy of Finland), tel. +358-9 77488 335, Fax +358-9 77488 395 e-mail: [firstname.lastname@aka.fi](mailto:firstname.lastname@aka.fi)

**Deadline for Submitting Proposals : 29 January 2010**

**DST – AF Call for Joint Research Proposals  
Application Forms for Joint Research Projects  
(For Indian Scientists)**

Ref No. \_\_\_\_\_

(to be filled by DST/)

**PART-A PROJECT IDENTIFICATION**

1. Research Field for Cooperation :
2. Sub-field of Proposed Research Field :
3. Title of Joint Research Project
  
4. Proposed Period of Joint Research Project : \_\_\_\_\_ Months
5. Proposed Budget from Indian Side : Rs.
6. Proposed Budget from Finnish Side : Euro.
7. Indian Principal Investigator (PI):
 

Name :	Date of Birth :
Designation :	
Organization :	
Division/ Department	
Postal Address	
Telephone No. : (Office)	(Residence)
Fax No.	E-Mail
8. Finnish Principal Investigator (PI):
 

Name :	
Designation :	
Organization :	
Division/ Department	
Postal Address	
Telephone No. : (Office)	(Residence)
Fax No.	E-Mail

## 9. Other Researchers in Indian Research Team

- 9.1 Name : Date of Birth :  
Designation :  
Organization :  
Division/ Department  
Telephone No. : (Office) (Residence)  
Fax No. E-Mail
- 9.2 Name : Date of Birth :  
Designation :  
Organization :  
Division/ Department  
Telephone No. : (Office) (Residence)  
Fax No. E-Mail
- 9.3 Name : Date of Birth :  
Designation :  
Organization :  
Division/ Department  
Telephone No. : (Office) (Residence)  
Fax No. E-Mail
- 9.4 Name : Date of Birth :  
Designation :  
Organization :  
Division/ Department  
Telephone No. : (Office) (Residence)  
Fax No. E-Mail
- 9.5 Name : Date of Birth :  
Designation :  
Organization :  
Division/ Department  
Telephone No. : (Office) (Residence)  
Fax No. E-Mail

## 10. Other Researchers in Finnish Research Team

## 10.1 Name :

Designation :

Organization :

Division/ Department

## 10.2 Name :

Designation :

Organization :

Division/ Department

## 10.3 Name :

Designation :

Organization :

Division/ Department

## 10.4 Name :

Designation :

Organization :

Division/ Department

## 10.5 Name :

Designation :

Organization :

Division/ Department

**B. TECHNICAL INFORMATION**

1. Joint Abstract of the Project (no more than one page)
2. Justification for collaboration
3. Added value to be generated / expected results of this cooperation (e.g. joint publications, patents, etc.). Are any of the expected results likely to have commercial value? How do you propose to share intellectual property rights?
4. Research plan, (no more than 8 / 15 pages for individual / consortium proposals respectively), including a clear description of the planned research and research collaboration, Year-wise and country-wise distribution of work and methods of implementation and description of any researcher training to be carried out within the project
5. Number of exchange visits required to achieve the project objectives (Year wise)

	INDIA TO FINLAND		FINLAND TO INDIA	
	Number of persons x visits	Duration for each person's visit	Number of persons x visits	Duration for each person's visit
1 <sup>st</sup> Year				
2 <sup>nd</sup> Year				
3 <sup>rd</sup> Year				

6. Bio-data of Indian and Finnish investigators to be attached as annexures.  
(Description should highlight the expertise of PI(s) and other members of the project team in the proposed field of work supported by citing relevant publications only. (To be appended in about 2 pages).

**C. Proposed Project Budget from the Indian Side and its justification**

## 1. Summary of Budget Estimates (in Rupees)

	Item	1st Year	2nd Year	3rd Year	Total
A.	Recurring				
	1.Salaries/wages				
	2. Consumables				
	3. Travel				
	4. Other costs				
B.	Equipment				
	TOTAL				

## 2.1 Details of Budget proposed for Salaries/ Wages(in Rupees)

		1st Year / (m.m.*)	2nd Year / (m.m.)	3rd Year / (m.m.)	Total / (m.m.)
Designation & number of persons	Monthly Emoluments				
Total					

\*m.m.: man months to be given within brackets before the budget amount

## 2.2. Justification for the manpower requirement.

## 3.1. Details of Budget proposed for Consumable Materials budget (in Rupees)

S.No.	Item	1st Year	2nd Year	3rd Year	Total
	Total				

## 3.2 Justification for consumable

## 4.1 Details of Budget proposed for Internal Travel budget in India (in Rupees)

	1st Year	2nd Year	3rd Year	Total
Number				
Budget in Rs.				

## 4.2 Justification for travel .

## 5.1 Details of Budget proposed for exchange visits and estimated expenditure:

	1st Year	2nd Year	3rd Year	Total
India – Finland				
Number of persons x visits				
Expenditure on Airfare, visa, transport and related expenditure in India				
Finland – India				
Number of visits and Mandays for each visit				
Expenditure on Hospitality (per diem @ 1000 per day + accommodation + local transport)				
Total budget				

## 5.2 Justification for travel .

## 6.1 Details of Budget proposed for Contingencies/ other costs Budget (in Rupees)

	1st Year	2nd Year	3rd Year	Total

## 6.2. Justification for specific costs/ contingences

## 7.1 Minor Equipment/ Accessories Budget

Sl. No.	Generic name of the Equipment along with make & model	Whether Imported/ Indigenous	Estimated Costs (in Rupees and Foreign Currency)*	Spare time for other users (in %)

\* includes transport, insurance and installation charges.

## 7.2 Justification for the proposed equipment.

## 8. List of facilities being extended by parent institution(s) for the project implementation.

## 9. Equipment available with the Institute/ Group/ Department/ Other Institutes for the project:

Equipment available with	Generic Name of Equipment	Model, Make & year of purchase	Remarks including accessories available and current usage of equipment
PI & his group			
PI's Department			
Other Inst In the region			

## 10.. Details of any other item of budget proposed and its justification

SIGNATURES OF THE INDIAN AND FINNISH PRINCIPAL INVESTIGATORS

\_\_\_\_\_  
INDIAN

\_\_\_\_\_  
FINNISH

DECLARATION FROM THE HEADS OF THE COLLABORATING INSTITUTIONS

It is certified that:

- (i) The Institutions agree to participate in this joint research project;
- (ii) The Institutions shall provide infrastructure and necessary facilities for implementing the joint project;
- (iii) The Institutions assume to undertake financial and other management responsibilities for the part of the project work to be carried out at their institution; and
- (iv) The back-up funding for human resources, consumable, etc. is available to this project.

SIGNATURE & SEAL OF THE HEAD OF THE INSTITUTIONS

\_\_\_\_\_  
INDIAN

\_\_\_\_\_  
FINNISH

Annexure  
(to be submitted by the Indian Side only)

### **CHECKLIST**

1. Title of the Project :
2. Initiating Institute of project :
3. Sponsoring Agency/Ministry :
4. Total cost of the project :
- Nature and Quantum of foreign collaboration sought
  - (i) Financial support: :
  - (ii) Equipment support :
  - (iii) Technical support :
  - (iv) Manpower training :
  - (v) Miscellaneous :
5. Is there any possibility, however :  
remote of use of data, information  
of result of the work which may  
impinge on India's national security?  
If yes, the nature of such a use may  
be indicated. (In case the concerned  
scrutinizing Ministry do not have clear  
answer, the matter should be referred  
to the DRDO and MHA for examination).

### **II. ORIGIN OF THE PROJECT AND ITS SPONSORS :**

6. If the proposal is foreign-originated, what is the background of the foreign agency or organization which is sponsoring the project? Information available, if any on past collaboration by foreign agency with Indian Institution.
7. Are the foreign agency, organization, scientists concerned, known to have taken up any project of military significance in the past or are known to be associated with any military organization or project?  
(if the above information is not known or if there is definite information that there is no such association, these should be clearly indicated).
8. Is the proposer (Indian) known to the foreign collaborator and his group for some time and has this emerged naturally from the research work done by the two sides?

### III. FUNDING OF THE PROJECT

9. Is the foreign source known to have funded research into sensitive and national security areas in its own country or in other countries?
10. Are there reasons to believe that the foreign source is a cover name for some other sponsor?

### IV. ADMINISTRATION AND CONTROL OF THE PROJECT

11. Give a list of the likely places of visit :  
within the country planned by the foreign collaborator. Also give a list of the institutions which the collaborator is likely to visit.
12. Will any sensitive source material be referred to during the course of the research?
13. (I) Does the collaboration involve
  - a) Transfer of biological material(s) :
  - b) Use of radioactive materials :
  - c) Use of environmentally or otherwise hazardous material(s) :
  - d) Use of Genetically Modified Organisms :
  - e) Field trials or testing :
  - f) Ethical issues :
  - g) Issues related to Intellectual Property Rights (IPR) :
14. If answer to any section of question 13 is yes, are the investigators/ proposers aware of the relevant regulations and have they agreed to abide by them? :
15. Will the research be conducted in accordance not only with the country's own ethical and environmental standards, but with international standards as well?

Signature with date of the Principal Investigator

Signature with date and seal of Head of Department/ Institute