

**GOVERNMENT OF ODISHA
SCIENCE AND TECHNOLOGY DEPARTMENT**

Letter No. ⁽³⁹⁾ 616 /ST, Bhubaneswar dated the 07-02-17
ST-(Bio)-05/2017

From

Er L N Padhi
Jr Scientist & Dy. Director (BT)

To All Principal Secretaries to Government/
All Commissioner-cum-Secretaries to Government/
All Secretaries to Government/
All Special Secretaries to Government.
(Except Parliamentary Affairs Department)

Sub: Operational Guidelines on Biotechnology Policy Resolution 2016

Madam/Sir,

In inviting a reference to the subject cited above, I am directed to enclose herewith the following operational guidelines on Biotechnology Policy Resolution 2016 for favour of kind information and necessary action.

1. Guidelines for Establishment of Centre of Excellence in Biotechnology
2. Guidelines for Biotechnology Enterprise & skill Development School (BESD)
3. Guidelines for Collaborative Research Project Grant in Advanced Areas of Applied Biotechnology
4. Guidelines for Promotional assistance under Biotechnology Policy Resolution-2016

The above four operational guidelines have been concurred in by Finance Department vide their UOR No-15-ES-III dated 06/02/2017.

Yours faithfully,

[Signature]
Jr Scientist & Dy. Director (BT)

Memo No. 617 /ST Dt: 07-02-17

Copy along with copies of the guidelines forwarded to Head, IT Portal, Secretariat, Govt. Of Odisha with a request to kindly upload the same in the website of Science & Technology Department for information of Public.

[Signature]
Jr Scientist & Dy. Director (BT)

(Contd..)

Guidelines for establishment of Centre of Excellence in Biotechnology



Science & Technology Department . . .
Government of Odisha
Bhubaneswar-751001

Guidelines for establishment of Centre of Excellence in Biotechnology (CEB)

1. Introduction:

The Government of Odisha has decided to encourage the Universities and Research Institutions in the state to set up Centre of Excellence for research in Biotechnology and healthcare using cutting edge technology. To harness the resources available in the state and convert them into products for the benefit of society through research and development, the State Govt. proposes to provide financial assistance to selected Universities and research organizations in the state to strive for excellence in their chosen areas of research in Biotechnology.

2. Objectives: The main objectives of the CEB scheme are to encourage:

- Industrial application of Biotechnology for public welfare
- New and innovative Research and/or extension programme of importance through collaboration with other institutions

3. Scope: The funding will be utilized as a gap funding for creation of instrumentation facility, procurement of consumables and development of manpower in Biotechnology in the State. The proposal should be on product and process development using bio-resources of the State.

4. Target Group: The R&D Institutes, Universities, Colleges, Industries or Agencies established in Odisha will be eligible for support under this scheme.

5. Eligibility Criteria: Any organization requesting financial support under the scheme, will be required to meet the following eligibility criteria:

- Should have at least five years experience and competence in conducting original research of high standard in any field of Biotechnology as evidenced from research publications and patents
- The organization should have sufficient manpower and trained personnel to carry out research
- The organization should have minimum basic facilities of building, laboratory, furniture, instruments/equipment etc.

6. Nature of assistance: The CEB funding will be project oriented and a Detailed Project Report (DPR) proposal will form the basis for sanctioning the grant. Once a proposal is approved, use of the grant will be as per the detailed budget and action plan finalized by the Expert Committee. The financial support of Government of Odisha may be used for

conducting project-oriented collaborative research work along with creation of instrumentation facilities, procurement of consumables, creation of library resources, travel for collection of samples and field work, conducting conferences, contingency, demonstration unit etc. The CEB grant will not be available for building construction and/or developing physical infrastructure.

7. **Tenure:** The tenure of the CEB scheme will be coterminous with the period of the IPR, 2015.

8. **Invitation of Proposals:** Proposals for financial assistance under the CEB scheme will be invited by the S&T Department, Odisha through notifications issued in newspapers/ website. The Institute is required to submit proposal for a single inter-disciplinary project.

9. **Committees:** The following committees are formed to discharge various functions:

9.1 **Expert Committee:** The Expert Committee would make assessment of the applications received and recommend the Department for consideration. It would also carry out mid-term evaluation of progress. The composition of the Expert Committee will be as follows:

- | | |
|---|-----------------|
| 1. Director (Tech.), Biotechnology, S&T Dept - | Chairman |
| 2. Subject expert from a National Laboratory- | Member |
| 3. Subject Expert from Academics- | Member |
| 4. Scientist of repute in Biotechnology- | Member |
| 5. Representative of Biotechnology Industry- | Member |
| 6. Deputy Director (Tech.), Biotechnology, S&T Dept - | Member Convener |

9.2 **Supervisory Committee:** The Supervisory Committee would supervise implementation of CEB scheme. The composition of the Supervisory Committee will be as follows:

- | | |
|--|-----------------|
| 1. Commissioner-cum-Secretary to Govt., S&T Dept.- | Chairman |
| 2. Academic of repute in Biotechnology- | Member |
| 3. Scientist of repute in Biotechnology- | Member |
| 4. Representative of a National Laboratory- | Member |
| 5. Representative of Biotechnology Industry- | Member |
| 6. Director (Tech.), Biotechnology S&T Dept - | Member Convener |

9.3 **Institutional Advisory Committee:** The Institutional Advisory Committee will be constituted by the institute to oversee the activities of CEB. The composition of the Advisory Committee will be as follows:

- | | |
|--------------------------------------|----------|
| 1. Head of the Institution- | Chairman |
| 2. Representative of S&T Department- | Member |

- | | |
|--------------------------------------|-----------------|
| 3. Outside Subject Expert (1)*- | Member |
| 4. Outside Subject Expert (2)**- | Member |
| 5. Finance Officer of the Institute- | Member |
| 6. Coordinator of the Centre- | Member Convener |

(* To be nominated by S&T Department, Odisha; ** To be nominated by host Institute)

10. Withdrawal of CEB status: If, as a result of the periodic reviews conducted, it is found that the Institution is not performing well, a six-month notice will be given to it for improvement. After six months, if the S&T Department is satisfied (either by visiting the Institute or otherwise) that the Institute has not made much progress or has not shown results as per the action plan and research programme approved, the status and privileges attached to the Institute under the CEB scheme may be withdrawn by the Government. The CEB status can also be revoked, if information and data supplied by the Institution is found to be incorrect or in case of misappropriation and misuse of funds. In such a case, either the institution may be asked to refund the financial assistance given to it under the scheme along with the interest, or no further grant will be sanctioned in favour of the institution or both. The decision of the S&T Department will be final and binding in such cases.

11. Submission of Utilization Certificate & Expenditure Statement

The Institute will submit the Utilization Certificate (UC) and Audited Expenditure Statement by a CA firm, duly signed by the Head of the Institute to the Science & Technology Department at the end of each Financial Year.

12. The fund allocation and expenditure under the scheme will be reviewed by the State Level Implementation Committee (SLIC).

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Guidelines for establishment of
Biotechnology Enterprise & Skill Development School (BESD)



Science & Technology Department
Government of Odisha
Bhubaneswar-751001

Guidelines for establishment of
Biotechnology Enterprise & Skill Development School (BESD)

1. **Introduction:** Odisha is endeavouring to build a holistic Biotechnology ecosystem to enable the State to become one of the top investment destinations in the Country. Government of Odisha has been promoting higher education and Research & Development in Biotechnology for long. Several Universities in the State are running Post-Graduation courses in Biotechnology. Many colleges of the State are also offering Graduate and Post-Graduate degrees in Biotechnology. Several Research/Academic Institutes in the State such as National Institute of Science Education and Research, Indian Institute of Technology, Institute of Life Science, National Rice Research Institute, Central Institute of Freshwater Aquaculture, Regional Medical Research Centre, Regional Plant Resource Centre, Central Tuber Crop Research Centre etc. are producing a very talented workforce in Biotechnology. The Government of Odisha has prioritised to provide all opportunities to the young talent of the State to make them Biotech entrepreneurs and motivate prospective entrepreneurs of the State to set up commercially viable Biotech ventures in small and medium scale sectors. Also the gap between the technical knowhow of the students and their employability in the Biotechnology industry needs to be bridged. Hence, to achieve these objectives, it is necessary to start Biotechnology Enterprise & Skill Development Schools (BESDs) in the State.
2. **Scope:** The funding will be utilized as a Corpus Fund with matching share from the Institute. The accrued interest from the Corpus Fund and fees collected from the students may be utilized for purchase of equipments required for the school and overall management of the School.
3. **Target Group:** The organizations located in Odisha with facility of teaching in Biotechnology (B.Sc./M.Sc./B.Tech./M.Tech.) and/or Research & Development facilities in Biotechnology shall be eligible for this support. The target group for inclusion under the scheme are R&D Institutes, Universities, Institutes, Colleges, Industries and Agencies.
4. **Eligibility Criteria:** Any R&D Institute/ University/College/Industry/ Agency aspiring to receive financial support under the scheme, will be required to meet the following eligibility criteria:
 - The organization should have at least five years experience and competence in conducting teaching and/or research in any field of Biotechnology.
 - The organization should have sufficient manpower and trained personnel to carry out the programme
 - The organization should have minimum basic facilities of building, laboratory, furniture, instruments/equipment, hostel and library

5. **Duration of the Programme:** Initially the Institute shall offer courses of six month and/or three month duration. New courses may be designed as per the demand of the industries with prior approval of the Government.
6. **Course Fee:** A maximum course fee of Rs. 50,000/- for six-month programme and a maximum course fee of Rs. 30,000/- for three-month programme will be collected from each participant. The fee structure may be revised with prior approval of the Government.
7. **Who can Participate:** The program will be open for potential new entrepreneurs of Odisha, who are willing to start biotechnology based enterprises in the state and to those who want to bridge the gap between their technical knowhow and employability. Following will be the eligibility for the participants:
 - M.Sc., M.Tech., B.Tech. degree, in Biotechnology or M.Sc. degree in Life Science.
 - Upcoming Biotechnology entrepreneurs.
 - Persons with previous experience in Biotechnology industries.
8. **Number of Participants:** Each program will have maximum 24 participants.
9. **General Course Content:** The courses will be designed as per the requirement of the Biotechnology industries. The detailed course modules will be prepared by the host institute in consultation with experts from Biotech industries, Biotechnology experts, Biotechnology Associations/ Consortiums, Science & Technology Department, Odisha etc. The general structure of the course must include Biotechnology skill and Business/Management skill. The participants will learn about fundamental aspects of business management required for an entrepreneur. Courses such as, entrepreneurship development, developing a business plan, basic concept of financial management, preparation of financial statements, human resource management, legal and statutory requirements, marketing skill, negotiation skill etc. will be the main focus. The host Institute is required to make arrangement with Biotechnology Industries for all participants to carry out Internship Programme of two month duration. Study materials will be prepared by the host institute in consultation with experts.
10. **Resource Persons:** Experts from Biotechnology industries, academics, research institutes, MSME, IED, NABARD, SIDBI, management experts, entrepreneurs etc. will be involved as resource persons for imparting training.
11. **Role of the host institute:** The host institute will provide infrastructure required for the programme. The host institute will manage the school. The host Institute is required to meet expenditure to organize the programme. The host Institute will be required to keep the record of the participants with respect to employment/self-employment and intimate the same to the Science & Technology Department. The institute is required to collect feedback from participants and submit the final report of the course along with the consolidated

feedback to the Science & Technology Department. The host Institute will take sufficient measures to invite companies for campus selection of participants.

12. Monitoring: The Monitoring Committee constituted by Biotechnology Cell, Science & Technology Department, Government of Odisha will guide and review such training programmes, visit the place of training to review the functioning of the School. The composition of the Monitoring Committee will be as follows:

1. Commissioner-cum-Secretary to Govt., S&T Dept.- Chairman
2. Academic of repute in Biotechnology- Member
3. Scientist of repute in Biotechnology- Member
4. Representative of a National Laboratory- Member
5. Representative of Biotechnology Industry- Member
6. Director (Tech.), Biotechnology S&T Dept - Member Convener

13. Withdrawal of Support: If, as a result of the periodic review conducted, it is found that the Institution is not performing well, a three-month notice will be given to it for improvement. After three months, if the S&T Department is satisfied (either by visiting the Institute or otherwise) that the Institute has not made much progress or has not shown results as per the action plan, the status and privileges attached to the Institute under the scheme may be withdrawn by the Government. The support will also be revoked, if information and data supplied by the Institution is found to be incorrect or in case of misappropriation and misuse of funds. In such a case, either the Institution may be asked to refund the financial assistance given to it under the scheme along with interest, or no further grant will be sanctioned in favour of the Institution or both. In all such cases the decision of the S&T Department will be final and binding.

14. Utilization of Fund:

The Institution will submit the manner of utilization of interest generated out of the Corpus Fund. The Institute will submit the Utilization Certificate (UC) and Audited Expenditure Statement by a CA firm, duly signed by the Head of the Institute to the Science & Technology Department at the end of each Financial Year.

15. The fund allocation and expenditure under the scheme will be reviewed by the State Level Implementation Committee (SLIC).

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Guidelines for Collaborative Research Project Grant in
Advanced Areas of Applied Biotechnology



Science & Technology Department
Government of Odisha
Bhubaneswar-751001

**Guidelines for Collaborative Research Project Grant in
Advanced Areas of Applied Biotechnology**

1. **Introduction:** The Science & Technology Department, Government of Odisha has been promoting higher education and Research & Development in Biotechnology. It is providing financial support to Universities and Research Institutes to carry out R&D projects. As part of the Biotechnology Policy Resolution, these initiatives would be expanded. The aim of the programme 'Collaborative Research Grant in Advanced Areas of Applied Biotechnology' is to encourage collaborative research to be carried out in the State with internationally acclaimed research groups of the country and abroad in advanced areas of applied Biotechnology.
2. **Objectives:** The main objectives of the Collaborative Research Grant in Advanced Areas of Applied Biotechnology are:
 - Application of Biotechnology for industrial use
 - Achievement of excellence in advanced areas of research in Biotechnology by networking and collaboration with other institutions of national and international repute
3. **Eligibility/Target Group:** The S&T Department, Odisha will provide financial support to Academic and Research Institutes functioning in Odisha to carry out collaborative and multi-institutional research in advanced areas of applied Biotechnology. The Principal Investigator (PI) /Co-PI/Coordinator can apply for support for research project if she/he has at least five years of service left before attaining superannuation.
4. **Funding:** Research grant up to Rs. 30 Lakh per annum per project will be available.
5. **Tenure:** The tenure of the project will be coterminous with the period of IPR, 2015.
6. **Advertisement inviting project proposals:**

The applications will be invited through advertisement in local newspapers and/or the website of the Department.
7. **Procedure of application:** The Principal Investigator (or the Project Coordinator in case of multi-institutional projects) may submit twelve (12) copies of project proposal/application, with a soft copy of the proposal on a CD in MS Word format. The applications must be submitted through proper channel. In case of multi-institutional projects, the consent of collaborative institutions is required.

8. **Nature of Assistance:** Normally, the quantum of assistance for a research project will be up to Rs. 30 lakhs per year which may include institutional overhead charges maximum up to 10%. The Department will provide financial support for the following items:

(A) **Non-Recurring Grant:**

- (i) Equipments: Only for the essential equipments required for the project but not available in the Institution.
- (ii) Books and Journals: essential books and journals required for the project.

(B) **Recurring Grant:**

- (i) Manpower-JRF/SRF (Qualifications and emoluments as per the UGC guidelines).
- (ii) Outsourcing Services- Specialized technical work such as sample analysis.
- (iii) Contingency.
- (iv) Chemicals and consumables.
- (v) Travel and field work for carrying out research / data / literature collection.

9. **Procedure for approval**

The proposals received, complete in all respect and duly forwarded by the Head of the Institution/Competent Authority will be assessed by the sub-committee on R & D in Biotechnology issued vide S&T Department Resolution No.3267 dated 14/08/2015. The applicants will be invited to give a presentation of their proposal. The final decision will be taken by the S&T Department on the basis of the recommendations made by the sub-committee on R&D and availability of funds.

10. **Evaluation and Monitoring**

- The Science & Technology Department, Government of Odisha will organize mid-term evaluation, interface meetings wherein the Principal Investigator/Project Coordinator will present the progress of the project before the sub-committee on R & D in Biotechnology. The progress of the project may also be evaluated on site.
- On completion of the project, the Principal Investigator/ Project Co-ordinator, is required to present the findings of the project before the Sub-committee on R & D in Biotechnology.

11. **Withdrawal of Support:** If, as a result of the periodic review conducted, it is found that the institution is not performing well, a three-month notice will be given to it for

improvement. After three months, if the S&T Department is satisfied (either by visiting the Institute or otherwise) that the Institute has not made much progress or has not shown results as per the action plan and research programme approved, then the support will be withdrawn. In such a case, either the institution may be asked to refund the financial assistance given to it under the scheme along with interest, or no further grant will be sanctioned in favour of the Institution or both.

12. Submission of Utilization Certificate and Expenditure Statement:

The Institute would furnish to the S&T Department the audited utilization certificate and expenditure statement duly signed by the Principal Investigator, the Head of the Finance wing and the Head of the Institute at the end of the each financial year as well as consolidated statement of expenditure at the end of the project.

13. General

- (i) In the absence of the Principal Investigator, the Co-Investigator may act as the Principal Investigator.
- (ii) In any research publication, from the outcome of the project, the funding agency must be acknowledged.
- (iii) The Project Fellow engaged in the Project may enrol for M.Phil./Ph.D. The data generated and the results obtained from the project may be incorporated by the Project Fellow in her/his thesis with the concurrence of the Principal Investigator.
- (iv) If the Principal Investigator/Project Coordinator fails to complete the project, she/he has to refund the entire amount sanctioned with interest.
- (v) The Department of Science & Technology reserves the right to reject any or all the research proposals without assigning any reasons thereof.

14. The fund allocation and expenditure under the scheme will be reviewed by the State Level Implementation Committee (SLIC).

APPLICATION FOR SUBMISSION OF RESEARCH AND DEVELOPMENT PROJECT

(Collaborative Research Project in Advanced Areas of Applied Biotechnology)

(I) GENERAL INFORMATION

1. Name and Address of the Institute/University submitting the project:
2. Collaborating Institute (s):
Address:
(No objection certificate of the Head of the collaborating Institute be attached)
3. Name, Designation, Address, E-mail, Contact Number of the Executive Authority of the Institute forwarding the application
4. Project Title
5. Specific Area:
6. Duration:-----
7. Total Cost (Rs.)----- (Not to exceed Rs. 30 Lakh/year)
8. Project Summary (Not to exceed one page. Please use separate sheet)
9. Name/Contact Information of the Principal Investigator
10. Name, Designation, Date of Birth/ Address, E-mail, Contact Number of PI/Co-PI

(II) TECHNICAL DETAILS OF PROJECT

11. Introduction (Indicate justification for carrying out this Research)
 - 11.1 Origin of the proposal
 - 11.2 Definition of the problem (in National context with special reference to the State)
 - 11.3 Objectives
12. Review of Current Status of research and development in the subject
 - 12.1 International Status
 - 12.2 National Status
 - 12.3 Importance of the proposed project in the context of current status
 - 12.4 Novelty of the project
 - 12.5 Anticipated products & processes of practical/technology utility/socio-economic relevance expected to be evolved by pursuing the Project
 - 12.6 Expertise available with the proposed investigating Group/Institution in the subject of the project.
 - 12.7 List of 5 experts in India/Odisha in the proposed subject area

13. Work Plan

13.1 Methodology

13.2 Risk associated with the research to be addressed

13.3 Proprietary/patented items, if any, expected to be used for this project

13.4 Linking of the research output with Industry to be explained

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

13.6 Time schedule of activities giving milestones.

14. Existing Facilities available to be utilized for the project:

DECLARATION / CERTIFICATION

It is certified that

- a) The research work proposed in the scheme/ project does not in any way duplicate the work already done or being carried out elsewhere on the subject.
- b) The same project has not been submitted by the Institute/ Investigator(s) to any other agency/agencies for financial Support.
- c) The emoluments for the manpower proposed are admissible as per the UGC norms.
- d) Necessary provision for the scheme/project will be made in the Institute/ University / State budget in anticipation of the sanction of the scheme / project.
- e) If the project involves the utilization of genetically engineered organism, it is agreed that we will ensure that an application will be submitted through our Institution Bio-safety Committee and we will declare that while conducting experiments the Bio-safety guidelines of Govt. of India would be followed in toto.
- f) If the project involves field trials/ experiments/exchange of specimens etc. we will ensure that ethical clearances would be taken from concerned ethics committees /competent authorities and the same would be conveyed to the funding agency before implementing the project.
- g) Necessary steps will be taken for publication of the research out puts of the project in accepted research journals.
- h) Wherever necessary, steps will be taken for tie up with industry for developing products and/or processes.
- i) The Institute /University agrees that the equipment, other basic facilities and such other administrative facilities, as per terms and conditions of the grant, will be extended to investigator(s) throughout the duration of the project.
- i) The Institute agrees to undertake the financial and other management responsibilities of the project.

Signature of Coordinator/ Principal Investigator

Signature of Co- Investigator (s)

Signature of Executive Authority of the Institute/University with seal

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Guidelines for Promotional Assistance under Biotechnology Policy Resolution - 2016



**Science & Technology Department
Government of Odisha
Bhubaneswar-751001**

Guidelines for Promotional Assistance under Biotechnology Policy Resolution - 2016

1. **Background:** The State of Odisha has vast scope for development of Biotechnology, a sunrise knowledge industry. The State, with its rich biodiversity and vast natural resources, coupled with industry friendly policy measures offers tremendous potential to become a major destination for investments in Biotechnology sector. As per the Biotechnology Policy Resolution 2016 the Government of Odisha would encourage special funding support maximum up to Rs. 50.00 lakh per annum to University/ Institute/Agencies/Industries for promotional assistance for the following activities:
 - (i) Conduct of Annual Workshop "Catch them Young" to attract Biotechnology innovators for start-ups in Biotechnology.
 - (ii) Bring out theme based bi-annual publications in Biotechnology sector to generate awareness among students, researchers, entrepreneurs and innovators.
 - (iii) Undertake promotional measures like publicity, printing and production of Information, Education & Communication (IEC) materials, exposure visits, preparation of model project reports, business meet and events etc.
 - (iv) Undertake promotional measures to make Biotechnology a 'Focus Sector' for investment, facilitate creating special hubs for resources like credit, capital, skilled human, raw materials and also make provisions for special incentives like power subsidy, training/apprentices/ employment subsidy etc.
 - (v) Institute Awards to showcase significant contribution and achievements in the Biotechnology sector such as :
 - Most promising start up venture
 - Best performing Biotechnology Unit
 - Lead Innovation Enterprise
 - Best performing University/Academic Institution/R&D laboratory
2. **Selection Committee:** The Committee will prepare the annual action plan with regard to promotional assistance. The consultant firms or agencies will be selected by the committee. The committee will have the following members

(I) Commissioner-cum-Secretary-	Chairman
(II) Director Biotechnology-	Member
(III) Representative of Department of Finance-	Member
(IV) Retired Senior Professor or Scientist (BT)-	Member
(V) AFA, S & T Department-	Member
(VI) Representative of ILS, Bhubaneswar-	Member
(VII) Deputy Director, Biotechnology-	Member Convener
3. **Submission of Utilization Certificate & Expenditure Statement**

The Institute will furnish to the S & T Department the Audited Expenditure Statement by a CA firm and the Utilization Certificate (UC) duly signed by the Head of the Institute at the end of each Financial Year.
4. The fund allocation and expenditure under the scheme will be reviewed by the State Level Implementation Committee (SLIC).