



DFG (German Research Foundation) & DST (Department of Science and Technology)

General Information

Pursuant to the Memorandum of Understanding (MoU) signed between DST (India) and DFG (Germany) in October 2004 and subsequently the renewed Programme of Cooperation (PoC) signed in February 2011, DST and DFG invites collaborative research proposals – under a thematic topic (as below) for support under the Indo-German (DST-DFG) initiative on building „Institutional Partnerships“. The programme complements other existing Indo-German scientific exchange programmes by offering incremental funds for research grant in addition to mobility funding from both sides.

The theme identified for the call for proposals in 2011 is „**Computational algorithmics with special focus on Algorithm Engineering**“

Efficient algorithms and data structures are a prerequisite for demanding computer applications that work with large data sets on increasingly complex hardware. Algorithmics – the systematic development of efficient algorithms – is therefore decisive for the transfer of technological possibilities into applications with large impact on engineering, economy, science, and our daily life. However, the solution of pending problems is inhibited by a wide gap between the state of knowledge of algorithm theory and the practical application of research results. The goal of algorithm engineering (AE) is to bridge this gap which has widened for decades now. The key for achieving this goal is a wider methodology. At the core of this methodology is a cycle of design, analysis, implementation, and experimental evaluation of practicable algorithms. Realistic models for machines and applications, algorithm libraries, and collections of real world inputs provide additional coupling to applications.

The projects funded within this call shall lead to a sustained innovative drive for the application of algorithms by advancing AE, establishing it more widely, and cross-linking AE researchers. The call is intended to support research projects that significantly contribute to bridging the described gaps between theory and practice using AE methodology. The collaborative research proposals on this chosen theme shall be supported in accordance with the guidelines of this announcement for Institutional Partnerships in the area of Computational algorithms specifically on algorithm engineering.

The Call:

Indian and German researchers are invited to submit applications within the framework of the thematic call “**Computational algorithmics with special focus on Algorithm Engineering**”.

Eligibility of collaborating scientists:India:

Faculty, scientists and academicians having permanent positions and belonging to universities, deemed universities and public funded research institutes can apply as a “Principal Investigator” (PI or Main Applicant).

Germany:

The eligibility criteria for participating as “Principal Investigator” (PI or Main Applicant) shall be according to the eligibility requirements of the DFG (please refer to DFG **Form No. 1.02e**).

http://www.dfg.de/forschungsfoerderung/formulare/download/1_02e.pdf

Administrative and financial information**a) Content information**

The proposal, including publication list, should not be more than 20 pages.. It should be self-explanatory and not require reviewers to read the literature that is either quoted or enclosed. The proposals should contain a working plan, describing the tasks of the involved research groups and how the cooperation will be organized. The applicants should describe the added value of the cooperation, i.e. the special benefit resulting from the cooperation of German and Indian groups. Each proposal must also be accompanied by a description of how the project reflects the theme of the call, both in terms of subject matter and organisation. Please include a list of own publications that are related to the proposed project. It serves as an important basis for assessing your proposal. Single applicant: two publications per year of the funding duration, multiple applicants: three publications per year of the funding duration.

The budget estimates should be shown in a diagram in order to get an overview at a glance. Furthermore, the costs need to be carefully justified and derived from the working programme.

Short CVs and lists of the five most important publications of the project leaders should be included in the proposals. A brief description of the scientific background of all involved researchers to be financed within the project is requested.

b) Funding

Grants will be offered towards project specific costs viz. consumables, upto two scientific personnel, one project related workshop; travel and living costs etc from each side. The Financial support is **NOT** available under the scheme for the following activities-

- i) already existing collaborative projects where travel and living costs are financed by other sources;
- ii) Capital equipments;
- iii) Office equipments viz. Desktops, laptops; scanners, printers, photocopy machines etc

The sending side will bear the travel costs (including medical overseas insurance, visa fees, etc.) from place of work in home institution to the place of work in host institution while the receiving side will provide local hospitality according to the norms of respective sides.

Support for research / project grant shall be in accordance with the national regulations and the guidelines of DST and DFG respectively. The applicable Institutional overhead charges payable to Indian Institute by DST is 10% of the total project cost.

c) Rates for local hospitality

DST (India) for German Scientists visiting India under the project:

Rs 1000/- per diem for visits up to one month (30 days), in addition to the cost of the accommodation for the entire duration of the visit

DFG (Germany) for Indian Scientists visiting Germany:

EUR 2300/2100/1128 (senior scientists/young scientists) per month (30 days)

EUR 104/95 per-diem for a stay during less than 22 days

d) General norms for visits under the approved project:

Generally, only 2 visits (up to 30 days per year for Sr. researchers and up to 60 days for young researchers) per year from each side will be supported. A project participant can avail only one visit per year of the project. Each visit of a project participant is considered as one visit under the project.

e) Evaluation of the proposals:

The applications will be evaluated jointly by a joint peer review panel, to be constituted by DST and DFG, on the basis of scientific merit/quality, justification for scientific-collaboration; and compatibility of the participating team members.

e) Project duration: Upto 2 years (non-extendable)

f) Application procedure

The **project proposals** are to be submitted separately but simultaneously to DST (by the Indian applicants) and to DFG (by the German applicants). Please also refer to the application procedure outlined below. A list of proposals received commonly by DST and DFG shall be prepared and only the proposals received by both sides shall be considered further.

In India (DST):

Only **ONE** original hard copy of the applications is to be submitted to:

Shri R K Sharma, Scientist-D,

International Division (Room No 4 B, Adm. Block)

Department of Science and Technology,

Technology Bhavan, New Mehrauli Road, New Delhi-110 016

along with a softcopy in a single pdf file (not scanned) of the application as attachment to sharma_rk@nic.in

In Germany (DFG):

Please send **three** paper copies of the application together with a CD-ROM including the proposal and all appendices, e.g. publications, as PDF-files, to:

Dr. Klaus Wefelmeier

Deutsche Forschungsgemeinschaft (German Research Foundation)

Kennedyallee 40, D-53175 Bonn

klaus.wefelmeier@dfg.de

- NOTE:**
- i. Incomplete and proposals not formulated as per the guidelines are liable for outright rejection.**
 - ii. Advance copy of the application shall NOT be considered; and**
 - iii. Request for extension of the deadline for submission of proposals shall not be considered in any case.**

Deadline for receipt of application: 30th May 2011

Likely date of start of the projects: 1st January 2012

APPLICATION FORM
INSTITUTIONAL PARTNERSHIP PROJECT (COMPUTATIONAL ALGORITHMS)

PART 1: General information

1. Title of the project:
2. (Subject Area, as specified in the announcement)
3. Contact details / Address of the project leaders:

	Indian project leader	German Project leader
Name & Designation		
Department & Institute/ University (address)		
Telephone (Work)		
Telephone (Residence)		
Fax No.		
Email ID		

4. Other participants in the project:

Indian side	German side

INSTITUTIONS ENDORSEMENT

Certified that –

- i) The project participants involved in the project as mentioned above are affiliated to the Institute/ University.
- ii) All information provided in the project proposal is correct; and
- iii) the necessary facilities including scientific equipments etc for implementation of the project are available in the Institution and all necessary administrative support will be extended to the project

Signatures of the Indian PI	Signatures of the German PI
Signatures of the Indian Head of Indian Institution with seal	Signatures of the Indian Head of Indian Institution with seal

PART-II

1. Project title
2. Scientific objectives
3. Current state of the research/ technology of the topic
4. Proposed activities including methodology of the proposed research work
5. Preliminary activities by the Indian side
6. Preliminary activities by the German side
7. Detailed description of the Indo-German co-operation
(Justification/ Rationale for collaboration)
7. Compatibility of intensions of both sides with regard to individual components of the project, working method etc
8. Expected results and dissemination plan
(Describe in detail the expected outcomes of the proposed activities and outline potential follow-on interactions between the involved institutes/institutions. If applicable, explain how you will disseminate your findings to key stakeholders and community and address potential for knowledge transfer to industry)
9. List of milestones
(Outline major milestones of your project on a time-scale of months and list the activities that will be required in order to achieve the milestone)
10. Ethical, safety and regulatory issues
(Does your proposed work raise ethical, safety or regulatory issues? If yes, how will you deal with it? Clearly indicate)
11. List of the five most important publications of the project participants, which have a bearing on the project (please do not send copies of the publications themselves or lists detailing all publications of the group)

PART-III Budget requirement:**A. Indian side (In Rupee only)****i. Visit of Indian scientists to Germany**

Name of Indian Scientists visiting Germany	Tentative dates of proposed visit and duration of stay in Germany	Anticipated budget estimates for international travel (including domestic travel in connection with the international travel, visa fees, medical insurance, etc) Please indicate break-up for each head
1.		
2.		
3.		
4.		

ii. Visit of German scientists to India

Name of German Scientists visiting India	Tentative dates of proposed visit and duration of stay in India	Per-diem charges @ Rs. 1000/- per day	Accommodation charges @ Rs. _____ per day
1.			

2.			
3.			
4.			

B. Other project costs:

Item	Details ie name, number, quantity etc	Budget requirement (1 st year)	Budget requirement (2 nd year)
Scientific manpower			
Spare parts / Consumables			
Workshop	Only one workshop during the currency of the project shall be supported		
Contingency etc			

B. German side (In Euro only)

i. Visit of German scientists to India

Name of Indian Scientists visiting Germany	Tentative dates of proposed visit and duration of stay in Germany	Anticipated budget estimates for international travel (including domestic travel in connection with the international travel, visa fees, medical insurance, etc) Please indicate break-up for each head
1.		
2.		
3.		
4.		

ii. Visit of Indian scientists to Germany

Name of German Scientists visiting India	Tentative dates of proposed visit and duration of stay in India	Per-diem charges @ Rs. 1000/- per day	Accommodation charges @ Rs. _____ per day
1.			
2.			
3.			
4.			

B. Other project costs:

Item	Details ie name, number, quantity etc	Budget requirement (1 st year)	Budget requirement (2 nd year)
Scientific manpower			
Spare parts / Consumables			

Joint workshop			
Contingency etc			

PART-IV (For Indian partners only)

1. List of on-going/completed research projects with the Indian project participant(s):

Title of the project	Brief description	Duration with dates of commencement and completion of the project	Funding available and source of funds

2. Infrastructure available/required to implement the project:

Facilities	List of items required for the project	If not available presently, how it is proposed to be procured/ recruited. Please indicate the source of funding
Equipment		
Manpower		
Consumables and Contingencies		

3. Does the project involve (i) Biological Material Transfer / Use of GMOs / Radioactive materials; (ii) Human / animal trials?

(If yes, submit necessary clearance of nodal agency / department of Govt in this regard)

4. Is the collaborative proposal involves IPR related issues?

(If yes, the partners need to submit the IPR sharing agreement by the collaborating institutes before sanction of the project by DST and DFG.

5. Please mention Name/ Address/ Contact details including email address/ area of specialization of 3 possible peer-reviewers of the project proposal.