

# **India-Japan Joint Research Laboratory Programme**

## **JST SICORP “CHIRP (Collaboration Hubs for International Research Program)” 2015**

### **JAPAN-INDIA Joint-Call for Proposals to be submitted by May 6th, 2016**

#### **I. General Description**

##### **I-1. New Scheme for Joint Funding of Japanese-Indian Research Collaboration**

Based on the Letter of Intent concluded between Japan Science and Technology Agency (JST) and Indian Department of Science and Technology (DST) in December 11 2015, JST and DST have agreed to implement a program for joint funding of Japanese-Indian collaborative research projects in the field of “Information and Communication Technology Research”.

Research topics for “Information Communication Technology” are: “Internet of Things”, “Artificial Intelligence”, “Big Data” and other related fields.

##### **I-2. Aim of Program and Research area**

This collaborative research program aims to enhance Japan’s and India’s identifiable and sustainable development of science and technology innovation by leading research organizations in Japan and India, to contribute to provide direct solutions to locally and globally shared challenges, creating innovation, building collaborative research platforms, and building capacity for Japanese and Indian researchers through exchanges of researchers, etc.

In order to comprehensively strengthen collaboration between Japan and India, JST and DST are promoting the establishment of Japan-India Joint Research Laboratories innovation (hereinafter “Joint-Labs”) at Japanese and Indian university or research institute, etc. (hereinafter referred to as the “institute”), aiming to effect social and industrial applications in India and Japan so that we can continuously and mutually advance science and technology as the driving-force of competitive power for both countries. Furthermore, after completion of the first funding period (1<sup>st</sup> phase) of a maximum of 60 months, we expect that the most successful Joint-Labs will be able to

advance to a 2<sup>nd</sup> phase to form a Collaboration Hub for International Research (hereinafter “Hub”) together with other Joint-Labs and/or research institutes to actively and practically promote such social and industrial applications.

This program supports international joint research to strengthen strategic collaboration between Japan and India within the area of “Information and Communications Technology Research”, focusing particularly on “Internet of Things”, “Artificial Intelligence”, and “Big Data” to have a practical and positive influence on social and human infrastructure such as that associated with agriculture, water, energy, health monitoring, disaster management and etc.

### **I-3. Prospective Applicants**

#### **I-3.1 JST/DST**

JST and DST invite Japanese and Indian researchers to submit proposals for collaborative research projects in the research areas described above. All applicants must fulfill national eligibility rules for research grant application. An important criterion of the proposed collaboration is that it should build on and reinforce already on-going research activities in each research group and contribute significant added value to these through bilateral collaboration. As well as applications from researchers at institutes, applications from researchers in Japanese industries are also welcome. Participation of industry in the joint lab will be preferred by Indian side. However, no funds will be provided to the Indian industry.

- a) The Japanese Principal Investigator (PI) /Indian PI is responsible for managing their Joint-lab which is to be implemented under their leadership.
- b) The Japanese PI/Indian PI has to own outcomes of their Joint-Lab and will be responsible for coordination of the activities of other participating institutions in the Joint-lab.
- c) The Japanese and Indian research institutes with which the Japanese PI /Indian PI is affiliated must have the ability to set up a Joint-Lab within Japanese/Indian institutes for collaborative research, evidence of which (e.g. letters of commitment) should be shown to JST/DST at the time of application. Furthermore, a Memorandum of Cooperation must be concluded between the Japanese and Indian host institutes detailing their commitment to supply research space, human and

financial support to the Japanese/Indian institutes for establishment and running of the Joint-Lab immediately after the research plan is approved. The MoU should also include the IPR arrangement between Indian & Japanese participating institution in the joint lab.

- d) The Japanese/Indian institutes are expected to have the necessary capabilities to set up the Joint-Lab, based on previously accomplished research outcomes.
- e) Main research activities should be done in the Joint-Lab, where one or several Japanese/Indian researchers are stationed for the full research period to fulfil their function as the key-researcher(s) of the Joint-Lab.
- f) Japanese and Indian researchers should be proactively engaged in efforts to apply innovative results created in the Joint-Lab within Indian and Japanese society.

### **I-3.2 DST**

The Principal Investigator (PI) and other investigators in India should be scientists and/or faculty members working in regular capacity in UGC recognized Universities, Deemed Universities, Academic Institutes or National Research & Development Laboratories/Institutes.

## **II. Support by JST and DST**

This program is designed to support additional expenses related to collaboration between Japanese and Indian researchers. JST/DST will not fund acquisition costs of any facilities but will support Japanese and Indian researchers' groups to set up Joint-Labs at Japanese and Indian institutes expected to advance to establish a Hub in the 2nd phase.

### **II-1. The Number of Funded Projects**

It is envisaged to fund a around three joint projects for the 1<sup>st</sup> phase in this call, depending on the number of proposals.

### **II-2. Funding Period**

#### **II-2.1 JST/DST**

The funding period of this program is divided into two phases, namely the 1st phase of Joint-Labs establishment lasting a maximum of 60 months dependent upon both

agencies obtaining governmental authorization each year.

The funding period for the 1<sup>st</sup> phase shall be counted from the projects' implementation start date, most likely covering a period from July 2016 to June 2021. The 1<sup>st</sup> phase is divided into the first 36 months and the latter 24 months. If after the first period of 36 months a project is deemed to have potential to have a significant impact on Japanese and Indian society as a symbol of science and technology collaboration, and demonstrates apparent potential for social expansion and industrial applications of innovative technology, after which support for the next 24 months will be extended. Successful joint labs will be eligible for consideration to get support for 2<sup>nd</sup> phase for graduating to a joint hub for a period of another 5 year; subject to fund availability at JST and DST.

### **II-3. Budget for a Collaborative Research Project**

#### **II-3.1 JST**

The total budget in the 1<sup>st</sup> Phase to cover direct expenses for a Japanese research project during the period of 60 months should not exceed 115million yen in principle. (In addition, 30% of the direct expenses will be also provided to cover indirect expenses.)

The annual budget to cover direct expenses for the Japanese research project should not exceed 23 million yen in principle. (In addition, 30% of the direct expenses will be provided to cover indirect expenses.)\_Both budget plans must get authorization from the Japanese government year by year.

Due to budget limitations of the Japanese and Indian governmental programs and periodical monitoring and evaluation by the Japanese-Indian Joint Evaluation Committee assigned by JST/DST, the exact budget may be adjusted each year.

In the 2<sup>nd</sup> Phase after completion of a maximum of 60 months in the 1<sup>st</sup> phase, the budget will be reassessed on the basis of the Joint Committee's recommendation regarding the prospects demonstrated by selected Joint-Labs to yield innovative applications in Japanese and Indian society and potential for subsequent advancement to become a sustainably self-reliant Hub.

#### **II-3.2 DST**

DST shall provide funding to collaborative research projects for approved activities to be carried out by Indian researchers, DST funding will be adjusting according to general pricing in India, and depending on their ability to get governmental authorization each year. DST will provide the support to the approved Science and Technology activities of

the Joint-Labs.

## **II-4. Contract between Applicant and JST and DST**

### **II-4.1.1 JST**

Support will be implemented according to a contract for commissioned research entered into between JST and the Japanese institutes. The contract for commissioned research will be renewed each year over the collaborative research period.

Since the contract is concluded on condition that all administrative procedures related to the project should be handled within the institution, the research leader should consult with the department in charge at his/her institution.

JST will not conclude any contracts for commissioned research with either the Indian institutes involved in Joint-Labs or any other Indian institutes. JST does not permit their commissioned institutes to allocate any quota in consignment research to other independent institutes in Japan and India.

The contract between the Japanese JST and institutes will stipulate that Article 19 of the Industrial Technology Enhancement Act (Japanese version of the Bayh-Dole Act) and Article 25 of the Act on Promotion of Creation, Protection and Exploitation of Contents shall be applied to all intellectual property rights generated as a result of this project, and that these can be the properties of the institution with which the research leader is affiliated.

### **II-4.1.2 DST**

Indian researchers will be awarded grants under the standard terms and conditions of DST.

## **II-4.2 Consortium Agreement**

The Project participants' institutes and any other organizations shall enter into a Consortium Agreement to specify at least how Intellectual Property Rights and non-disclosure agreements will be handled in order to ensure good collaboration. This Consortium Agreement will need to be signed among the project participants before the project starts. If an agreement has been already concluded, it must be reported in the application by each copy submitted to JST and DST, while the check-list in specified form must be offered to both agencies before conclusion of Consortium Agreement.

### **II-4.3.1 Funded Expenses from JST/DST**

Funding provided within this call is intended to enhance the capacity of the applicants to collaborate. Funding will therefore be provided mainly in support of the means for collaboration and of the local research that is necessary for the collaboration. Projects

will be funded for up to three years.

The funding from JST to Japanese researchers and from DST to Indian researchers will be in accordance with the general terms and conditions of JST and DST respectively.

Expenses covered in the program include the following items:

(1) Expenses for research exchanges

1) Travel expenses

In principle, travel expenses for the Japanese researchers should be based on the rules of the institute to which the research leader belongs and for the Indian researchers as per the Government of India Norms.

For Japanese researchers visiting India, the Japanese side provides for return air travel and premium for overseas medical insurance and the Indian side would provide to them local hospitality (accommodation, meals or per diem in lieu, and local transport). Similarly for Indian scientists visiting Japan, the Indian side provides a return air ticket travel and premium for overseas medical insurance and the Japanese side would provide them for local hospitality (accommodation, meals or per diem in lieu, of and local transport). JST/DST do not stipulate any limit to the number of eligible trips.

2) Expenses for holding symposia, seminars and meetings

(2) Expenses for research activities

1) Expenses for facilities and equipment

2) Expenses for consumables

3) Expenses for personnel

- Stipend or salary for a PhD student, or salary for a post-doctoral fellow (for Japanese researchers). JRF, SRF, RA etc. as per DST norms for the Indian researchers.

4) Others

- Expenses for creating software, renting or leasing equipment, transporting equipment, etc. (for Japanese researchers). As per DST norms for the Indian researchers.

(3) Overhead expenses

Since all administrative procedures related to this project are to be carried out by the institutions, overhead expenses amounting to 30% or less of the total amount of research exchange and research activity expenses will be accepted. Overhead

expenses shall be provided within the total budget.

(4) Expenses not covered/funded in the program:

- 1) Expenses related to acquiring real estate or constructing buildings or other facilities
- 2) Expenses unrelated to implementation of this collaborative research project

#### **II-4.3.2 Funded Expenses from DST**

The funding from DST to Indian researchers will be in accordance with the general terms and conditions of DST.

### **III. Application**

The Japanese and Indian applicants shall individually write their applications using the application forms provided by JST and DST. Japanese researchers should submit their applications to JST and Indian researchers should submit their applications to DST.

Applications shall include:

- a) Project description including how collaboration will be carried out, with clear statements of what roles Japanese and Indian researchers will play respectively in the project;
- b) Description of the expected outcome of the proposed project, scientifically as well as in terms of its relevance for industry and society;
- c) Description of the ongoing activities and specific advantages of the Japanese and Indian groups respectively, which form the basis for the proposed joint project;
- d) Description of the expected added value from the proposed joint project, including how the competence, technology and other resources in each group complement each other;
- e) Description of how the project is expected to help strengthen research collaboration between Japan and India over the longer term;
- f) Description of the added value expected from the multidisciplinary approach in the proposed joint project; and
- g) Description of how the proposed joint project compares with other comparable activities worldwide.

#### **III -1. Application Forms**

The following application forms are unified by JST/DST, and should be submitted to JST/DST by Japanese and Indian researchers in English.

Form-1	Title of the proposed research , Information regarding Japan-based PI or India-based PI
Form-2	Affiliated organization to be installed Joint-Laboratory in the 1 <sup>st</sup> phase
Form-3	PI's Publications, Patents and Partnership records in Japan & India
Form-4	Participants in Japanese Team & Indian Team
Form-5	Abstract of the proposed research
Form-6	Detailed descriptions of the Collaborative Research Project in 10 year
Form-7	Time Schedule and Work Plan
Form-8	Budget Description for Japanese Team in the 1 <sup>st</sup> phase
Form-9	Budget Description for Indian Team in the 1 <sup>st</sup> phase
Form-10	Key Professional Personnel in Japanese Team & Indian Team

### **III-2. Preparation of Application Forms**

Applicants should fill in the particulars in all the application forms listed above III-1.

### **III-3. Submission of Application Forms by Japanese and Indian Applicants**

Applicants to this call for proposals should submit their applications to JST by 15:30 (Tokyo time) on May 6th, 2016 through the online application system (<http://www.e-rad.go.jp/index.html>), and to DST on the same day (Deli time).

Indian researchers should submit their project proposals by e-mail to [nvasishta@nic.in](mailto:nvasishta@nic.in) (preferably in MS Word format in one file, indicating file name as PI name & area code) as well as by post (3 copies) in the prescribed format on or before the given deadline (May 6th, 2016):

Dr. Naveen Vasishta, Scientist 'D' International Division, Department of Science & Technology, New Mehrauli Road, New Delhi-110016.

## **IV. Evaluation of Project Proposals**



#### **IV-1. Evaluation Procedure**

The same proposal identified between Japanese counterpart and Indian counterpart must be submitted individually to JST from Japanese researcher and to DST from Indian researcher, because both JST and DST completely agreed to jointly elaborate the sole guideline, the same criteria, and the same application-forms in English, so that they can prove this joint-call to be a result of Japan-India perfect collaboration to every applicant in both countries.

The Japanese Program Officer (PO) will serve as Chair of the evaluation panel, and with selected Advisors will evaluate all proposals by the Japanese researchers to make a short-list of proposals that may be funded for the 1<sup>st</sup> phase. DST's recommended Chair and their evaluation panel will evaluate all proposals by the Indian researchers and make their own short-list of potential projects to fund.

Based on the scientific evaluation and comments by the limited number of representatives from both countries, JST and DST will make a common decision regarding funding to be awarded to three selected proposals. DST and JST have agreed a common set of guidelines, common evaluation criteria, and the same application-forms in English, demonstrating this join-call to be a result of excellent Japan-India collaboration..

#### **IV-2. Evaluation Criteria**

The following evaluation criteria jointly defined by JST and DST will be applied in assessment of each application:

- 1) Conformity with program aims and designated research fields, including project integration;
- 2) Scientific quality, innovativeness, social impact of the joint research outcomes;
- 3) Leadership and performance track-record in joint-research of the Japanese PI, and their potential to successfully manage the Joint-Lab (and future Hub) set up at the Indian institute;
- 4) Appropriate research collaboration and necessary support to Joint-labs (Hubs in the future) from the institutes in India where they will be established;
- 5) Appropriate division of research activities with the counterpart research institute and

adequacy of the plan for research expenses to realize the proposed research activity.

- 6) The proposed research activity shall be eminent, creative and at an internationally high level in an attempt to produce a significant impact on the development of future science and technology or to solve global and regional common issues or to create innovative technological seeds that can contribute to the creation of new industries in the future.
- 7) Expectation for synergistic effects to be achieved through Japan-India research collaboration and exchange and capacity-building of researchers.
- 8) Solution-oriented and independently sustainable nature of research on crucial issues of contemporary ASEAN and India, including social application of innovative outcomes.

#### **IV-3. Announcement of Decision**

The final decision regarding supported projects will be notified to the applicants around May 2016.

### **V. Responsibilities of Research Leaders after Proposals are Approved**

#### **V-1. Annual Progress Report (JST/DST)**

At the end of each fiscal year, the Japanese and Indian research leader shall promptly submit to JST/DST a progress report on the status of research collaboration, and the institute with which the research leader is affiliated shall promptly submit a financial report on supported expenses.

#### **V-2. Intermediate and Final Report**

After completion of three years' collaborative research in the Joint-Labs, research leaders shall promptly submit to JST/DST an intermediate report which should include a financial report and description of the research collaboration activities. The report should include a general summary compiled jointly by both the Japanese and the Indian research groups.

After completion of five year's collaborative research in the Joint-Labs, research leaders shall promptly submit to JST/DST a final report which should include a financial report and description of the research collaboration activities. The report should include a general summary compiled jointly by both the Japanese and the Indian research groups. If papers describing the results of collaborative research conducted in Joint-Labs are presented to academic journals, societies, etc., copies of such papers should be attached to both the intermediate report and the final report.

Japanese and Indian applicants should contact the following for further information:



Hirotooshi Tagata (Mr.), Dai Minowa (Mr.)  
Department of International Affairs  
Japan Science and Technology Agency  
Tel. +81(0)3-5214-7375 Fax +81(0)3-5214-7379  
jointlab@jst.go.jp

Indian applicants should contact the following for further information:



Dr. Naveen Vasishta  
Scientist 'D', International Division  
Department of Science & Technology  
New Mehrauli Road, New Delhi-110016  
nvasishta@nic.in

# India–Japan Joint Research Laboratory Programme

## 2015 SICORP Collaborative Hub for International Research Program

### between Japan and India

#### – Application Forms – Form-1

#### Title of Collaborative Research Project

<b>Title of Collaborative Research Project</b>  (日本語課題名)	<div style="border: 1px solid black; height: 40px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 40px; color: red; text-align: center; padding: 5px;">         (must be added in application to JST)       </div>
<b>Five key words describing the proposed research topic:</b>	<div style="border: 1px solid black; height: 60px;"></div>

#### India-based Principal Investigator (PI)

A copy of the Collaborative Research Agreement entered into among the collaborating research organizations in Japan–India must be attached to the application to JST and DST.

The PI is also required to describe the name and position of a responsible person, who must be a signatory to a Memorandum of Cooperation (MoU) between the collaborating organizations in both countries, since it is essential for the PI to secure official authorization and complete support of their affiliated organization.

<b>Name (Family)</b>  <b>Organization</b>  <b>Division/Department</b>  <b>Address</b>  <b>Tel. /Mobile/Fax/E-mail</b>	<b>(First)</b>   <b>Title</b>    <u><b>* Director or similar-level responsible person administrating the affiliated organization</b></u> <b>Name (Family)</b>  <b>Charge</b>  <b>Tel./Mobile/Fax/E.mail</b>
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The PI is also required to describe the name and position of a responsible person, who must be a signatory to a Memorandum of Cooperation (MoU) between the collaborating organizations in both countries, since it is essential for the PI to secure official authorization and complete support of their affiliated organization.

<b>Name (Family)</b> (日本語表記) <b>Organization</b> (日本語表記) <b>Division/Department</b> (日本語表記) <b>Address</b> (日本語表記) <b>Tel. /Fax/E-mail</b>	<b>(First)</b>   <b>Title</b>    <u><b>* Director or similar-level responsible person administrating the affiliated organization</b></u> <b>Name (Family)</b> (日本語表記)
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Information about Indian Institutes establishing a “Joint-Laboratory” in the 1<sup>st</sup> phase

For

m-2

Affiliated organization in which a Joint-Laboratory will be installed in the 1<sup>st</sup> phase

Country		
Responsible person	Name (Family)	(First)
Organization		
Division/Department		Title
Address		
Tel./Mobile/Fax/E.mail		

Affiliated organization in which a Joint-Laboratory will be installed in the 1<sup>st</sup> phase

Country			
Responsible person	Name	(Family)	(First)
Organization			
Division/Department			Title
Address			
Tel./Mobile/Fax/E.mail			

Affiliated organization in which a Joint-Laboratory will be installed in the 1<sup>st</sup> phase

Country			
Responsible person	Name	(Family)	(First)
Organization			
Division/Department			Title
Address			
Tel./Mobile/Fax/E.mail			

orm-3

**Principal Investigator (PI) on the Japanese Research Team**

<b>Name</b>	(Family) (First)
<b>Organization</b>	
<p><b>Record of collaboration with researchers of the counterpart country, Main Scientific Publications, Patent Applications <u>in the last 5 years, etc.</u></b></p>	

**Principal Investigator (PI) on the Indian Research Team**

<b>Name</b>	<b>(Family)</b>	<b>(First)</b>
<b>Organization</b>		
<p align="center"><b>Record of collaboration with researchers of the counterpart country, Main Scientific Publications, Patent Applications in the last 5 years, etc.</b></p>		



**Form-4**

**Participants in the Japanese Research Team**

Name	Organization, Division	Title	Degree	Specialty
(Leader)				
(Researchers)				

**Participants in the Indian Research Team**

Name	Organization, Division	Title	Degree	Specialty
(Leader)				
(Researchers)				

**Form-5**

**Abstract**

**Instructions**

An abstract of 20 lines should be included to describe the work plan of both the Japan-based and India-based research teams and how their work is to be integrated in the Joint-Laboratory in the 1<sup>st</sup> phase and Joint-Hub in the 2<sup>nd</sup> phase.

The abstract should present:

1. Objectives and targeted outcomes after completion of a maximum of 5 years' and 10years' collaborative research (**subject to availability of fund**).
2. Methodology
3. Formation of collaboration and management of research-networking
4. Potential for significant scientific contribution by the proposed research
5. Potential for significant social and economic impact to both countries by the proposed research

**Abstract:**

**Illustration demonstrating the Joint-Research Structure / concept:**

–maximum 1 page

**List of interested companies**

Please list potential companies which may be interested in the research topics targeted by this proposal and with which the Japan- and/or India-based teams intend to collaborate in the future.

1) Japanese team:

2) Indian team:

**Form-6**

**Detailed descriptions of the Collaborative Research Project in 5 years (the 1<sup>st</sup> phase) and 10 years (the expected whole period) (subject to availability of fund).**

– maximum 6 pages

(Please refer to the evaluation criteria in the guidelines. References should be listed at the end of this section.)

(1) Detailed description of the research topic

- (2) Discussion of the scientific and technological background of each element of the project
- (3) Explanation of the conformity of the project to the priority research fields and type of research, as detailed in the call for proposals
- (4) Expected scientific, social and economic contribution of the project (focusing on synergy and mutual benefits of the project, including expected added value from the project)
- (5) Specific goals, methodology and work plan of the project
- (6) Statement describing the state of the art in the research field, the approximate number of research groups working in the field, and the special strengths of the Japan-India research team
- (7) Measures to foster researchers including circulation and exchange

(Itemize the specific research activities to be done by each team in each year. The targets to be achieved and the specific roles of each team should be included. Descriptions for each team should not exceed 1 page, respectively.)

**Japanese side (Start date of the collaborative project)**

**1st Year**

**2nd Year**

**3rd Year**

**4th Year**

**5th Year**

**Indian side (Start date of the collaborative project)**

**1st Year**

**2nd Year**

**3rd Year**

**4th Year**

**5th Year**

**Time Schedule and Research Networking Plan – maximum 1 page**

(Including a clear description of plans for joint workshops, researcher exchanges etc. in each year, and the purposes of and expected outcomes of these activities.)

**1st Year**

**2nd Year**

**3rd Year**

**4th Year**

**5th Year**

**Form-8**

**Budget Description (for Japanese Team) in the 1<sup>st</sup> phase**

**(A) Budget Summary in Japanese Yen**

	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019	Fiscal year 2020	Fiscal year 2021	<b>TOTAL</b>
Direct Expenses							
Facilities and equipment							
Consumables							
Travel							
Salaries for researchers, PhD students, post-docs, etc.							

Other							
Total amount in Direct Expenses							
Overhead Expenses							
Overhead Expenses							
<b>TOTAL Budget Requested (including Direct and Overhead Expenses)</b>							

**Instructions:**

Travel expenses must be indicated in the table. Details should be given regarding the calculation of travel expenses (number of trips, airfares, days of car rental, etc.) in the Budget Justification (see below). When the services of sub-contractors or consultants are budgeted for, please specify the nature of the work to be performed and detail the cost calculation in the Budget Justification.

**(B) Budget Justification**

Please explain in detail and justify, in relation to the work plan, the major budget paragraphs and special items, such as travel and consultancy and sub-contractor services.

**(C) Other Sources of Support**

Has this research proposal been submitted to other funding sources? Yes\_\_\_No\_\_\_

Funding source:\_\_\_\_\_Sum requested:\_\_\_\_\_

Has the request been approved? Yes \_\_\_\_\_No\_\_\_\_\_

Funding source: \_\_\_\_\_Sum requested:\_\_\_\_\_

Has the request been approved? Yes\_\_\_\_\_No\_\_\_\_\_

\* If this project has received support from other sources in the past or is currently receiving support, please name the funding sources, the period of support and the amount of support. Rights or obligations in relation to the funding source should be indicated, if in effect. Should it be considered necessary, JST must request presentation of the relevant contracts and information regarding previous stages of the research.

\* If patent applications have been presented or patents have been registered in relation to the research project, please provide the following details: country in which the patent was

registered/ requested; patent/request number; names of the inventors; etc.

## Budget Description (For Indian Team) in the 1<sup>st</sup> phase

### (A) Budget Summary in India Rupee

	Fiscal year 2016	Fiscal year 2017	Fiscal year 2018	Fiscal year 2019	Fiscal year 2020	Fiscal year 2021	TOTAL
Direct Expenses							
Facilities and equipment							
Consumables							
Travel							
Salaries for researchers, PhD students, post-docs, etc.							
Other							
Total amount in Direct Expenses							
Overhead Expenses							
Overhead Expenses							
<b>TOTAL Budget Requested (including Direct and Overhead Expenses)</b>							

#### Instructions:

Travel expenses must be indicated in the table. Details should be given regarding the calculation of travel expenses (number of trips, airfares, days of car rental, etc.) in the Budget Justification (see below). When the services of sub-contractors or consultants are budgeted for, please specify the nature of the work to be performed and detail the cost calculation in the Budget Justification.

### (B) Budget Justification

Please explain in detail and justify, in relation to the work plan, the major budget paragraphs and special items, such as travel and consultancy and sub-contractor services.

### (C) Other Sources of Support

Has this research proposal been submitted to other funding sources? Yes\_\_\_No\_\_\_

Funding source: \_\_\_\_\_ Sum requested: \_\_\_\_\_

Has the request been approved? Yes \_\_\_\_\_ No \_\_\_\_\_

Funding source: \_\_\_\_\_ Sum requested: \_\_\_\_\_

Has the request been approved? Yes \_\_\_\_\_ No \_\_\_\_\_

\* If this project has received support from other sources in the past or is currently receiving support, please name the funding sources, the period of support and the amount of support. Rights or obligations in relation to the funding source should be indicated, if in effect. Should it be considered necessary, DST may request presentation of the relevant contracts and information regarding previous stages of the research.

\* If patent applications have been presented or patents have been registered in relation to the research project, please provide the following details: country in which the patent was registered/ requested; patent/request number; names of the inventors; etc.



Indicate “staff type” in the following order: principal investigator (PI), assistant investigators, and postdoctoral research fellows.

**(A) Japan-based Team**

Staff Type	Name	Institution/ Department	Position	Role in the Project	Effort (%)

**(B) India-based Team**

Staff Type	Name	Institution/ Department	Position	Role in the Project	Effort (%)

\* Effort percentage is defined as the percentage of total working hours devoted to this project per week.

For instance, 50% means this individual will devote half of his/her working hours to this research project each week

**To be filled by Indian PI**

## **FINANCIAL AND ADMINISTRATIVE INFORMATION**

### **TOTAL COST OF THE PROJECT :**

1. List of equipment and other facilities available in the participating Institutes for implementation of the project : (In case facilities of other institutes are utilised, a consent letter from the these institute(s) may be enclosed)

2.

Items of expenditure	I Year (Rs.)	II Year (Rs.)	III Year (Rs.)	IV Year (Rs.)	V Year (Rs.)	Total (Rs.)
a) Manpower*						
b) Equipments \$						
c) Consumables#						
d) Visits by Indian scientists to Japan (Pl. indicate no. of visits & duration) International air-fare by lowest economy class including airport taxes and airport transfers in India						
e) Medical Insurance (silver class)						
f) Visa Fee						
g) Visits by Japanese scientists to India (Pl. indicate no. of visits & duration) h) Accommodation Charges (Institution guest House as per actual) i) @ Rs.1000 / per day-per-diem						
j) Domestic travel \$#						
Total						
Over-head						
Grand total (Rs.)						

\* Please indicate the designation of manpower like JRF, RA etc. including their monthly emoluments as per DST guidelines if any.

\$ Kindly attach the list of the equipments with invoice and justification.

# Details of consumables including name and quantity is to be provided with full justification.

\$# Kindly indicate the amount including per visit along with justification.

*Note :i) The PI is to required to submit periodic reports and its continuation in the second year would depend upon its progress assessed by DST. At the end of each financial year .the PI is also required to submit the Utilisation Certificates and Statement of Expenditure in prescribed format.*

*ii) Visit of one person is to be counted as one visit.*

3. Designation and address of the Authorised official in Institute/ University to receive the grant
4. A letter from the Japanese Principal Investigator agreeing with the objectives, work plan including projected visits from both sides may be enclosed.
5. For transferring the money through electronically (ECS), registration with Central Plan Scheme and Monitoring System (CPMS) is mandatory, therefore, you are required to provide us Name of the Agency (Full name), Name and Designation of A/C holder (as per Bank A/C), Bank Account No., Bank Name and Branch Address, IFSC Code. On receipt of these information the finance division of DST will release the grant to implement the project.

(ECS format attached)

For registering log on to [www.cga.nic.in](http://www.cga.nic.in) (ECS detail)

6. *We hereby certify the statements above to be true and correct.*

Signature with Date  
Indian Principal Investigator  
Investigator

Signature with Date  
Indian Co-Principal

**ONGOING / COMPLETED PROJECTS WITH THE INDIAN PRINCIPAL INVESTIGATOR :**

National Projects:

S. No.	Project Title	Sponsoring Agency	Budget	Status

International Projects:

S. No.	Project Title	Name of the Colloborating Scientist & Institiute	Sponsoring Agency	Budget	Status

**CERTIFICATE OF HEAD OF THE INDIAN INSTITUTION**

It is certified that

- 1) The institution agrees to participate in this joint research project;
- 2) In the event of the Indian Principal Investigator (PI) leaving the Institute due to retirement or otherwise, the Co-PI would become the PI and be responsible for completing the project and submitting the periodic progress report and financial statements;
- 3) The institution shall provide infrastructure & available facilities as mentioned above, for implementing the joint project;
- 4) The institution assumes to undertake financial & other management responsibilities for part of the project work to be carried out in this institution;
- 5) The breakup funding for manpower, consumables etc. is available to this project;
- 6) All necessary formalities as per our institution have been completed.

Signature and seal of the Head of the institution

**Electronic Clearing System (ECS) Format**

1	Name of the Agency	
2	Name and Designation of A/C holder (as per Bank A/C)	
3	Bank Account No.	
4	Bank Name and Branch Address	
5	IFSC Code	
6	MICR Code	
7	Name of Principal Investigator	
8	E-mail (Agency/ PI)	
9	Mobile No. (Agency/ PI)	

Agency/ Institution are requested to fill up above mentioned columns for transferring the fund through electronically.

(Kindly also send scanned copy of the cancelled cheque which has all the requisite details if possible).

## 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?

....2/-

## **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?

#### **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

**PROJECT SUMMARY**

1. Project Title:
2. Total cost of the project (Indian side) (in Rs.):
3. Duration of the Project.
4. Project Investigators (PIs) and Co-Investigators:
  - 4.1 Indian PIs
  - 4.2 Foreign
5. Other Project participants:
  - 5.3 Indian
  - 5.2 Foreign
6. Implementing Agencies / Institutions:
  - 6.1 Indian
  - 6.2 Foreign
7. Sponsoring Agency / Department / Ministry
  - 7.3 Indian
  - 7.2 Foreign
8. Administrative Ministry in Government of India:
9. Has the Project been cleared by Secretary of the Administrative/  
Sponsoring Ministry/Department from security/sensitivity angle?: Yes/No



10. If answer to (9) above is 'No', then does the Administrative/  
sponsoring Ministry/Department recommend the Project to  
be considered by High Level Committee of Secretaries? Yes/No

Signature of the concerned Officer  
in the Administrative/Sponsoring  
Ministry/Department