PARALA MAHARAJA ENGINEERING COLLEGE

(A constituent college of Biju Patnaik University of Technology, Odisha, Rourkela) SITALAPALLI: BERHAMPUR: DIST.:-GANJAM: PIN – 761003

No: 1314

NOTICE

Dt. 1/9/2018

It is hereby informed to all the staffs and students of this institution that Planning & Convergence department of Odisha invites application regarding new ideas and innovations in prescribed format. The last date of submission is 22.09.2018 by 5.00 P.M. I am looking forward for maximum participation from our institute. You can find the details in the website www.odisha.gov.in/pc and https://www.pmec.ac.in.

Copy to cell Hoors and notice boards/website.

PRINCIPAL

PMEC, Berhampur

GOVERNMENT OF ODISHA PLANNING & CONVERGENCE DEPARTMENT

No.	8235	/P	Bhubaneswar,	dated the 21st June, 2018
F	C-INO-ACTI-0001	I-2016		

ADVERTISEMENT

The Last date of Receipt of the Application – 22.09.2018 by 5.00 P.M.

To encourage and promote the culture of finding new ideas for solving various socio-economic problems, or facilitating linkage of technology with product development for setting up new enterprises, Planning & Convergence Department, Government of Odisha invites application in prescribed format from the willing Students / Researchers / Scientists / Educational institutes / Entrepreneurs and Citizens for

- i. Awards for Innovative Ideas
- ii. Awards for Successful Innovative Proven Concepts / Projects / Prototypes
- iii. Financial Assistance for Innovative R & D Projects
- iv. Implementation of Innovative Projects

How to apply:

Candidates fulfilling the above criteria are required to submit their applications only by speed Post / Regd. Post to the **Joint Director to Government (Innovation)**, **Planning and Convergence Department**, **Government of Odisha**, **Odisha State Secretariat**, **Bhubaneswar** – **751001** in the following prescribed format along with supporting documents so as to reach by **5.00 PM of 22.09.2018**.

The application may be submitted as per the guidelines given in the Website: pc.odisha.gov.in/Schemes of Inovation.html.

GUIDELINES FOR FINANCIAL ASSISTANCE FOR INNOVATIVE R & D PROJECTS

Eradication of poverty, improving quality of life, achieving the Millennium Development Goals (MDGs), enhancement of employment opportunities and higher growth are priority objectives for the State. Among others, innovation and technology have an important role in overcoming limitations of resources, optimal utilization of resources, and in enhancing the efficiency and effectiveness of implementation of programmes.

Innovation is not only about developing new technology or product but also includes a business model, service, process, structure or system which has value for the business, industry and society. Hence, innovation can be applied to any sector, discipline, or technology or any process, structure and business model in any organisation to bring about change for adding value to mankind. Keeping in view the myriad problems and high potential of adding value in various socio-economic sectors in the State to address the development concerns of large population, there is a need for innovation and technology application for inclusive development and growth. Such innovations should be based on the novelty and the likely benefits to the society.

The Planning & Convergence Department, Government of Odisha strives to promote research in different areas of public interest. The public interest areas are Municipal Solid Waste (MSW) Management, Health, Sanitation, Agriculture, Pollution Control and so on. The aim of the programme is to encourage Research and Development for the application of Innovation in:

- i. Agriculture and Allied Sectors
- ii. Engineering and design
- iii. Rural Development
- iv. Health
- v. Sanitation
- vi. Urban Development / Management [Municipal Solid Waste (MSW), Sewerage Management]
- vii. New materials and Nanotechnology
- viii. ICT (Hardware & Software)
- ix. Renewable Energy
- x. Environmental Management
- xi. Handloom and Handicraft
- xii. Judiciary
- xiii. e-Governance
- xiv. Community Policing
- xv. Government
- xvi. Management tool or model, etc.
- xvii. Water Resource Management
- xviii. Any other(to be specified clearly)

. The Guidelines provide assistance for the preparation and submission of Project Proposals, the method of approval, mechanism of evaluation & monitoring and submission of utilization certificate.

1

1. Objectives

The Universities, Colleges and Research Institutes are the centers of research. Hence the University and College teachers and scientists of State / Central funded Research Institutes as well as Government Organization need to be supported to meet their requirements of research in identified areas of Innovation.

2. Eligibility/Target Group

- a) Students (Two categories as given below)
 - I. Class VIII to XII.
 - II. Under-Graduate, Graduate, PG / M.Phil / Ph.D
- **b)** Other category (other than students)
- And also the Planning & Convergence Department, Government of Odisha will provide support to teachers / researchers of State Universities, Government Colleges, Govt Organization and scientists/ researchers of state funded Research Institutes of Odisha and Research Institutes of Govt. of India functioning in Odisha. A person can avail only one research project of Planning & Convergence Department, Government of Odisha at any given time as Principal Investigator / Co-Investigator / Project Co-coordinator). The Principal Investigator / Project Co-coordinator can apply for research project if she / he has left with five years of service. The P & C Department will also consider collaborative and multi-institutional research projects.

3. Advertisement inviting project proposals:

The Planning & Convergence Department, Government of Odisha will invite applications through advertisement in local newspapers and/or the website of the Department, or through National and State level Government Institutions. The format of application and the guidelines is annexed herewith which will be available in the website of P&C Deptt. www.odisha.gov.in/pc.

4. Procedure of application

The Principal Investigator (or the Project Coordinator in case of multi-institutional projects) may submit **ten (10) copies** of Project Proposal / application, with a soft copy of the proposal on a CD in MS Word. The applications must be submitted through proper channel. The Proposal should be prepared and submitted strictly as per the recommended format. The proposal must be very concise and should be printed on both sides of A-4 size paper. The applications must reach by the last date. **Application is to be submitted by registered post.** For Government institutions, one can submit an advance copy of the application, but the applicant has to ensure that the application through proper channel reaches the Department within two weeks.

5. Tenure and Implementation

The tenure of the project will be for a maximum period of three years. The effective date of implementation will be from the date of release of funds.

6. Nature of Assistance

Normally, the quantum of assistance for a research project will be under Rs.25 Lakhs, but subject to change with recommendation of Selection Committee. The Planning & Convergence

Department, Government of Odisha will not provide any grant under Institutional overhead. The Department will provide financial support for the items as follows:

(a) Non-Recurring Grants

- (i) Equipment: Essential equipments required for the project but not available in the Institution.
- (ii) Books and Journals: Essential Books and Journals required for the project.

The equipment as well as books and journals grants may be utilised to procure the essential equipments and books and journals needed for the proposed research work. The escalation, if any, in the cost of approved equipment may be met out of savings / re-appropriation from non-recurring head only with the approval of Principal / Registrar of the college / University / Head of the Institution / Organization under intimation to the Department.

The equipments and books & journals acquired by the Principal Investigator under a Major Research Project must be deposited to University / College / Institution or in the departmental library or the central library after the completion of the project which will be the institutional property. The University / College / Institution / Organization should make every effort to put all the equipment available in the laboratories in effective use.

(b) Recurring Grants

- (i) Manpower (*Refer Annexure-II*) -Project Fellow / Technical Assistant / Field Assistant (Emolument: Project Fellow: Rs. 12,000/- per month for first two years and Rs. 14,000/-p.m. for third / subsequent years; Technical Assistant/ Field Assistant: Rs. 5000/- per month.
- (ii) Hiring Services- Specialized technical work such as sample analysis.
- (iii) Contingency-Advertisement and selection of manpower, spares of apparatus, photocopies, typing, stationary, postage, computation and printing, audit fee needed for the project, etc.
- (iv) Chemicals and Consumables- To meet expenditure on chemicals, glassware and other consumable items.
- (v) Travel and Field work for data collection and collection of other information such as documents and visit to libraries (only inside the country, foreign travel is strictly prohibited in this scheme); the allocated fund should not be used for attending conferences, workshops, seminars or training program etc.

7. 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 a Screening Committee & Selection Committee of P&C Department. The applicants will be invited to give presentations to justify their proposals. No TA/DA would be paid to the participants for presentation. The final decision will be taken by the P&C Department on the basis of the recommendations made by the Committee and availability of funds.

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a. Criteria of Selection

- 1. The criteria of selection for R&D projects depends on
 - Concept of the innovative project
 - Novelty of the innovative project (Novelty means, how the idea of the project is significantly different or significantly better than earlier method / product / technology etc. and new idea has not been tried earlier).
 - The criteria of selection depends on the novelty of the project i.e. any project which is innovative in nature but doable under the given resources and technology.
 - Feasibility (How the project can be implemented under the given resources, constraints and technology)
- **2.** Such innovative R&D project should have value for the citizen and society.
- **3.** The innovative R&D project can be given for different sectors like:
 - i. Agriculture and Allied Sector
 - ii. Engineering and design
 - iii. Rural Development
 - iv. Health
 - v. Sanitation
 - vi. Urban Development / Management [Municipal Solid Waste (MSW), Sewerage Management]
 - vii. New materials and Nanotechnology
 - viii. ICT (Hardware & Software)
 - ix. Renewable Energy
 - x. Environmental Management
 - xi. Handloom and Handicraft
 - xii. Judiciarv
 - xiii. e-Governance
 - xiv. Community Policing
 - xv. Government
 - **xvi.** Management tool or model, etc.
 - xvii. Water Resource Management
 - **xviii.** Any other (to be specified clearly)
- 4. The innovative R&D project proposal should provide necessary design and technical specifications (if any) by which project can be further tested / analyzed, if required.

b. Selection Procedure

1. Advertisement

The Planning & Convergence Department, Government of Odisha will invite applications through advertisement in local newspapers and/or the website of the Department (minimum 60 days period for submission of applications), or through National and State level Government Institutions.

2. The Proposal to be submitted in the prescribed proforma

3. Selection by an Internal Screening Committee and Selection Committee constituted by Government of Odisha in P&C Department : Proposals received will be first placed before the internal Screening Committee and then before the Selection Committee.

c. Internal Screening Committee

There will be Internal Screening Committee comprising of the following members.

1. Joint Director (Innovation), P&C Deptt Member

2. Scientist / Junior Scientist, P&C Deptt. Member

3. Assistant Director, P&C Deptt. Member

d. Selection Committee

A state level Selection committee may be constituted with the following members

1. Special Secretary to Govt, P&C Deptt. Chair person

2. Two subject experts (for a particular sector) from XIMB, NISER, IMMT, ILS, RMRC, CRRI, CIFA, IIT, Bhubaneswar, CET, OUAT, Utkal University etc. and other National Level institution like NABARD, RBI, BSNL etc. Members

3. Director-cum-Additional Secretary to Govt, P&C Deptt .-Member

4. F.A-cum-Additional Secretary to Govt., P&C Deptt. Member

5. Scientist / Junior Scientist, P&C Deptt. Member

6. Joint Director (Innovation), P&C Deptt Member

Convener

TORs of the Selection Committee.

The Selection Committee will look into the following:

- 1. The Committee will examine the proposal (with reference to check list) forwarded by the Screening Committee.
- 2. The Selection Committee will examine the recommendation of Screening Committee.
- 3. The Committee will recommend the innovative R&D project selected for funding to Govt. basing on the evaluation on different criteria as detailed below.

SI No	Criteria	Maximum Marks	Marks Awarded
1	Novelty of the idea / concept of the innovative R & D project	30	
2	Work Plan, Methodology of the R&D project	30	
3	Value / benefit of innovative proven concept / prototype to the society and citizen	20	
4	Practicability / feasibility of delivered output of the innovative R&D project	20	
	Total marks	100	

4. The Selection Committee reserves the right to select or reject any or all applications without assigning any reason thereof.

Honorarium and Sitting fees

- Rs.1500/- for Non-Government experts (including retired experts). per expert per day (maximum 15 projects in a day).
- 2. Rs.1000/- for Institutes like IIT, NISER, CRRI, OUAT, Utkal University etc.per expert per day (maximum 15 projects in a day).
- 3. No honorarium and sitting fees for State govt. member / expert

- TA & DA

(As given to senior class -I officers of State Government. Out station member can travel by air and their boarding and lodging expenses will be borne by "State Innovation Fund" of P&C Department)

8. Procedure for Release of Grants

The procedure for release of grants for different target groups is given below:

- a) Students
- b) Other category (other than students)
- c) Teachers / Researchers / Scientist of Institutes
- (i) The grant will be released to the Registrar of the University/ Principal of the College / Director or CEO of the Research Institute / Head of the Organization.
- (ii) The first installment of the grant shall comprise of 100% of the Non-recurring grant and 50% of the total Recurring grant approved by the P&C Department.
- (iii) The second installment will be released on the basis of recommendation of the Selection Committee, progress report, submission of expenditure statement and utilization certificate. The second installment of the grant shall comprise of 40% of the total Recurring grant approved by the P&C Department.

- (iv) The remaining 10% of the total Recurring grant approved by the P&C Department will be released after final presentation of the research findings before the Selection committee and on receipt of following documents for final reimbursement.
 - (a) Five copies of the final report of the project along with soft copy to be submitted to P&C Department.
 - (b) A consolidated Audited Utilization Certificate for the amount actually utilized towards the project duly signed and sealed by Government Internal Auditor / Chartered Accountant, Registrar/Principal/ Director or CEO of the Research Institute as well as the Principal Investigator/Project Coordinator in the prescribed proforma.
 - (c) The unutilized grant if any may be refunded immediately through demand draft drawn in favour of the "State Innovation Fund" of P&C Department, Government of Odisha, payable at Bhubaneswar.
 - (d) Copy of the research publication of the results of the project in any accepted journal of National and International repute..
 - (e) The Principal Investigators / Project Coordinators / Institutions / Organization are expected to settle the accounts immediately on completion of the project. In case the balance grant is not claimed within six months from the date of completion of the project, the same will lapse and no representation will be entertained on this score.
 - (f) It is mandatory to post the Executive Summary of the report, Research documents, Monographs, Academic papers provided under the Project on the website of the University / Institution / College / Organization.

9. Evaluation and Monitoring

- (i) After one and half year from the date of release of fund, the Planning & Convergence Department, Government of Odisha will go for mid-term evaluation wherein the Principal Investigator / Project Co-ordinators will present the progress of the project before the Selection Committee / Evaluation Committee / Steering Committee of P&C Department.
- (ii) On completion of the project the Principal Investigator / Project Co-coordinator, is required to present the findings of the project before the Steering Committee on the subject.
- (iii) The progress of the Project will be also evaluated every year on site / in the P&C Department / through Video Conferencing.

10. Submission of Utilization Certificate and Expenditure Statement

The Principal Investigator / Institute / Organization would furnish the audited statement of expenditure and Utilization Certificate in the prescribed format duly signed by the competent authority at the end of the each financial year as well as consolidated statement of expenditure at the end of the project to the P & C Department.

11. General

- (i) After the finalization of the selection procedure, the selected applicants will be informed.
- (ii) The Principal Investigator / Co-investigators / Project Coordinators must send their acceptance letter duly forwarded by their employer/ respective head..
- (iii) Project is not transferable in any case.
- (iv) In the absence of the Principal Investigator, the Co-Investigator shall act as the Principal Investigator.
- (v) If the Principal Investigator / Project Coordinator is transferred from her / his original place of work to another Institution, No objection certificate should be furnished for the transfer of the project from both the Institutions stating that necessary facilities will be provided by the Institution, in which the awardee is transferred, for smooth running of the project.
- (vi) In any research publication, the funding agency (P&C Department) must be acknowledged.
- (vii) The Project Fellow engaged in the Project may enroll for M.Phil./ Ph.D. The data generated and the results obtained out of the Project may be incorporated by the Project Fellow in her / his thesis with concurrence of the Principal Investigator.
- (viii) If the Principal Investigator / Project Coordinator fail to complete the Project, she / he has to refund the entire amount sanctioned with interest.
- (ix) The P&C Department reserves rights to reject any or all the research proposals without assigning any reasons thereof.

8

PROFORMA

PROFORMA FOR SUBMISSION OF RESEARCH AND DEVELOPMENT PROJECT IN THE IDENTIFIED AREAS OF INNOVATION (To be filled by the applicant)

PART- I: GENERAL INFORMATION

1.	Name of the Institute / University / Organization submitting the project proposal
2.	Name and designation of the Head / Executive Authority of the Institute / University /
	Organization forwarding the application
3.	
4.	Sectors:

- - i. Agriculture and Allied Sectors
 - ii. Engineering and design
 - iii. Rural Development
 - iv. Health
 - v. Sanitation
 - vi. Urban Development / Management [Municipal Solid Waste (MSW), Sewerage Management]
 - vii. New materials and Nanotechnology
 - viii. ICT (Hardware & Software)
 - ix. Renewable Energy
 - x. Environmental Management
 - xi. Handloom and Handicraft
 - xii. Judiciary
 - xiii. e-Governance
 - xiv. Community Policing
 - xv. Government
 - xvi. Management tool or model, etc.
 - xvii. Water Resource Management

Note: The category of the project will be considered only on above sectors.

- 5. Specific Sector (Please see point No.4)
- 6. Novelty of the innovative R&D project (Novelty means, how the idea of the project is significantly different or significantly better than earlier method / product / technology etc. and new idea has not been tried earlier).
- 7. Such innovative R&D project should have value for the citizen and society (half page).

uration	of the	Proi	iect:
	uration	uration of the	uration of the Pro

- 9. Total Cost (Rs.)-----(Not to exceed Rs. 10 Lakhs)
- 10. Budget (In Rupees)

SI.	Items	Year-1	Year-2	Year-3	Total
No					
1	Non- Recurring (equipments, accessories etc)				
2	Recurring Manpower				
3	Consumables/ other Item of expenditure				
4	Travel				
5	Contingency				
	Total	X	Y	Z	(X + Y + Z)

- 11. Project Summary (Not to exceed one page. Please use separate sheet)
- 12. Recommendation
- 13. Recommendation to be attached
 - i. For students, the proposal is to be recommended (in the form of letter) by the Director / Dean /Principal / HoD of Department / Headmaster / Headmistress
 - **ii.** For other category, it is to be recommended (in the form of letter) by Educational Institutes, Government agencies, Departments, any Industrial Organization or by any Registered Society /Company.

PART II: PARTICULARS OF INVESTIGATORS

14.	14. Name of the Principal Investigator:	
	Date of Birth:Sex:-	
	Designation:	
	Department:	
	Institute /University/ organization	
	Address:	
	PIN:	
	Telephone:Fax	C
	E-mail:	
	No. of Projects being handled at present:	
15.	15. Name of the Co-Investigator:	
	Date of Birth:Sex:-	
	Designation:	
	Department:	
	Institute/University / Organization	
	Address:	
	PIN:	
	Telephone:Fax	C
	E-mail:	
	No. of Projects being handled at present:	

(If more number of Co-investigators are involved particulars may be provided as above)

PART- III: TECHNICAL DETAILS OF PROJECT

(Under the following heads on separate sheets)

- 16. Introduction (Indicate justification for carrying out this Research)
 - 16.1 How the problem has been identified and what is the background?
 - 16.2 Nature of the problem in the national context and specifically in Odisha context.
 - 16.3 How acute is the problem or need for addressing the problem?
 - 16.4 Novelty of the innovative R&D project (Novelty means, how the idea of the project is significantly different or significantly better than earlier method / product / technology etc. and new idea has not been tried earlier).
 - 16.5 Origin of the proposal
 - 16.6 Past research undertaken at National and International level
 - 16.7 Objectives
 - 16.8 Summary
- 17. Review of Current Status of research and development is the subject of Innovation.
 - 17.1 International Status
 - 17.2 National Status
 - 17.3 Importance of the proposed Innovative project in the context of current status
 - 17.4 Anticipated products & processes of practical / technology utility / socioeconomic relevance expected to be evolved by pursuing the Project
 - 17.5 Expertise available with the proposed innovation
 - 17.6 Group / Institution / Organization in the subject of the Innovative project.
 - 17.7 List of 5 experts in India / Odisha in the proposed subject area

SI.	Name	Designation	Address/Telephone/E-mail
No.			

18. Work Plan

- 18.1 Methodology
- 18.2 Risk associated with the research to be addressed
- 18.3 Safety level requirement and the equipment needed
- 18.4 Linking of the research output with Industry to be mentioned
- 18.5 Flow diagram in detail for each phase of the Innovative project.
- 18.6 Proprietary/patented items, if any, expected to be used for this project
- 18.7 Suggested plan of action for utilization of research outcome expected from the project

18.8	Time	schedule	of	activities	aivina	milestones.

SI No	Name of Milestone	Expected Start	Expected Completion
		(Month/Year)	(Month/Year)

19. Project Implementing organizations / Agency / Agencies

SI. No.	Name of Organization / Agencie	Address of Organizations / Agency	Proposed Research Aspects	Proposed Amount	Cost Sharing %

20. Specific deliverables :

PART IV: BUDGET PARTICULARS

21. Budget (In Rupees)

A. Non-Recurring (e.g. equipments, accessories etc)

SI. No	Item	Year-1	Year-2	Year-3	Total

Total (A)

B. Recurring

B.1 Manpower

SI. No.	Designation (Project fellow / Tech. asst /field asst)	Number	Consolidated Emolument	Year-1	Year-2	Year-3	Total

Sub- Total (B.1) =

B.2 Consumables / Item of expenditure

SI. No.	Item	Quantity	Year-1	Year-2	Year- 3	Total

Sub-Total (B.2) =

B.3 Other Items

Head	Year- 1	Year- 2	Year- 3	Total
Travel				
Contingency				

Sub total (B.3) =

Total B (B.1+B.2+B.3) =

Grand Total (A+B) =

Note:

- Financial Year : April-March
- Please give justification for each head and sub-head separately mentioned in the above table.
- Overall contingency is within 5% of the project cost.
- Travel expenses should be within 5% of the project cost. However, if the project work involves extensive tour component beyond 5%, the limit is flexible with proper justification.

• In case of multi- institution project, the budget estimate to be given separately for each institution

PART-V: EXISTING FACILITIES

22. Available equipment and accessories to be utilized for the innovative R&D project:

SI. No.	Name of equipment	Make	Model	Funding Agency	Year of procurement

PART -VI: DECLARATION / CERTIFICATION

It is certified that

- a) The Innovative research work proposed in the 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 Investigator(s) to any other agency/agencies for financial support.
- c) The emoluments for the manpower proposed are those admissible as per the Planning and Convergence guidelines.
- d). If the project involves field trials / experiments / exchange of specimens etc. we will ensure that ethical clearances would be taken from concerned Ethical Committees / Competent authorities and the same would be conveyed to the funding agency before implementing the project.
- e). It is agreed that any research outcome or intellectual property right(s) arising out of the project shall be taken in accordance with the rules.
- f) Necessary steps will be taken for publication of the research outputs of the R & D project in accepted research journals of National and international repute.
- g) Wherever necessary, steps will be taken for tie up with industry for developing products and / or processes.
- h) I / We agree to accept the terms and conditions as enclosed <u>in Annexure-III</u>. The same is signed and enclosed.
- i) The Institute / University / Organization / Agency 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.
- j) The Institute / Organization / Agency assumes to undertake the financial and other management responsibilities of the project.

Signature of Principal Investigator

Signature of Co-Investigator

Signature of Project Coordinator (Applicable only for multi-institutional project)

Signature of Executive Authority of the Institute / University /Organization / Agency with seal &Date:

PART - VII: PROFORMA FOR BIODATA OF PROJECT COORDINATEOR / PRINCIPAL INVESTIGATOR / CO-INVESTIGATORS

Name:							
Design	ation:						
Departi	ment / Institute	/ Unive	rsity/Organi	zation			
Date of	Birth:		Sex (N	1/F)	S.	C/S.T	
Educat	ion (Class-X,)	KII, Grad	luation, Pos	t Graduation	and Profe	essional C	Career)
SI. No.	Board/Univers	sity	Degree Aw	arded	Year	Award / Prize / Certificate	
separa Publica Books: Resear Genera Patents Others	te sheets) Itions (Number Itions (Number Itions (Ref Itions (Ref	rs only): eports: fy):		 :he proposed		ork.	ecessary, attach Year of Publication
Project	(s) Submitted	/ being p	oursed / carr	ried out by Ir	vestigator		
SI. No.	Title of Project	Fundir Agend	9	uration To	No. of So Associate working the Proje	es under	Total Approved Cost of the Project (in Rs.)

Highlights of progress of the project (s) to date (in 200 words) for ongoing project only (if necessary attach separate sheets)

Date: Signature of Investigator

List of Subject Areas for the Consideration of the Project Proposal

- i. Agriculture and Allied Sectors
- ii. Engineering and design
- iii. Rural Development
- iv. Health
- v. Sanitation
- vi. Urban Development / Management [Municipal Solid Waste (MSW), Sewerage Management]
- vii. New materials and Nanotechnology
- viii. ICT (Hardware & Software)
- ix. Renewable Energy
- x. Environmental Management
- xi. Handloom and Handicraft
- xii. Judiciary
- xiii. e-Governance
- xiv. Community Policing
- xv. Government
- xvi. Management tool or model, etc.
- xvii. Water Resource Management

GUIDELINES ON QUALIFICATION, MODE OF SELECTION & EMOLUMENTS FOR RESEARCH PERSONNEL PARTICIPATING IN R & D PROJECT IN THE IDENTIFIED AREAS OF INNOVATION

1. Minimum Qualification

- (A) **Project Fellow**: Post-Graduate Degree in the identified areas of Innovation with minimum 55% marks.
- (B) **Technical Assistant/Field Assistant**: Graduate Degree in the identified areas of Innovation with minimum 55% marks. Only one Technical Assistant/ Field Assistant per project is allowed.

2. Mode of Selection

The selection of the Project Fellow / Technical Assistant / Field Assistant may be made by an open selection through a duly constituted Selection Committee by the Institute /Organization. The constitution of Selection Committee will be as under:

- i. Head of the Department / Head of the Institute /Organization will act as the Chairperson
- ii. One Subject Expert (External) (from the institute / organization other that the Institute / organization where the project is undertaken)
- iii. One nominee of the Vice-Chancellor / Head of Institution / Organization / Principal (in case of College) / Head master in case of school
- iv. Principal Investigator
- v. Co-Investigator (if any)

3. Emoluments

- (A) Project Fellow: Rs. 12,000/- (Per month fixed), for a period of two years and Rs. 14,000/- p.m. for the third/subsequent years.
- (B) Technical Assistant/Field Assistant: Rs. 5000/- (per month fixed)

TERMS AND CONDITIONS OF THE GRANT FOR INNOVATIVE R&D PROJECT (To be signed and enclosed with the proforma)

- 1. Approval of the Research proposal and grant released would be for the specific Project Mentioned in Part I to V of this proposal and be exclusively spent on the Project for which it had been sanctioned within the stipulated time. The Institute is not permitted to seek or utilize funds from any other organization (Government, Semi Government, Autonomous or Private) for his research project. Any unspent part of amount would be surrendered to the Govt. of Odisha through an account payee demand draft drawn in favour of the "Drawing and Disbursing Officer, P&C Department, Govt. of Odisha", and carry forward of funds of the next financial year for utilization for the same project may be considered only with the specific approval of the P&C Department.
- 2. For permanent /semi-permanent assets acquired solely or mainly out of the grant, an audited record in the form of a register in the prescribed proforma (enclosed at *Annexure-IV*) shall be maintained by the Institute / Organization.. The term "assets" means equipments. The grant will not be utilized for construction of any immoveable property, full facilities by way of accommodation, etc. by the Institute / Organization.
- 3. All the assets acquired from the grant will be the property of Government of Odisha and should not, without the prior sanction of the P&C Department, be disposed off or encumbered or utilized for purpose other than those for which has been sanctioned.
- 4. At the conclusion of the project, the Government of Odisha will be free to sell or otherwise dispose of assets which are the property of the Government. The Institute shall render to Govt. necessary facilities for arranging the sale / disposal of these assets Government may however, consider the request of host institution to retain the assets created under project for carrying out similar work for the promotion of innovation.
- 5. The Project Implementing Institute / PI / Co-PI in absence of PI, will furnish progress report of work on the project every year. The progress of the project will also be reviewed / monitored at least once in a year. P&C Department shall designate Scientists / Specialists to visit the Institute periodically for reviewing the progress of work and for suggesting such measures so as to ensure early realization of the objectives of the project. On completion of the project, five copies of consolidated report of the work done on the subject would be submitted to the P&C Department.
- 6. The Institute is required to send to P&C Department a list of assets referred to at SI. No. 2 above at the end of each financial year as well as at the time of seeking further installments of the grant.
- 7. The Principal Investigator / Institute / organization would furnish the audited Expenditure Statement in the prescribed format (*Annexure-VI*) and Utilization Certificate in the prescribed format (*Annexure-V*) to the P&C Department duly signed by the P.I. the Head of the Institute and the Head of the Finance wing, pertaining to the grant at the end of the

- each financial year as well as consolidated statement of expenditure at the end of the project.
- 8. A stamped money receipt be sent to the P&C Department on receipt of the Cheque / Demand draft towards each release.
- 9. The Accountant General, Odisha at his discretion shall have the right of access to the books and accounts of the Institute for the grant received from the Government.
- 10. The Institute would maintain separate audited account for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest thus earned should be reported to the P&C Department before release of final installments.
- 11. Sale proceeds, if any, as a result of the development of the project arising directly from funds granted by the P&C Department shall be reported to the Government of Odisha. The Government of Odisha may at its discretion allow a portion of such receipt to be retained by the Institute for its utilization for the project activities.
- 12. Investigators / Institutes wishing to publish papers, based on the research work done under P&C Department project, should acknowledge the financial support received from the P&C Department.
- 13. Investigators / Institutes shall follow the detailed instructions on technology transfer and Intellectual Property Rights (IPR) as given at *Annexure-VII*.
- 14. Investigators / Institutes /Organization may file patents with the help of PIC Cell of Science &Technology Department,Govt. of Odisha on priority basis. The format may be seen at Annexure-VIII.
- 15. The Government of Odisha in P&C Department will have the right to call for drawings, specifications and other data necessary to enable the transfer of know how to other parties and the Institute shall supply all the needed information at the request of the P&C Department.
- 16. The information required for commercializing the Project may be furnished to P&C Department as per the format enclosed at Annexure-IX.
- 17. The Institute / Organization may not entrust the implementation of the work for which the grant is being sanctioned to another Institution / Organization and divert the grant receipts as assistance to the later Institution. However, in such situations the express permission of P&C Department shall be obtained. In case the Grantee is not in a position to execute or complete the project, it may be required to refund the amount of grant received forthwith to the Government of Odisha in P&C Department.
- 18. The human resources that may be engaged for the project by the Institute are not to be treated as employees of the Government of Odisha and deployment of such human resource at the time of completion or termination of project will not be the concern / responsibility of the Government of Odisha. The organization may make reservations for Scheduled Castes, Scheduled Tribes etc. in the human resources to be engaged for the project in accordance with the instruction issued by Govt. of Odisha from time to time.

- 19. The P&C Department reserves the right to terminate the grant at any stage and also to recover the amounts already paid, if it is convinced that the grant has not been properly utilized for the work on the project.
- 20. The project will become operative with effect from the date of release of the first installment for the project.
- 21. If the Investigator to whom a grant for a project has been sanctioned leaves the Institution where the project is being implemented, he shall submit five copies of complete and detailed report of the work done by him of the project and shall refund the unspent balance, if any. before his / her relieve from the Institution / Organization.
- 22. The organization should maintain subsidiary accounts of the Government of Odisha grant and furnish it to the Audit Officer as and when the recurring and non-recurring expenditure exceeds the limits of Rs. 5.00 lakhs.

Signature of Project Coordinator (only for multi- Institutional project) Date:

Signature of Executive Authority (applicable **of Institute University** with seal

Signature of Principal Investigator Date:

Signature of Co-Investigator Date:

Signature of Co-Investigator Date:

Assets acquired wholly or substantially out of Government grants Register to be maintained by Grantee Institution

Nam	e of the Sanctioning Authority:	
1.	SI No	
2.	Name of Grantee Institution	
3.	No. & Date of sanction order	
4.	Amount of the sanctioned grant	
5.	Brief purpose of the grant	
6.	Whether any condition regarding the right of ownership of Govt. in the property or other assets acquired out of the grant was incorporated in	
7.	Particulars of assets actually credited or acquired	
8.	Value of the assets as on	
9.	Purpose for which utilized at present	
10.	Encumbered or not	
11.	Reasons if encumbered	
12.	Disposed off or not	
13.	Reasons and authority, if any, for disposal	
14.	Amount realized on disposal	
15.	Remarks	
(Pro	ject Investigator)	(Finance Officer)

(Head of the Institute)

UTILISATION CERTIFICATE

(for the financial year	r ending 31 st March	
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(Proje	ct Investigator) (Finance Officer)
MINUS	1. 2. 3. 4. 5.
	certified that I have satisfied myself that the conditions on which the grants- in-aid was sanctioned have been duly fulfilled / are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned. of checks exercised:
1.	Certified that the amount of Rs(Rupees) mentioned against col. 9 has been utilized on the project /scheme for the purpose for which it was sanctioned that the balance of Rs (Rupees) remaining unutilized at the end of the year has been surrendered to Govt. (Vide No dated) / will be adjusted towards the grants- in aid payable during the next year.
12	. Amount allowed to be carried forward to the next financial year vide letter No. & date
11	. Balance amount available at the end of the financial year :
10	. Unspent balance refunded, if any (please give details of cheque No. etc.)
9.	Actual expenditure (excluding commitment) incurred during the financial year (Statement of expenditure is enclosed) :
8.	Total amount that was available for expenditure during the financial year (Sl. Nos. 5, 6 and 7)
7.	Other receipt / interest earned if any, on the grant received from P&C Department :
6.	Amount received from P&C Department during the financial year (please give No and dates of sanction orders showing the Amount paid)
5.	Amount brought forward from the previous financial quoting P&C Department letter No. & date in which the authority to carry forward the said amount was given :
4.	P&C Department sanction order No & date of sanctioning the project.
3.	Principal Investigator:
	Name of the Organization :
1.	Title of the innovative project /scheme:

(To be Countersigned by the

P&C Department Officer- in – charge)

Statement of Expenditure referred to in para 9 of the Utilization Certificate

Showing grants received	from the P&C [Department a	and the	expenditure	incurred	during	the
period from 1 st April	to 31 st Marcl	h <u> </u>					

Item	Unspent balance carried forward from previous year	Grants Received form P&C Deptt. during the year	Other receipts/ interest earned if any, on the P&C Deptt. grants	Total Col. (2+3+4)	Expenditure (excluding) Commitment) Incurred during the year	Balance (5-6)	Remark
1	2	3	4	5	6	7	8
Non - Recurring (i) Equipments							
Recurring I .Human Resource							
ii. Consumables / Item of expenditure							
iii. Travel							
iv. Contingency							
Total :							

(Project Investigator) (Finance Officer)

(Head of the Institute)

Instruction for Technology and Intellectual property Rights

With a view to encourage the institution to file patent applications for their innovations and motivate them to transfer their technologies for commercialization and facilitate to reward their inventions, the following instructions are issued.

1. In these instructions:

- (a) "Institution" means any technical, scientific academic establishment where research work is carried out through funding by the Central / State Government.
- (b) "Intellectual Property Rights" include patents, registered designs, copyright and layout design of integrated circuits etc.
- (c) "Inventor" means an employee of the institution whose duties involve carrying out of scientific or technical research.
- **2. Scope:** These instructions apply to those institution receiving funds for research projects from the P&C Department .
- 3. Inventions by institution: Institution shall be encouraged to seek protection of Intellectual property Rights (IPR) to the results of research through R&D projects in the identified area of Innovation. While the patent may be taken in the name (s) of inventor(s), the institution /Organization shall ensure that the patent is assigned to it. The institution shall get its name entered in the Register of patents as the proprietor of the patent. The institution shall take necessary steps for commercial exploitation of the patent on exclusive/ non-exclusive basis. The institution is permitted to retain the benefits and earnings arising out of the IPR. However, the institution may determine the share of the inventor(s) shall be limited to 1/3rd of the actual earnings.
- 4. Inventions by institution and industrial concerns: IPR generated through joint research by institution(s) and industrial concern(s) through joint efforts can be owned Jointly by them as may be mutually agreed to by them through a written agreement. The Institution and industrial concern may transfer the technology to a third party for commercialization on exclusive basis. The third party, exclusively, licensed to market the innovation in India, must manufacture the product in India. The joint owners may determine the share of the inventor(s) and other persons from such actual earnings. Such share(s) shall not exceed 1/3rd of the actual earnings.
- 5. Patent Facilitating Fund: The institution shall set apart not less than 25 percent of such earning for crediting into a fund called Patent Facilitating Fund. This fund shall be

utilized by the institution for updating the innovation, for filing new patent applications, protecting their rights against infringement, for creating awareness and building competency on IPR and related issues.

- **6. Information:** The Government shall submit information relating to the details of the patents obtained about the benefits and earnings arising out of IPR and the turnover of the products periodically to the Department/ Ministry, which has provided funds.
- 1. Royalty-free license: The Government shall have a royalty-free license for the use of the intellectual property for the purpose of the Government of India.
- **2. Review :** These instructions shall be reviewed by the State Government after a period of five years.

Patent Facilitation Form Performa for filing of patents

Part-A

1.	Ti	tle of	Invention:
2.	N	ame (of the Inventor:
3.	A	ddres	ss:
	Te	eleph	one :Fax : E-mail :
4.	W	/hethe	er the invention is made out of P&C Department funded project (Yes/No)
	lf	,	Sanction letter No Date
		b)	Subject area:
	If No,	<u>a)</u>	When and Where the invention was developed
		b) S	ponsoring organization / agency

- 5. Description of the invention (indicating prior art and the highlights of the invention)
- 6. Present stage of development (including scale of operation /production, validation, quality etc)
- 7. Utility of your invention.
- 8. Present national and international knowledge on the utility of this invention.
- 9. Present status of patenting on this invention (patent and literature search)
- 10. Novelty, non-obviousness, inventive step and utility of this invention, with brief justification.
- 11. Country of filing patent and Justification for the same.
- 12. Have you approached any other institution for patenting this invention? (If yes . provide details and outcome).

Part-B

- 1. Objectives of your invention.
- 2. Detailed description of the invention (should be accompanied with drawing) (diagrams, if any, duly labeled and correlated with the description)
- 3. Existing state of art.
- 4. Drawbacks in the existing state of art.
- 5. How these drawbacks have been overcome by your invention
- 6. Name of the inventor(s) with contact phone number(s)

Part - C

Declaration: I / we certify and declare that all the information provided in parts A & B is true and correct to the best of my / our knowledge and belief.

Name of the Investigators	Signatures
1.	
2.	
3.	
Date:	Place:

Note: Ten copies of the documents with above details are to be submitted to P&C Department at the following address: Director-cum-Additional Secretary to Government, P & C Department, Odisha Secretariat, Bhubaneswar-751001

The applications are to be submitted to the following address.

Joint Director (Innovation),

Planning and Convergence Department,

Government of Odisha,

Odisha State Secretariat,

Bhubaneswar - 751001

Odisha

Contact No - +91 674 2322626

Email ID - jd3-pc.od@nic.in

Information required for commercializing

- 1. Name Title of the Product/ Process developed:
 - i. Product (s):
 - ii. Process (es):
- 2. Name & address of the investigator/innovator (s) (with telephone No./ Fax No./ E-mail No. etc.)
- 3. Brief description of process / product indicating specific use (indicate with flow diagram / circuit diagram etc. wherever applicable) indicating the salient features of the invention.
- 4. Background information on the developments in the field, viz technology alternatives in India & abroad (literature survey in brief indicating India and foreign groups active in the area).
- 5. Level of production technology (i.e. lab level, pilot plant level etc.) and validation date, if any.
- 6. Specification of the products whenever applicable.
- 7. Main Raw Materials, chemicals and components used in production product/Development of process, and sourcing of the relevant equipment/ machinery from India /abroad.
- 8. What contribution in technology / economic benefits the product / process is expected to make.
- 9. Any further development work required on the product/process? If so, briefly describe.
- 10. Market information on the existing products/processes relevant to the invention.
- 11. Advantage of the product/ process in terms of technical superiority and cost effective.
- 12. Work done on prototype fabrication:
 - (a) Has any prototype been prepared? If so, the number of prototypes already prepared.
 - (b) Has the prototype been operated successfully?
 - (c) Have you a set of drawings for making prototypes?
- 13. Is the product / process an import substitute or is developed for the first time?
- 14. Safety & pollution aspects of the product / process.
- 15. Name and addresses of entrepreneurs who may be willing to acquire this technology
- 16. Have you contacted any entrepreneurs? If so, Please provide the details.
- 17. Terms & conditions for technology transfer. Please indicate the extent of sum and royalties that your institute is contemplating.
- 18. Any other information (relevant to technology transfer) may be provided.

I / We certify and declare that the information provided is true and correct to the b	est of
my / our knowledge, belief and abilities.	

Date :	
	Signature of the inventor (s)
Place :	