<u>"Scheme for Promotion of Inter Institutional Research</u> <u>Collaboration (SPIIRC)"</u>

Guidelines

1. Introduction

The Scheme for Promotion of Inter Institutional Research Collaboration (SPIIRC) is envisaged to work on exciting challenges or research problems for improving the creative and interdisciplinary Research Ecosystem of Research Centres/R&D Institutions and Higher Educational Institutions by facilitating Academic and Research collaborations between the State Research Centres/ Institutions and the premium R&D/Academic Institutions in the Country to jointly solve problems of state/national relevance. The scheme encourages top notch research in the stipulated areas with a multi-disciplinary and inter-institutional perspective. R&D Institutions under Govt. of Kerala, Science/Engineering Departments of State Universities, Research Centres affiliated to any of the Universities in Kerala, Govt. or Aided Colleges in Kerala are eligible to apply under this scheme. The National Institutions under the Department of Science and Technology, Department of Biotechnology, Department of Space, Ministry of Earth Sciences, Council for Scientific and Industrial Research, ICAR Institutions, ICMR Institutions, IITs, IISER, NITs, Central Universities, etc, can be the collaborating Institutions for the Research. The collaborating Institute should be engaged in Research in the fields chosen for collaborative work. The objective of the Programme is to enable productive academic and research co-operation by supporting visits of Researchers in Inter Institutional basis. The Inter Institutional Research Collaboration shall result in large number of high impact research publications, patents, development of niche courses, high quality text books and research monographs, imbibing of best practices from top academicians in the country and researchers and strong cooperation.

2. About the Scheme

The Scheme aims to promote Inter Institutional Research Collaboration with a multidisciplinary approach by supporting the Research proposals from State R&D Centres/R&D Institutions/University Departments/Govt or Aided Institutions, having social relevance pertaining to the State. The Proposal shall be for a Collaborative Research with the National level premium R&D /Academic Institutions in the Country. The Collaborating Institution shall have excellent track record in the area of research. Principal Investigator from the State Institution/Centre can submit the research proposal in any of the Thrust Areas identified and address a challenging issue of theoretical, experimental and/or translational value. The project team shall comprise of PI and at least two Faculty Members/Scientists and one Researcher from the State Institution and at least 1 Faculty Member/Scientist and 1 Researcher from the National Collaborating Institution. The Researchers from the State/National Institutions shall be registered Research Scholars for full-time PhD or Post-Doctoral. The proposal must state clear and measurable deliverables with timelines. The scheme aims to enable productive academic and research co-operation by supporting the visits of researchers in Inter-Institutional basis. The researchers can visit the laboratories of different premier institutions in India.

3. Who can apply?

- Research Centres / R&D Institutions under Govt. of Kerala, Science/Engineering Departments of State Universities, State Government or Aided Colleges in Kerala are eligible to apply. Any other outstanding & premium academic institutions in the Kerala State can also apply.
- Collaboration from National level Institution/Centre is mandatory for applying under this scheme.
- Principal Investigator (PI) shall be a full time Professor/Scientist having Doctoral Degree in Science/Engineering from the State owned Institution.
- The PI shall have at least 3 years of service in the Institution and more than 5 years left for retirement.
- There shall be atleast two Faculty Members/Scientists and one Researcher from the State Institution as Co-Investigators and atleast 1 Faculty Member/Scientist and 1 Researcher from the National Collaborating Institution as Co-I(s). In the case of multidisciplinary research, if any other State Institution is involved, there can be more Co-I(s) from those Institutions as the case may be.

The Co-Investigator (Co-I) from each Institution shall be a full time Scientist/ Faculty of the Centre/ University/ Institution with adequate years of service to retire. The Researchers from the State/National Institutions shall be Research Scholars registered for full-time PhD or Post-Doctoral.

4. Thrust Areas

The PI can submit the research proposal in any of the following thrust areas.

- Basic Sciences Physical Science, Chemical Science, Biological Science
- Applied and Interdisciplinary Sciences
- Computational and Mathematical Sciences
- Earth, Atmosphere and Environmental Sciences
- Emergent areas like Genomics, Artificial Intelligence, Material Science, Advance research in medical sector, etc.
- · Innovation based and demand driven research
- Advances in Engineering and Technology

5. Financial Support from KSCSTE

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 previous year. Maximum grant up to Rs.30 lakh will be provided which will be spread on a span of three years. Maximum five projects (depending on budget availability) can be supported under the scheme in each year. The grant is exclusively for the stipulated research and does not include any civil construction or moveable or immovable properties. The budget heads of the grant can be utilised for Manpower, Travel Expenses, Consumables, Hospitality Expenses for Experts, Other Costs, etc. The travel expenses include expenses for travel by the Investigators and Researchers between the Institutions and the hospitality expenses may include accommodation and living expenses, IA, etc. The expenses under the head 'other costs' may include testing charges, lab expenses, fabrication, patent filing, technology transfer, etc. These expenses are to be borne by the host Institution and may have the freedom to transfer the amount to other concerned Institutions for the purpose but without any additional institutional overhead charges.

6. Social Relevance and Expected Output

- ✓ Research Proposals from Research Centres/R&D Institutions/ University Departments/Govt. or Aided Colleges having experience in conducting research and technology development activities in the research area will be supported under the scheme. The Research component in the proposal shall have social relevance pertaining to the State/Nation. The proposals shall be in the form of research projects in collaboration with National level Institutions.
- ✓ Tangible research output in the form of a new product/technology/process having potential for commercialisation is expected. The additional tangible output is the creation of facilities which can facilitate further augmented research in the Institution/ Centre in the area of research.
- ✓ Tangible Research output with a new product/technology/process having potential for commercialisation is expected from the scheme. The efforts which will be made for commercialising the research output shall be clearly mentioned in the proposal. PI shall take necessary steps to have industrial collaboration for the successful commercialisation of the research output.
- \checkmark The other research output indicators are publications/patents/PhDs.
- ✓ More output in the form of international collaboration, publications in International Conferences, Industrial Collaboration, Human Resource development, is encouraged in the scheme.
- ✓ The proposal shall fit into the Sustainable Development Goal (SDG) Framework with details of SDG Goals & Indicators.

7. Procedure for Proposal submission

- Proposals will be invited through notification in the website of KSCSTE, once in a year. The Proposals can be submitted through online only on notification and during the active time.
- The Principal Investigator shall also submit the Endorsement from the Implementing Institution and the collaborating National Institution, Consent letters and necessary Certificates from the Investigators in the prescribed format, Resumes of PI and Co-I(s) highlighting the research achievements.
- General Format of Documents will be available in the website of KSCSTE. Proposals submitted in any other mode will not be considered.

8. Operating Procedure of the Scheme

- Scrutiny of Application On receiving the project proposal, Acknowledgement with Reference Number and other Instructions, if any, will be issued. The proposals are scrutinized thereafter. After scrutiny, the proposals will be further processed for peer review.
- Peer Review The proposal as per the norms of KSCSTE in prescribed format will be forwarded to 5 National level Reviewers who are experts in the field for Review. Proposals which are recommended by at least 3 Reviewers will be placed in the Programme Advisory Committee (PAC) of the Programme for further evaluation and final decision. The PI &Co-I(s) will be invited to present the research proposal before the PAC.
- Presentation before Programme Advisory Committee The PAC assesses the proposals and based on the merit, recommends the nature and quantum of assistance to be provided to the approved proposal. The decision of KSCSTE based on the recommendations of PAC on such proposal shall be final. The panel of Reviewers and the PAC shall be decided and constituted by KSCSTE.
- Issuing Sanction Order Based on the recommendations of the PAC and with the approval of competent authority, offer letter with the recommendations of PAC will be issued to the Principal Investigator/ Co-Investigator (s) 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 PI are in order, Sanction Order will be issued. The sanction order includes breakup of funds allocated under different heads like Manpower, Travel, Consumables, Other Costs, Hospitality, Contingencies, Institutional Overhead, etc. The total cost of the project will be finalised based on the 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. Any correspondence with KSCSTE regarding the project should invariably quote the reference number and date in the Sanction Order and it should be addressed to the Director, KSCSTE.
- After issuing Sanction Order from KSCSTE, the Council will take steps to effect the payment electronically.
- The financial grant for the proposal is released on the basis of yearly requirements taking note of technical progress and expenditure incurred. The first sanction order indicates the budgetary allocation for the entire duration of project

under various heads like Manpower, Travel, Consumables, Hospitality, Contingencies, Other Costs, Institutional Overhead, etc. The first installment of grant (1st year grant) is released along with the first sanction order.

- Diversion of funds is not normally allowed. However, any reallocation/reappropriation of grants under different heads requires prior approval of KSCSTE on unavoidable circumstances. The scheme does not encourage procurement of equipments for the project but the equipments available in other Institutes may be made use of and the usage charges, may be included in the budget head under 'other costs'. There should not be a break/ time gap in between the project period.
- ➤ 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 case the Institution is not able to implement the project, it should refund the entire grant or the balance grant at the earliest to KSCSTE.
- Date of Start of the Project The project becomes operative with effect from the date of sanction order or receipt of fund by the Implementing Institution. This date should be intimated by the Institution authorities/ Principal Investigator to KSCSTE. 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.
- Submission of Progress Reports PI shall furnish Progress Reports on the research work carried out on a quarterly basis. Quarterly Progress Reports (QPRs) should be submitted with effect from Date of Start of project. In addition, PI shall submit Annual Progress Report on project-year-basis within 3 months of completion of project year from the date of start of project.
- Progress Monitoring/Review procedure The PI needs to present the technical and financial progress of the research work done before the Programme Advisory Committee (PAC) of the Programme. The Committee will meet normally once in every year or as and when required. Also, the financial grant for subsequent years will be released based on the review of progress and recommendation of the PAC. The Committee reserves the right to terminate the Project at any stage if it is convinced that the grant has not been properly utilised or satisfactory progress is not being made.
- 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/Centre 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 project year calculated from the date of start of the project.
 - ✓ The PI as well as the Implementing Institution has the responsibility of informing KSCSTE 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.
- Project Completion Report & Final Technical Report On completion of the project, the Principal Investigator through the Implementing Institution shall submit 2 copies of bound volume of Project Completion Report (PCR) and 3 copies of Final Technical Report (FTR) in the prescribed format (soft binding without using plastic material, also soft copies). Along with PCR and FTR, the Asset Transfer Certificate duly signed by the Head of the Implementing Institution shall also be submitted in the prescribed format.

9. Guidelines for Publication of Research Output

- i) Investigators who wish to publish technical/ scientific papers based on the research work done under the project, should acknowledge the assistance received from KSCSTE.
- ii) The Investigator(s) should not enter into any collaboration with a foreign party (individual/ industry) without prior approval of KSCSTE.
- iii) Investigators are also requested to publish some of the research papers emerging out of the project work in leading Indian Journals.
- iv) 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.
- v) The knowledge generated from the project will be the property of KSCSTE and should be properly acknowledged. Transfer of technology generated, applications for patents, etc., shall be done only in consultation with KSCSTE and as agreed upon by KSCSTE and the Implementing Institution.