

**BETTER OPPORTUNITIES  
FOR  
YOUNG SCIENTISTS  
IN CHOSEN AREAS OF  
SCIENCE AND TECHNOLOGY  
(BOYSCAST)**

GENERAL INFORMATION



GOVERNMENT OF INDIA  
**MINISTRY OF SCIENCE AND TECHNOLOGY**  
**DEPARTMENT OF SCIENCE & TECHNOLOGY**  
TECHNOLOGY BHAVAN  
NEW MEHRAULI ROAD, NEW DELHI - 110016

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## GENERAL INFORMATION

### INTRODUCTION

It has been well recognised that in order to keep abreast with the latest development in science and technology, Indian scientists and technologists, particularly the young scientists should have opportunities to interact with the international community and get first hand experience of the developments taking place at the international level. Indian scientists and technologists should also be able to participate and contribute to the latest developments in chosen frontline areas of science and technology in which India would like to build up its national capability. It is with this background that the Department of Science & Technology, Government of India has initiated the programme of "Better opportunities for Young Scientists in Chosen Areas of Science & Technology" (BOYSCAST).

### OBJECTIVES

The objectives of the BOYSCAST programme are:

- to provide opportunities to young scientists for visiting international institutions to enable them to participate and contribute to the latest developments in specially chosen frontline areas of Science & Technology through personal interaction with scientists and technologists abroad.
- to use the experience and talent of these young scientists and technologists to initiate and strengthen the national programmes in these identified chosen areas of science and technology.
- to use these talented young people to further generate and spread expertise at the national S & T institutions, working in these chosen areas of Science and Technology so that, in future, we can train more young scientists in our own institutions.

### ELIGIBILITY CRITERIA

Young Indian Scientists and Technologists who fulfil the following conditions can submit a proposal for award of BOYSCAST fellowship:

- *Academic Qualifications:* Masters Degree in Engineering, Technology or equivalent or Ph.D. in Science or Technology or equivalent or M.D. Degree in Medicine or equivalent.
- *Age:* Less than 35 years (on the date of application)
- *Employment:* A regular position in a recognised S & T institution or university or college. Candidate must be officially sponsored (their application to be formally forwarded) by the employer/head of the institution or agency with commitment to depute them for research/training under BOYSCAST programme. Forwarding note merely stating above would be considered only after award of fellowship will not be considered by DST.
- *Area of work:* Area proposed by the candidate should be in line with the chosen area (published along with announcement of fellowship each year).
- *Place of work:* The fellow should be accepted by a foreign scientific/technological institution which is internationally recognised as an outstanding institution where major work in the identified area is in progress.
- Willingness of the foreign institution to accept and extend necessary support to the candidate for the work proposed. Candidate is required to produce evidence, in the form of a letter of acceptance from the institution to be visited.
- Young scientists and technologists having established credibility in the proposed area of work will be preferred.
- Candidate must not have earlier availed of this fellowship at least during the past three years.
- The institute, where the candidate belongs, should have either already initiated major research activities in the chosen area or should have immediate plans to initiate such programmes based on the expertise of the individual and proposed training abroad.

## **METHODOLOGY FOR IMPLEMENTATION**

1. Announcement of the fellowship will be made in leading newspapers around Feb/March.
2. Application for the award of fellowship are accepted from (i) eligible candidate who may forward their application through the head of their institution and from (ii) eminent scientists/technologists/institutions by way of nomination of eligible bright young scientists. In the case of nomination, application should also be forwarded by the head of the institution where the candidate is employed.
3. The programme would be implemented through an Expert Committee involving eminent scientists and technologists.
4. Applications will not normally be called for interview.
5. The BOYSCAST fellow will be required to submit a detailed progress report on their participation, submitted immediately after their return giving details of the training received and research work done including papers communicated/published. They may also highlight how this exposure will help in their future work.
6. Details of other laboratories visited and outcome of such visits should also be given along with the report.
7. A report evaluating the performance of the Boyscast fellow and highlights of scientific results by the professor with whom the fellow has worked abroad should also be submitted.
8. Boyscast fellow may be required to submit other reports from time to time highlighting how the knowledge gained abroad is being utilised.

## **PROCEDURE FOR APPLICATION**

Application for the award of BOYSCAST fellowship should be sent in the prescribed format. Fifteen (15) copied are required to be forwarded through the head of agency /organisation /institution where the candidate is employed.

- Application should reach DST within 45 days of the date of publication of the advertisement in newspapers.
- The matter should be neatly typed as per format (and not as annexures) and should not exceed 10-12 typed pages.

The following documents should accompany the application:

- Recent letter of acceptance from foreign institution to be visited by the candidate specifically mentioning the BOYSCAST fellowship.
- Endorsement from head of the agency/organisation/institution on letter head as per the prescribed format.
- List of publication of the candidate.
- A short (500 words) write up on the future plans of the candidate in utilising the expertise in India by special training obtained abroad.
- Reprints of three best publications, in the last five years.

Application with documents to be addressed to:

**HEAD--HUMAN RESOURCES  
(BOYSCAST SCHEME)  
Ministry of Science & Technology  
Technology Bhavan  
New Mehrauli Road  
New Delhi - 110016**

## GUIDELINES

### GUIDELINES GOVERNING THE PROGRAMME

1. The individual availing this fellowship would be called a BOYCAST FELLOW.
2. After the approval of the fellowship, the BOYCAST FELLOW should not deviate from:
  - (a) Approved area of research/training
  - (b) Identified Institute abroad
  - (c) Duration of fellowship
3. BOYCAST FELLOW should will a bond to the parent institute that he/she would serve the parent institute/anywhere in India for a period of atleast three years after return, pursuing research in their area of specialisation abroad.
4. Young scientist and Technologist who have availed such an opportunity once will not be eligible for consideration again under this scheme for the next three years after return. In case of special requirements, where it becomes important in the context of a well identified programme, which is relevant to the national programme, this condition may be waived.
5. If the fellow does not return to India or gets job opportunity overseas on completion of the duration, fellow will be required be reimburse the whole of the expenditure incurred during the fellowship period in one lumpsum within one month of the completion of the Fellowship. Parent institute will recover the whole of the expenditure from the fellow and remit it to DST within the stipulated period.
6. If the fellow on return to parent institution, resigns from the job goes abroad or accepts another job unconnected with the chosen area, then it would be construed as having broken the bond and would be required to pay forthwith a sum of money pro-rated to the uncompleted period under the bond.
7. The fellow will be entitled for fellowship of US \$ 1500 per month (if it is for a period of three to six months) or equivalent amount in foreign exchange of the country of study during the period of fellowship. The institution where the candidate belongs would be responsible for necessary foreign exchange arrangements.
8. Fellow will also be entitled for a personal contingent grant of Rs. 10,000/- for fellowship duration upto six months and Rs. 15,000/- for fellowship duration above six months.
9. Fellow will be entitled to air passage in economy class both ways by Air India from present place of working to the place of training by direct route. Other airlines should not be made use of for this purpose except in sectors where Air India does not operate. In such cases, air passage should be got booked through Air India. To and fro Air ticket should be purchased before departure to avoid escalation in return airfare.
10. Rules governing payment of salary, leave, medical, gratuity, GPF and Pension etc. of the Department/Institution/University to which a fellow belongs would continue to be applicable. No liability on any of these accounts will be borne by DST.
11. Fellow will be permitted to travel within host country to attend conferences or visit other Institutes of interest with prior approval from Guide of Host Institute with intimation to DST. Fellow will be entitled to incur expenditure separately calculated as US & 100 per month x duration of stay in months (e.g. 3 months duration \$ 300: 6 months duration \$ 600 etc.) Expenditure incurred on this will be settled by DST at the time of final settlement and on submission of the following details:
  - Recommendation Letter from Guide Host Institute permitting to attending the conference or visit other institute of interest within host country and within fellowship duration only.
  - Authenticated claim bill for travel, hotel stay, and registration fee if any duly certified by competent financial authority/guide of Host Institute.

Total claim bills on this budget head should not exceed the amount specified above. Only actual expenditure incurred will be re-imbursed by DST which should be within the limits prescribed above.

12. Bank Commission charges, Medical Insurance expenses, Visa Fee, Airport tax and taxi charges etc. will be met by the fellow front out of the personal contingent grant.
13. The candidate selected for the award of the BOYSCAST fellowship should commence their research/training before the end of the financial year in which the award is given. Failure to do so would render the fellow forfeit the award. The decision of DST on all these matters would be final.
14. The fellow will submit to DST a final report on their work at the end of their training/research. This should be submitted within two months of their return. The report should also include authenticated detailed expenditure statement in connection with their training/research under this scheme as per the DST format.
15. A report evaluating the performance of the BOYSCAST FELLOW by the Professor of Institute with whom fellow has worked should also be sent to DST along with the final report.
16. The final settlement of accounts will be subject to availability of reports mentioned at 14 and 15 above.

FORMATS

**RECORD SHEET (TWO COPIES)**

1. DST Ref. No.\*:
2. Name, designation & address of applicant:
3. Date of birth & age:
4. Broad area of research and chosen area:
5. Parent Inst. Consent (yes/ No)
6. Overseas host Institute:
7. Host consent dated (Yes/No):
8. Duration (Months) :
9. No. of publications:
10. List of reprinting enclosed:
  - (i)
  - (ii)
  - (iii)
11. Other projects with applicant: ( DST / Other Agencies )

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Sl. No.	Title	Date of start Date of completion	Cost (Rs. In lakhs)	Agency reference No.
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\* To be filled by DST

## APPLICATION (FIFTEEN COPIES)

1. Name, designation and address of application
2. Date of birth and age:
3. Academic qualification (Bachelor's degree onwards with :  
Subject to specialisation and academic distinction, if any)
4. Details and nature of present and previous employment:
5. \*Brief summary on current areas of research:
6. \*(a) Number of research publications in referred journals:  
excluding papers presented in conference, symposia  
etc. during last five years (Enclose one copy of  
reprints of your three best publications)  
  
(b) Number of Ph.D. students guided:  
  
\*(c) Details of training courses conducted, research:  
projects granted to the applicant during the last  
ten years.
7. Honors and awards received:
8. \*Overseas visits (include details like country and labo-:  
ratory of visit, duration, purpose, degrees obtained,  
paper published etc.
9. \*Details of proposed training
  - (i) Broad area:
  - (ii) Chosen area in which training/research programme:  
proposed
  - (iii) Brief summary of the training/research programme:  
and its objectives
  - (iv) Justification of its importance and relevance to on-:  
Going/future programmes of the institution of the  
Applicant
  - (v) Future scope of application in India:
10. Proposed place of research/training:
  - (a) Justify its selection and enclose consent of Overseas:  
Host institution alongwith facilities to be provided  
with each application form.
  - (b) Do you purpose to visit any other Institute/attend:  
any conference in the host country during your  
stay. If yes, please give details.
11. Proposed duration of the fellowship (from 3 to 12 months):  
-- Please specify based on your correspondence with  
host institute (It will not be possible to change the  
duration later)

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\*Please provide information here and NOT AS ANNEXURES.

12. Have you applied for BOYSCAST fellowship previously?:

-- Please give details if answer is in the affirmative:

13. Details of institutes/scientists and engineers engaged:  
In proposed area of study, within India (if any)

14. Can the proposed study be undertaken in any Indian:  
Institute? If yes, please specify. If not, why not?

15. Do you have an on-going S & T project? If yes, please:  
Mention its reference number, title, duration (Date of  
Start and of completion), funding agency and total cost

16. Name and address of two Indian referees in the:  
selected area

Place:

(Signature of Applicant)

Date:

### **STATEMENT FROM THE PRESENT EMPLOYER**

(This should mention about the continuity of the employment, deputation terms like leave, payment of salary etc. during the fellowship).

#### NOTES:

1. The candidate should themselves correspond with their proposed host institution abroad for placement .
2. Application not duly forwarded by the parent institution/organisation or received after the last date, will not be considered.
3. Visa arrangements to be made by the candidate.

## REPORT (Three copies)

Report on Participation in Training/Research abroad under BOYSCAST Scheme

1. Name and designation of BOYSCAST fellow:
2. Address:
3. Chosen frontline area of S&T in which training research was:  
Carried out
4. Name and address of Professor and host institute:
5. Duration: From \_\_\_\_\_ To \_\_\_\_\_: \_\_\_\_\_ Months
6. Organisation for work adopted:
7. Academic highlights:
  - (i) Developments/technique expertise acquired (500 words):
  - (ii) Research results, including any papers prepared/  
Submitted for publication. (500 words)
  - (iii) Proposed utilization of the experience in India (500 words):
8. (a) Would you like to apply for a Young scientist/SERC:  
Project. If yes, please specify & give brief outline.  
(Please ask for format separately).
- (b) Would you be able to train young scientists in the area:  
of your work abroad. If yes, give brief outline.
9. Names of Indian Scientists working in the subject area, Please:  
list them with address
10. Scientists who would be interested in your report, Please list;  
them. Have you sent them your report? If not, please send.
11. Visits to other scientific institutions. Universities and:  
Laboratories during your visit abroad alongwith details of  
Knowledge acquired. (500 words)
12. Remarks of the Head of the parent Department/Institution/  
Organisation about the overall progress of the training  
acquired in particular, its further application in the institute  
in national context.

Signature  
Name of BOYSCAST fellow

DST: Sanction No. and Date

(Signature)  
Name and Designation

## REPORT OF HOST INSTITUTE

1. Name of Professor and Host Institute address of BOYSCAST:  
Fellow
2. Area of research:
3. Duration: From \_\_\_\_\_ to \_\_\_\_\_ : \_\_\_\_\_ Months
4. Brief highlights of achievements:
5. Has the fellow visited other labs/institutes/conferences in host:  
country. If yes benefits derived.
6. Has the fellow participated in other activities (sports, cultural:  
Etc.) Please specify.
7. Your assessment of BOYSCAST fellow overall performance:  
on a scale of 1-10. (1 being lowest & 10 highest).
8. Any other comment you may like to make:

Signature  
Name, Designation and  
Host Institute address

## CLAIM SHEET (Two Copies)

(To be filled by the applicant)

1. Name, Designation and Address:
2. DST Sanction letter No. and date:
3. Broad Area:
4. Chosen area of training:
5. Name, designation & address of Professor of host institute:
6. Duration of the training \_\_\_\_\_ : \_\_\_\_\_ Months  
From \_\_\_\_\_ To \_\_\_\_\_
7. Details of expenditure on the training:
  - A. TRAVEL
    - (i) Place of work in India:
    - (ii) Port of embarkation with date of departure:
    - (iii) Port of Disembarkation with date of arrival:
    - (iv) Venue of training if in a city different from (iii) above:
    - (v) Air fare for onward travel to venue by shortest route: Rs.
    - (vi) Air fare for return travel: Rs.
    - (vii) Total expenditure on Air travel (v +vi) Rs.
  - B. \*Expenditure incurred for attending conference/visit to other: Rs.  
Institutes within host Country
  - C. Fellowship  $\left[ \begin{array}{l} \text{US \$ } \_\_\_\_\_\_ \text{ x } \_\_\_\_\_\_ \text{ months} \\ \text{x Rs. } \_\_\_\_\_\_ \text{ as per foreign ex. Rate} \end{array} \right]$  :Rs.
  - D. Contingency: Rs.
  - E. Total (A to D)

### Certificate

Certified that I have attended the above training/research programme and the particulars furnished above are correct. Also certified that I have not received any financial assistance from any other sources.

Signature

Name & Address

Date:

### Please attach the following documents:

1. A xerox copy of the Air-India ticket, both ways.
2. In case the journey is performed by the shortest route, a certificate from Air-India indicating the Airfare by the shortest route.
3. A xerox copy of the bank receipt showing the exchange rate per US\$ as on the date of obtaining foreign exchange.
4. \*Break-up details as ANNEXURE with authenticated claim bills and recommendation letter as per guidelines.
5. Three copies of Report.

## Details to be furnished by Instt./Organisation

1. Total Grant received:
2. Sanction letter No. & date:
3. Total expenditure incurred on training of the fellow:
4. Amount to be released to the concerned Institution/organisation:
5. Balance (if available) returned/Being returned to DST:
6. Utilization certificate in the proforma enclosed:

### CERTIFICATE:

Certified that BOYSCAST fellow has been paid grand as Sanctioned by DST column 2 above for training abroad and as per guidelines of the BOYSCAST scheme.

Signature

Name & Address  
of BOYSCAST fellow

Date:

Signature of  
Competent Financial Authority

Date:

## UTILIZATION CERTIFICATE (Two Copies)

1. Title: BOYSCAST FELLOWSHIP SPONSERED  
BY DEPARTMENT OF SCIENCE AND  
TECHNOLOGY. GOI.
2. Address of the Institution:
3. Name & Designation of BOYSCAST Fellow:
4. DST sanction letter No. & date:
5. Head of Account as given in the DST Sanction letter:
6. Amount brought forward from the previous financial year:
7. Grant received during the financial year \_\_\_\_\_ :
8. Amount that was available for expenditure:
9. Actual expenditure:
10. Balance amount available at the end of the financial year:
11. Unspent balance refunded if any:
12. Amount to be carried forwarded for the next financial year, if any:
13. Balance to be reimbursed to the BOYSCAST fellow:

Certified that out of Rs. \_\_\_\_\_ of grand-in-aid sanctioned during the financial year \_\_\_\_\_ in favour of Dr. \_\_\_\_\_ BOYSCAST awardee under this Department letter No. \_\_\_\_\_ dated \_\_\_\_\_ and Rs. \_\_\_\_\_ on account of unspent balance of the previous year, a sum of Rs. \_\_\_\_\_ has been utilised for the purpose of Research/training abroad in respect of Dr. \_\_\_\_\_ BOYSCAST fellow for which it was sanctioned and that the balance amount of Rs. \_\_\_\_\_ due to the awardee may be please be reimbursed.

Signature of  
BOYSCAST Fellow

Date:

Signature of the  
Joint Registrar (Finance)

Date:

Signature of the  
Head of the Institute

Date:

# **OPPORTUNITIES FOR YOUNG SCIENTISTS**

## **GUIDELINES AND FORMAT FOR PROJECT PROPOSAL**



**GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE & TECHNOLOGY  
TECHNOLOGY BHAVAN  
NEW MEHRAULI ROAD, New Delhi - 110016**

## **A SCHEME FOR YOUNG SCIENTISTS (S Y S)**

### **1. The objectives of the programme are :**

01. To provide opportunities to young scientists for pursuing exciting and innovative research ideas.
  02. To provide opportunities for interaction and exchange of ideas with the scientific community both at national and international level.
  03. To encourage publications for promoting scientific interest.
  04. To involve young scientists in national S&T development process.
  05. To encourage S&T institutions, professional bodies and other agencies including State Councils on Science & technology to develop S&T programmes involving young scientists.
2. The scheme covers young scientists who have adequate background of and training in any field of Science & Technology and show inclination to undertake an activity for fulfillment of the objective of the scheme as part of their career.
3. Application for funding research proposals by young scientists (upto 35 years of age—in case of married women scientists this is relaxable from case to case basis ) are invited. A project can also be formulated for determining the feasibility of a larger independent project. These proposals should be specific time –bound and formulated with care.

## **B. SCIENCE & ENGINEERING RESEARCH COUNCIL SCHEME FOR YOUNG SCIENTISTS (SERCYS)**

The Science & Engineering Research Council (SERC) aims at promoting frontline research in emerging and inter-disciplinary areas of Science and Engineering. As part of this scheme SERCYS programme was initiated to support young research workers who have extra spark of originality and motivation.

### **The objectives of the programme are :**

01. To provide quick support to young scientists to pursue their bright ideas in newly emerging and front line areas of research in Science & Engineering.
02. To work for integrated research programmes involving inter-disciplinary fields.
03. To support inter-institutional programmes.
04. The scheme is open to young scientists upper age limit being 32 years. Researchers/Scientists who have shown promising achievement during their Ph.D. work is eligible to apply. Those who have submitted their Ph.D. thesis and are expecting their degree within a period of six months are also eligible. Applications from scientists received after one year from their obtaining Ph.D. degree may not be considered.

**C. GENERAL DIRECTIONS**

1. Please do not skip reproduction of any section even if the answer is 'nil'.
2. Application need not be forwarded/routed through any institution at this stage. Certificate at Annex-II is required only after the approval of the proposal.
3. The minimum qualification is Ph.D. or M.D. or M.Tech.
4. Fifteen (15) copies of the complete proposal should be submitted to DST at any time during the year.
5. Detach Acknowledgement card, information sheet and page 3 (Three) from the booklet. Use capital letters only for filling these with black pen. Send these sheets filled along with 15 copies of the proposal containing details of items 1 to 28 (Annex-I) and Annex-III.
6. The title of the project should precisely indicate the specific work/topic of the research proposal.
7. Project duration should not exceed 24 months.
8. Under Young Scientist Scheme (SYS) the budget normally should be within Rs.3.00 lakhs for 2 years, the salary of Project Investigator being additional wherever applicable. No major equipment is provided.
9. Project Investigator, if not employed, is entitled to draw salary in the scale of Rs. 2200-75-4000.
10. The Investigator should ensure that he/she is not planning to be away from the project for more than 8 weeks during the tenure of the project.
11. The project is given to an "Individual Scientist". Normally no additional staff is provided.
12. One project is sanctioned at a time to a Project Investigator under the scheme. Second project be considered based on the performance or the 1<sup>st</sup> project (if other conditions are fulfilled).
13. Project Investigators are expected to attend Group Monitoring Workshops (GMWs), specially organised to review of progress of the project. This may be taken into account while preparing the travel budget.
14. All correspondence including research proposal may be sent at the following contact address :

Head, H.R.Unit,  
Department of Science & Technology,  
Government of India  
Technology Bhawan  
New Mehrauli Road,  
New Delhi-110016.

Gram : SCIENCTECH  
Phone: 667373  
Telex : 31-66096 DST IN  
31-61805 DST IN  
Fax : 011-661682  
011-6863847  
011-6862418

**FORMATS FOR SUBMISSION OF PROJECT  
(To be filled by applicant)**

1. Scheme applied for :  
SERCYS       SYS
- \*2. Broad Subject : Life Sc.       Chemical Sc.   
Engg. Sc.       Physical Sc.
3. Sub Area      Interdisciplinary
4. Project Title \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Inst.Name \_\_\_\_\_
6. Department \_\_\_\_\_
7. Address \_\_\_\_\_  
\_\_\_\_\_
8. Principal Inv. \_\_\_\_\_
9. Designation \_\_\_\_\_
10. Date of Birth
11. Sex (M/F)/Married/Unmarried
12. Year of Ph.D.
13. Telephone/Fax      14. Gram/e-mail      15. Telex
16. Duration   months
17. Total Cost
18. FE Component

\*Please mark only one box.

**For Office use only**

File No.: \_\_\_\_\_

Date of Receipt

Area

Inst.Code

Invest. Code

19. Project Summary

20. Key words (maximum 6)

21. Introduction

01. **Origin of the proposal** (How the ideas regarding the problem to be studied were conceived Proposed work should not be a mere extension of the Ph.D. work).
02. **Definition of the problem** (Define concepts, ideas, etc. related to the problem).
03. **Objectives** (Specific point by point objectives. Formulate as precisely as possible to cover only the identified specific aspects to be achieved **within the two-year period**).

22. Review of Research and Development in the subject

01. **Status** both National and International (Brief review of the field and recent developments. Details related to specific objectives of the proposal. This should be based upon a thorough literature survey).
02. **Importance of the proposed project in the context of current status** (Identify critical gap areas where you can effectively contribute with your expertise and learning. Focus on one or two specific aspects which can be studied in depth during a two-year programme).
03. **Review of expertise available with proposed investigator/institution in the subject of the project** (State preliminary work already done, techniques standardised, data collected etc. by earlier groups working at the institution).
04. **Name(s) and address(es) of Indian expert(s) in the subject**

23. Work Plan

01. **Methodology** - Should be given in detail on the basis of the proposed "Objectives" of the proposal (Clearly spell out mode/theory/system to be used and steps involved in proposed studies avoiding generalities. Include a block diagram of set up/apparatus or flow chart like diagram for proposed work as applicable. Focus on scientific and technical details).
02. **Organization of work elements** - (Facilities required for execution of the project and indicate which ones already exist with you).
03. Time schedule of activities giving milestones
04. **Suggested plan of action for utilisation of research/ outcome expected from the project** (Indicate whether the outcome of the project will result in advancement of knowledge and/or specific applications, if any).
05. Have you prepared the project in consultation with some expert(s)? If so, please give the name of the expert(s) with address(es).

## 24. Biodata of Principal Investigator

01. Name
02. Father's/Husband's Name
03. Whether SC/ST
04. Academic and Professional qualifications (graduation onwards);  
Degree  
University/Institute  
Year/Month of Passing  
Division Rank/Grade/Marks %
05. Details of research work:  
Year of registration for Ph.D.  
Title of Thesis  
Summary of work
06. Employment details, if employed:  
Name of Organisation  
Designation  
Pay and Scale  
Date of Joining  
Nature of work
07. Achievements:  
Awards/Prizes  
Books authored  
Patents awarded  
No. of research papers (authored / co-authored)  
Others
08. List of publications: (Sl. Nos, Authors, Year, Title of the paper, Name of the journal, No. of volume, Page, Date of publications etc.).

## 25. Research Project(s) including DST's with the Investigator (Use separate sheet for each project)

01. Investigator(s)
02. Project Title
03. Status
04. Duration  
Date of start  
Scheduled completion date
05. Cost of Project
06. Name of funding agency
07. Reference number allotted
08. Summary of the project (maximum 200 words)

09. Highlights of the up to date progress of the project (maximum 200 words)
10. Major results achieved on the project
26. Have you ever attended any programme organised under DST namely, Contact Programme, BOYSCAST Fellowships, SERC School, State S&T Council Fellowship etc.? If yes, please give detail namely, year, duration, area, etc.
27. Any other relevant information
28. Certificate from the Investigator
  01. I agree to abide by the terms and conditions of the research grant
  02. I did not submit this project/similar project proposal elsewhere for financial support

Date:  
Place:

Name and signature of Investigator

**\*Certificate from the Institute/University**

This is to certify that:

- (i) Dr \_\_\_\_\_ will be appointed by this institute as the Principal Investigators in the project \_\_\_\_\_ approved by Department of Science & Technology vide No. \_\_\_\_\_ dated \_\_\_\_\_ .
- (ii) The date of appointment starts from the date on which the University/Institute receives the bank draft from Department of Science & Technology
- (iii) The Investigator will be governed by the rules and regulations of the University/Institute and will be under the administrative control of the University/Institute for the duration of the project.
- (iv) The grant-in-aid by the Department of Science & Technology will be used to meet the expenditure on the project and for the period for which the project has been sanctioned as indicated in sanction letter.
- (v) No administrative or other liability will be attached to Department of Science & Technology at the end of the project.
- (vi) The pay of the Investigator, if applicable, will be fixed at Rs. \_\_\_\_\_ basic in the scale of Rs. 2200-4000 which is commensurate to that of other comparable positions in the University/Institute. The Investigator will draw other allowances as per the rules of the University/Institute, except DA, which is at Central Government rate.
- (vii) The project will terminate on \_\_\_\_\_ . While the project is in progress the investigator will be released for going abroad/joining another institute/long leave only after clearance from the Department of Science & Technology.
- (viii) The University/Institute will provide basic facilities to the investigator for undertaking the research project.
- (ix) The University/Institute will take into its books all assets received under this sanction and its disposal would be at the discretion of Department of Science & Technology.

**Seal of University/Institute**

**Signature  
Registrar of University/  
Head of Institute**

\*To be submitted after approval of the Project.

**Statement I (BP/BE)****BUDGET ESTIMATES: SUMMARY**

(In Rupees)

Items	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total
A. Recurring			
1. Salaries/Wages			
2. Consumables			
3. Travel			
4. Other-Costs			
Sub-Total A			
B. Minor items of Equipment			
Grand Total (A+B)			
Total FEC			

\* Should conform to the plan of work. Attach a sheet giving justification for each item needed as per methodology

**Statement II (BP/SW)****BUDGET FOR SALARIES/WAGES**

(In Rupees)

Designation (number of persons)	Monthly Emoluments	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total
<b>Full time</b>				
<b>Part time</b>				
<b>Total</b>				

\* Man months to be given within brackets below the budget amount:

**Statement III (BP/TA)**

**BUDGET FOR TRAVEL**

(In Rupees)

---

Item	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total
Travel (Including GMW)			

---

Note: No international travel is permitted.

**Statement IV (BP/CO)**

**BUDGET FOR OTHER COSTS**

(In Rupees)

---

Items	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total
(a) Contingencies			
(b) Other (Pl. Specify)			
Total			

---

**Statement V (BP/EQ)**

**MINOR ITEMS OF EQUIPMENT\*\***

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Generic Name of equipment and accessories with make and model	Number	Imported/ Indigenous	Estimated Cost (in Rupees)*
--	--------	-------------------------	--------------------------------

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\*Include duties, installation charges, inland transport etc. Foreign exchange component in rupee amount projected should be given. Indicate the amount in the currency of the country of origin within brackets.

\*\*No major equipment, costs to build/establish a laboratory etc. provided.

**Statement VI (BP/CM)**

**BUDGET FOR CONSUMABLE MATERIALS**

(In Rupees)

---

Head*	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total
Q			
B			
F			
Q			
B			
F			
Q			
B			
F			
B			
TOTAL			
F			

---

\*Q: Quantity/number

B: Budget

F: Foreign exchange component

## INFORMATION SHEET

**\*PROJECT NO.**

**\*File No.**

1. Project Title :
  
2. Name/Designation/Address of Principal Investigator :
  
3. Date of Birth :
  
4. Budget : Rs. For 2 years
  
- 4.1 List of equipment(s): Rs.
  
- 4.2 Staff: Rs.
  
5. Other project(s) with Investigator  
(If any, give title, funding agency, year of initiation & completion, total amount sanctioned, equipment procedure, etc.):
  
6. Date of submission of present proposal to DST:
  
- \*7. Date of Receipt of proposal in DST:
  
- \*8. Secretarial comments:

---

Note: (i) KINDLY FILL UP THE FORM AND SEND ALONG WITH APPLICATION  
(ii) \*TO BE FILLED UP BY DST.

## PART A: GENERAL INFORMATION AND INSTRUCTIONS

1. As a part of its Science & Technology Promotion Programme the Department of Science & Technology considers time bound research proposals for financial support. Earlier R&D Programmes were being considered under two separate schemes viz., science and Engineering Research Council. SERC will now provide an integrated and cohesive approach for supporting R&D Programmes Broadly, the objectives of the SERC would be as follows:
  - (i) To promote research in newly emerging and frontline areas of Science and Engineering including multi-disciplinary fields.
  - (ii) To selectively promote the general research capability in relevant areas of Science and Engineering taking into account existing research capabilities of the host institution; and
  - (iii) To encourage Young Scientist to take up challenging research and development activities.

2. The approach to supporting research in carefully identified thrust areas under various disciplines will continue with the objective of formulation coordinated thrust areas Programmes by inviting the concerned Scientists to present their proposals in related areas of the Programme Advisory Committees constituted for this purpose.

Research proposals from scientific institutions/research laboratories under various scientific departments, which are in line with the normal research activities of these institutions may not be considered for support under SERC. Only research proposals outside the normal activities of such institutions (i.e. National R&D Programmes, Programmes in newly emerging and frontline areas of research etc.) will be considered.

3. The proposal should be prepared and *submitted strictly according to the formats* prescribed in this document.
4. Please read explanatory notes and detailed instructions carefully for completing each section of the prescribed format while preparing the proposal.
5. Copies of the proposal and other required documents must be sent in one lot through proper channel to :

The Secretary  
Attention: \*Science and Engineering Research Council-Secretariat  
Department of Science & Technology  
Technology Bhavan  
New Mehrauli Road  
New Delhi - 110016

6. Please contact DST if the acknowledgement letter mentioning the registration number of the project is not received within one month from the date of dispatch of the proposals.
7. Please feel free to enquire about the status of the proposals, but only after six months from the date on the acknowledgement letter.
8. Please make sure to quote the registration number (given by the DST) and title of the proposals in all your future communications.

N.B.: The information should be given under each section. No Annexures should be enclosed along with the project proposal.

**Important Note:** The proposals will be received in DST during ANYTIME OF THE YEAR

## DOCUMENT 8/ENCLOSURES REQUIRED WITH THE PROPOSAL

Item	Number of Copies
a) Endorsement from the Head of the Institution (on letter head)	one
b) Certificate from Investigator(s)	one
c) Detail of the proposals from the Section 001 to 500 (stitched)	30
d) Name and address of experts/institutions who may be interested in the subject/outcome of the project (circulation list)	two
e) Sheet containing sections 101 to 192	one

### GENERAL TERMS & CONDITIONS

1. The Principal Institution assumes financial and other administrative responsibilities of the project.
2. In case of multi-institutional project the Principal Investigator (PI) has to obtain formal agreement from the collaborating institutions/scientists.
3. International travel is normally not permissible under the project.
4. The manpower recruited for the project should be paid as per the rules of the Institute and guidelines of the Govt. of India.
5. It is the policy of DST to maximise the use of an equipment. In this light, Investigator shall permit the use of spare of ideal capacities of equipment procured under the project by bonafide users (research workers in other DST funded projects or other projects of the Institute).
6. The proposals are scrutinized by experts in the field and after a peer review SERC takes the decision.

**Endorsement from the Head of Institution**  
**(To be given on letter head)**

Project Title:

1. Certified that the Institute welcomes participation of Shri/Smt \_\_\_\_\_ as the Principal Investigator and Shri/Smt \_\_\_\_\_ as the Principal Co-Investigator for the project and that in the unforeseen event of discontinuance by the Principal Investigator, the Principal Co-Investigator will assume the responsibility of the truthful completion of the project (with due intimation to DST).
2. Certified that the equipment and other basic facilities as enumerated in Section 420 and such other administrative facilities as per terms and conditions of the grant, will be extended to the Investigator(s) through out the duration of the project.
3. Institute assumes to undertake the financial and other management responsibilities of the project.

Name and Signature of Head of Institution

Date: \_\_\_\_\_

Place: \_\_\_\_\_

\*In regard to the research proposals emanation form scientific Institutions/Laboratories under various scientific departments, the Head of institution is required to provide a justification indication clearly whether the research proposal falls in line with the normal research activities of the institution or not and if not, the scientific reasons which meant its consideration by DST.

## Certificate from the Investigator

Project Title: \_\_\_\_\_

1. I/We agree to abide by the terms and conditions of the SERC research grant.
2. I/We did not submit the project proposal elsewhere for financial support.
3. I/We have explored and ensured that equipment and basic facilities (enumerated in Section 420) will actually be available as and when required for the purpose of the projects. I/We shall not request financial support under this project, for procurement of these items.
4. I/We undertake that spare time on permanent equipment (listed in Section 350) will be made available to other users.
5. I/We have enclosed the following materials:

	Items	Number of Copies
a)	Endorsement from the Head of Institution	One
b)	(This) Certificate from Investigator(s)	One
c)	Details of the proposal from Section 001 to 500 (Stitched)	30
d)	Name and address of experts/institution interested in the subject/outcome (of Principal investigator).	2
e)	Sheet containing sections 101 to 192	1

Name and signature of Investigator

Date: \_\_\_\_\_

Place: \_\_\_\_\_

## PART B: PRESCRIBED FORMAT

### Important Note on Project Formulation:

1. Please continue your project to only a new specific aspects of a problem which can be studied in depth in a three year period to identify the specific aspects to be studied, you may consider proceeding along the following lines:
  - i) Having decided on a broad topic of research, review the National Status
  - ii) Identify critical gap areas where your expertise can effectively contribute
  - iii) From these gap areas, identify one or two specific aspects which can be studied in depth through a three year research project
2. While writing the proposal, please ensure that scientific and technical details are clearly
3. Projects which involve Recombinant DNA work should be examined and certified by institutional Biosafety Committee. Certificate from his committee from this committee should accompany the project proposal Guidelines for constitution of Biosafety Committee can be obtained from:

Director,  
Department of Biotechnology  
CGO Complex, Lodi Road,  
Block No. 2, Floor-7, Room No. 12  
New Delhi - 110 003  
Telegram: BIOTECH, Telex: 31-74105 BIOT IN  
Telephone: 363012, 363018
4. Projects which are clinically oriented or projects which involve experiments with human material should be examined and certified by institutional Ethical Committee. Certificate from this Committee should accompany the project proposal. Guidelines for constitution of institutional Ethical Committee can be obtained from:

The Director General,  
Indian Council Of Medical Research,  
Ansari Nagar,  
New Delhi - 110 029  
Telegram: SCIENTIFIC, Telex: 031-63067, Telephone: 653980, 652895, 652794
5. Proposals with broad objectives not achievable in three years or written without specific details are viewed unfavorably.

### Instructions for Filling up Proforma:

1. Please use paper approximately of A4 size.
2. Please type as per the layout given in the formats.
3. **Please do not skip reproduction of any section even if the answer is "nil"**
4. For certain sections, specially from section 101 to 192 maximum length of the answers (no of characters) have been specified within brackets. Please restrict your answer to number of characters/words.

5. Detach page no. 13 from the booklet; use capital letters only for filling sections 101 to 192 with black ball pen. Leave blank all codes except Pin Code indicated in the address column. Send this sheet filled along with 30 copies of the proposal, containing of Section 101 to 500.
6. Please read additional instructions given on the following pages before filling the corresponding section of the format.

### **Section 101: Project title**

Project title should be within 150 characters (30 Characters in each line). A title "investigations of the Magnetic Properties of certain compounds of Transition metals with Rare Earths" may be sharpened to "Magnetic Properties of (Rare Earths) (Transition Metal) Compounds" (underline the key words).

### **Section 102: Scheme**

Indicate the scheme under which the proposal in question should ideally be considered. If the investigators are not fully conversant with the objectives of different Science and Technology promotion schemes of DST, tick 'any suitable scheme'. Responsibility then will rest with DST, to select the right one.

### **Section 103 to 104 Broad Subject**

Please make only one of the boxes. This classification is meant of to convey the emphasis of the research work in case it has equal emphasis on more than one discipline, it may be put under inter-disciplinary category. Sub area is to be defined as per thrust areas listed by DST.

### **Section 105: Duration**

Expected total duration of the project may expressed in months. Proposed duration should normally not exceed 36 months.

### **Section 106: Total Cost**

Give total cost of the project in rupees. Foreign exchange component, if any, of the total cost may be given in terms of US \$ equivalent.

### **Section 111 to 119: Investigator and Principal Institution**

Indicate the status (Govt./autonomous/private etc.) of the institution. In case of private or registered society a bond has to be executed after approval of the proposal.

While writing names write the surname first. Give date of Birth in date, month and year format each consisting of 2 digits.

### **Section 120 to 138: Collaborating Investigators/Institutions**

In case a project is to be executed by more than one institution (which is welcomed) and/or requires regular inputs from other Scientists, the names of collaborating institutions and Scientists are to be recorded.

### **Section 191: Project Summary**

Use separate sheet for sections 191&192. Give project title, PI name, name of institution(s) involved before writing the summary.

Written in telegraphic language, the summary should give an account of (a) research objectives (b) methodology to be adopted and (c) expected outcome of the project. This summary may be published in the list of on-going projects and will be widely circulated amongst scientists/scientific institutions (with addresses) is required to be furnished along with the proposal.

### **Section 192: Subject Keywords**

Please suggest not more than ten keywords that best describe the project. This is to facilitate systematic information storage and retrieval. Your library staff may help in selection of Keywords. Kindly underline these keywords wherever used in project summary.

### **Section 211: Origin of the Proposal**

Identify the stimuli which prompted preparations and submission of the project proposal to the DST. The source of stimuli could be the National Five-Year Plan (S&T Chapter), state-of-art-report or other reports published by the DST, proceedings of a special workshop/seminar, announcements by DST on Thrust Area Programmes, an earlier etc. In all such cases, give specific details so that the source is clearly identifiable. If the project has no such origin, please state so.

### **Section 212: Definition of the Problem**

Please give precise technical statement of only those problems which the project is expected to cover within the specified duration (normally 3 years).

A historical or general introduction to the area will not be title appropriate under this like head and should be given under 220. For example, do not include a statement. "The problem is utilization of agricultural wastes is important for national economy\_\_\_\_\_specially rice bran. Japan has developed technology for edible rice bran oil\_\_\_\_\_ Removable of free-fatty-acids in an important problem for making edible rice bran oil\_\_\_\_\_ " Instead, a straight forward definition of the problem could be "Stabilisation of fresh rice bran is necessary for preventing rapid rice of free fatty acids. As oils with high FFA are difficult to refine, the problem of stabilisation of rice bran through chemical mode using sodium metabisulphide is to be studied. In addition, its peculiar odour needs to be removed for making it acceptable as edible oil".

### **Section 213: Objectives**

Instead of an essay, it is suggested that the objectives be spelled out point by point in telegraphic language keeping in view the definition of the problem outlined in Section 212. For example, the objective of the rice bran problem could be written as:

1. To examine alternative chemical modes for stabilisation of rice bran oil.
2. To determine the exact source/cause of odour and to explore methods for its removal.

### **Section 221 to 222: State of knowledge**

Please indicate the recent development in the proposed field of work, both in the country and in other parts of the world. This should be in 2 separate parts (namely Indian and international situations) and based on literature survey. In the literature survey, inclusion of list of important review articles, if available, is recommended. This section will enable the referees to appreciate the effort that has been put in preparing the project proposal.

### **Section 223: Justification for subject area**

The importance of the Project should be brought out in this section in the light of the international and nation state of knowledge on the subject. This could be done in two parts:

- (a) Matters relating to scientific and technical advancement of knowledge.
- (b) Issues concerning application of the new knowledge to socio-economic advancement of the country such as, production of quality commodities for internal consumption leading to better life-style, resource conservation, import substitution, export earnings, employment generation, uplift of economically weaker sections, development of cottage and small scale industries etc.

### **Section 224: Review of expertise**

The section is essentially to summarise the background [details to be enumerated in section 430 and professional experience (details in section 450)] of the investigators to establish credential for undertaking the project and to highlight relevance of the project to the research already going on in the sponsoring institution. Nevertheless, a research venture by the investigators in an entirely new field will also meet due consideration.

### **Section 231: Methodology**

It is essential that from this statement the other experts in the field should get a clear understanding of the research technique to be employed in the project as distinct from data/sample collection activities and routine activities. Further, the description should indicate precisely how the stated objectives will be achieved. The history of creation of new knowledge in the area (narrated in sections 221 and 222) should not be repeated here. Discuss different methods of approach in order of priority.

### **Section 232: Work elements**

In this section the entire project activity is to be broken down to specific work elements in consonance with the objectives and methodology defined in the earlier sections. While doing so, equal emphasis should be given to:

- (a) Technical work elements, such as designing the experiment/model, making observations/calculations, etc.
- (b) Administrative work elements e.g. selection of equipment and obtaining quotations, obtaining certificates like NMI, CDE etc., recruitment of staff etc.

Further, for multi-institutional projects, this section should be utilised to indicate the distribution of functional responsibilities between the principal and collaborating institution(s) and the mechanism for coordination.

### **Section 233: Time schedule**

On the basis of work elements identified earlier, the time schedule should be drawn. Here specific indications of milestones would be worthwhile. These milestones will help in periodic evaluation of the progress of the project. It is once again cleared here that lead time for creation of infrastructural facilities be computed on realistic basis.

### **Section 240: Utilisation of research results**

It is necessary to widely disseminate the research results and to facilitate their use by other teaching and research communities and industries. The intent of this section is to get an idea of how the

interaction between researchers and potential users of research results could possibly be catalysed, stimulated and maintained.

In this light therefore, a utilization plan is solicited. This may start with identification of the user community i.e. individuals and institutions. The interaction could be promoted in several ways. For example, selected members of the community may be invited to periodic presentations by the instructors for their expert guidance. The investigators may propose to organize workshops on the subject or to present the results in meetings of professional associations, association of industries, national seminars and the like. Circulation of interim reports to wider audience could be another mechanism. A research leading to development of a process which could possibly be commercialized should have active involvement of agencies like the National Research Development Corporation of India from the inception of the project. Please list appropriate activities with brief description.

### **Section 300: Budget**

Summary of the budget may be prepared after filling on Sections 310 to 350. Give realistic estimates of costs of different items involved. While doing so, please ensure that all the constraints have been taken note of and of different activities properly estimated (also vide notes for section 232 to 233).

All costs are to be expressed in rupees only. If further exchange is required for purchase of equipment or consumables, show it in terms of US\$ equivalent. But please note that the rupee figures should be inclusive of the rupee equivalent of foreign exchange quoted. Also include customs duty and other such charges, if applicable.

### **Section 310: Budget for manpower**

While major part of the project work is to be carried out by the Principal Investigator and Co-Investigators, some additional scientific and technical personnel may be asked for working full time on the project. Please assess your additional requirements carefully taking into account the level of personnel required and their likely availability for working on the project. You may like to select your requirement from amongst the following categories of personnel :-

- (a) Post-doctoral or equivalent (Scientist/Professor)
- (b) Personnel with two to three years of research experience
- (c) Fresh post-graduates or equivalent
- (d) Secretariat

Please check rules and regulations of your institution for salaries payable to the required category of personnel for working out the budget.

Salaries payable are to be expressed in lumpsum indication the regular scale of pay. "Full-time" would be recruited fresh or employed from existing staff of the institute full time for the project (and their salaries/wages debited to project account). People who are already in position and whose honorarium/job-rate payment/over-time allowance/part of salary is to be debited to project account, may be classified under part-time personnel. For both categories of personnel, the extent of involvement, especially for computation of budget estimates, may be expressed in terms of man-months per year.

Please prepare the list in descending order of salary. Personnel with same designation but with different salary are to be shown separately.

### **Section 311: Justification for salaries & wages**

Justification for number and level of staff to be recruited, their year of deployment and comments on whether personnel from other institution will be deployed on deputation basis.

### **Section 340: Budget-for other costs**

Some projects may have special requirements not covered under sections 310 to 330 Costs for such requirements are to be indicated in this section specifying the item under a & b.

Contingencies are meant to cover incidental and other miscellaneous expenditure.

### **Section 342: Justification for other costs**

Please specify the special requirements. These requirements could be of computer, payments for using specialised instrumentation facilities etc. The basis of calculation the costs should be clearly stated.

### **Section 350: Budget-for permanent equipment**

Specially list all items of permanent equipment costing Rs. 1000/- or above, or requiring import. Other minor items may be clubbed.

Be as possible while naming the equipment. Indication of the make and model will help identifying the exact nature of the equipment better. For example, instead of mentioning "gas chromatograph", a detailed statement like "PYE-Unichems" Model 304 microprocess or controlled gas chromatograph would be appropriate to define the requirement. Similarly, instead of "Infra Red spectrophotometer", something like "Perkin elmer Model 598" or "Shimadzu Mode IR-408" should be stated. After the project is approved however, the investigators may go in for a different model or make so long as the basic characteristic and costs are comparable to those mentioned in proposal.

Include provisions for installation charge, inland transport insurance etc. in the estimated cost. In many cases, equipment procured under the project may not be kept occupied full-time studies contemplated. The spare time on equipment could fruitfully be utilized by other researchers engaged in DST sponsored or any other project of the institute. It is the policy of the DST to maximise the use of an equipment. In this light, the investigators are urged to permit the use of spare of idle capacities of an equipment by bonafide users.

### **Section 351: Justification for permanent equipment**

Justification for each item of equipment (including their accessories, specific characteristics, resolution etc. in relation, other institutions in the neighborhood, Regional Sophisticated Instrument Centres.

State what efforts will be made to utilize existing equipment, give reasons why indigenous models, if available, cannot be used.

### **Section 410: Time schedules - Bar diagram**

The bar diagram should have work elements/activities as row and time in the column. The suggested time interval is three months. After approval of proposal PI will have to submit a PERT chart. The purpose of the PERT chart to help in evaluation and monitoring.

### **Section 420: Existing facilities**

Basic infrastructural facilities and equipment that would be extended by the institute to the project should be recorded.

Please make sure that these facilities and equipment will actually be available during execution of the project.

In part B, please list all the available equipments and accessories which will be made use of in executing the project. Please note that this list is to cover equipment and accessories under these categories:

- (a) Equipment within your research group
- (b) Equipment in your department
- (c) Equipment in other departments or centres of your institutions in the region including Regional Sophisticated instruments Centre.

In case equipment required for the project exists at (a), (b) or (c) but cannot be used for project work, give reasons under the remarks column.

### **Section 430: Biodata of Investigators**

Biodata of the Principal Investigator and all other Investigators who are already in position and available for the project are to be given here.

While providing the list of publications include: (a) names of Journal/publisher etc.

Section numbering should start with 430 for the PI and followed by 431, 432 etc. for other investigators.

### **Section 450: Other research projects with investigators**

Summary details of the projects (completed/on-going or proposed) with different investigators may be gives. These should also include DST Projects. Each project should come on a separate sheet. Section numbering should start with 450 and could be continued upto 499.

1. Major results achieved should give

- (a) brief review of the results achieved and scope for further research in the area;
- (b) Scientific and technological benefits emerging out;
- (c) manpower trained.

**FORMATS FOR SUBMISSION OF PROJECTS  
(To be filled by applicant)**

For Office use only

101 Project Title \_\_\_\_\_ 30 File no.: \_\_\_\_\_  
 \_\_\_\_\_ 30 2 \_\_\_\_\_  
 \_\_\_\_\_ 30 16  
 \_\_\_\_\_ 30  
 \_\_\_\_\_ 30  
 \_\_\_\_\_ 30 Area  17  
 \_\_\_\_\_ 30

102 Scheme applied for: Thrust Area  Non Thrust Area

103 Broad Subject: Life Sc.  Chemical Sc.

Others Interdisciplinary

104 Sub Area

105 Duration   months 106 Total cost       Rec. Type

107 FE Component

111 Principal Inv. \_\_\_\_\_ 30 Invest Code        
 2 7

112 Designation \_\_\_\_\_ 30

113 Department \_\_\_\_\_ 30 Inst. Code        
 8 13

114 Inst. Name \_\_\_\_\_ 30

115 Address \_\_\_\_\_ 30  
 \_\_\_\_\_ 30

116 Date of Birth       Sex (M/F)  Rec. Type  1

117 Telephone 118 Gram 119 Telex

121 Co-Investigator \_\_\_\_\_ Invest Code        
 2 7

122 Designation \_\_\_\_\_ 30

123 Department \_\_\_\_\_ 30

124	Inst. Name	_____	30	Inst. Code	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	8	13
125	Address	_____	30				
		_____			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		30
126	Date of Birth	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Sex (M/F)	<input type="checkbox"/>	Rec. Type	<input type="checkbox"/> 1
127	Telephone			128 Gram		129 Telex	
131	Co-Investigator	_____		Invest Code	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	2	7
132	Designation	_____	30				
133	Department	_____	30				
134	Inst. Name	_____	30	Inst. Code	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	9	13
135	Address	_____	30				
		_____			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		30
136	Date of Birth	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Sex (M/F)	<input type="checkbox"/>	Rec. Type	<input type="checkbox"/> 1
137	Telephone			138 Gram		139 Telex	
141	Co-Investigator	_____		Invest Code	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	2	7
142	Designation	_____	30				
143	Department	_____	30				
144	Inst. Name	_____	30	Inst. Code	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	10	13
145	Address	_____	30				
		_____			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		30
146	Date of Birth	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Sex (M/F)	<input type="checkbox"/>	Title: 47	
147	Telephone			148 Gram		149 Telex	
		_____					
		_____					
		_____					

Registration No.: \_\_\_\_\_

Project title:

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Principal Investigator: \_\_\_\_\_ Institutions(s) i) \_\_\_\_\_

ii) \_\_\_\_\_

iii) \_\_\_\_\_

191) Project summary (Maximum 150 words)

192) Key Words (Maximum 6) \_\_\_\_\_

200 Technical details

210 Introduction (under the following heads)

211 Definition of the proposal

212 Definition of the problem

213 Objectives

220 Review of status of Research and Development in the subject

221 International status

222 National Status

223 Importance of the proposed project in the context of current status

224 Review of expertise available with proposed investigating group/institution in the subject of the project.

230 Work Plan

231 Methodology

232 Organization of work elements

233 Time schedule of activities giving milestones (also append to bar diagram and mark it as Section 410)

234 Suggested plan of action for utilization of research outcome expected from the project.

[300] BUDGET ESTIMATES: SUMMARY

(In Rupees)

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Item	BUDGET		
	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
Total			
<hr/>			
A. Recurring			
1. Salaries/Wages			
2. Consumables			
3. Travel			
4. Other costs			
<hr/>			
B. Permanent equipment			
<hr/>			
Grand total (A+B)			
Total FEC			

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Financial Year: April to March

Count six months from submission of the proposal to arrive at expected time point for commencement of the project.

Foreign Exchange component (in US\$) of rupee amount projected may be furnished.

N.B. Entries here should match will those given in section 301 to 350; justification for each item is to be given in Section 360.

**BUDGET FOR SALARIES/WAGES**

(In Rupees)

Designation (number of persons)	Monthly Emoluments (m.m)	BUDGET			
		1 <sup>st</sup> Year (m.m)	2 <sup>nd</sup> Year (m.m)	3 <sup>rd</sup> Year (m.m)	Total
Full time					
Part time					
Total					

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

**(320) BUDGET FOR CONSUMABLE MATERIALS**

(In Rupees)

Head	BUDGET		
	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
Total			
Q			
B			
F			
Total	B		
	F		

\*Q: Quantity/number, B: Budget, F: Foreign Exchange Component in US\$

**(330) BUDGET FOR TRAVEL**

(In Rupees)

Item	BUDGET
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	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
Total			
<hr/>			
Travel			
<hr/>			

**331. JUSTIFICATION FOR (330)**

**(340) BUDGET FOR OTHER COSTS**

(In Rupees)

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Item	BUDGET		
	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
Total			
<hr/>			
A. Contingencies			
<hr/>			
<hr/>			

**(350) PERMANENT EQUIPMENT**

(In Rupees)

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Generic name of equipment and accessories with make & model	Name	Imported/Indigenous	Estimated cost (FEC)*	Sparetime available for use by other (in %)
1				
2				
Total				

---

\* Include installation charges, inland transport etc. Foreign exchange component (in US\$) of rupee amount projected should be given in brackets.

**(351) JUSTIFICATION FOR (350)**

**(410) TIME SCHEDULE OF ACTIVITIES - BAR DIAGRAM**

**(420) LIST FACILITIES THAT WILL BE EXTENDED TO THE INVESTIGATOR(S) BY THE IMPLEMENTING INSTITUTION(S) FOR THE PROJECT**

A. Infrastructural facilities (Tick the appropriate box)

Item	Yes	No	NR*	Item	Yes	No	NR*
(a) Workshop				(g) Transportation			
(b) Water & Electricity				(h) Administrative & Secretarial support			
(c) Standby power supply				(i) Library facilities			
(d) Laboratory Space & Furniture				(j) Computational facilities			
(e) Air-conditioned room of Equipment				(k) Animal/Glass house			
(f) Telecommunication				(l) Any other			

NR: Not required

B. Available equipment and accessories to be utilized for the project

Sl. No.	Remarks	Name of Equipment and accessories	Model and Make
(a)	Available with in investigators group	1 2 3	
(b)	Available in the investigators Deptt.	4 5 6	
(c)	Available else where in the institution or in the region	7 8 9	

NOTE: Please make sure that the aforesaid facilities and equipment will be available for the project

### 430: PROFORMA FOR BIODATA OF INVESTIGATORS

- A. Name \_\_\_\_\_ B. Date of Birth \_\_\_\_\_
- C. Institution \_\_\_\_\_ D. Whether belongs to SC/St \_\_\_\_\_
- E. Academic (M. Sc. Onwards) and professional career  
Degree/position held \_\_\_\_\_  
Year \_\_\_\_\_ University/Institution \_\_\_\_\_
- F. Award/Prize/Certificate etc. won by the investigator \_\_\_\_\_
- G. Publications (Numbers only)
- Books \_\_\_\_\_ Research Papers, reports \_\_\_\_\_ General articles \_\_\_\_\_
- Patents \_\_\_\_\_ Other (Please specify) \_\_\_\_\_
- H. List of publications \_\_\_\_\_

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Sl. No. to	Title of the paper	Authors	Name of No. of the Journals & Year	Page No. From
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### 450: RESEARCH PROJECT(S) (Including DST projects) WITH THE INVESTIGATORS (Use separate sheet for each project)

- A. Investigator (s) (a) \_\_\_\_\_  
(b) \_\_\_\_\_  
(c) \_\_\_\_\_
- B. Project Title \_\_\_\_\_
- C. Status [completed] \_\_\_\_\_ D. Duration \_\_\_\_\_ Months  
[on-going] \_\_\_\_\_ From \_\_\_\_\_ to \_\_\_\_\_  
[proposed] \_\_\_\_\_
- or
- [submitted] \_\_\_\_\_ E. Total Cost \_\_\_\_\_
- F. Name of the funding agency \_\_\_\_\_
- G. Summary of the project (in 200 words) \_\_\_\_\_
- H. Highlights of progress of the Project to date (in 200 words) - for on-going Projects only \_\_\_\_\_

Major Results achieved from the Project (in 200 words) - for completed Projects only.

**500: ANY OTHER RELEVANT MATTER NOT DISCUSSED ELSE WHERE.**

MGIPF - 303 Deptt. of Sci & Tech./95 - 1,000

## **TRAVEL SUPPORT**

### **FOR ATTENDING INTERNATIONAL CONFERENCE / SEMINAR / SYMPOSIUM / WORK-SHOP(AND "TRAINING COURSES, SHORT-TERM SCHOOLS FOR YOUNG SCIENTISTS UP TO THE AGE OF 35 YEARS)**

#### **1. ABOUT THE SCHEME**

The Department has a scheme under which financial assistance towards travel cost is considered for participation in International conferences, which are not sponsored by International Council of Scientific Unions (ICSU). However young scientists upto the age of 35 years are eligible to seek support even for ICSU Conferences training courses and short-term schools. The scheme does not provide assistance towards maintenance registration fee airport tax taxi fare and other costs. Applications from scientists having partial support from other national sources or from organizers will be given preference.

#### **2. ELIGIBILITY**

- (a) Indian scientists working in Educational/Academic Institutions and Research Laboratories are eligible for travel support to participate in conferences etc. on selective basis.
- (b) The applicant has an accepted paper for presentation or an invitation to chair a session or as a Keynote speaker. Young Scientists (below 35 years of age ) are eligible to apply for attending training programs/Short-term courses/schools.
- (c) The applicant has NOT availed of financial assistance from DST in the last three years.
- (d) The conference/training course is of an International character. (Applications to attend annual meetings of professional societies will not be considered).
- (e) The application is complete in all respects forwarded through proper channel and received 8 weeks prior to date of conference.
- (f) Canvassing will disqualify the applicant for the travel grant.

**NOTE :** The passages are to be booked directly in a National Carrier i.e. Air India/Indian Airlines as the case may be, **EVEN TO PLACES WHERE AIR INDIA/INDIAN AIRLINES FLIGHTS DO NOT OPERATE**, the passage is to be booked **THROUGH AIR INDIA/INDIAN AIRLINES**.

#### **3. ENCLOSURES**

The following documents are to be forwarded:

- (a) One copy of the completed Application form and Bio-data.
- (b) Certificate in proof of date of birth (For Young Scientists only - age of 35 years will be considered as on the date of the conference).
- (c) Invitation from organizers.

- (d) Detailed announcement of the conference (Please attach Photocopy of the announcement).
  - (e) Letter of acceptance of paper for presentation and/or invitation from organizers to chair the session/participate as a key-note speaker.
  - (f) Abstract of the paper to be presented by the applicant at the conference.
  - (g) A certificate from Air-India indicating the cost of return air fare by economy/excursion class by shortest route.
  - (h) A copy or letter from other national or international partial cost or TRAVEL.
3. The Scientists may please ensure that all the essential documents mentioned in para 3 above are properly attached with the application, **INCOMPLETE APPLICATION ARE LIKELY TO BE REJECTED.**
  4. The Department in the event of selection will initially issue a commitment letter agreeing to the support. The committed amount will be reimbursed to the scientist only on his return to India after participation in the conference and on submitting a detailed report, a copy of air ticket etc. within two months from the date of the conference.
  5. The decision on the application is expected to be communicated *about four weeks* before the commencement of the conference. No interim correspondence will be possible.
  6. The application complete in all respects together with enclosures as indicated at para 3 above, must reach the Department of Science and Technology at least Eight Weeks prior to the commencement of the conference duly forwarded by the Head of the Institution. *If the application is not received in time the request will not be considered.*
  7. Application may be addressed to :  

Secretary,  
Department of Science  
And Technology,  
Technology Bhavan,  
Atten : (STP, Division)  
New Mehrauli Road,  
New Delhi- 110 016

Envelop may please be superscribed

Application for International  
Travel support



C. Broad, Area of the Conference :

Life Science.	{	}	Physical Sciences.	{	}
Chemical Sciences.	{	}	Engineering Science.	{	}
Earth Science.	{	}	Multidisciplinary.	{	}

6. Purpose of visit :

- A. (I) Presenting Paper Oral / Poster  
(II) No. of papers Single author / one of the authors.
- B. Chairing a session YES / NO  
C. Keynote speaker YES / NO  
D. Other(Please Specify)

7. Particulars of financial assistance the applicant is applying for / receiving from other  
National source / organizers towards travel for attending of conference.

(I) Name of the funding agency

(II) Sanctioned / Committed amount

8. Total Air-fair by shortest route Excursion / Economy Class :

9. Amount requested from DST towards travel :

10. Details of International conferences attended in the last three years if any (Title of the conference, dates venue, funding agency & amount).

11. Are the findings being presented :

result out of DST project (1)  
or other work (2)

If (1) then :

[a] DST Project's reference number

[b] Project Title

[c] Duration of Project

[d] Name of Principal Investigator

[e] Status Ongoing / Completed

12. Designation and address of authorized Officer Viz. Registrar / Finance officer etc. for receiving checks / Demand Drafts.
13. Nearest branch of Union Bank of India.
14. Proposed date of leaving India for the Conference and the likely date of return.
15. Indicate clearly the benefit expected to be derived by attending the Conference (Attach separate sheet)  
(100 Words only)
16. Other countries likely to be visited apart from the venue of the Conference:
  - (I) Country
  - (II) Duration
  - (III) Purpose
  - (IV) Support provided
17. Any other information which you may like to furnish in support of your application.
18. I declare that the information furnished above is correct.
19. Signature of applicant.
20. Recommendation of the Head of the Department / Institute.

Signature & Official  
Seal of forwarding authority

PLEASE ENCLOSE SUPPORTING DOCUMENTS where in the checklist the applicants answer is Yes (Strike off what is not applicable)

**CHECK LIST**

- |  |         |
|--|---------|
| 1. Applicant has paper(s) accepted at the Conference:                                | Yes/No  |
| 2. Copy of abstract of paper (s):  | Yes/No  |
| 3. Applicant has availed assistance in last three years from DST:                    | Yes/No  |
| 4. Applicant has been sanctioned any travel support by any other agency:             | Yes/No  |
| 5. Air India certificate indicating cost of return air fare Excursion/Economy class: | Yes/No. |
| 6. Brochure/Announcement of the Conference   | Yes/No  |
| 7. Technical program of the Conference:  | Yes/No  |
| 8. Conference is organized by ICSU or its affiliated bodies:                         | Yes/No  |
| 9. Applicant a Young Scientist:  | Yes/No  |
| 10. Certificate in proof of date of birth:   | Yes/No  |

**(B) FOR OFFICE USE ONLY**

Decision of the committee

Concurrence of Finance

