



KERALA BIOTECHNOLOGY COMMISSION

Young Investigator's Programme in Biotechnology

Guidelines

1. Introduction

Young Investigator's Programme in Biotechnology (YIPB) is a research support programme aims to provide quick research support to young researchers to pursue their ideas in newly emerging and front-line areas of research in Biotechnology. Proposals can be submitted in any branch of biotechnology related to medical, agriculture, veterinary, environment, marine, industrial or bioresources. Post-Doctoral students/Research Associates not having permanent positions can also be Principal Investigator provided a senior faculty/scientist holding permanent positions shall associate as Co-Principal Investigator.

Maximum research grant of Rs.30 lakh will be provided to the selected projects for a maximum duration of 3 years.

2. Who can apply?

- The Principal Investigator (PI) shall be a regular Faculty from Universities / Government / Aided Colleges / Scientists in R&D Institutions in Kerala state (or) Post-Doctoral students / Research Associates not having permanent positions with whom a senior faculty / scientist holding permanent positions to be associated as Co-PI.
- The PI should possess Ph.D. in any branch of Life Sciences and have three years post-Doctoral experience in Biotechnology and
- The PI should be less than 40 years of age; age relaxation of 5 years will be given to women and those belonging to SC/ST/OBC and Physically Handicapped category.
- In the case of research proposals from Central Govt. Institutions, it is desirable that there may be a State Institution as collaborator.

3. Time slot to apply

Project Proposals will be invited through notification in the website of KBC and KSCSTE once in a year. The Proposals can be submitted through online only on notification and during the active time.

4. How to apply?

Proposals under this programme shall be submitted online only. Proposals submitted in any other mode will not be considered and summarily rejected. The Principal Investigator shall also submit Endorsement from the Implementing Institution, Certificate from the Investigators, Certificate of No pending SE&UC, Resumes of PI and Co-I(s) and Self Appraisal of the PI to execute the project, etc. along with the project proposal (Document formats can be downloaded from the website)

5. Nature of Financial Support

The financial support from KSCSTE will be in the form of research grant which will be released on project year basis after reviewing the progress of the project in the previous year. Maximum grant of Rs.30 lakh will be provided which will be spread on a span of three years. The grant is exclusively for the stipulated research and does not include any civil construction or moveable or immovable properties. Young Scientists not drawing any other fellowship / salary are eligible for a fellowship of Rs. 45,000/- plus 10% HRA per month from the grants, in addition to the support or travel, contingency, consumables and minor equipments. PI with regular position can seek manpower at junior level (Project Fellow or Technical Assistant as per KSCSTE Rules). But, either the salary or the fellowship, only one can be availed at a time. In addition, the implementing institution is eligible for an overhead @ 10% of total expenditure subject to a ceiling of Rs. 1 lakh, on successful completion of the project and after settlement of the SE & UC. The budget heads covered in the research grant are as follows:

| Sl. No | Item | Guidelines |
|--------|---|--|
| 1. | Man Power –Salaries / Wages i. Project Fellow ii. Technical Assistant | PIs not drawing any other fellowship / salary are eligible for fellowship of Rs. 45,000/- plus 10% HRA per month Project Fellow: @ Rs. 22,000/- per month for the candidates having 1 st Class M.Sc. in Biotechnology related subjects. Technical Assistant: @Rs. 19,000/- per month for candidates with 1 st Class Graduation in Biotechnology related subjects |

| | | |
|----|------------------------|---|
| 2. | Equipment | Generally, no major equipment for research is granted to Central Government Institutions in Kerala unless the proposal is in collaboration with an Institute in the State, in which case the equipment support will be provided to the State institute. In exceptional cases, the PAC-KBC can recommend equipment to Central Government Institutions, subjected to approval from the Chairman, KBC. PI shall submit budgetary quotation for the equipment to be purchased under the project. |
| 3. | Consumables | It may include Testing and Lab charges, Fabrication charges and other laboratory consumables. |
| 4. | Travel Expenses | Maximum Rs.30,000/- per year, relaxable in exceptional cases where the study involves extensive travel. |
| 5. | Contingencies | Maximum Rs.50,000/- per year, relaxable in exceptional cases. |
| 6. | Institutional Overhead | 10% of total expenditure, subject to a ceiling of Rs.1 lakh |

6. Social Relevance and tangible output

Research Proposals having social relevance pertaining to the State are desired. The proposals that enable inter-institutional collaborative and inter-disciplinary research are encouraged. The applied research proposals will be given preference which address problems that are of generic concern/ interest to the Kerala State, while fundamental research projects are also considered. The proposal shall fit into the Sustainable Development Goal (SDG) Framework with details of SDG Goals & Indicators.

7. Commercialisation Efforts

Tangible Research output with a new product / technology / process having potential for commercialisation are expected. The efforts which will be made for commercialising the research output shall be clearly mentioned in the proposal. The other research output indicators are publications/patents/Ph.Ds.

8. Procedure of Operation of the scheme

The Research proposals in the scheme are to be submitted in Two Stages. In the first stage, only pre-proposals will be invited through online submission. The detailed proposals need to be submitted on intimation after the review and evaluation of the pre-proposals.

The pre-proposals under the scheme will be reviewed and evaluated as per following guidelines.

Stage 1: Submission and Evaluation of Pre – Proposal

➤ Submission of Pre-Proposal

Once the call for proposal is notified, the PI has to initially submit the Pre-proposal for the proposed research fitting into the identified domain themes/sub themes, as explained above, through online.

➤ Scrutiny of the Pre-proposal

On receiving the pre-proposal, acknowledgement with a reference number will be issued to the PI through email and SMS. The project proposal will be scrutinized thereafter.

Complete proposals with all the relevant documents will be proceeded further for Peer Review and the incomplete proposals will not be processed further and summarily rejected.

➤ Peer Review of Pre – Proposal

The pre - proposal will be forwarded to 3 subject experts for peer review. The pre-proposal will be evaluated based on an Evaluation Matrix containing 7 criteria (scores from 5 to 0), as per the following criteria:

0: Fails to address the criteria cannot be evaluated

1: Poor: Criterion is inadequately addressed and there are serious inherent weaknesses

2: Fair: Broadly addresses the criterion, but there are serious inherent weaknesses

3: Good: Proposal addresses the criterion well, but there are several shortcomings

4: Very Good: Proposal addresses the criterion well, a few shortcomings are found

5: Excellent: Proposal addresses the criterion well, no shortcomings as such are found

| Sl No. | Criterion | Score | | | | | |
|--------|--|----------------|----------------|-----------|-----------|-----------|-----------|
| | | Excellent 5 | Very Good 4 | Good 3 | Fair 2 | Poor 1 | Fail 0 |
| a | Clarity and relevance of the objectives | | | | | | |
| b | Soundness/dependability of the concept | | | | | | |
| c | Extent for potential beyond the state of the art | | | | | | |
| d | Coherence and effectiveness of work plan, appropriateness of allocation of tasks and resources | | | | | | |
| e | Complementarities of participants (where relevant) | | | | | | |
| f | Environmental and socially important impact (where relevant) | | | | | | |
| g | Suitability of the budget | | | | | | |

- ✓ **Clarity and relevance of the objectives**
Are the Objectives must be clear, measurable, realistic and achievable within the project duration?
- ✓ **Soundness/dependability of the concept**
Is the scientific/technical concept fundamentally flawless?
- ✓ **Extent for potential beyond the state of the art**
Does the proposed concept demonstrate a clear vision, does it have a potential to make a step-change in its field?
- ✓ **Coherence and effectiveness of work plan, appropriateness of allocation of tasks and resources**
How clearly is the work plan described, how appropriate is it towards realizing the Objectives?
Are the activities scientifically/technically feasible?
Are the tasks written in the work plan feasible in the time frame projected? Do the PIs have the resources to complete the tasks?
- ✓ **Complementarities of participants (where relevant)**
Does the proposal along with the CV demonstrate that the applicants have the

- expertise and capabilities to deliver the project?
- Are their skills are unique and complementary towards realizing the objectives?
- ✓ **Environmental and socially important impact (where relevant)**
Has the applicant has identified potential stakeholders and stated the relevance and possible benefits to the stakeholders.
- ✓ **Suitability of the budget**

➤ **Screening Procedure after Scoring**

The reviewers will assign suitable scores based on review of the pre - proposals. Based on review reports from reviewers, the proposals will be ranked based on the score points. Only 50% of the proposals which secure higher than 60% score points (average of scores by subject experts) will be considered to proceed for the next stage for submitting detailed proposals and others will be rejected. The PIs of the selected proposals will be intimated about the submission of detailed proposal.

Stage 2: Submission and Evaluation of Detailed Proposal

➤ **Submission of Detailed Proposal**

The PIs of the selected pre-proposals will be informed to submit the detailed Proposal through online within the stipulated time frame.

➤ **Scrutiny and Peer Review**

The detailed Project Proposals will be scrutinized and sent to the referees for peer review. The proposal will be sent to five national level experts in the concerned field for peer review. Based on the review reports from referees, the recommended proposals will be placed in the Programme Advisory Committee for YIPB (PAC-YIPB) for final decision.

➤ **Presentation before the Programme Advisory Committee (PAC)**

The PI/Co-Is will be invited to present the proposal before the PAC. PAC is a high-level Committee comprising of National Level Experts and constituted by KBC. The Council assesses the objectives, scope, content and social relevance of the proposed project and recommends the nature and quantum of assistance to be provided to the approved project. The decision made by KBC based on the recommendations of PAC on such proposal shall be final.

9. Issuing Sanction Order

- Based on the recommendations of the PAC and with the approval of the competent authority, Offer letter with the recommendations of PAC will be issued to the Principal Investigator/Co-Investigator of the approved project. The PI accepting the offer shall execute the Terms and Conditions (T&C) in the prescribed format.
- If the documents furnished by the PI are in order, Sanction Order will be issued. The Sanction Order includes breakup of funds allocated under the different heads like Equipment, Manpower, Travel, Consumables, Contingencies, etc. The total cost of the project will be finalised based on the latest quotation(s) of the equipments approved under the project and other relevant documents related to manpower, contingencies, etc. submitted by the Principal Investigator.
- Copies of the Sanction Order will be sent to the Principal Investigator (PI) and Head of the Institution (Principal/ Registrar/ Director/ Comptroller etc. as the case may be). Any correspondence with the KBC regarding the project should invariably quote the file number as shown in the Acknowledgement and all correspondences should be addressed to the Director, KSCSTE.
- After issuing Sanction Order, KBC will take steps to effect the payment electronically.
- The research grant for the project is released on the basis of yearly requirements taking note of the technical progress and expenditure incurred. The first Sanction Order indicates the budgetary allocation for the entire duration of the project under various heads like Equipment, Manpower, Travel, Consumables, Contingencies, Institutional Overheads, etc. The first installment of grant (1st year grant) will be released along with the first sanction order.
- Diversion of fund from Equipment, Manpower, etc., is normally not allowed. However, on genuine grounds, any reallocation/ re-appropriation of grant under different heads may be considered based on the recommendation of PAC and with the approval of KSCSTE. The Equipments sanctioned in the project should be procured at the earliest to avoid any cost escalation. The PI and the implementing Institution should complete all formalities in advance for placing the order. There should not be a break/ time gap in between the project period. The project has to be carried out continuously and it shall be completed on expiry of approved duration.
- The Institution shall not entrust the implementation of the work for which the grant is being sanctioned to another institution nor shall it divert the grant to other institution as assistance. In any case the Institution is not able to implement the project, it should refund the entire grant or the balance grant to KSCSTE at the earliest.

➤ Once the project is sanctioned, PI should furnish the following documents.

- ✓ Date of start of the project in prescribed format.
- ✓ Specifications of the equipment purchased.

10. Date of Start of the Project

The project becomes operative with effect from the date of Sanction Order or receipt of grant by the Implementing Institution. This date should be intimated to KBC by the Institution authorities/ Principal Investigator. The date of start of the programme should in no case be later than one month after the receipt of the fund by the Institution.

11. Submission of Progress Reports

The Principal Investigator shall furnish Progress Reports on the activities of the project on a half yearly basis. Half yearly Progress Reports should be submitted with effect from the Date of start of the project. In addition, PI shall also submit Annual Progress Reports covering the details of entire work carried on project-year-basis within 1 month of completion of each project year.

12. Mid Term Project Evaluation

The Council organizes Group Monitoring Workshops (GMW) meetings periodically for keeping strict vigil on the progress of the project work by each PI. The Investigators should attend the review meeting since it provides an opportunity to get their project reviewed and any mid-term requests by the PIs for additional grant/ extension in duration etc. are considered by KBC during the review. Subsequent release of grant would be based on the review and the recommendations of GMW/PAC. Descriptive evaluation will be carried out against each of the following criteria;

- a) Is the project execution as per the projected timeline?
- b) Is there sufficient participation from each of the collaborators involved?
- c) Are the milestones achieved?
- d) Are there any specific bottlenecks that the PIs have identified?
- e) Are the alternate solutions to the bottlenecks/roadblocks projected?
- f) Does the proposal execution need a course correction?

Based on the assessment of the research progress, the ongoing projects are graded in a scale of 1 to 10. If the grade is below 6.0, then the project will be terminated, and the balance amount will not be released.

13. Periodic submission of SE & UC

- The Implementing Institution shall forward the audited financial statements - Utilization Certificate (UC) and Statement of Expenditure (SE) countersigned by the Head of the Institution to the effect that the grant has been utilized for the research work for which it was granted.
- Audited Utilization Certificate and Statement of Expenditure (audited by Accounts Officer in case of Government Institutions and audited by Chartered Accountant in case of Aided Institutions) of the previous year in the prescribed format should be furnished within three months of completion of the project year calculated from the date of start of the project (This period will be referred to as the project year- I, II, III respectively w.e.f. the date of start of the project.) The project year – I is calculated from the date of start of the project and not based on the financial year. [e.g., If the date of start of the project is 01.10.2021, the project year – I will be from 01.10.2021 to 30.09.2022 and not from 01.10.2021 to 31.03.2022]
- The Implementing Institution will maintain separate audited accounts for the project. Any interest accrued should be reported to KBC and should be reflected in the Statement of Expenditure.

14. Release of further instalment of Grant

- The subsequent installment of grant would be released annually on the basis of expenditure incurred in the previous project year & expected expenditure in that year, based on the thorough midterm review and evaluation of progress and by the recommendation of GMW/PAC. Annual Progress Report and Audited Utilization Certificate and Statement of Expenditure of the previous year in the prescribed format (audited by Accounts Officer in case of Government Institutions and audited by Chartered Accountant in case of Aided Institutions) including committed expenditure for the next year shall be forwarded through the Head of the Institution within 3 months of the completion of project year.
- However, any request for release of the next instalment should be accompanied by the following documents: a) Audited Utilization Certificate and Statement of Expenditure for the previous project year (in original) b) Latest authenticated Statement of Expenditure

including Committed Expenditure and interest accrued if any and a detailed Annual Progress Report.

- If substantial funds are available after verifying the Utilization Certificate & Statement of Expenditure, amount will not be released. If the funds are nearing to be over during the middle of the year, a Statement of Expenditure should be submitted for the interim release of grant. The request for grant should however reach KBC at least 30 days in advance.
- In the case of project duration exceeding one year, the unspent amount need not be refunded at the end of first or second year as the case may be, but the amount may be automatically adjusted towards the release of subsequent grants, unless or otherwise specified.
- The grant amount sanctioned for the Ist, IInd or IIIrd year should be utilized within the same project year and the unutilized portion of the grant amount should not be used without prior permission from the Council. Subsequent release of grant should be based on the yearly appropriation of the grant utilized for the purpose for which it was sanctioned.

15. Re-appropriation of Fund and Extension details

- Re-appropriation of fund within the total budget may be approved based on the recommendation of GMW/PAC. PI should submit request for re-appropriation in the prescribed format. However, re-appropriation from manpower and equipment will not be normally allowed.
- The extension of duration of the project will not be granted normally. In exceptional cases where the work could not be completed within the stipulated time, PI should submit request for extension in the prescribed format, six months before completing the tenure. The final decision will be based on the recommendations of GMW/PAC and/or with the approval of KBC.

16. Conditions if the progress is not satisfactory

- During the progress monitoring/ review, if the project is awarded with grade below 6.0, which means progress is poor, then the project will be terminated and the balance amount will not be released.
- KBC reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilised or appropriate progress is not being made. Also, the PI is liable to refund the grant amount in part or in full in case of unsatisfactory implementation of the project or unwillingness to co-operate with the Council for monitoring/evaluating the progress of the project.

17. Submission of Documents on Project Completion

On completion of the project, the PI through the Institution should send the following documents as both hard & soft copy to KSCSTE to enable settlement of the accounts and project:

- ✓ Final Technical Report (FTR) in the prescribed format
- ✓ Project Completion Report (PCR) in the prescribed format
- ✓ One page abstract highlighting the outcome
- ✓ Consolidated audited Statement of Expenditure and Utilisation Certificate
- ✓ Asset Transfer Certificate in the prescribed format
- ✓ DD/Cheque for any unspent amount with the Institution in favour of the Member Secretary, KSCSTE / online transfer of unspent amount to KBC's account

The above documents must be submitted within 3 months of completion of the project. The PIs who submit the FTR after 6 months shall not be considered for future support under any research scheme.

18. Final review of projects

Final Technical Report (FTR) of the completed YIPB projects will be graded. The FTR will be evaluated by two referees (preferably by the experts who evaluated the original proposal) with grading.

| Innovativeness of the work | Methodology of the work carried out | Publications *(in journals with high impact factor, weightage to be given) | Relevance/ Application of the work | Presentation of the report | Grade (in 1-10 scale) |
|----------------------------|-------------------------------------|--|------------------------------------|----------------------------|-----------------------|
|----------------------------|-------------------------------------|--|------------------------------------|----------------------------|-----------------------|

No projects shall be sanctioned in future by KSCSTE to the PIs whose project FTR are graded below 6.

19. Guidelines for Publication of Research Output

- Investigators who wish to publish technical / scientific papers based on the research work done under the project, should acknowledge the assistance received from KBC, KSCSTE.
- The Investigator(s) should not enter into any collaboration with a foreign party (individual/ industry) without prior approval of KBC.
- Investigators are also requested to publish some of the research papers emerging out of the project work in leading Indian Journals.
- If the results of research are to be legally protected, the results should not be published without action being taken to secure legal protection for the results.

- The knowledge generated from the project will be the property of KBC and should be properly acknowledged. Transfer of technology generated, applications for patents, etc., shall be done only in consultation with KBC and as agreed upon by KBC and the Implementing Institution.

20. Guidelines for IP Output generated

Transfer of technology generated, applications for patents, etc., shall be done only in consultation with KBC, KSCSTE and as agreed upon by KBC and the Implementing Institution.

21. Other necessary conditions

Principal Investigator (PI) & Co-Investigator(s) and the Implementing Institution

- The project team consists of the Principal Investigator, Co-Investigator(s) and the project personnel appointed as per the Sanction Order. There can be a Project Advisor also, if the PI wishes. The advisor shall be a senior fellow in the field with reputation and experience in handling such Projects. The PI has the primary responsibility of the implementation of the project. It is necessary to ensure that the project is carried out by the project team in a cohesive manner. Periodic meetings of the team are essential for this purpose.
- KBC-KSCSTE's name should be engraved or affixed permanently on all equipments / instruments procured and also in the fabricated ones under the YIPB of KBC like ***'Procured under the YIPB project sanctioned from KBC-KSCSTE'***.
- In case of PIs who are not the permanent employee of the institution, association of a "in-service" Co-Investigator who is a permanent faculty / scientist should be ensured.
- Having accepted the responsibility for the implementation of the project, the PI should be committed to implement the project over its duration and should have no plans to go on long leave.
- In case, the PI is shifting to another institution on new appointment/ transfer/ long term deputation, the project could be transferred to that institution with the mutual consent of both the institutions and of KBC. Such requests for transfer of the project should be sent well in advance and should be accompanied with 'No Objection' certificates from both the institutions and the Endorsement Certificate from the new Institution.
- In case the PI leaves the project due to unforeseen circumstances, the Co-Investigator could be considered as the PI subject to the approval of the Head of the Institution and KBC. Such a request should be sent at least well in advance along with a detailed bio-data of the Co-Investigator and with consent letter from PI and Head of the Institution.
- The PI as well as the implementing institution has the responsibility of informing

KBC about any change in the status of the PI/ Co-Investigator including relieving them on short term deputation for a continuous period of 3 months or more.

- The Implementing Institution has an important role to play and in consultation with KBC should take steps to ensure successful completion of the project, before relieving the PI or make proper alternative arrangements for ensuring the successful completion of the project.
- PI should strictly adhere to the purchase procedures of the implementing institution for the purchase of equipment sanctioned for the project.
- The implementing Institution should provide necessary infrastructure facilities which should be adequate for smooth implementation of the project.
- Normally only one project will be sanctioned to a Scientist/Researcher at a time by KBC / KSCSTE. The PI can submit further proposals only after the successful completion of the sanctioned project. In case of budget constraints, preference will be given to the projects which are applied for the first time.
- For permanent, semi-permanent or infrastructural assets acquired solely from the project grants, an audited record in the form of a register in the prescribed format shall be maintained by the Institution. The term "Assets" include (a) the immovable property acquired out of the grant; and (b) movable property of capital nature where the value exceeds Rs.5,000/-. The Institution is required to send to KBC list of assets acquired from the grant. The grant shall not be utilised for construction of any building unless specific provision is made for this purpose in the Sanction Order.
- All the assets acquired from the grant shall be the property of KBC and should not be disposed off or encumbered or utilised for any purpose other than those for which the grant had been sanctioned, without the prior sanction of KBC.
- After completion/ termination of the project, KBC shall be free to sell or otherwise dispose off the assets which are the property of KBC. The Institution shall render to the Government necessary facilities for arranging the sale of these assets. KBC also has the discretion to gift the assets to the Institution or transfer them to any other Institution if it is considered appropriate and justified.

Selection of Project Staff

- The application to the position shall be invited on an open basis through advertisements and there shall be a selection committee constituted for the purpose.
- PI should furnish the details of the Project personnel recruited in the project along with a copy of Appointment Order. If a vacancy arises in the due course, details of new project personnel appointed should also be reported promptly.
- Project personnel will be eligible only for casual leave, as per rules of the institutions. PI may authorize participation by such staff in any scientific event in India or abroad which may be treated as on duty. Maternity leave as per Govt. of

India instructions would be available to all categories.

- Students, selected as Project Fellows are encouraged to register for higher qualification and the tuition fees to undertake this may be reimbursed to the student from the contingency grant sanctioned under the project grant, subject to the discretion of the PI/Head of the institution.
- All the personnel including research personnel appointed under the project, for the full/ part duration of the project, are to be treated as temporary employees and will be governed by the administrative rules/ service conditions of the implementing Institution. No reference on these issues should be made to KBC and that KBC will not be responsible for such appointments.
- KBC will have no liability, whatsoever, for the project staff after completion of the project duration and cannot make any claim either to the implementing institution or to KBC for any type of appointment.
- Scale and emoluments for the posts which are not covered under this guideline are to be governed by the norms prevalent in the implementing Institution.
- Government Departments/Institutions/Agencies shall ensure that the above guidelines are followed in regard to the remuneration and the other benefits to the research personnel engaged in R&D projects funded by KBC-KSCSTE.

In case of any specific clarifications, please contact:

Kerala Biotechnology Commission,
Kerala State Council for Science, Technology and Environment (KSCSTE), Sasthra Bhavan,
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