

DST/WOS-B/HN-19/2021- Kanchan (G)
 Government of India
 Ministry of Science & Technology
 Department of Science & Technology
 (KIRAN Division)

Technology Bhavan,
 New Delhi-110016
 Dated: 24.09.2021

ORDER

Sub:-Financial assistance for the project titled "NIR-Sensitive GD 203 based materials as triggers for photoreaction of photosensitive materials for biomedical application"

PI: Dr. Kanchan Upadhyay, Bhilai Institute of Technology, Durg - 491001.

Sanction of the President is hereby accorded to the approval of the above mentioned project at a total cost of Rs.33,46,800/- (Rupees Thirty Three Lac Forty Six Thousand Eight Hundred Only) for a duration of three years. The detailed breakup of the grant for General & Capital Components is given below:-

General Components- Rs.33,46,800/-
 Capital Assets- Rs. Nil/-
 Total- Rs.33,46,800/-

S. No.	Proposed Budget Head	1 st year	2 nd year	3 rd year	Total
Non-Recurring (Capital Assets)					
1.	Equipment	-	-	-	Nil/-
A	TOTAL	-	-	-	Nil/-
Recurring (General)					
Recurring-I (Manpower)					
	Fellowship for Ph.D @ Rs.55,000/PM +HRA @ 16% for 36 months	7,65,600/-	7,65,600/-	7,65,600/-	22,96,800/-
Recurring-II (Consumables & Travel)					
	-Consumables:Rs.4,50,000/- Raw materials, Growing cell lines, testing anticancer ability, chemicals etc. Other cost: Rs.3,00,000/- (for out sourcing work and characterization) -Travel: Rs.75,000/- (Capping for 3 years)	2,75,000/-	2,75,000/-	2,75,000/-	8,25,000/-
Recurring-III (Contingency)					
	Miscellaneous Expenses	25,000/-	25,000/-	25,000/-	75,000/-
Recurring-IV (Overhead Charges)					
	Overhead Charges	50,000/-	50,000/-	50,000/-	1,50,000/-
B	Total	11,15,600/-	11,15,600/-	11,15,600/-	33,46,800/-
Grand Total (A+B)		11,15,600/-	11,15,600/-	11,15,600/-	33,46,800/-

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2. The sanction of the President is also accorded to the release of Rs. 11,15,600/- (Rupees Eleven Lac Fifteen Thousand Six Hundred Only) to the **Finance Officer, Bhilai Institute of Technology, Durg - 491001** being the first installment of grant for implementation of the above mentioned project.
3. While providing operational flexibility among various sub head under head **Recurring-II**, it should be ensured that not more than Rs.75,000/- should be spent for Travel.
4. This sanction is subject to the condition that the grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned/ accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.
5. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/ final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.
6. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE&UC has to be furnished for the released Capital head grant.
7. The grant-in-aid being released is subject to the condition that
- (a) As per Rule 149 of GFR, 2017, the Goods (Consumables/equipment) available in GeM portal are to be procured mandatorily online through GeM only.
- (b) While submitting Utilization Certificate & Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.
- (C) *"GI is advised to start using EAT module and next release will be made only after mapping and following EAT modules by the Grantee Institution".*
8. "The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing account. For Grants released during F.Y. 2019-20 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. www.bharatkosh.gov.in), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure / Utilization Certificate for considering subsequent release of Grant/ Closure of Project accounts."

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9. (a). DST reserves sole rights on the assets out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.

(b). DST reserves rights to close the project activity any time based on the review of progress of the project.

(c). A prior intimation to DST by grantee is must before leaving the country for attending conference/availing any short term fellowship abroad during the project tenure.

10. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C & AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.

11. Due acknowledgment of technical support / financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publications / media releases as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.

12. Failure to comply with the terms and condition of the Bond (if applicable) will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.

13. The targeted deliverables along with the timelines as proposed in the project are annexed herewith. The subsequent releases will be made on the basis of "Targets Vs Achievement".

14. The expenditure involved is dubitable to Demand No.88, Department of Science & Technology for the year 2021-22:

3425	Other Scientific Research (Major Head)
60	Others (Sub-Major Head)
60.200	Assistance to other Scientific Bodies (Minor Head)
68	Science and Technology Institutional and Human Capacity Building (Sub Head)
01	Disha Programme for Women in Science
68.01.31	Grants-in-aid General for the year 2021-22 (Voted)
	(Previous: Disha Programme for Women in Science 3425.60.200.55.01.31)

15. The amount of Rs.11,15,600/- (Rupees Eleven Lac Fifteen Thousand Six Hundred Only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to the Finance Officer, Bhilai Institute of technology, Durg - 491001. The bank details for electronic transfer of funds through RTGS are given below:-

Institution Account Name	Bhilai Institute of Technology, Durg
Saving Bank Account Number	32471126372
Name of Bank	State Bank of India
Branch Name	Alka Departmental Store Sector - 10 Bhilai
RTGS/IFSC Code	SBIN0006942
MICR Code	490002007

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16. As per Rule 234 of GFR 2017, this sanction has been entered at S. No. 353 in the register of grants maintained in the Division for the scheme (KIRAN: WOS-B).

17. This issues with the concurrence of IFD Vide their Concurrence Dy. No. C/2181/IFD 2021.

22 Dated: 23.09.2021.

Pawan Kumar
(Pawan Kumar)^{24/09}
Scientist-'C'
011-26590290

To
The Pay and Accounts Officer,
Department of Science & Technology,
New Delhi.

Copy for information and necessary action to:-

- ✓ 1. Cash Section (3 copies) for making the payment to the granteE.
2. Account Section.
3. Director of Audit, (Scientific Deptt), AGCR Building, New Delhi - 110 002.
4. Sanction Folder
5. Head (KIRAN)
6. Dr. Kanchan Upadhyay, Bhilai Institute of Technology, Durg - 491001.
7. Dr. Raunak Kumar Tamrakar (Mentor), Bhilai Institute of Technology, Durg - 491001.
8. The Finance Officer, Bhilai Institute of Technology, Durg - 491001.

Pawan Kumar
(Pawan Kumar)^{24/09/2021}
Scientist-'C'
011-26590290



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No.CSVTU/TEQIP-III/2020/CRP-IV/ 3759

Bhilai, Date: 07/01/2020

To,

Principals/Directors,

All Affiliated Engineering Institutes of CSVTU, Bhilai

Subject: List of Approved Research Projects with sanctioned amount under "Collaborative Research Project " Phase-IV with guidelines and Forms under TEQIP-III.

Dear Sir/Madam,

A list of approved Research Projects with sanctioned amount and Title of the project of "Collaborative Research Project" Phase-IV with detailed guidelines and Forms under TEQIP-III is hereby attached with list of Principal Investigator's (PI) and Co-PI's from various affiliated institutes of CSVTU, Bhilai.

All respective PI's and Co-PI's are informed to follow the guidelines strictly and utilize the funds accordingly. The detail guidelines will be available on the CSVTU institute website for smooth functioning of the research work.

Enclosures:

1. List of projects with Title, PI, Co-PI Name & affiliation with sanctioned amount.
2. Guidelines for under "Collaborative Research Project " & Forms under "Collaborative Research Project "

Thasaku
07/01/2020
TEQIP Coordinator
CSVTU Bhilai

**List of Approved Colloborative Research Project Summary
with Santioned Amount for Phase-IV under TEQIP-III**

CRP Sanction No.	Name of PI and Affiliation	Title of Research Project	Name of Co-PI and Affiliation	Total Approved Grant(INR)
PHASE-IV				
CSVТУ/CRP/T EQIP-III/100, Date 28/12/2019	Mr.Keshav Kori, CSIT Durg	Online questionbank gathering system to gather questions according to the subjects for the university students	Mr.V.P.Singh, CEC Durg Mr.Dheeraj Kumar Ghaghre, CSIT Durg	300000/-
CSVТУ/CRP/T EQIP-III/101, Date 28/12/2019	Mr.Dheeraj Kumar Ghaghre, CSIT Durg	Cost effective exam paper generation system & distribution across all exam centres digitally through artificial intelligence with maintain high security & confidentiality	Mr.V.P.Singh, CEC Durg Mr.Keshav Kori, CSIT Durg	300000/-
CSVТУ/CRP/T EQIP-III/102, Date 28/12/2019	Mrs.Vinni Sharma, BIT Durg	Use of Binaural Auditory Beats for reducing attention Deficit Disorder in Autistic children & analysing the effectiveness	Mr.Dewanand Bhonsle, SSTC -SSGI Bhilai	200000/-

Thasah
07/01/2020
TEQIP-III Coordinator
CSVТУ, Bhilai

**TEQIP-III, Coordinator
CSVТУ Bhilai (C.G.)**

// स्वीकृति आदेश //

नवा रायपुर अटल नगर, दिनांक 25/03/2022
क्रमांक 708/F2(SS)-04/रायोआ/2020 : छत्तीसगढ़ शासन, वित्त निर्देश 30/2016 द्वारा प्रत्यायोजित अधिकारों का उपयोग करते हुये एतद् द्वारा Dr. Ashok Chandra, Associate Professor, BIT Durg को उनके द्वारा नवाचार प्रस्ताव- "Introduction of smart warehouses for post harvest problems of chhattisgarh farmers." हेतु राशि रु. 5.00 लाख (पांच लाख रुपये मात्र) को दो किस्तों में प्रदाय की स्वीकृति प्रदान की जाती है।

2/ उक्त स्वीकृति "विशेषज्ञ सह मूल्यांकन समिति" की बैठक दिनांक 15/03/2022 में प्रदत्त अनुमोदन के आधार पर जारी की जा रही है।

3/ निम्नानुसार मदवार राशि रु. 5.00 लाख प्रदाय की स्वीकृति प्रदाय की जाती है -

Cost Estimate for Innovation Project :

S. No.	Item	Rate	Details	Estimated cost (Rs.) as on date
1.	Mud house	Rs. 350/-sqm	Total area one house 4x4=16 sqm ² Total cost=16x350x12=5600x12=67200/-	67,200
2.	Humidity and temperature equipment	2,000/-	Total house=12 12x2000=24000/-	24,000
3.	Field work cost	75,000		75,000
4.	RCC Boundary	100/0.92 sqm	Total area of boundary wall=174 m ² Total cost=189130/-	1,89,130
5.	Testing and other cost	50,000/-		50,000
6.	Cost of App	30,000/-		30,000
7.	Expert Honorarium	40,000/-		40,000
8.	Miscellaneous exp.	24,670/-		24,670
Total:				5,00,000

उपरोक्तानुसार कार्य हेतु प्रथम किस्त के रूप में लागत का 50 प्रतिशत यथा रु. 2.50 लाख प्रथम किस्त के रूप में प्रदाय की स्वीकृति प्रदान की जाती है। उक्त कार्य हेतु 08 माह की अवधि निर्धारित की गई है। उक्त अवधि की गणना प्रथम किस्त जारी दिनांक से की जावेगी।

4/ उपरोक्तानुसार व्यय मांग संख्या-31 योजना, आर्थिक एवं सांख्यिकी विभाग से संबंधित व्यय योजना क्रमांक 6474-नवाचारों का बौद्धिक संपदा अधिकार के अंतर्गत #10 व्यवसायिक सेवाओं हेतु अदायगियां, उपशीर्ष 003- परामर्श सेवाएं मद से विकलनीय होगी।

5/ राज्य योजना आयोग द्वारा योजना अंतर्गत ज्ञापन क्रमांक 1674 दिनांक 08/12/2020 द्वारा जारी "नवाचारों के अध्ययन व प्रोत्साहन हेतु दिशा-निर्देश" तथा MoU अंतर्गत निहित समस्त नियम एवं शर्तों का पूर्ण रूप से पालन करना अनिवार्य होगा।

6/ मुख्य नियम व शर्तें -

6.1/ स्वीकृत राशि में से प्रथम किस्त के रूप में प्रस्ताव की 50 प्रतिशत राशि प्रदाय की जावेगी। उक्त राशि संस्था प्रमुख को जारी की जावेगी। जिसे उनके द्वारा Principal Investigator को जारी किया जा सकेगा।

6.2/ प्रथम अंतरिम रिपोर्ट, व्यय का विवरण, निर्धारित प्रारूप में उपयोगिता प्रमाण पत्र तथा कार्य की प्रगति संतोषजनक होने संबंधी प्रमाण पत्र संस्था प्रमुख द्वारा प्रस्तुत करने के बाद द्वितीय एवं अंतिम किस्त की राशि जारी की जावेगी।

- 6.3/ नवाचार की ड्राफ्ट रिपोर्ट तथा क्रियाशील प्रोटोटाइप की जानकारी को "विशेषज्ञ सह मूल्यांकन समिति" के समक्ष प्रस्तुत करना होगा। समिति द्वारा दिये गये सुझाव अनुरूप अंतिम रिपोर्ट मय संक्षेपिका तथा क्रियाशील प्रोटोटाइप के संबंध में समिति द्वारा दिये गये सुझाव का समावेश करते हुये हार्ड कॉपी तथा सॉफ्ट कॉपी राज्य योजना आयोग को संस्था प्रमुख द्वारा प्रस्तुत किया जावेगा।
- 6.4/ फाईनल रिपोर्ट के साथ सामग्रीवार व्यय का विस्तृत विवरण (मच बिल/वाउचर) तथा उपयोगित राशि का उपयोगिता प्रमाण पत्र निर्धारित प्रारूप में दिया जाना होगा।
- 6.5/ अनुपयोगित राशि को राज्य योजना आयोग को NEFT/RTGS/Demand Draft (सदस्य सचिव, राज्य योजना आयोग के नाम से) के माध्यम से वापिस किया जाना होगा।
- 6.6/ नवाचार हेतु प्रदाय राशि से क्रय की गई अनावर्ती स्वरूप की सामग्रियों को संबंधित शासकीय संस्था/विभाग को जमा करना होगा जिसकी स्टॉक एंट्री संस्था/विभाग द्वारा की जाकर उसकी पावती फाईनल रिपोर्ट के साथ प्रदाय करनी होगी। गैर सरकारी संस्था द्वारा अनावर्ती स्वरूप की सामग्री को राज्य योजना आयोग के भण्डार शाखा में फाईनल रिपोर्ट प्रदाय के समय जमा करना होगा।
- 6.7/ सामग्री का क्रय भण्डार क्रय नियमों का पालन करते हुये करना होगा।
- 6.8/ प्रदत्त स्वीकृति अंतर्गत जारी राशि का उपयोग स्वीकृत परियोजना अनुसार घटकवार निर्धारित सीमा में सुनिश्चित किया जाना होगा।
- 6.9/ निर्धारित उद्देश्य एवं कार्य क्षेत्र अनुसार पूर्ण कार्य संपादन सुनिश्चित न होने पर प्रदायित राशि को वापिस किया जाना होगा।
- 6.10/ नवाचार संबंध में हुई प्रगति व अन्य जानकारी को राज्य योजना आयोग द्वारा चाहे जाने पर उपलब्ध करवाया जाना आवश्यक होगा।


(अनुप कुमार श्रीवास्तव)

सदस्य सचिव

राज्य योजना आयोग, छत्तीसगढ़

पृ. क्रमांक: 709./F2(SS)-04/रायोजा/अ.प्र./2022 नवा रायपुर अटल नगर दिनांक 25/03/2022
प्रतिलिपि :-

1. निज सचिव, माननीय उपाध्यक्ष, राज्य योजना आयोग, छत्तीसगढ़।
2. निज सहायक, माननीय सदस्य, राज्य योजना आयोग, छत्तीसगढ़।
3. सचिव, छ.ग. शासन, वित्त विभाग, मंत्रालय महानदी भवन, नवा रायपुर अटल नगर।
4. अवर सचिव, छ.ग. शासन, योजना, आर्थिक एवं सांख्यिकी विभाग, मंत्रालय महानदी भवन, नवा रायपुर अटल नगर।
5. Principal, BIT Durg को सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
6. Dr. Ashok Chandra, Associate Professor, BIT Durg को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।
7. संयुक्त संचालक, वित्त, राज्य योजना आयोग को। संबंधित अध्ययनकर्ता से प्राप्त बैंक संबंधी विवरण अनुसार किस्त प्रदाय की कार्यवाही सुनिश्चित करें, लेखा अद्यतन रखें तथा राशि प्राप्ति दिनांक व प्रकार से शोध शाखा, राज्य योजना आयोग को अवगत करावे।


सदस्य सचिव

राज्य योजना आयोग, छत्तीसगढ़

MEMORANDUM OF UNDERSTANDING

BETWEEN

Chhattisgarh State Planning Commission, GoCG (SPC)

and

Bhilai Institute of Technology, Durg (C.G.)

This Memorandum of Understanding (MoU) is entered into as of 24 March 2022, 2022, by and between the Chhattisgarh State Planning Commission, Government of Chhattisgarh hereinafter referred as SPC for short and Bhilai Institute of Technology, Durg (C.G.) (Institute's Name) hereinafter referred as Institute as per provisions in para 8 of the guidelines (for promotion of Innovation) issued vide SPC order no. 1674 Date 08-12-2020.

The partners have decided to enter into this MoU because they:

RECOGNIZE the mutual interest in the fields of innovation and dissemination of knowledge

RECOGNIZE the importance of SPC's role in promoting innovation and its contribution to development of the State

RECOGNIZE the importance of the Bhilai Institute of Technology, Durg (C.G.) (Institute's Name) within its field of expertise

[Handwritten Signature]



This MoU will enable the parties to:

FOSTER collaboration in promoting innovation and facilitating the innovator.

HARNESSING the Innovative capacity of the Institute and advance research and innovation

The parties hereby agree to work in collaboration according to the terms and conditions set out in the articles following hereunder.

ARTICLE I: BACKGROUND

This MoU will be executed as part of Collaboration, infrastructure sharing for promoting innovation in the State and to develop innovation eco-system in the State.

ARTICLE II: SCOPE OF THE COLLABORATION

The general purpose of this MoU is to extend the infrastructural facilities including laboratories of the Bhilai Institute of Technology, Bhubaneswar Institute and facilitate the innovators for prototype development and successful completion of his/her Innovation project and may include the following general terms and conditions;

- i. Both parties agree that the grant-in-Aid provided by the State Planning Commission will be regulated in accordance with the provisions contained in the components of the proposal submitted and approved by SPC and guidelines issued by SPC in this regard.
- ii. Consultancy and research activities at laboratories available in the institute would be extended to the innovator and shall maintain confidentiality of the research work carried out at the Institute for the project funded by the SPC.
- iii. Exchange of scholarly Information including indices to theses/dissertation, books and magazines on relevant subjects (subject to copyright rules).



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- iv. Extend invitations for attending scholarly and technical meetings, National and International Conferences, held by the respective parties.
- v. The Institute will provide necessary infrastructure / space for working in furtherance of the innovation to the Innovator.
- vi. Purchase of hardware/software/equipment etc. shall be made as per the prevailing purchase rules of the state government and procedures followed by the institute.
- vii. While working on the proposal, no liability shall arise for the SPC or State Government.
- viii. The financial support by SPC shall primarily cover expenses as per the approved proposal.
- ix. The account for actual expenditure incurred under the proposal shall be maintained by the Institute and same shall be forwarded to SPC on a regular quarterly basis from the date of receipt of grant.
- x. Works related to innovation shall start within a period of one months from the date of actual release of first installment of innovation Grant.
- xi. The grant shall be released in installments depending on the progress of the work in furtherance of innovation. The balance amount shall be released after the submission of the (i) utilization Certificate (ii) Statement of Account (iii) copy of original bills/vouchers and progress made in terms of envisaged deliverables by the institute. The UC and SE shall be signed and stamped by competent authority of the institute.
- xii. The financial assistance/grant shall only be utilized for project work.
- xiii. Unspent portion of the assistance shall be refunded to the Office of the SPC. Separate accounts of each Innovation grant shall be maintained and the same be subjected to test check by the Office of the SPC

2



- xiv. In the event of violation of any of the terms and conditions of this MoU, the organization/institute will have to refund the entire amount sanctioned, to the Office of the SPC on demand or such part thereof along with penal interest as applicable.
- xv. Assets acquired out of the funds released shall not be disposed off without obtaining the prior approval of the Office of the SPC.
- xvi. The institute shall adhere to the budget plan.
- xvii. The progress of the innovation shall be monitored by the Office of the SPC and the Institute.
- xviii. All Intellectual Property generated under the SPC funded project would be sole property of the SPC and any disclosure or licensing of the same shall be done after taking No Objection Certificate from the SPC.

ARTICLE III: THE AGREEMENT

2.1 At State Planning Commission (SPC), this MoU shall be administered by, *Member Secretary*, SPC or his / her authorized representative. At *Bhilai Institute of Technology, Durg C.G.* (Institute Name) this MoU shall be administered by *Dr. M.R. Gupta (Principal)* or his / her authorized representative.

2.2 The parties may enter into specific written agreements under authority of this MoU to clarify and define the nature, extent and terms of operation for the proposed collaborations, including availing facilities of laboratory and intellectual property ownership issues. However, it is made clear that this MoU does not authorize the institute to make any financial commitment, unless it is supported by specific approval of the competent authority of SPC.

ARTICLE IV: GENERAL TERMS



2


Confidential

This MoU is not intended to, and does not create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by either party, its officers, employees, or agents against the other party, its officers, employees, or agents.

Nothing in this MoU obligates either party to commit or transfer any funds, assets, or other resources in support of projects or activities between the parties or between one part and a third party unless expressly agreed by independent covenant or order/ agreement.

3.3 The activities of this MoU must be carried out in accordance with appropriate laws and regulations existing in India.

3.4 In all the disputes under this MoU, shall be resolved through the process of arbitration and the Vice Chairman, State Planning Commission (SPC) shall be the sole arbitrator, whose decision shall be final and binding on both the parties.

SPC		Dr. M.K. Gupta (Principal)
Signed By		Signed By (.....)
Signature		Signature 
Date ____/____/2022		Date 24 / 03 / 2022

Official Stamp



Official Stamp

Dr. M.K. Gupta
Principal
Bhilai Institute of Technology
(Beth Balkrishnan Memorial)
Bhilai House, Durg - 491001
Chhattisgarh, INDIA



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

Bhilai, Date: 19/04/2022

No. CSVTU/TEQIP-III/2022/ 6834

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/54, Dated 05/09/2019, the Collaborative Research Project (CRP) titled "Effect of application of epoxy coating on structural steel connection" was approved for grant-in-aid of INR 2,00,000/- subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Dr. Mohan Kumar Gupta
Name of the Institute : BIT durg

Name of Co-Principal Investigator : Ms. Smita Gupta
Name of the Institute : UTD Bhilai
Name of Co-Principal Investigator : Ms. Shraddha Sharma
Name of the Institute : BIT Durg

Thasah
Coordinator TEQIP-III
CSVTU, Bhilai

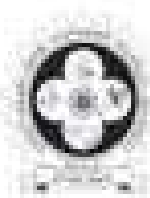


CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/41 Date 17/08/2019	Assessment of environmental footprint of building from life cycle perspective in context of Indian building sector	Ms.Suman Vaidya UTD-CSTU Bhilai	Mr.Manish Sakshalecha SSIPMT Raipur Mrid. Pravej Alam SSIPMT Raipur	2,50,000
CSVТУ/CRP/TEQIP-III/42 Date 17/08/2019	UV resistant solar dryer for food processing	Dr. Anurag Verma CSIT Durg	Dr. P.K. Gupta, UTD-CSTU Bhilai Dr. Sanjay Agrawal IGNOU New Delhi	1,00,000
CSVТУ/CRP/TEQIP-III/43 Date 17/08/2019	Development of control strategy for human arm motion imitation system for industrial robot programming	Dr.Abhishhek Jha, UTD-CSTU Bhilai	Mr.Sanjay G. Sakheewade RCET Bhilai, Dr.Shital S. Chidharwar VNIT Nagpur	1,00,000

PHASE-III

CSVТУ/CRP/TEQIP-III/44 Date 05/09/2019	Design and implementation of a micro grid energy management system	Dr.Shirmpy Rathan Goyal SSTC Bhilai	Dr. Shaabneeti Ray BIT Durg Dr. Mahesh Singh SSTC Bhilai	180000
CSVТУ/CRP/TEQIP-III/45 Date 05/09/2019	Development of a low cost solar dryer for forest produce in bastar region	Mr. Manish Kumar BIT DURG	Mr. H.R. Chandrakar CSIT Durg Mr. Vikram Tapas NMOX, DAV Polytechnic Bastar	150000
CSVТУ/CRP/TEQIP-III/46 Date 05/09/2019	Design of hybrid dielectric resonator antenna	Dr. Dipali soren CCET Bhilai	Mr. Nilesh Tamboli JCET Bilaspur	210000
CSVТУ/CRP/TEQIP-III/47 Date 05/09/2019	Design of Rain water harvesting system for different site condition	Dr. S.K. Jaiswal BIT OARG	Mr.Santosh Kumar, SSGI Bhilai Mr.Gaurav Saxena, BIT Durg	180000
CSVТУ/CRP/TEQIP-III/48 Date 05/09/2019	Assessment of critical ground water potential zones of kharran basin using integrated approach of geospatial techniques	Vaibhav Prakash Rao Deshpande BIT Raipur	Manish Kumar Sinha UTD-CSTU Bhilai	210000

TEQIP-III, Coordinator
CSTU Bhilai (C.G.)



No. CSVTU/TEQIP-III/2019/CRP-Final/3212

Bhilai, Date: 03/10/2019

**List of Approved Collaborative Research Project Summary
with Sanctioned Amount (Phase-I, II & III) under TEQIP-III**

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
PHASE-I				
CSVTU/CRP/TEQIP-III/01 Date 06/06/2019	"The use of ontologies for effective knowledge modeling of distributed databases and information retrieval"	Mr. Sunan Kumar Swamkar CSIT Durg	Dr. K.P. Supreethi JNTU Hyderabad	3,00,000
CSVTU/CRP/TEQIP-III/02 Date 06/06/2019	"Investigation of the effect of swirl pipe on pressure drop in slurry flow in pipelines"	Mr. R.K. Rathore CSIT Durg	Dr. Abhishek Jha UTD CSVTU Bhilai	3,00,000
CSVTU/CRP/TEQIP-III/03 Date 06/06/2019	"Functionalized 2D materials"	Dr. Mohan Lal Varma SSGI Bhilai	Dr. B. Keshav Rao SSGI Bhilai Dr. Anil Kumar Choobe CCET Bhilai	2,50,000
CSVTU/CRP/TEQIP-III/04 Date 06/06/2019	"Assessment of Mine tailing Treatment Efficiency of microbes grown in anaerobic, aerobic and anoxic environment"	Dr. Biju Prava Sahariah UTD CSVTU Bhilai	Dr. Tanusree Chatterjee BIT Raipur	2,95,000
CSVTU/CRP/TEQIP-III/05 Date 06/06/2019	"Green Synthesis of chitosan based antimicrobial bio-nanocomposite film using MMT as strength enhancer and AgNPs as nanofiller for food packaging applications"	Dr. Minisha Agrawal RCET Bhilai	Mr. Thaneswar Sahu, UTD-CSVTU, Bhilai Dr. Dharam Pal NIT Raipur	1,00,000
CSVTU/CRP/TEQIP-III/06 Date 06/06/2019	"Fabrication and Analysis of Hybrid composite Reinforced with Fiber and particulate Bulk"	Mr. Ajay Kumar Verma SSGI Bhilai	Dr. Manoj Verma UTD CSVTU Bhilai	2,80,000
CSVTU/CRP/TEQIP-III/07 Date 06/06/2019	"Conditioning Monitoring of Power Transformer using Dissolved Gas"	Mr. Rahul Pandey SSGI Bhilai	Dr. Narain Goel SSGI Bhilai Dr. S.P. Shukla BIT Durg	2,14,000


**TEQIP-III, Coordinator
CSVTU Bhilai (C.G.)**



CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/24 Date: 17/08/2019	Determination of paraquat pesticides in vegetable and water sample using silver nan particles at raipur district	Dr. Shilpa Sharma RCET Bhilai	Dr. Rakesh Singh Dhundi SSIPMT Raipur	1,50,000
CSVТУ/CRP/TEQIP-III/25 Date: 17/08/2019	Key barriers in the growth of engineering education in chhattisgarh state: a fuzzy kano and TISM integrated approach	Mr. Navon Jain SSIPMT, Raipur	Dr. Bhagwati Charan Patel SSGI Bhilai	1,00,000
CSVТУ/CRP/TEQIP-III/26 Date: 17/08/2019	Effect of magnetic field on ion transport and dielectric properties of solid nano-composite polymer electrolytes	Dr. Homendra Das Sahu SSGI Bhilai	Dr. Arti Verma RCET Bhilai Dr. Mohan L. Verma SSGI Bhilai	2,00,000
CSVТУ/CRP/TEQIP-III/27 Date: 17/08/2019	Smart irrigation system using IoT	Mr. Prabhas Kumar Gupta CSIT Durg	Dr. Nagendra Tripathi BIT Durg	1,00,000
CSVТУ/CRP/TEQIP-III/28 Date: 17/08/2019	Synthesis and nanometer characterization of CaZrO_3 thin film	Dr. Ritu Shrivastava SSEC Bhilai	Dr. Shubham Chandra Shrivastava RCET Bhilai	2,00,000
CSVТУ/CRP/TEQIP-III/29 Date: 17/08/2019	Investigation and optimization of process parameter of wire EDM on nickel based superalloy.	Dr. Abhishek Ganguly SSTC-SSGI Bhilai	Dr. Lokesh singh RSR Bhilai Mr. Kanak Dewangan SSEC, Bhilai	2,80,000
CSVТУ/CRP/TEQIP-III/30 Date: 17/08/2019	Development of functionally graded material and multi material tools for machining process	Dr. Lokesh singh RSR Bhilai	Dr. Abhishek Ganguly SSTC-SSGI Bhilai	2,80,000
CSVТУ/CRP/TEQIP-III/31 Date: 17/08/2019	Studies of luminescence properties of rare earth doped and co-doped phosphors	Dr. Manmeet Kaur Bhuie SSTC-SSGI Bhilai	Mr. Prashant Kumar Sahu BIT Durg Dr. Mimi Akash Patra SSTC-SSGI Bhilai	2,00,000
CSVТУ/CRP/TEQIP-III/32 Date: 17/08/2019	Design testing and evaluation of a novel transplanting mechanism in manual rice transplanter for improved performance	Mr. Vikky Kumar SSTC Bhilai	Dr. Manoj Verma UTD-CSVТУ, Bhilai Deepak Mahapatra BRSM Raipur	2,86,000

TEQIP-III, Coordinator
CSVТУ Bhilai (C.G.)



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVTU/CRP/TEQIP-III/48 Date 05/09/2019	To facilitated the sales of rural products and arts of Chhattisgarh through e-commerce using data mining, data science and soft computing techniques.	Aditya Tiwari BIT Raipur	Dr. Jyothi Billa BIT DURG	120000
CSVTU/CRP/TEQIP-III/50 Date 05/09/2019	Development of efficient biosorption technology for removing cadmium from industrial effluents.	Dr. Sangrati Sahu BIT Raipur	Dr. Madharina pandey BIT Durg	100000
CSVTU/CRP/TEQIP-III/51 Date 05/09/2019	Effect on properties on geo-polymer concrete with particle replacement of fine aggregate by crusher stone	Deepnala pandey BIT Raipur	Mr. Tushar singh Rathour SSIPMT Raipur Dr. R.k. Mishra BIT Raipur	180000
CSVTU/CRP/TEQIP-III/52 Date 05/09/2019	Advances of sustainable tourism in Chhattisgarh	Dr. Soumen sarkar SSTC Bhilai	Birwajet Bhattacharjee SSTC Bhilai Arvishok Chakraborty BIT Durg	100000
CSVTU/CRP/TEQIP-III/53 Date 05/09/2019	Development of single phase low cost power analyser	Dr. Mihirlesh singh KITE Raipur	Ritesh Dwan RIT RAIPUR Dr. Sanj T. Chacko Polytechnic durg	125000
CSVTU/CRP/TEQIP-III/54 Date 05/09/2019	Effect of application of epoxy coating on structural steel connection	Dr. Mohan Kumar Gupta BIT durg	Ms. Smriti Gupta UTD Bhilai Ms. Shradha sharma BIT Durg	200000
CSVTU/CRP/TEQIP-III/55 Date 05/09/2019	Line start permanent magnet motors for future electric vehicle	Dr. Ankit Dwivedi CEC bilaspur	Pritha Gupta REC Durg	150000
CSVTU/CRP/TEQIP-III/56 Date 05/09/2019	Determination of organophosphorous pesticides in vegetable and water sample at ulhaspur area	Dr. Rakesh Sing Omudhel SSIPMT Raipur	Dr. Shilpa Sharma RCET Raipur	150000
CSVTU/CRP/TEQIP-III/57 Date 05/09/2019	Design and fabrication of low cost electric two wheeler	Mr Anil Chakrawarti SSIPMT Raipur	Manish Kumar Mishra BIT Raipur	250000
CSVTU/CRP/TEQIP-III/58 Date 05/09/2019	Design and Development of a cost effective phase measurement unit for real time monitoring of smart power system	Dr. Shashwati Ray BIT durg	Dr. Stampy Rallian Goyal SSTC bhilai Mr. Gaurav Shankar BIT Durg	200000



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVTU/CRP/TEQIP-III/48 Date 05/09/2019	To facilitated the sales of rural products and arts of Chhattisgarh through e-commerce using data mining, data science and soft computing techniques.	Aditya Tiwari BIT Raipur	Dr. Jyothi Billa BIT DURG	120000
CSVTU/CRP/TEQIP-III/50 Date 05/09/2019	Development of efficient biosorption technology for removing cadmium from industrial effluents.	Dr. Sangrati Sahu BIT Raipur	Dr. Madharina pandey BIT Durg	100000
CSVTU/CRP/TEQIP-III/51 Date 05/09/2019	Effect on properties on geo-polymer concrete with particle replacement of fine aggregate by crusher stone	Deepnala pandey BIT Raipur	Mr. Tushar singh Rathour SSIPMT Raipur Dr. R.k. Mishra BIT Raipur	180000
CSVTU/CRP/TEQIP-III/52 Date 05/09/2019	Advances of sustainable tourism in Chhattisgarh	Dr. Soumen sarkar SSTC Bhilai	Birwajet Bhattacharjee SSTC Bhilai Arvishok Chakraborty BIT Durg	100000
CSVTU/CRP/TEQIP-III/53 Date 05/09/2019	Development of single phase low cost power analyser	Dr. Mihirlesh singh KITE Raipur	Ritesh Dwan RIT RAIPUR Dr. Sanjiv Chacko Polytechnic durg	125000
CSVTU/CRP/TEQIP-III/54 Date 05/09/2019	Effect of application of epoxy coating on structural steel connection	Dr. Mohan Kumar Gupta BIT durg	Ms. Smriti Gupta UTD Bhilai Ms. Shradha sharma BIT Durg	200000
CSVTU/CRP/TEQIP-III/55 Date 05/09/2019	Line start permanent magnet motors for future electric vehicle	Dr. Ankit Dwivedi CEC bilaspur	Pritha Gupta REC Durg	150000
CSVTU/CRP/TEQIP-III/56 Date 05/09/2019	Determination of organophosphorous pesticides in vegetable and water sample at ulhaspur area	Dr. Rakesh Singh Omudhel SSIPMT Raipur	Dr. Shilpa Sharma RCET Raipur	150000
CSVTU/CRP/TEQIP-III/57 Date 05/09/2019	Design and fabrication of low cost electric two wheeler	Mr Anil Chakrawarti SSIPMT Raipur	Manish Kumar Mishra BIT Raipur	250000
CSVTU/CRP/TEQIP-III/58 Date 05/09/2019	Design and Development of a cost effective phase measurement unit for real time monitoring of smart power system	Dr. Shashwati Ray BIT durg	Dr. Stampy Rallian Goyal SSTC bhilai Mr. Gaurav Shankar BIT Durg	200000



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVTU/CRP/TEQIP-III/78 Date 05/09/2019	Design and fabrication of OTA-C load pole cancellation based compact low-pass elliptic filter for Bandpass filter application.	Pratibha Verma UTD CSVTU Bhilai	Dr. Rajkumar Dhapte SSGI Bhilai Prashant Dwivedi UTD/CSVTU Bhilai	260000
CSVTU/CRP/TEQIP-III/79 Date 05/09/2019	Sector field scaled application on linguistic information for decision making in a multi dimensional algorithm	Dr. Dibip Kumar Dash CCET Bhilai	Radheshyam Panda SSGI/SSTC Dr. Ritesh Dash CCET Bhilai	100000
CSVTU/CRP/TEQIP-III/80 Date 05/09/2019	Experimental and numerical simulation for the effect of Rheological parameters along with erosion prediction in a pipeline	Mr. Rahul Mishra SSEC Bhilai	Dr. Swapnil Jain SSEC Bhilai Vaibhav singh thakur KEC Bhilai	200000
CSVTU/CRP/TEQIP-III/81 Date 05/09/2019	Nanocomposite polymer electrolytes synthesis ion conduction and device fabrication	Dr. Angesh Kumar Chandra SSIPMT Raipur	Dr. Alok Bhatt BCET Bhilai	150000
CSVTU/CRP/TEQIP-III/82 Date 05/09/2019	Environmental pollution reduction from spark ignition engine automobiles using copper nano-particles coated on catalytic converter as a catalyst.	Dr. T. Rama Rao BIT Raipur	S.S. Deepak RCET Raipur Dr. Mukesh Thakur NMDC DAY Polytechnic	150000
CSVTU/CRP/TEQIP-III/83 Date 05/09/2019	IoT based automation of electrical and electronics devices in college academic building using arduino and wifi module	Ashmita shukla BIT Raipur	Mr. Ritesh Dwivedi BIT Raipur	150000
CSVTU/CRP/TEQIP-III/84 Date 05/09/2019	Luminescence behaviour of rare earth activated SrAl ₂ O ₄ and ZnO ₂ nano-phosphors and their application for deformation detection technique with possibilities of their integration with MEMS device	Mr. Manish Kumar Mishra BIT Raipur	Vinayak Sachdev SSIPMT Raipur	200000
CSVTU/CRP/TEQIP-III/85 Date 05/09/2019	Dual Capability Smart Braille pad for blind person	Dr. Devanand Bhoole SSTC Bhilai	Dr. S.P. SHUKLA BIT Durg	150000
CSVTU/CRP/TEQIP-III/86 Date 05/09/2019	2D nano-structure based field effect transistor as gas sensor, ab-initio modeling	Swati Verma SSGI Bhilai	Dr. Anon Kumar BIT Durg Dr. B. keshav Rao SSGI Bhilai	150000

TEQIP-III, Coordinator
CSVTU Bhilai (C.G.)



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/16 Date 17/08/2019	Mechanoluminescence and thermo luminescence studies of rare earth activated phosphors for display and mechanical sensors	Dr. Vikas Dubey, BIT RAIPUR	Dr. Ramesh Kumar, Tamarak, BIT Durg, Mr. Ramesh Chandrasekar, NMDC DAV Polytechnic	2,00,000
CSVТУ/CRP/TEQIP-III/17 Date 17/08/2019	Mechanoluminescence for crack detection in cementitious structure	Dr. Shri Ram Krishna Sharma, BIT RAIPUR	Mr. Manish Kumar Sinha C/TD-CSVТУ, Bhilai	2,50,000
CSVТУ/CRP/TEQIP-III/18 Date 17/08/2019	Health risk assessment and remediation technique for uranium contamination in ground water of durg and near by district chhattisgarh	Dr. Suresh Kumar Sir BIT Durg	Dr. Pradeep Kumar Ghosh KEC Bhilai	2,00,000
CSVТУ/CRP/TEQIP-III/19 Date 17/08/2019	Mutual coupling reduction in planar compact antenna for mid band 5G wireless application	Mr. Upendra Sori SSIPMT Raipur	Mr. Vidhata Poddar, CEC-Bilaspur, Mr. Robert Mark, GGU Bilaspur	2,50,000
CSVТУ/CRP/TEQIP-III/20 Date 17/08/2019	Design and development of cluster based smart agriculture system using machine learning and IoT	Dr. Ritesh Dash CCET Bhilai	Dr. G.C. Bhunia BIT Durg Dr. Dillip Kumar Dash, CCET Bhilai	2,50,000
CSVТУ/CRP/TEQIP-III/21 Date 17/08/2019	Development of manually driven solar juice cart	Prof. Shashi Tiwari SSGI Bhilai	Prof. Rajnish Prasad Pandey, CSIT Durg DR. R. N. Patel NIT Raipur	2,50,000
CSVТУ/CRP/TEQIP-III/22 Date 17/08/2019	A novel high entropy alloys with composite microstructure	Dr. Anil kumar BIT Durg	Mr. Rajesh Kumar, CSIT Durg, Mr. Ritesh Chandrasekar, NMDC DAV Polytechnic	2,00,000
CSVТУ/CRP/TEQIP-III/23 Date 17/08/2019	Electroluminescence studies of $\text{SrAl}_2\text{O}_4: \text{Eu}^{2+}$, Dy^{3+} thin films of EL based device applications.	Dr. Dharmendra Singh Kohari, SSIPMT Raipur	Dr. Vikas Dubey BIT Raipur Dr. Shubra Mishra SSIPMT Raipur	2,00,000

TEQIP-III, Coordinator
CSVТУ Bhilai (C.G.)



छत्तीसगढ़ विज्ञान एवं प्रौद्योगिकी परिषद
Chhattisgarh Council of Science & Technology

M. I G. 25, Indravati Colony, Raipur, (C. G.) 492 001

Phone: 0771 2434589; FAX: 0771 2434093; Email: dgccost@gmail.com

No. CCOST/MRP/2015

Raipur, Date:/...../2015

Sanction Order

To
Principal
Bhilai Institute of Technology,
Durg (CG)

Sub: Sanction of Mini Research Project entitled "Implementation of laboratory scale micro grid incorporating renewable energy source".

Ref: Mini Research Project proposal of Dr. S. P. Shukla, Professor, Department of Electrical Engineering, Bhilai Institute of Technology, Bhilai House Durg (CG).

Project Investigator: Dr. S. P. Shukla, Professor, Department of Electrical Engineering, Bhilai Institute of Technology, Bhilai House Durg (CG).

Sanction is hereby accorded for **Rs.4,95,000/- (Rs. Four Lakhs ninety five thousand)** only for two years duration. The amount is being released on the following terms and conditions:-

The Mini research projects must be pertaining to Socio-Economic Development of the State.

1. In line with the Council's objectives it is imperative to support only such Research & Development Mini Research projects which are relevant to the achievement of specific objectives of the Council as follows:
"To identify and utilize areas of science and technology for-
 - a. Achieving socio-economic development of the state and
 - b. To achieve the objectives of tackling the problems particularly of backwardness, unemployment and poverty in the rural areas, and among the under-privileged section of the society".
2. Mini research project will be sanctioned to permanent faculty member(s).
3. Six copies of the project proposal to be submitted to Council in the prescribed Performa.



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/ 6803

Bhilai, Date: 19/03/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/14, Dated 17/08/2019, the Collaborative Research Project (CRP) titled "**Design and development of parallel frame work for measurement of heat distributioning in metallic sheets**" was approved for grant-in-aid of INR 3, 00,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Dr. Manisha Sharma

Name of the Institute : BIT DURG

Name of Co-Principal Investigator : Dr. Rajesh Tiwari

Name of the Institute : SSGI, Bhilai

Name of Co-Principal Investigator : Dr. Kamal K Mehta

Name of the Institute : SSGI, Bhilai

Thasahu
Coordinator TEQIP-III
CSVТУ, Bhilai



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/ 6860

Bhilai, Date: 13/09/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/86, Dated 05/09/2019, the Collaborative Research Project (CRP) titled "2D nanostructure based field effect transistor as gas sensor, ab-initio modelling" was approved for grant-in-aid of INR 1,50,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Ms. Swati Verma

Name of the Institute : SSGI Bhilai

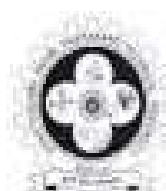
Name of Co-Principal Investigator : Dr. Arun Kumar

Name of the Institute : BIT Durg

Name of Co-Principal Investigator : Dr. B. Keshav Rao

Name of the Institute : SSTC Bhilai

Thasah
Coordinator TEQIP-III
CSVTU, Bhilai



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/69 Date 05/09/2019	Design and fabrication and analysis of semi auto rise transplanter	Er. Sanjay kumar Sahu BIT Raipur	Pradeep Kumar sahu SSIPMT Raipur	250000
CSVТУ/CRP/TEQIP-III/70 Date 05/09/2019	Design of wearable textile antenna for WLAN and Bluetooth application	Mr. Jaydeep Dewangan BIT Raipur	Mr. Dilip Tamboli SRIT Raipur	250000
CSVТУ/CRP/TEQIP-III/71 Date 05/09/2019	Simulation of biochemical effect using EM field of Diagnosis and treatment of disease	Ms. Rashmi Mishra BIT Raipur	Dilip Tamboli SRIT Raipur Ms. Arpita Shukla BIT Raipur	225000
CSVТУ/CRP/TEQIP-III/72 Date 05/09/2019	Design and implementation of image retrieval system for trademark/ logo image for registration	Latika Pinjarkar SSGI BHILAI	Dr. Manisha sharma BIT Durg Dr. Smita selot SSGI Bhilai	150000
CSVТУ/CRP/TEQIP-III/73 Date 05/09/2019	Design and development of a novel biosensor for detection of relevant biological analyte in biological fluid	Prashant Dwivedi UTD CSVТУ BHILAI	Dr. Rekha trivedi SSTC Bhilai Ms. Neha Mishra UTD CSVТУ BHILAI	225000
CSVТУ/CRP/TEQIP-III/74 Date 05/09/2019	Measurement of leaf area and nitrogen content of beet leaf using image processing technique	Amar Kumar Dey BIT Durg	Abhishek Misal UTD CSVТУ BHILAI	180000
CSVТУ/CRP/TEQIP-III/75 Date 05/09/2019	An assessment of molecular mechanics of novel formulated drug delivery system for skin targeting	Dr. Ashish Patel Guest Faculty UTD CSVТУ Bhilai	Dr. Chanchal Deep Kaur Shri Rawatpura Sarkar Institute of Pharmacy Bhilai Dr. Kshirita Varma Guest Faculty UTD CSVТУ Bhilai	290000
CSVТУ/CRP/TEQIP-III/76 Date 05/09/2019	Design of digital signature scheme and their application	Dr. Manoj Kumar Chande SSIPMT Raipur	Dr. Rajlaxmi Gupta, SSGI Bhilai Dr. S.D. Diwan, GEC Raipur	130000
CSVТУ/CRP/TEQIP-III/77 Date 05/09/2019	An algorithm to reduce successive interference in multipath advance wireless channel	Dr. Hemlata Sinha, SSIPMT Raipur	Mr. Md. Khaja Mohiddin, BIT RAIPUR Mr. Sumit Kumar Roy, SSIPMT Raipur	150000

TEQIP-III, Coordinator
CSVТУ Bhilai (C.G.)



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/6822

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/34, Dated 17/08/2019, the Collaborative Research Project (CRP) titled "**Performance enhancement of micro inverter solar PV power generation using passive filters**" was approved for grant-in-aid of INR 3,00,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Dr. Naveen Goel

Name of the Institute : SSGI Bhilai

Name of Co-Principal Investigator : Ms. Ekta Tamrakar

Name of the Institute : BIT Durg

Name of Co-Principal Investigator : Mr. Rahul Pandey

Name of the Institute : SSTC-SSGI Bhilai

Thasaku
Coordinator TEQIP-III
CSV TU, Bhilai



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/6800

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/10, Dated 06/06/2019, the Collaborative Research Project (CRP) titled "Development of Low Cost Single Family Solar Cooker" was approved for grant-in-aid of INR 2,25,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Mr. Abhishek Misal

Name of the Institute : UTD CSVTU Bhilai

Name of Co-Principal Investigator : Dr. Amar Kumar Dey

Name of the Institute : BIT Durg

Name of Co-Principal Investigator : Dr. Sanjay Agrawal

Name of the Institute : IGNOU New Delhi

Thasaku
Coordinator TEQIP-III
CSVTU, Bhilai



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2019/CRP-III/ 2190

Bhilai, Date: 17/08/2019

To,

Principals/Directors,


All Affiliated Engineering Institutes of CSVTU, Bhilai

Subject: List of Approved Collaborative Research Projects under Collaborative Research Scheme of TEQIP-III

Dear Sir/Madam,

Based on the oral presentation of Collaborative Research Proposals by the Principal Investigator (PI) and Co-PI (in the presence of competitive authority/ Evaluation Committee) from various affiliated institutes of CSVTU, Bhilai, please find the attached list of approved Research Projects.

All respective PIs and Co-PIs (First Co-PI) are requested to open a joint account immediately and submit the account details to TEQIP-III CELL, CSVTU Bhilai at the earliest so that funds may be transferred accordingly. The detail guidelines will be available on the CSVTU website for smooth functioning of the research work.


Dr. Pankaj Kumar Gupta
TEQIP Coordinator
CSVTU, Bhilai

Enclosure: 1. Guidelines for Collaborative Research

Newai, P.O. Newai, Bhilai, Distt. Durg (Chhattisgarh) - 491107
Ph. No. : 0788 - 2200062, Fax : 0788-2445020, Website : www.csvtu.ac.in, E-mail : registrar@csvtu.ac.in

Scanned by CamScanner



Ms. CSVTU/TEQIP-III/2019/CRP-I/under-II/22

Bhilai, Durg-491007/2019

List of Approved Collaborative Research Project Summary with Sanctioned Amount (Phase-I, II & III) under TEQIP-III

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
PHASE-I				
CSVTU/CRP/TEQIP-III/01 Date	"The use of orthologues for effective knowledge modeling of their mutual diseases and inflammation reversal"	Dr. Suman Kumar Singhania CSMI Durg	Dr. R. P. Sengupta NRI Hyderabad	₹ 20,00,000
CSVTU/CRP/TEQIP-III/02 Date	"Investigation of the effect of soil pipe on pressure drop in slurry flow in pipelines"	Dr. R. K. Kadambe CSMI Durg	Dr. Ashish Kumar IITD CSVTU/Bhilai	₹ 20,00,000
06/06/2019 CSVTU/CRP/TEQIP-III/03 Date	"A micro-optimized 2D nanoparticles"	Dr. Mohan Lal Verma NSRI Bhilai	Dr. R. Keshav Kumar NSRI Bhilai Dr. Anil Kumar V. Rourkela IITD CSVTU/Bhilai	₹ 90,00,000
06/06/2019 CSVTU/CRP/TEQIP-III/04 Date	"Assessment of Mine tailing Treatment Efficiency of anionic, cationic, amphoteric, aerobic and anaerobic environment"	Dr. Ritesh Prasad Sahasrab IITD CSVTU/Bhilai	Dr. Jyoti Prasad Sahasrab IITD CSVTU/Bhilai	₹ 20,00,000
06/06/2019 CSVTU/CRP/TEQIP-III/05 Date	"A novel Synthesis of chitosan based antimicrobial bio-nanocomposite film using NMT as strength enhancer and AgNPs as filler for food packaging applications"	Dr. Manish Agrawal IITD CSVTU/Bhilai	Dr. Manish Agrawal IITD CSVTU/Bhilai	₹ 10,00,000
CSVTU/CRP/TEQIP-III/06 Date	"Fabrication and Analysis of Hybrid composite Reinforced with Fiber and particulate Brin"	Dr. Anurag Kumar Verma NSRI Bhilai	Dr. Manish Verma IITD CSVTU/Bhilai	₹ 20,00,000
06/06/2019 CSVTU/CRP/TEQIP-III/07 Date	"A comprehensive Monitoring of Power Transformers using Dissolved Gases"	Dr. R. Chand Prasad NSRI Bhilai	Dr. Anand Kumar NSRI Bhilai Dr. S. S. Shinde IITD CSVTU/Bhilai	₹ 2,00,00,000

TEQIP-III, Co-ordinator
CSVTU Bhilai (C.G.)

Ms. Dr. P. C. Nandan, Dean, Durg Technicality

File No. 0786-221006/2019, File No. 0786-141007/2019, Bhopal, West Bengal



CoE/Section Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Aperture Grant (INR)
CSVTU/CEB/TEQP-III/08 Date 06/06/2019	Characterisation and Nanoparticles for Biomedical and Environmental Application	Dr. Sandhya P. Singh ICET, Bilhail	Ms. Sandhya Singh CSVTU, Bilhail	2,00,000
CSVTU/CEB/TEQP-III/09 Date 06/06/2019	Determination of water Quality of Sheersah River due to rapid polluting streams around Durg City.	Dr. P. N. Chhabra KEE, Bilhail-41	Dr. Himu Bhandu INTE, Hyderabad	1,00,000
CSVTU/CEB/TEQP-III/10 Date 06/06/2019	Development of Low Cost single levels solar cooker	Dr. Turbha Kumar Gangra IITB, SVT, Bilhail	Dr. Anand Venug CSVTU Durg Dr. Saraju Agarwal ICETBIL	2,25,000

PHASE-II

CSVTU/CEB/TEQP-III/11 Date 17/08/2019	An R.T. approach towards enhancing English speaking skills	Dr. Saurav Kumar SVINET, R/CEP, Bilhail	Mr. Anand Kumar Singh, HET Durg	4,50,000
CSVTU/CEB/TEQP-III/12 Date 17/08/2019	A Novel Approach in the synthesis of photosensitive non-detractive material dyes (characterization, the utilization of solar energy in C-Haloalkane)	Dr. Durgesh K. Chandra HET Bilhail	Dr. Durg Singh Rajgurunagar SVT, Bilhail Dr. Rajan Das HET Bilhail	2,00,000
CSVTU/CEB/TEQP-III/13 Date 17/08/2019	Extraction of oil using process, reactor and its characterization	Mr. Rajan Kumar HET Bilhail	Mr. Mahesh K. Thakur SVT, Bilhail Mr. Chhabra SVINET, Bilhail Mr. Rajan K. Mishra SVINET, Bilhail	3,00,000
CSVTU/CEB/TEQP-III/14 Date 17/08/2019	Design and development of parallel frame work for management of heat distributioning metabolic seeds	Dr. Manish Sharma HET Bilhail	Mr. Rajan K. Mishra SVINET, Bilhail Dr. Rajan K. Mishra SVINET, Bilhail	1,00,000
CSVTU/CEB/TEQP-III/15 Date 17/08/2019	Manufacturing and characterization of AA/CC alloy using carbon and nanoparticles/graphene as reinforcing agent	Mr. Nishu Kumar SVT, Bilhail	Mr. Sandhya Singh HET Bilhail Mr. Rajan Kumar SVT, Bilhail Mr. Rajan Kumar SVT, Bilhail	1,00,000

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TEQP-III, Coordinator
CSVTU, Bilhail (C.G.)



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
इन्जीनियरिंग विभाग, चण्डीगढ़, दिल्ली

इन्जीनियरिंग विभाग
विभागीय निदेशिका, मिनाह

CSP Sanction Number	Title of Research Project	Name of PI and Address	Name of Co-PI and Affiliation	Total Approved Grant (₹Lakhs)
CSP/TU/CMP/ TEGP-01/3 Date 17/06/2019	Nanotechnology for sustainable de-contaminant	Dr. Manoj Anand Pragati SSITC, SSCA Bhubar	Mrs. Sarada Sengupta CSIT Group, Dr. Mahabub Khan Bihar SSITC - SSCA Bhubar	1.10.000
CSP/TU/CMP/ TEGP-01/3 Date 17/06/2019	Performance enhancement of manufacturing solar PV power generation using positive filter-	Dr. Nagesh Joshi SSCA Bhubar	Mr. L. Vinay Kumar HBT Bang. Mr. Rohit Pandey SSCI Bhubar	1.80.000
CSP/TU/CMP/ TEGP-01/3 Date 17/06/2019	Design of solar based efficient hybrid electric vehicle	Mr. Rahul Rajgopal SSCI Bhubar	Mr. Keshav Kumar Gyafacive IIT-Del-SVT Bhubar Dr. H. N. Prasad SSIT Bangor Dr. J.P. Patra SSIPMIT Bangor Dr. Aruna Kumar SSCI Bhubar Mrs. Smita Samal SSIPMIT Bangor	2.00.000
CSP/TU/CMP/ TEGP-01/3 Date 17/06/2019	Smart tube design for automating a new of boiler system with detection using machine learning and internet of things.	Dr. Subhantha Chatterjee SSCI Bhubar	Dr. Anil Kumar HBT Bangor Ms. Shobani Pradhan SSITC Bhubar	1.00.000
CSP/TU/CMP/ TEGP-01/3 Date 17/06/2019	Promotion of ethanol biomass and increase its utilization different types of agro-industrial waste.	Dr. Mahesh Sahasrabhoj SSIPST Bangor	Mr. Sudhintha Kumar Das IIT-Del-SVT Dr. Indrajit Singh Rathore SSIPMIT Bangor Dr. Akshay Kumar Tugor SSCI Bhubar Dr. Narayan Ghorabadi SSIT Bangor	1.80.000
CSP/TU/CMP/ TEGP-01/3 Date 17/06/2019	Stabilization of expansive soil using Alkali activated fly ash	Dr. Satish Kumar Tripathi C.I.T. Midnapur	SSCI Bhubar	2.80.000
CSP/TU/CMP/ TEGP-01/4 Date 17/06/2019	Security analysis of digital signature scheme	Dr. Mayee Singh RCET Bhubar	Mr. Sandeep Kumar Kapra IITDCT Bangor	80.000

TEQIP-III, Coordinator
CSVP: Philia (C.G.)



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

स्वामीवर्ग स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CBS Section Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVTU/CBP/TEQIP-III/96 Date 05/09/2019	Synthesis and characterization of high entropy alloys	Dr. Anu Anila BIT Durg	Mr. Sanjay Singh CSIT Durg Dr. Anil Kumar BIT Durg	300000
CSVTU/CBP/TEQIP-III/97 Date 05/09/2019	Effect of L ₃ - Doping on the Structural and Optical Properties of electron beam evaporation deposited on Si/S thin films	Dr. Sandhan Mishra SSIPMT Raipur	Dr. Anu Verma RCTE Bhilai Dr. Divyendra Singh Kshatri SSIPMT Raipur	200000
CSVTU/CBP/TEQIP-III/98 Date 05/09/2019	Fixed Point Theorems - Fractal Theory, AFM analysis of thin films with Fractal Theory	Dr. Sohal Chandra Simastana RCTE Bilai	Dr. Ravi Shankar SSEC Bilai	100000
CSVTU/CBP/TEQIP-III/99 Date 05/09/2019	Development of EOT based control on composite material	Ms. Rakky Sahu RSR Rourkela College of Engineering & Technology Bilai	Mr. Divyendra Singh Bhar CCTE Bilai	180000

TEQIP-III Coordinator
CSVTU, Bilai

TEQIP-III Coordinator
CSVTU Bilai (C.G.)

Serial: FV-Beswan, Date: 04/11/2019

Ph. No - 0788-2790067, Fax No. 0788-2124794, Website: www.cstv.ac.in, E-mail: regd@chhatravtu.ac.in



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/6832

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/49, Dated 05/09/2019, the Collaborative Research Project (CRP) titled "To facilitated the sales of rural products and arts of Chhattisgarh through e commerce using data mining, data science and soft computing techniques" was approved for grant-in-aid of INR 1,20,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Mr. Aditya Tiwari

Name of the Institute : BIT Raipur

Name of Co-Principal Investigator : Dr. Jyothi Pillai

Name of the Institute : BIT DURG

Name of Co-Principal Investigator :

Name of the Institute :

Thasaku
Coordinator TEQIP-III
CSV TU, Bhilai



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2019/CRP-II/ 2190

Bhilai, Date: 17/08/2019

To,

Principals/Directors,

All Affiliated Engineering Institutes of CSVTU, Bhilai

Subject: List of Approved Collaborative Research Projects under Collaborative Research Scheme of TEQIP-III

Dear Sir/Madam,

Based on the oral presentation of Collaborative Research Proposals by the Principal Investigator (PI) and Co-PI (in the presence of competitive authority/ Evaluation Committee) from various affiliated institutes of CSVTU, Bhilai, please find the attached list of approved Research Projects.

All respective PIs and Co-PIs (First Co-PI) are requested to open a joint account immediately and submit the account details to TEQIP-III CELL, CSVTU Bhilai at the earliest so that funds may be transferred accordingly. The detail guidelines will be available on the CSVTU website for smooth functioning of the research work.


Dr. Pankaj Kumar Gupta
TEQIP Coordinator
CSVTU, Bhilai

Enclosure: 1. Guidelines for Collaborative Research

The following Guidelines are recommended for the Principal Investigators and Co – Investigators in the Collaborative Research Projects

1. The institute where Principal Investigator is working becomes the **lead Institute**.
2. An Initial amount pertaining to 50% of the sanctioned and approved amount will be released to the Joint-account of the PI and first Co-PI.
3. In case, PI or Co-PI is leaving the institute, he/she shall be deemed to be withdrawn from the project.
4. PI's and Co-PI's are required to fill the Forms A to F and submit to TEQIP-III CSVTU whenever asked.
5. PI's and Co-PI's are required to submit Form A within 3 days after receiving the sanction letter.
6. PI's and Co-PI's need to be present at the time of Progress Evaluation-I conducted at TEQIP-III CSVTU Bhilai after 4 months from the date of start of the project.
7. The subsequent Instalments of the sanctioned Research grant will be released on satisfactory Performance in Progress Review-I and submission of Form B and Form D duly filled and signed.
8. Progress Review–II will be conducted after 8 Months for which PI's & Co-PI's need to be Present.
9. The final instalment will be released upon submission of Form C & D and satisfactory Performance in the Progress Review–II.
10. The Project should result in at least one publication (preferably in SCOPUS in the relevant journal at National /International level.
11. PI's and Co-PI's will be informed if there are any directions from NPIU or changes made by TEQIP-III CSVTU Bhilai relevant to Collaborative Research Scheme time to time and are to be abided in due course till the completion of TEQIP-III Project.
12. All non-consumables procured for the research project will automatically become the property of the lead institution after completion of the project.
13. Any deviation in the expenditure as defined in the project proposal is not accepted. In such case prior permission is necessary from the university. After obtaining necessary permission, funds should be utilized as per the revised guidelines. No deviation is accepted.
14. Any interest incurred should be deposited back to the university CSVTU Bhilai, TEQIP-III Account.
15. Unspent amount as per the proposal/ Guidelines of the TEQIP within the stipulated time should be deposited back to the university TEQIP account. (Along with Interest Incurred).
16. Any discrepancy with PIs/Co-PIs while implementing the project is to be brought to the notice of University authorities.
17. For any other matters, decision of university is final and binding.

Approved List of Collaborative Research Proposals under Phase-II

Project No.	Project Title	Principal Investigator & Affiliation	Co-Principal Investigator & Affiliation
		Name and Affiliation	Name and Affiliation
CRP-II/02	An ICT approach towards enhancing english speaking skills.	Dr. Seema Arora SSIPMT RAIPUR	Mr. Amrendra Kumar Singh, BIT Durg Dr. Madhu karma Durga Mahavidyalaya Raipur
CRP-II/04	A Novel approach to the synthesis of photosensitive non structure material their characterization for utilization of solar energy in chhattisgarh	Dr. Rajesh Lalwani BIT DURG	Dr. Devi Singh Raghuwanshi, SSTC,Bhilai Dr.Rubi Das , BIT DURG
CRP-II/06	Extraction of oil using pyrolysis reactor and its characterization	Mr.Jaysingh Gaharwar BIT DURG	Mr.Mahesh Kumar Dewangan , SSTC,Bhilai Mr. Deepak Mahapatra BRSM College Mungeli
CRP-II/09	Design and development of parallel frame work for measurement of heat distributioning metallic seeds.	Dr. Manisha Sharma BIT Durg	Mr.Rajesh Tiwari SSGI,Bhilai Dr. Kamal K mehta SSGI,Bhilai
CRP-II/10	Manufacturing and charactetrization of AA7075 alloy foam using calcium and magnesium carbonate as foaming agent	Mr.Nitish Kumar Singh RCET, BHILAI	Dr. P. K. Gupta, UTD ,CSVTU bhilai Mr. Ram krishna RCET-Bhilai
CRP-II/12	Mechanoluminescence and thermo luminance studies of rere earth activated phosphors for display ans mechanical sensors	Dr. Vikas Dubey, BIT RAIPUR	Dr. Anil Kumar. BIT DURG Mr.Rituraj Chandrakar, NMDC DAV Polytechnic, Dantewada
CRP-II/13	Mechanoluminescence for crack detection in cementitious structure	Dr. Shri Ram Krishna Sharma, BIT RAIPUR	Mr.Manish Kumar Sinha UTD-CSVTU, Bhilai
CRP-II/16	Health risk assesment and remediation technique for uranium containamination in ground water of durg and near by district chhattisgarh	Dr. Santosh Kumar Sar BIT Durg	Dr. Pradeep Kumar Ghosh KEC Bhiai
CRP-II/21	Mutual coupling reduction in planner compact antenna for mid band 5G wireless application	Mr. Upendra Soni SSIPMT Raipur	Mr. Vidhata Poddar, CEC Bilaspur, Mr.Robert Mark, GGU Bilaspur

Project No.	Project Title	Principal Investigator & Affiliation	Co-Principal Investigator & Affiliation
		Name and Affiliation	Name and Affiliation
CRP-II/28	Development of manually driven solar juice cart	Prof. Shruti Tiwari SSGI Bhilai	Dr. P.K.Gupta, UTD ,CSVTU bhilai DR. R.N. Patel NIT Raipur
CRP-II/35	A novel high entropy alloys with composite microstructure	Dr. Anil Kumar BIT Durg	Dr. Vikas Dubey BIT Raipur Mr.Rituraj Chandrakar, NMDC DAV Polytechnic, Dantewada
CRP-II/36	Electroluminescence studies of SrAl ₂ O ₄ : Eu ²⁺ , Dy ³⁺ thin films of EL based device applications.	Dr. Dharendra Singh Kshatri, SSIPMT Raipur	Dr. Vikas Dubey BIT Raipur Dr. Shubra Mishra SSIPMT Raipur
CRP-II/37	Determination of paraquat pesticides in vegetable and water sample using silver nanoparticles at raipur district	Dr. Shilpa Sharma RCET Bhilai	Dr. Rakesh Singh dhundhel SSIPMT Raipur
CRP-II/39	Key barriers in the growth of engineering education in chhattisgarh state :a fuzzy kano and TISM integrated approach	Mr.Naveen Jain SSIPMT Raipur	Dr. Bhagwati Charan Patel SSGI Bhilai
CRP-II/42	Effect of magnetic field on ion transport and dielectric properties of solid nano composite polymer electrolytes	Dr. Homendra Das Sahu SSGI Bhilai	Dr. Arti Verma RCET Bhilai Dr. Mohan L Verma SSGI Bhilai
CRP-II/44	Smart irrigation system using IoT	Mr. Prabhas Kumar Gupta CSIT Durg	Dr. Nagendra Tripathi BIT Durg
CRP-II/47	Synthesis and nanometer characterization of CdZnS thin film	Dr. Ritu Shrivastava SSEC Bhilai	Dr. Shubhas Chandra Shrivastava RCET Bhilai
CRP-II/49	Investigation and optimization of process parameter of wire EDM on nickel based superalloy.	Dr. Abhijeet Ganguly SSTC-SSGI Bhilai	Dr. Lokesh Singh RSR Bhilai Mr. Kunal Dewangan SSEC Bhilai
CRP-II/50	Development of functionally graded material and multi material tools for machining process	Dr. Lokesh Singh RSR Bhilai	Dr. Abhijit Ganguly SSTC-SSGI Bhilai
CRP-II/52	Studies of luminescence properties of rare earth doped and codoped phosphors	Dr. Manmeet Kaur Bhuie SSTC-SSGI Bhilai	Mr. Prashant Kumar Sahu BIT DURG Dr. Mimi Akash Pateria SSTC-SSGI Bhilai
CRP-II/54	Design testing and evaluation of a novel transplanting mechanism in manual rice transplanter for improved performance	Mr. Vikky Kumhar SSTC Bhilai	Dr. Manoj Verma UTD CSVTU, Bhilai Mr. Deepak Mahapatra BRSM Mungeli

Project No.	Project Title	Principal Investigator & Affiliation	Co-Principal Investigator & Affiliation
		Name and Affiliation	Name and Affiliation
CRP-II/56	Performance enhancement of microinverting solar PV power generation using passive filters	Dr. Naveen Goel SSGI Bhilai	Ms. Ekta Tamrakar BIT Durg, Mr.Rahul Pandey SSGI Bhilai
CRP-II/57	Design of solar based efficient hybrid electric vehicle	Mr.Rahul Baghel SSGI Bhilai	Mr. Harish Kumar Ghritlahre UTD- CSVTU Bhilai, Dr. R.N.Patel NIT Raipur
CRP-II/60	Smart bike device for automating a two wheeler vehicle crash detection using machine learning and internet of things	Dr. Siddhartha Choubey SSGI Bhilai	Dr. J.P. Patra SSIPMT Raipur Dr. Abha Choubey SSGI Bhilai
CRP-II/62	Opinion mining of tourism sector of india using machine learning algorithm from reviews collected through social media	Dr. Smita Selot SSTC Bhilai	Dr. Ani thomas BIT Durg Mr. Sreejit Panicker SSTC Bhilai
CRP-II/68	Production of ethanol biofuel and manure by utilizing different types of agro and animal waste	Mr.Manish Sakhlecha SSIPMT Raipur	Ms.Sushmita Gouraha UTD CSVTU-Bhilai Mr.Toshan Singh Rathour SSIPMT Raipur
CRP-II/70	Stabalization of expensive soil using Alkali activated fly ash	Dr. Subhlaksmi Tiwari CEC Bilaspur	Dr. Manoj Kumar Tiwari SSGI Bhilai Dr.Sandeep Chouksey NIT Raipur
CRP-II/71	Security analysis of digital signature scheme	Dr. Manju Sanghi RCET Bhilai	Mr.Sharda Charan Gupta CIPET Raipur
CRP-II/75	Assessment of environmental footprint of building from life cycle perspective in context of indian building sector	Ms.Jui Giri UTD-CSVTU Bhilai	Mr.Manish Sakhlecha SSIPMT Raipur Mohamad Pravej Alam SSIPMT Raipur
CRP-II/76	UV resistant solar dryer for food processing	Dr. Anurag Verma CSIT Durg	Dr. P.K. Gupta UTD-CSVTU Bhilai Dr. Sanjay Agrawal IGNOU New Delhi
CRP-II/77	Devlopment of control strategy for human arm motion imitation system for industrial robot programming	Dr.Abhishek Jha, UTD-CSVTU Bhilai	Mr.Sanjay G. Sakharwade RCET Bhilai, Dr.Shital S. Chiddarwar VNIT Nagpur



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/6844

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/64, Dated 05/09/2019, the Collaborative Research Project (CRP) titled "**Fabrication of Safe Low Pressure Acetylene Generator for Gas Welders of Chhattisgarh Region**" was approved for grant-in-aid of INR 1, 50,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator	:	Mr. Prem Shankar Sahu
Name of the Institute	:	BIT Durg
Name of Co-Principal Investigator	:	Mr. H.R. Chandrakar
Name of the Institute	:	CSIT Durg
Name of Co-Principal Investigator	:	Mr. Vikrant Tapas
Name of the Institute	:	NMDC DAV Polytechnic Bastar

Thasahu
Coordinator TEQIP-III
CSVTU, Bhilai



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/08 Date 06/06/2019	"Green synthesis and characterisation of Metallic Nanoparticles for Biomedical and Environmental Applications"	Dr. Sandhya Pillai CCET Bhilai	Mrs. Sumita Sengupta CSIT Bhilai	2,00,000
CSVТУ/CRP/TEQIP-III/09 Date 06/06/2019	"Determination of water Quality of Sheonath River due to major polluting streams around Durg City"	Dr. P.K. Ghosh KEC BHILAI	Dr. Hirma Bindu, JNTU Hyderabad	3,00,000
CSVТУ/CRP/TEQIP-III/10 Date 06/06/2019	"Development of Low Cost single family solar cooker"	Dr. Pankaj Kumar Gupta UTD CSVТУ Bhilai	Dr. Anurag Verma CSIT Durg Dr. Sanjay Agrawal, IGNOU	2,25,000
PHASE-II				
CSVТУ/CRP/TEQIP-III/11 Date 17/08/2019	An ICT approach towards enhancing english speaking skills.	Dr. Seema Arora SSIPMT RAIPUR	Mr. Amrendra Kumar Singh, BIT Durg Dr. Madhu karma Durga Mahavidyalaya Raipur	1,50,000
CSVТУ/CRP/TEQIP-III/12 Date 17/08/2019	A Novel approach to the synthesis of photosensitive non structure material their characterization for utilization of solar energy in Chhattisgarh	Dr. Rajesh Lalwani BIT DURG	Dr. Devi Singh Raghuramshi, SSTC, Bhilai Dr. Rubi Das, BIT DURG	2,00,000
CSVТУ/CRP/TEQIP-III/13 Date 17/08/2019	Extraction of oil using pyrolysis reactor and its characterization	Mr. Jaysingh Gaharwar BIT DURG	Mr. Mahesh K Dewangan, SSTC, Bhilai Mr. Deepak mahapatra BRSM College Mungeli	3,00,000
CSVТУ/CRP/TEQIP-III/14 Date 17/08/2019	Design and development of parallel frame work for measurement of heat distributioning metallic seeds.	Dr. Manisha Sharma BIT Durg	Mr. Rajesh Tiwari, SSGI, Bhilai Dr. Karnal K Mehta, SSGI, Bhilai	3,00,000
CSVТУ/CRP/TEQIP-III/15 Date 17/08/2019	Manufacturing and characterization of AA7075 alloy foam using calcium and magnesium carbonate as foaming agent	Mr. Nitish Kumar Singh RCET, BHILAI	Ms. Sushmita Gouraha, UTD, CSVТУ Bhilai Mr. Ram krishna RCET-Bhilai	3,00,000

**TEQIP-III, Coordinator
CSVТУ Bhilai (C.G.)**

Newai, P.O-Newai, Distt. Durg (Chhattisgarh) - 491107

Ph. No.: 0788-2200062, Fax No.: 0788-2445020, Website: www.csvtu.ac.in, E-mail: registrar@csvtu.ac.in



CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/16 Date 17/08/2019	Mechanoluminescence and thermo luminance studies of rare earth activated phosphors for display and mechanical sensors	Dr. Vikas Dubey, BIT RAIPUR	Dr. Raunak Kumar Tamrakar, BIT Durg Mr. Rituraj Chandrakar, NMDC DAV Polytechnic	2,00,000
CSVТУ/CRP/TEQIP-III/17 Date 17/08/2019	Mechanoluminescence for crack detection in cementitious structure	Dr. Shri Ram Krishna Sharma, BIT RAIPUR	Mr. Manish Kumar Sinha UTD-CSVТУ, Bhilai	2,50,000
CSVТУ/CRP/TEQIP-III/18 Date 17/08/2019	Health risk assesment and remediation technique for uranium contamination in ground water of durg and near by district chhattisgarh	Dr. Santosh Kumar Sar BIT Durg	Dr. Pradeep Kumar Ghosh KEC Bhilai	2,00,000
CSVТУ/CRP/TEQIP-III/19 Date 17/08/2019	Mutual coupling reduction in planner compact antenna for mid band 5G wireless application	Mr. Upendra Soni SSIPMT Raipur	Mr. Vidhata Poddar, CEC Bilaspur, Mr. Robert Mark, GGU Bilaspur	2,50,000
CSVТУ/CRP/TEQIP-III/20 Date 17/08/2019	Design and development of cluster based smart agriculture system using machine learning and IoT	Dr. Ritesh Dash CCET Bhilai	Dr. G.C. Biswal BIT Durg Dr. Dillip Kumar Dash, CCET Bhilai	2,50,000
CSVТУ/CRP/TEQIP-III/21 Date 17/08/2019	Development of manually driven solar juice cart	Prof. Shruti Tiwari SSGI Bhilai	Prof. Rajnish Prasad Pandey, CSIT Durg DR. R.N. Patel NIT Raipur	2,50,000
CSVТУ/CRP/TEQIP-III/22 Date 17/08/2019	A novel high entropy alloys with composite microstructure	Dr. Anil kumar BIT Durg	Mr. Rajesh Kumar, CSIT Durg Mr. Rituraj Chandrakar, NMDC DAV Polytechnic	2,00,000
CSVТУ/CRP/TEQIP-III/23 Date 17/08/2019	Electroluminescence studies of SrAl ₂ O ₄ : Eu ²⁺ , Dy ³⁺ thin films of EL based device applications.	Dr. Dharendra Singh Kshatri, SSIPMT Raipur	Dr. Vikas Dubey BIT Raipur Dr. Shubra Mishra SSIPMT Raipur	2,00,000

TEQIP-III, Coordinator
CSVТУ Bhilai (C.G.)



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/96 Date 05/09/2019	Synthesis and characterization of high entropy alloys	Dr. Arun Arora BIT Durg	Mr. Sanjay Singh CSIT Durg Dr Anil Kumar ,BIT Durg	300000
CSVТУ/CRP/TEQIP-III/97 Date 05/09/2019	Effect of La ³⁺ Doping on the Structural and Optical Properties of electron beam evaporation deposited on SrS thin films	Dr. Shubhra Mishra SSIPMT Raipur	Dr. Arti Verma RCET Bhilai Dr Dharendra Singh Kshatri SSIPMT Raipur	200000
CSVТУ/CRP/TEQIP-III/98 Date 05/09/2019	Fixed Point Theory, Fractal Theory, AFM analysis of thin films with Fractal Theory	Dr Subhash Chandra Shrivastava RCET Bhilai	Dr Ritu Shrivatava SSEC Bhilai	100000
CSVТУ/CRP/TEQIP-III/99 Date 05/09/2019	Development of IOT based control on composite material	Ms Rinkey Sahu RSR Rungta Collage of Engineering & Technology Bhilai	Mr Hrishabh Singh Bias CCET Bhilai	180000

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj,

New Delhi-110070

RPS - Sanction Letter

File No. 8-98/FDC/RPS (POLICY-1) /2019-20

Date: 14 Aug 2020

The Drawing and Disbursing Officer
All India Council for Technical Education
Nelson Mandela Marg,
Vasant Kunj, New Delhi-110070,

Sub: Release of a sum of Rs.2279019/- being the 1st installment of the total grant of Rs.2313725/- for conduct of Project under Research Promotion Scheme (RPS) during the financial year 2020-21.

Sir,

With reference to the proposal submitted by the institute, this is to convey the sanction of the Council for payment of Rs.2279019/- (Rupees Twenty Two Lakh Seventy Nine Thousand Nineteen Only) as 1st installment out of a total approved grant-in-aid of Rs.2313725/- for conduct of a Project under the Research Promotion Scheme (RPS), as per details given below:-

I.	Name and address of the Beneficiary Institution (University / College / Institution)	: Registrar / Director / Principal, Bhilai Institute of Technology, Durg, Chhattisgarh-491001
II.	Principal Investigator's Name & Dept./Course	: Mr. Anil Kumar (Mechanical Engineering)
III.	Grant-in-aid Sanctioned	: Rs.2313725 /- (Rs. 1966666/- for non-recurring and Rs.347059/- for recurring expenditure)
IV.	Amount to be Released during the year 2019-20 (as 1 st installment)	: Rs.2279019 /- (Rs. 1966666/- Full amount of non-recurring & Rs 312353/- 90 % of recurring sanctioned)
V.	Project Duration	: 3 Years
VI.	Title of the Project	: Development and Characterization of Novel WNbMoTaTiSix ($x = 0, 0.3, 0.6$ and 0.9 atomic ratio) Refractory High Entropy Alloys for High Temperature Applications by Vacuum Arc Melting Route.

I. Release of funds:

1. The amount of the grant shall be drawn by the Drawing and Disbursing Officer (DDO), All India Council for Technical Education, New Delhi on the Grants-in-aid bill and shall be disbursed to and credited to the account of Bhilai Institute of Technology, Durg, Chhattisgarh-491001 through RTGS/PMFS.
2. The sanctioned grant-in-aid is debitable to the Major Head "601.12-a (RPS Plan)" Gen. and is valid for payment during the financial year 2020-21.
3. The sanction issues in exercise of the powers delegated to the Council. It is also certified that grant-in-aid is being released in conformity with the rules and principles of the Scheme.
4. The grant-in-aid is being released in conformity with the Terms & Conditions as well as norms of the scheme as already communicated and also being communicated in this letter.

II. Maintenance of account by the Institute/PI:

1. Funds covered by this grant shall be kept separately and would not be mixed up with other funds so as to know the amount of interest accrued on the grant.
2. The grant is intended to cover items of expenditure/equipment approved by AICTE.
3. Acknowledgement of receipt of grant and letter of acceptance of terms and conditions is to be submitted to AICTE within 15 days from the receipt of the grant to the following address:

Director (Faculty Development Cell), AICTE, Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

Contd...2/-

4. The accounts of the grantee will be opened for test check by the Council or Comptroller & Auditor General of India or by any officer designated by them.
5. The Principal and PI of the Institute are requested to verify the correctness of the undermentioned bank account/RTGS/PFMS details submitted by them alongwith the Proposal, in which the grant is being released. In case of any omission, the same should be reported to AICTE immediately along with refund of entire grant: -

Institute Pan No.	Bank Name	Bank Branch	Bank Branch Add.	Account Holder Name	Account Type	Account Number	IFSC Code
AAATR67 SSD	State Bank of India	Alka Departmental Store	Sector-10, Bhilai	Principal	Current Account	32471126372	SBIN0006942

6. The grantee institution shall observe all financial norms and guidelines as prescribed by the AICTE/Government of India from time to time. Grantee institution must follow GFR guidelines in procuring the sanctioned items and maintain an audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets shall be maintained by the Institute in the prescribed form i.e. GFR-19.
7. Interest accrued on the sanctioned grant-in-aid will be reported and refunded to AICTE and not adjusted against the subsequent installment.

III. General Instructions:

1. It should be ensured that no RPS project in favour of the same P.I. has been sanctioned during the last 03 years before utilizing this amount and the matter be brought to the notice of this Council immediately in case a faculty is sanctioned multiple RPS Projects.
2. The duration of Project is 03 years and the date of release of the grant by AICTE shall be taken as the date of commencement of the project. The Registrar/Director/Principal shall intimate about the receipt of the grant to AICTE. Any Expenditure, incurred prior to issuance of this Sanction Order, would not allowed to be adjusted in the grant and if the University/Institution do not take up the project work within 6 months of the receipt of the grant, approval shall *ipso facto* lapse and the Institute has to necessarily refund the entire grant to AICTE along with interest within a month. In case the grant is not refunded within said duration 18% interest will be levied on it. The grant has to be refunded to AICTE, through RTGS as per details given below:

Account Number	SS103199952
Name of the Account Holder	Member Secretary, AICTE, New Delhi
Bank Name	State Bank of India
Branch Name	Shashtri Bhawan, New Delhi
IFSC Code	SBIN0050203

3. The Institute may constitute a Project Monitoring Committee (PMC). The composition of the PMC shall be as under:
 - i. Principal/Director of the institution (Chairperson)
 - ii. Two HODs from institute (Members)
 - iii. In case of private institute one subject expert from government institute, not below the rank of Associate Professor (Member)
 - iv. Coordinator of the project (Member Secretary)
4. The grant shall be utilized strictly for the purpose as specified in the sanction letter. Re-appropriation of funds from one Head to another is strictly not permitted viz. Recurring and non-recurring Heads. Further, the equipment(s)/item(s) purchased should be as per the specifications and individual item-wise costs sanctioned by AICTE, and not taking the total grant sanctioned as one entity. Item-wise purchase cost shall be matched with the sanctioned cost, and the cost of item purchased below the sanction cost shall be restricted as actual cost. If the item purchase cost is higher than its sanctioned cost, the cost shall be restricted to the sanctioned cost and the additional amount shall be met by the Institute from its own resources.
5. Similarly, the recurring grant shall be used for the Items sanctioned by the AICTE. No money be used for going abroad to attend Conference / seminars. However, for presenting a Paper in a Seminar / Conference within the country, the travel expenses may be met from the recurring grant.

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6. No request for additional grant over and above the sanctioned grant shall be considered by the AICTE. The additional amount, if any, expended beyond the sanctioned grant shall be met by the Institute from its own resources.
7. The Institute/University shall not charge any overheads on this Project and will provide all the administrative support and timely release of grant to PI for completion of the Project.
8. The grantee shall utilize grants only on approved items as per list of equipment attached. However, if the grantee wishes to recast the Project, approval of Council must be obtained for the revised item of expenditure and they will maintain proper accounts of the expenditure as per the norms/procedures of AICTE/Government of India. The revised proposal should be within the total grant sanctioned and duly-supported with reasons and recommendations of the Project Monitoring Committee (PMC).
9. The assets acquired wholly or substantially out of All India Council for Technical Education's grant shall not be disposed or encumbered or utilized for the purpose other than those for which the Grant was given without proper sanction of the All India Council for Technical Education.
10. Each project sanctioned by AICTE is assigned a specific Reference Number, which is given on pre-page. All correspondence address to AICTE regarding the project must quote this number alongwith year of sanction of the project, otherwise correspondence may not be entertained.
11. The grantee shall follow the terms and conditions of Research Promotion Scheme (RPS) as laid down by the Council from time to time.

IV. Submission of documents by the Institute/PI to AICTE:

A. Documents to be submitted within one month of completion of each financial year:

- i. Annual Progress Report, indicating therein the number of patents, publications or any other achievement.
- ii. Utilization Certificate, Audited Utilization Certificate, Receipt & Payments, Statement of Expenditure
- iii. Audited record of assets acquired wholly or substantially out of the grant-in-aid and a register for assets in the prescribed form i.e. GFR-19.
- iv. Separate Bills/vouchers related to Non-recurring and recurring expenditures duly signed & stamped by the PI & Head of the institution.
- v. Stock entry register duly verified by the Store-in-charge and PI & counter signed by Head of institution.

B. Documents to be submitted within two month of completion of the Project:

- i. The consolidated Utilization Certificate (UC) and Receipt & Payment Account for the Project duration, duly audited.
- ii. Consolidated audited statement of expenditure, to the effect that the grant has been utilized for the purpose for which it has been sanctioned. It should contain the head-wise break up of expenditure made from the grant-in-aid provided by the Council.
- iii. Project Completion Report duly signed & stamped by the PI & Head of the institution and Project Evaluation Committee (PEC) Members.
- iv. Principal Investigator/institute to submit the Feed Back Form in AICTE format.
- v. The prescribed formats for submission of necessary mandatory documents and Terms & Conditions may please be downloaded from www.aicte-india.org/schemes/research-innovations-development-schemes.

Note: Any deviation from the above said time schedule will cause serious action against the institute.

Approved list of items under Non-recurring grant:

S. No.	Approved Item (As per proposal)	No. of Units	Amount recommended
A.	Non-recurring		
i)	Vacuum Arc Melting Furnace	1	Rs.1966666/-
B.	Recurring (i.e. 90% of total approved recurring grant) for Contingencies & Consumables only		Rs.312353/-
	Grand Total (A)+(B)		Rs.2279019/-

1. Registrar/Director/Principal,
Bhilai Institute of Technology,
Durg, Chhattisgarh-491001
2. Name of Principal Investigator,
Mr. Anil Kumar,
Bhilai Institute of Technology,
Durg, Chhattisgarh-491001
3. Office of Director General of Audit
General Revenues, AOCR Building
(P. Estate, New Delhi-110002.
4. Guard File

(Col. B. Venkat)
Director (FDC)

21 AUG 2020



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/ 6805

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/16, Dated 17/08/2019, the Collaborative Research Project (CRP) titled "**Mechanoluminescence and thermo luminance studies of rare earth activated phosphors for display and mechanical sensors**" was approved for grant-in-aid of INR 2,00,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Dr. Vikas Dubey

Name of the Institute : BIT RAIPUR

Name of Co-Principal Investigator : Dr. Raunak Kumar Tamrakar

Name of the Institute : BIT Durg

Name of Co-Principal Investigator : Mr. Rituraj Chandrakar

Name of the Institute : NMDC DAV Polytechnic, Dantewada

Thasaku
Coordinator TEQIP-III
CSVТУ, Bhilai



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/ 6801

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/12, Dated 17/08/2019, the Collaborative Research Project (CRP) titled "A Novel approach to the synthesis of photosensitive non structure material their characterization for utilization of solar energy in Chhattisgarh" was approved for grant-in-aid of INR 2,00,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Dr. Rajesh Lalwani

Name of the Institute : BIT DURG

Name of Co-Principal Investigator : Dr. Devi Singh Raghuwanshi

Name of the Institute : SSTC, Bhilai

Name of Co-Principal Investigator : Dr. Rubi Das

Name of the Institute : BIT Durg

Thasah
Coordinator TEQIP-III
CSV TU, Bhilai



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/ 6819

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/31, Dated 17/08/2019, the Collaborative Research Project (CRP) titled "**Studies of luminescence properties of rare earth doped and codoped phosphors**" was approved for grant-in-aid of INR 2,00,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator	:	Dr. Manmeet Kaur Bhuie
Name of the Institute	:	SSTC-SSGI Bhilai
Name of Co-Principal Investigator	:	Dr. Mimi Akash Pateria
Name of the Institute	:	SSTC-SSGI Bhilai
Name of Co-Principal Investigator	:	Mr. Prashant Kumar Sahu
Name of the Institute	:	BIT DURG

Thasah
Coordinator TEQIP-III
CSVТУ, Bhilai



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/ 6864

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/90, Dated 05/09/2019, the Collaborative Research Project (CRP) titled "**Development of low cost and high performance polymer gas sensor**" was approved for grant-in-aid of INR 2,00,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Dr. Devi Singh Raghuwanshi

Name of the Institute : SSGI Bhilai

Name of Co-Principal Investigator : Dr. Rajesh Lalwani

Name of the Institute : BIT Durg

Name of Co-Principal Investigator : B. Gopal Krishna

Name of the Institute : Pt. R.S.S.U. Raipur

Thasaku
Coordinator TEQIP-III
CSVТУ, Bhilai

Collaborative Research Project Completion Report

Funded by TEQIP-III CSVTU, Bhilai

Title of The project: "Mechanoluminescence Technique for Crack Detection in Cementitious Structures"

File number: CSVTU/CRP/TEQIP-III/17

Submitted to

Self Attested




**Chhattisgarh Swami Vivekanand Technical
University, Bhilai**

By

Dr. Sri Ram Krishna Mishra

Dr. Raunak Kumar Tamrakar

(Principal Investigator)

(Co Principal Investigator)

Bhilai Institute of Technology Raipur

Bhilai Institute of Technology Durg

**Bhilai Institute of Technology Raipur, Kendri, New Raipur
C.G., India 493661**



CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

CRP Sanction Number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVТУ/CRP/TEQIP-III/16 Date 17/08/2019	Mechanoluminescence and thermo luminescence studies of rare earth activated phosphors for display and mechanical sensors	Dr. Vikas Dubey, BIT RAIPUR	Dr. Ramak Kumar Jamrakar, BIT Durg Mr. Rituraj Chandrakar, NMDC DAV Polytechnic	2,00,000
CSVТУ/CRP/TEQIP-III/17 Date 17/08/2019	Mechanoluminescence for crack detection in cementitious structure	Dr. Shri Ram Krishna Sharma, BIT RAIPUR	Mr. Manish Kumar Sinha UTD-CSVТУ, Bhilai	2,50,000
CSVТУ/CRP/TEQIP-III/18 Date 17/08/2019	Health risk assesment and remediation technique for uranium contamination in ground water of durg and near by district chhattisgarh	Dr. Santosh Kumar Saxena BIT Durg	Dr. Pradeep Kumar Ghosh KEC Bhilai	2,00,000
CSVТУ/CRP/TEQIP-III/19 Date 17/08/2019	Mutual coupling reduction in planar compact antenna for mid band 5G wireless application	Mr. Upendra Soni SSIPMT Raipur	Mr. Vidhata Peddar, CEC Bilaspur, Mr. Robert Mark, GGU Bilaspur	2,50,000
CSVТУ/CRP/TEQIP-III/20 Date 17/08/2019	Design and development of cluster based smart agriculture system using machine learning and IoT	Dr. Rakesh Dash CCT Bhilai	Dr. G.C. Biswal BIT Durg, Dr. Dillip Kumar Dash, CCT Bhilai	2,50,000
CSVТУ/CRP/TEQIP-III/21 Date 17/08/2019	Development of manually driven solar juice cart	Prof. Shashi Tiwari SSCI Bhilai	Prof. Rajkish Prasad Pandey, CSIT Durg DR. R. N. Patel NIT Raipur	2,50,000
CSVТУ/CRP/TEQIP-III/22 Date 17/08/2019	A novel high entropy alloys with composite microstructure	Dr. Anil Kumar BIT Durg	Mr. Rajesh Kumar, CSIT Durg Mr. Rituraj Chandrakar, NMDC DAV Polytechnic	2,00,000
CSVТУ/CRP/TEQIP-III/23 Date 17/08/2019	Electroluminescence studies of $\text{SrAl}_2\text{O}_4:\text{Eu}^{2+}, \text{Dy}^{3+}$ thin films of EL based device applications	Dr. Dharendra Singh Kshatri, SSIPMT Raipur	Dr. Vikas Dubey BIT Raipur Dr. Shobha Mishra SSIPMT Raipur	2,00,000

TEQIP-III, Coordinator
CSVТУ Bhilai (C.G.)

CHHATISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI
छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, बिलाई

Sl. No.	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
CSVTU/CRP/TEQIP-III/49 Date: 05/09/2019	To facilitated the sales of rural products and arts of Chhattisgarh through e-commerce using data mining, data science and soft computing techniques.	Aditya Tiwari BIT Raipur	Dr. Jyoti Pillai BIT DURG	120000
CSVTU/CRP/TEQIP-III/50 Date: 05/09/2019	Development of efficient biosorption technology for removing cadmium from industrial effluents.	Dr. Sangeeta Sahu BIT Raipur	Dr. Madhuma Pandey BIT Durg	100000
CSVTU/CRP/TEQIP-III/51 Date: 05/09/2019	Effect on properties on geo-polymer concrete with particle replacement of fine aggregate by crusher stone	Deepnala Pandey BIT Raipur	Mr. Tejash Singh Rathour SSIPMT Raipur Dr. R.K. Mishra BIT Raipur	180000
CSVTU/CRP/TEQIP-III/52 Date: 05/09/2019	Avenues of sustainable tourism in Chhattisgarh	Dr. Souren Sarkar SSTC Bhilai	Biswajit Bhattacharjee SSTC Bhilai Abhishek Chakraborty BIT Durg	100000
CSVTU/CRP/TEQIP-III/53 Date: 05/09/2019	Development of single phase low cost power analyser	Dr. Mihir Singh KITE Raipur	Ritesh Orwan RIT RAIPUR Dr. Saji T. Chacko Polytechnic durg	115000
CSVTU/CRP/TEQIP-III/54 Date: 05/09/2019	Effect of application of epoxy coating on structural steel connection	Dr. Mohan Kumar Gupta BIT durg	Ms. Sneha Gupta UTD Bilai Ms. Shraddha Sharma BIT Durg	200000
CSVTU/CRP/TEQIP-III/55 Date: 05/09/2019	Line start permanent magnet motors for future electric vehicle	Dr. Ankit Dwivedi CEC Bilaspur	Pallava Gupta REC Durg	150000
CSVTU/CRP/TEQIP-III/56 Date: 05/09/2019	Determination of organophosphorus pesticides in vegetable and water sample at Atharapur area	Dr. Rakesh Singh Dimdhal SSIPMT Raipur	Dr. Shilpa Sharma RCET Raipur	150000
CSVTU/CRP/TEQIP-III/57 Date: 05/09/2019	design and fabrication of low cost electric two wheeler.	Mr. Atul Chakrawarti SSIPMT Raipur	Manish Kumar Mishra BIT Raipur	250000
CSVTU/CRP/TEQIP-III/58 Date: 05/09/2019	Design and Development of a cost effective phasor measurement unit for real time monitoring of smart power system	Dr. Shashwati Ray BIT durg	Dr. Shrimpy Kalhan Goyal, SSTC Bhilai Mr. Gourav Shankar BIT Durg	200000



Sanction number	Title of Research Project	Name of PI and Affiliation	Name of Co-PI and Affiliation	Total Approved Grant (INR)
JTU/CRP/QIP-III/16 Date 17/08/2019	Mechanoluminescence and thermo luminance studies of rare earth activated phosphors for display and mechanical sensors	Dr. Vikas Dubey, BIT RAIPUR	Dr. Raunak Kumar Tannakar, BIT Durg Mr Rituraj Chandrakar, NMDC DAV Polytechnic	2.00,000
SVTU/CRP/EQIP-III/17 Date 17/08/2019	Mechanoluminescence for crack detection in cementitious structure	Dr. Shri Ram Krishna Sharma, BIT RAIPUR	Mr. Manish Kumar Sinha, UTD-CSVTU, Bhilai	2.50,000
SVTU/CRP/TEQIP-III/18 Date 17/08/2019	Health risk assesment and remediation technique for uranium contamination in ground water of durg and near by district chhattisgarh	Dr. Santosh Kumar Sar, BIT Durg	Dr. Pradeep Kumar Ghosh, KEC Bhilai	2.00,000
CSVТУ/CRP/TEQIP-III/19 Date 17/08/2019	Mutual coupling reduction in planner compact antenna for mid band 5G wireless application	Mr. Upendra Soni,SSIPMT Raipur	Mr. Vidhata Poddar, CEC Bilaspur, Mr. Robert Mark, GGU Bilaspur	2.50,000
CSVТУ/CRP/TEQIP-III/20 Date 17/08/2019	Design and development of cluster based smart agriculture system using machine learning and IoT	Dr. Ritesh Dash, CCET Bhilai	Dr. G.C. Biswal, BIT Durg Dr. Dillip Kumar Dash, CCET Bhilai	2.50,000
CSVТУ/CRP/TEQIP-III/21 Date 17/08/2019	Development of manually driven solar juice cart	Prof. Shruti Tiwari, SSGI Bhilai	Prof. Rajnish Prasad Pandey, CSIT Durg DR. R.N. Patel, NIT Raipur	2.50,000
CSVТУ/CRP/TEQIP-III/22 Date 17/08/2019	A novel high entropy alloys with composite microstructure	Dr. Anil kumar, BIT Durg	Mr. Rajesh Kumar, CSIT Durg Mr Rituraj Chandrakar, NMDC DAV Polytechnic	2.00,000
CSVТУ/CRP/TEQIP-III/23 Date 17/08/2019	Electroluminescence studies of SrAl ₂ O ₄ : Eu ²⁺ , Dy ³⁺ thin films of EL based device applications.	Dr. Dharendra Singh Kshatri, SSIPMT Raipur	Dr. Vikas Dubey, BIT Raipur Dr. Shubra Mishra, SSIPMT Raipur	2.50,000



BHILAI INSTITUTE OF TECHNOLOGY, DURG

भिलाई प्रौद्योगिकी संस्थान, दुर्ग
(ESTD. 1986)

(Seth Balkrishan Memorial)

Approved by AICTE, New Delhi, Affiliated to CSVTU, Bilai
Major UG Courses Accredited by NBA
Accredited by NAAC With "A" Grade
An ISO 9001:2015 Certified Institution
NIRF-2018 Rank Band 151-200

Date: 07/09/2019

To,

The Project Director - DST NIMAT 2019-20
Entrepreneurship Development Institute of India
Distt- Gandhinagar, Gujarat India

Subject: Submission of required documents for DST NIMAT Project 2017-18

Reference: EDII/DST-NIMAT/19-20/002, Dated: 12.08.2019

Sir,

This is with reference to the above sanction order for conducting Entrepreneurship Awareness Camp (EAC) under the aegis of NSTEDB, New Delhi, we hereby submitting the various documents required for release of first installment of project fund sanction.

List of documents:

1. Duly signed Agreement
2. Duly signed "Terms & Conditions"
3. Action Plan (Annexure - I)
4. Bank Details (Annexure IA)
5. Programme Schedule

An early action is solicited.

Thanking you,

Dr. Ashok Kumar Chandra
Associate Professor,
Department of Management
BIT Durg C.G.



DST - NIMAT PROJECT 2019-20

Implemented by:
Entrepreneurship Development Institute of India (EDII), Ahmedabad

Under the aegis of:
The National Science & Technology Entrepreneurship Development Board, DST, Govt. of India

Agreement between EDII and Programme Implementing Agency (PIA)

Entrepreneurship Development Institute of India (henceforth referred to as EDII) having its Head Office at Village & P.O. Bhat 382 428, Dist. Gandhinagar (Gujarat) and

BHILAI INSTITUTE OF TECHNOLOGY,

BHILAI HOUSE, G.E. ROAD, DURG, CG. 491001

(Name & address of the Programme Implementing Agency (PIA)) hereby enter into the following Agreement on 07/09/2019 (Date) at DURG (Place).

BHILAI INSTITUTE OF TECHNOLOGY, DURG (Name of the PIA) has agreed to conduct 02 EXC(s) / EDP(s) / WEDP(s) / TEDP(s) / FDP(s). The programme (s)/ activity are to be conducted as per the terms and conditions enclosed.

General Guidelines

1. The grant being released should be exclusively spent on the specified purpose for which it has been sanctioned within stipulated time. Any unspent balance out of the amount sanctioned would be surrendered to EDII, Ahmedabad. Carry forward of unspent funds to the next financial year for utilisation for the same purpose may be considered only with the specific approval of the EDII, Ahmedabad.
2. The Programme Implementing Agency will furnish progress report of the work on the programme from time to time. In addition, appropriate persons may visit the Programme Implementing Agency periodically for ascertaining the progress of work and resolve any difficulties that might be encountered in the course of implementation. During the progress of the project, the PIA will provide all facilities to the Visiting Persons. On completion of the programme, consolidated report of the work done on the subject in a bond form shall be sent to EDII, Ahmedabad.
3. The Programme Implementing Agency shall furnish to EDII, Ahmedabad, Utilisation Certificates (copy enclosed) and an Audited Statement of Accounts pertaining to the grant within three months of completion of the programme / activity sanctioned.
4. The Programme Implementing Agency will maintain separate audited accounts for this project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the EDII, Ahmedabad. The interest thus earned will be treated as a credit to the PIA and the same to be refunded to NSTEDB through EDII.
5. The Programme Implementing Agency will not outsource the work for which the grant is being sanctioned. In case the PIA itself is not in a position to execute or complete the project, it would be required to refund the entire amount of grant-in-aid received by it to EDII, Ahmedabad.

[P.T.O.]



TERMS AND CONDITIONS FOR CONDUCTING ENTREPRENEURSHIP AWARENESS CAMP (EAC)

- Each camp of three days duration to be conducted in the premises of the academic institution.
- Each EAC should have minimum 75 students having S & T background i.e., S&T graduate/diploma holders, students of degree/diploma in Science & Technology.
- Industrial visit to be organized as part of EAC.
- Programme Implementing Agency may like to provide inputs as per the suggested schedule placed at EDII website (www.ediindia.org>Projects>Ongoing Major Project>DST-NIMAT).
- Reading/reference material to be provided to the participants and the same can be downloaded from EDII website.
- Financial assistance will be made available to the PIA @ Rs. 20,000/- per EAC as per the budget break-up given below:

Sr. No.	Expenditure Head	Amount in Rs.
1	Manpower including honorarium to experts	5000.00
2	Travel & Factory visit	4500.00
3	Miscellaneous & Contingency	7500.00
4	Administrative overheads	3000.00
	Total	20,000.00

- First installment i.e., 80% to be released on receipt of the duly signed Agreement, Terms & Condition along with the Action Plan (as per Annexure-I) and Bank detail (Annexure-I(A)).
- Activity Completion Statement (ACS) (as per Annexure - II) should be submitted within one week after completion of each activity.
- Second and final installment i.e., 20% to be released on successful completion of EAC(s), submission of Post Programme Report (PPR) within one month (Soft Copy in Microsoft Word Format on CD & Hard Copy in Spiral Binding) and List of Participants (in excel format) as per the Proforma placed at EDII website, submission of statement of audited expenditure (as per Annexure-III) and utilization certificate (as per Annexure-IV).



Signature of Head of the Institute

Principal

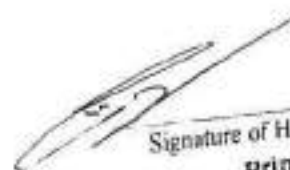
Bhilai Institute of Technology
(9th Balkrishna Memorial)
Bhilai House, DURG-491001
Chhattisgarh, INDIA

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	Total	20,000.00

- First installment i.e., 80% to be released on receipt of the duly signed Agreement, Terms & Condition along with the Action Plan (as per Annexure-I) and Bank detail (Annexure-II(A)).
- Activity Completion Statement (ACS) (as per Annexure - II) should be submitted within one week after completion of each activity.
- Second and final installment i.e., 20% to be released on successful completion of EAC(s), submission of Post Programme Report (PPR) within one month (Soft Copy in Microsoft Word Format on CD & Hard Copy in Spiral Binding) and List of Participants (in excel format) as per the Proforma placed at EDII website, submission of statement of audited expenditure (as per Annexure-III) and utilization certificate (as per Annexure-IV).



Signature of Head of the Institute
Principal
Bhilai Institute of Technology
(Seth Bhadrishan Memorial)
Bhilai House, DURG-491001
Chhattisgarh, INDIA

Annexure - 1 (A)
DST NIMAT Project 2019-20

BANK DETAILS

Name & Postal Address of the Programme Implementing Agency:

BHILAI INSTITUTE OF TECHNOLOGY, BHILAI HOUSE DURG C.G. INDIA 491001.

Contact: 0788-2359297, 2359163, 6556554 (EPABX)

Mobile: +91 788 - 2359263, 2359408

Email: bit@bitdurg.ac.in, principal@bitdurg.ac.in

1. Name of the Account Holder : BHILAI INSTITUTE OF TECHNOLOGY, DURG
2. Bank Account No. : 00000032471126372
3. Type of Account : CURRENT ACCOUNT
4. Name of the Bank : STATE BANK OF INDIA
5. Address of Bank : ALKA DEPARTMENTAL STORE,
SECTOR-10, BHILAI, DURG C.G. 490006
6. 9 Digit branch MICR Code : 490002007
7. Bank IFSC Code : SBIN0006942
8. Branch Code : 6942



Seal and signature of Head of the Institute
Principal
Bhilai Institute of Technology
(Seth Balakrishnan Memorial)
Bhilai House, DURG-491001
Chhattisgarh, INDIA



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI

छत्तीसगढ़ स्वामी विवेकानंद तकनीकी विश्वविद्यालय, भिलाई

No. CSVTU/TEQIP-III/2022/ 6835

Bhilai, Date: 19/04/2022

Project Completion Certificate

Collaborative Research Project (CRP) under TEQIP-III

As per the letter No. CSVTU/CRP/TEQIP-III/52, Dated 05/09/2019, the Collaborative Research Project (CRP) titled "Avenues of sustainable tourism in Chhattisgarh" was approved for grant-in-aid of INR 1,00,000/-subjected to the fulfilment of the Guidelines. The project has been successfully completed and report submitted to TEQIP-III Cell, CSVTU Bhilai.

Name of Principal Investigator : Dr. Souren Sarkar

Name of the Institute : SSTC Bhilai

Name of Co-Principal Investigator : Dr. Biswajeet Bhattacharjee

Name of the Institute : SSTC Bhilai

Name of Co-Principal Investigator : Dr. Abhishek Chakarborty

Name of the Institute : BIT Durg

Thashe
Coordinator TEQIP-III
CSVТУ, Bhilai

NVIDIA-BENNETT RESEARCH CENTRE FOR ARTIFICIAL INTELLIGENCE

Prof. Deepak Garg

Head : NVIDIA-Bennett Research Centre for Artificial Intelligence

www.gdeepak.com



BENNETT
UNIVERSITY
JALANAH INDIA GROUP

Date : 02-04-2018

Dear Dr. Arun Arora
Principal, Bhilai Institute of Technology, Durg, Chhatisgarh (India)

It is my pleasure to inform that Royal Academy of Engineering, UK has sanctioned a project titled *"Making Deep Learning and AI skills mainstream in India to fulfil trilateral needs of entrepreneurship, Industry-academia partnership and application-inspired Engineering Research"* worth £ 3,39,000 GBP. The project start date is 02 April, 2018 and end date is 30 April, 2020.

University College London and Brunel University are our UK partners. NVIDIA, Videoken, Edvantics and AWS Educate unit of Amazon are our Industry Partners.

As per the project structure there are Zonal Partners spread across different states of India, who will be lead institution for 10 more institutions in their surrounding geographical area. As part of this initiative a five member research group on AI will be established with planned and defined outcomes.

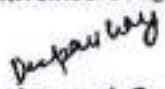
We appreciate the letter of support given by your institution. The obligations and benefits of each Zonal partner are being circulated in a separate sheet.

This document notifies your institution as a Zonal Partner and Dr. M.V. Padmavati as Lead Contact from your institution.

Any change in Lead Contact should be duly informed. Any defaulting behaviour on key aspects of the projects may lead to the cancellation of Zonal Partner status.

We are continuously trying to further upscale the project in terms of funding, partners and resources. Your continuous involvement will be key to making this project as a key milestone in Artificial Intelligence Revolution in India and also enable your institution to excel.

With sincere regards


Prof. Deepak Garg



**SILESIA
UNIVERSITY
IN OPAVA**

Rektor of the Silesian University in Opava
Doc. Ing. Pavel Tuleja, Ph.D.

Bhilai Institute of Technology, Durg
India

Opava 31st October 2017

Confirmation of the participation in the project of the Erasmus+ programme

This is to certify that the Bhilai Institute of Technology, Durg, India participates in the project of the European Commission Erasmus+ programme Key Activity 107 – Higher education student and staff mobility between Programme and Partner Countries.

The project period is from 1st June 2017 to 31st July 2019.

The project activities contain mobilities of students and academic staff in the following extent:

- 4 academic staff mobilities from Bhilai Institute of Technology, Durg, India, to Silesian University in Opava, Czech Republic.
- 2 academic staff mobilities from Silesian University in Opava, Czech Republic to Bhilai Institute of Technology, Durg, India.
- 8 students mobilities from Bhilai Institute of Technology, Durg, India, to Silesian University in Opava, Czech Republic.



SILESIA UNIVERSITY IN OPAVA

Ná Rybníčku 626/1 | 746 01 Opava | Czech Republic | T: +420 553 684 621 | rektor@slu.cz | WWW.SLU.CZ

Data Box ID: gw69hq | e-registry: c-podpis@slu.cz

Číslo žádosti: 2017-1-CZ01-KA107-034877

Slezská univerzita v Opavě
Na Rybníčku 626/1
746 01 Opava
č.j. DZS/10284/2017

V Praze 26. května 2017

Vyhodnocení žádosti o financování mobilit studentů a zaměstnanců mezi programovými a partnerskými zeměmi programu Erasmus+ vysokoškolské vzdělávání (KA1).
Výzva 2017

Vážená paní / Vážený pane,

dovolujeme si Vám oznámit, že na základě jednání Schvalovací komise programu Erasmus+ vysokoškolské vzdělávání ze dne 25. května 2017 byla Vaše žádost o financování mobilit studentů a zaměstnanců mezi programovými a partnerskými zeměmi programu Erasmus+ vyhodnocena následovně¹:

Region	Země	Požadovaný grant v €	Schválený grant v € včetně OM	Rozhodnutí	Počet mobilit
Region 6 - Asia	India	58 720,00	58 720,00	schváleno	16
Region 7 - Central Asia	Uzbekistan	47 036,00	47 036,00	schváleno	12

Hodnocení probíhalo pro každou jednotlivou zemi zvlášť, instituce tedy mohla získat grant například jen pro určité mobility/země. Při hodnocení byly žádosti posuzovány na základě čtyř výběrových kritérií:

1. Relevance strategie (max. 30b)
2. Kvalita podmínek spolupráce (max. 30b)
3. Kvalita koncepce a realizace projektu (max. 20b)
4. Dopad a diseminace (max. 20b)

Země zamítnutá z důvodu nedostatku financí je taková země, která splňovala výběrová kritéria, ale vzhledem k vysokému počtu žadatelů o grant v dané rozpočtové obálce mohl být grant udělen pouze žadatelům, jejichž žádosti dosáhly v hodnocení vyššího počtu bodů.

Země zamítnutá z důvodu kvality je taková země, která při hodnocení nedosáhla minimálně 60 bodů ze 100 možných, nebo taková, která v prvním kritériu (Relevance strategie) nedosáhla alespoň 50 % z maximálního počtu bodů v daném kritériu.

Prostředky na organizaci mobilit jsou alokovány v paušální výši na 1 mobilitu dle pravidel Evropské komise (tj. 350 EUR na první až stou mobilitu a 200 EUR na stoprvou a každou další mobilitu).

¹ Toto rozhodnutí, které je výsledkem výběrového procesu uskutečňovaného na základě postupů stanovených Evropskou komisí, je konečné. Proti výsledku je možné se do 15 dní od doručení tohoto rozhodnutí odvolat, a to písemně na e-mail ombud@man.dzs.cz či na adresu Ombudman, DZS, Na Fuších 4, Praha 1, 120 00.

Celková schválená finanční podpora tohoto projektu z prostředků Evropské unie činí: 105 756,00 EUR.
Celkový počet schválených mobilit je 28.

Finanční podpora z prostředků EU Vám bude přidělena na základě grantové smlouvy s DZS.

O výsledku výběrového řízení prosím uvědomte Vaše partnerské instituce.

Děkujeme za Váš zájem o účast v programu Erasmus+ vysokoškolské vzdělávání.

S pozdravem



Ing. Alena Svobodová
vedoucí oddělení Erasmus+ vysokoškolské vzdělávání

Příloha 1: Komentář hodnotitelů

Příloha 2: Pokyny pro zadávání bankovních údajů do systému BADU

Příloha 1: Komentář hodnotitelů

Navrhovaný projekt mobilit vychází z dosavadní spolupráce Slezské univerzity se jmenovanými univerzitami v Indii a v Uzbekistánu, v rámci které docházelo nejenom k vědecké spolupráci, ale rovněž k výměně pedagogů v obou směrech a k přijímání uzbeckých doktorandů na Slezskou univerzitu. Žadatel by měl pouze upřesnit, kdy tato spolupráce začala a v kterých letech probíhaly jednotlivé aktivity.

Navrhovaný projekt plně odpovídá dlouhodobé strategii internacionalizace na Slezské univerzitě a rovněž naplňuje strategické cíle Chhattisgarh Swami Vivekanand Technical University v Indii a National University of Uzbekistan. Žadatel by měl pouze více rozvést, jak plánované mobility zapadají do strategie internacionalizace na University of Delhi. Žadatel jasně odůvodňuje výběr požadovaných studentských a učitelských mobilit mezi partnerskými univerzitami. Žadatel stručně popisuje rozdělení zodpovědností a rolí v rámci interinstitucionální dohody mezi Slezskou univerzitou a partnerskými univerzitami v Indii a v Uzbekistánu. U obou zemí jsou dobře popsány cíle kooperujících institucí a mobilita může pomoci k naplnění těchto cílů.

Jednotlivé fáze projektu včetně přípravy, výběru účastníků, samotné realizace mobilit a navazujících aktivit jsou jasně popsány. Žadatel by měl pouze upřesnit, jak budou uznávány zahraniční výjezdy učitelů. Všechny fáze projektu by měly být zaneseny do časového harmonogramu. V žádosti jsou zmíněny komunikační prostředky, které budou použity během realizace projektu. Pozitivní je skutečnost, že mobilita je přístupná i osobám se specifickými potřebami.

Žadatel adekvátně popisuje dopad projektu na vyjádřující studenty a učitele a na akademické prostředí na zapojených univerzitách, měl by ale také doplnit dopad projektu na ostatní subjekty na místní, regionální a vnitrostátní úrovni a to jak v České republice, tak i v Indii a v Uzbekistánu. V případě Indie žadatel konkrétně specifikuje diseminační aktivity a kanály, kterými budou výsledky šířeny. Není ale dostatečně zřejmé, zda se jedná o diseminační aktivity pouze ze strany Slezské univerzity, nebo rovněž ze strany indických institucí. V případě Uzbekistánu je otázka diseminace zcela opomenuta. Žádost by měla obsahovat i strategii monitorování a způsoby evaluace výsledků mobility.

Závěr:

Celkově lze žádost hodnotit jako dobrou a v případě dostatečných finančních prostředků ji lze doporučit k financování. I přes drobné výtky zejména v oblasti navazujících aktivit (diseminace, evaluace) lze díky předchozí spolupráci zapojených institucí předjímat úspěšnou realizaci projektu.

Higher Education Partnership - India Contract

This Contract (the 'Contract') is made on the 17th March, 2016 between:

- (A) **The Royal Academy of Engineering** incorporated by Royal Charter of 3 Carlton House Terrace, London SW1Y 5DG, Registered Charity 293074 ('the Academy')
- (B) **Thapar University** Computer Science and Engg Dept, Patiala, India, 147004, India, ('the Recipient')

Background:

- (A) This Contract contains the terms and conditions of an Award to be made by the Academy under its Higher Education Partnership - India scheme, whose purpose is support the aims of the UK government's Newton Fund by facilitating international visits and exchanges between industry and academic partners in the UK and their counterparts in selected Newton Fund Partner Countries.
- (B) The details of the Award are set out in Annex A to this Contract.

It is agreed as follows:

1. Definitions

'The Award' means the award of a grant whose details are set out in Annex A.

'The Award Letter' means the letter or email from the Academy addressed to the Awardee(s) confirming the Award as detailed in Annex A.

'The Recipient' means the university / organisation named above which will be formally receiving the Award.

'The Principal Contact' means the Awardee who is the principal contact at the Recipient who is named in Annex A.

'The Programme of Activities' means those activities specified in the Application, attached as Annex B, subject to any additional, excluded or amended activities detailed in clause 3.4

'The Awardee(s)' means the Principal Contact and any other person(s) who is named in the original Application, as the context may require.

'Online Grant System' means the Academy's online application and assessment program through which the Award application was submitted, assessed, and will be monitored.

'Statement of Expenditure' means the statement of expenditure required to be submitted by the Recipient under Clause 5.1.

'Report' means any formal written update concerning the Programme of Activities required to be submitted by the Awardee under Clause 4.5.

'Not applicable' means this clause is not relevant to this Contract and has been redacted. The clause number remains in place to maintain the accuracy of any clauses which refer to other clauses.

2. Grant of Award

Dr Shivani Goel

Lead Co-Applicant

Co-Applicant

+91-9915599654 (Mobile)

shivani@thapar.edu (Work)

www.thapar.edu (Work)

Computer Science and Engineering Department, Thapar University, Patiala, India, 147004, India (Work)

Mr Mark Lester

Main UK and Industry Representative

Co-Applicant

020 38265 621 (Work)

mark.lester@futurelearn.com (Work)

www.futurelearn.com (Work)

FutureLearn, c/o The British Library, 96 Euston Rd, London, UK, NW1 2DB, United Kingdom (Great Britain) (Work)

Please include your institution name in the address line

Please provide contact details of the Lead and Co-Applicants

Please enter details for every applicant involved in this proposal, including the Lead Indian university and co-applicants from industry and academia in the UK and India.

Title	Full Name	Job title	Institution	Email
Dr	Deepak Garg	Head, Computer Science and Engineering Department	Thapar University, Patiala	dgarg@thapar.edu
Prof	Susheel Mittal	Deputy Director	Thapar University, Patiala	smittal@thapar.edu
Dr	Shivani Goel	Assistant Professor	Thapar University, Patiala	shivani@thapar.edu
Mr	Mark Lester	Global Head of Education Partnerships	FutureLearn, UK	mark.lester@futurelearn.com
Prof	Amit Sareen	Head, Department of Applied Sciences	Amritsar College of Engineering, Amritsar	amit.sareen@yahoo.com
Prof	Kamal Bijani	Director-Amrita E-Learning Research Lab	Amrita University, Kerala	kamal@amrita.edu

3. Programme of Activities, and timetable

- 3.1 The Recipient shall procure the carrying out of the Programme of Activities as described in Annex B.
- 3.2 The Recipient shall not modify or alter the Programme of Activities without the prior written consent of The Academy.
- 3.3 The Academy's approval must be sought in advance and in writing for changes to any of the following:
- 3.3.1 the Start Date
 - 3.3.2 the End Date
 - 3.3.3 the re-allocation of expenditure between different cost categories, as specified in Annex B
 - 3.3.4 a change from full to part-time employment, or from part-time to full-time, as applicable.

The Awardee(s) should specify any reasons for the requested changes, and may at the Academy's request be required to provide further reasonable information. The Recipient and the Awardee(s) will be notified of the Academy's decision in writing. However, no additional funding will be provided if these dates are varied, subject to Clause 2.12 (if applicable).

- 3.4 The Recipient shall undertake the additional or amended activities (if any) specified in Annex B, and shall not use the funding for the activities excluded (if any) in Annex B.
- 3.5 Not applicable.

4. Payment of the Award

- 4.1 The amount of the Award to be paid to the Recipient is set out in Annex D.
- 4.2 The Recipient undertakes to provide funding for any additional costs not covered by the Award which are necessary for the successful completion of the Programme of Activities. The Award is cash-limited and no supplementary funding will be provided by the Academy to complete the Programme of Activities in event of a shortfall.
- 4.3 The Recipient will provide the Awardee(s) with sufficient access to funds to enable the successful completion of the Programme of Activities.
- 4.4 Once this Contract has been signed by both parties in accordance with Clause 2.2 and any conditions specified in Clause 2.3 have been met the Academy shall make payments to the Recipient according to the Payments Schedule shown in Annex D. The Recipient will complete Annex E with the necessary banking information required to process the payments. The Recipient is not required to submit invoices for payment and all payments will be made to the bank account provided.
- 4.5 Each payment will be conditional upon receipt by the Academy of any and all Reports which fall due prior to the payment date, in accordance with Clause 5.1. Reports must be submitted in a timely manner and be of a satisfactory standard to release payment, as determined by the Academy, acting reasonably. Reports submitted more than 60 days after the due date are unlikely to be considered timely and no further payment will be made.
- 4.6 The Academy will deduct from the Final Payment (a) any underspend on the Programme of Activities which is evident from the Statement of Expenditure and (b) any funds not spent exclusively on the Programme of Activities, and if the amount to be deducted exceeds the amount of the Final Payment then no Final Payment will be made and the balance due shall be refunded to the Academy by the Recipient within 4 weeks of the Award End Date.

in place to ensure that research is conducted in accordance with standards of best practice; systems to promote research integrity; and transparent, robust and fair processes to investigate alleged research misconduct.

- 6.9 The Recipient shall ensure that the Awardee(s) acknowledge the Academy's financial contribution in all publications regarding or resulting from the Programme of Activities, in the form specified in Clause 2.8 or as otherwise agreed to by the Academy.
- 6.10 The Recipient shall ensure that all uses of the Academy's logo conform to the Academy's requirements, as notified by the Academy to the Recipient.
- 6.11 The Academy may refer to the making of the Award, the names of the Recipient and the Awardee(s), and the general aims of the Award in any reports to its funders and in any publicity material.
- 6.12 Not applicable.
- 6.13 Not applicable.
- 6.14 Not applicable.

7. Intellectual Property and equity rights

- 7.1 The Academy will not own or be granted a licence under any intellectual property rights relating to or resulting from the Programme of Activities.
- 7.2 The Recipient will ensure that the intellectual property rights in any results derived from the Programme of Activities are shared between the Recipient, the Company and the Awardee(s) and agreed in writing between the Recipient, the Company and the Awardee(s) before the Award Start Date. The Recipient will supply details to the Academy on request.
- 7.3 The Recipient will ensure that all existing intellectual property rights required to undertake the Programme of Activities are agreed in writing between the Recipient and the Awardee(s) before the Award Start Date. The Recipient will supply details to the Academy on request.
- 7.4 Not applicable.

8. Termination

- 8.1 Should the Department for Business, Innovation and Skills (or successor department) reduce the funding of this Award the Academy reserves the right to terminate this Contract at any time with immediate effect by giving written notice to the Recipient.
- 8.2 The Academy may also terminate this Contract by notice in writing if:
 - 8.2.1 the Recipient or the Awardee(s) has provided any false information in connection with the Award application or the Programme of Activities; or
 - 8.2.2 the Recipient fails to apply the Award monies for the purposes specified in this Contract; or
 - 8.2.3 the Recipient is in breach of any other provisions of this Contract;
 - 8.2.4 the Awardee(s) cease(s), in the reasonable opinion of the Academy to have suitable employment for the completion of the Programme of Activities; or
 - 8.2.5 the Recipient receives funding from alternative sources for the Programme of Activities which covers the same costs as are funded under this Contract (without the prior agreement of the Academy); or
 - 8.2.6 The Academy, acting reasonably, considers the Awardee(s) unfit or unable to pursue the Programme of Activities in accordance with the requirements of this contract, if the facilities required for the Programme of Activities are not available, or if for any other reason the Programme of Activities cannot be fulfilled; or

Goals and Objectives

Please state three main objectives for the exchange.

1. To inculcate Innovative Pedagogy in Engineering Education and cutting edge MOOC Instructional design blended with appropriate face to face instructional strategies to enhance Engineering Education. This will be done by designing Mini MOOCs with the help of FutureLearn (UK) and then further scaling up the activity with the help of lead zonal institutions. The Main initiative will be to develop Mini-MOOCs Designing and Developing Mini-MOOCs.
2. To make the initiative as PAN-India Initiative by having 11 zonal lead institutions who will further take up the lead to train the Tier-2 and Tier-3 Institutions in their region
3. To enhance the capacity of the teachers and driving technology enhanced education adoption in Universities. We will be introducing the technology, skills, resources and training required for developing such MOOCs at the institutional level.

The main activities to be undertaken

This is a key section of the application.

Describe the programme of work to be undertaken during the programme including how novel, realistic/ambitious the project is. **Outline the specific deliverables anticipated and appropriate milestones by which to measure progress.** There is an option to upload any supporting documents, figures and diagrams in the next question. Your description should include:

- a description of the agreed work programme(s), including a breakdown of tasks.
- context of the proposed research, including its application (academic and/or industrial)
- context of the proposed programme and the need it addresses
- a detailed technical case for the programme of work.

Please note: All responsibility for arranging travel and accommodation will lie with researchers and institutions involved. You have up to 1000 words to answer this question.

Need of the proposed programme: India has seen a considerable growth in the Higher Education in in last decade. There is a urgent need to fill the gap regarding quality of delivery of education. In parallel there is also a huge change coming by the way of new interventions due to advance technology, online learning, availability of internet etc. Both factors of quality as well as introduction of new concepts delivery need to be considered together, so that the higher education system does not lag as far as the latest happenings in this domain are concerned.

As of now, we had seen a lot of progress in teaching pedagogy by the use of multimedia content, flipped classroom, blended learning and online learning. Different systems and concepts has been successful by the initiatives of many companies and Universities in the world. In India, It is still at the nascent stage. Instructors, Institutions, educators and managers need to be initiated and trained. They also need a hand-holding to build a prototype and working model of state of the art modules and also a sample dry run of these concepts at their own institutions. So to fulfil this need and to spread this culture in the country, we have selected 10 partners across India which cover 10 geographical zones of India. These will be called Zonal Lead Institutions and will be at a level below the overall lead institution (Thapar University). These Institutions has further agreed to train 10 more institutions in their zone in the second level. So, In Total 110 institutions will be benefited by this programme.

Context of the Proposed Research and its application: We propose to develop 4 Mini-MOOCs. Two of these will be on the core concept (i.e. how to design Mini-MOOC, How to manage a Mini-MOOC from inception to delivery). Two more Mini-MOOCs will be on the model MOOCs showcasing the best practices introduced in the first two Mini-MOOCs.

Major List of Tasks will be

1. To design world class content for these four Mini-MOOCs with the help of available expertise and also with the help of UK and Industry partner. To decide and document the instructional strategies to be used along with the delivery of mini-MOOCs
2. To run these Mini-MOOCs on FutureLearn Platform so that these can become usable by the institutional users in the first phase. It will also help to dry-run and test the efficacy of these, so as to get the actual feedback from the users.
3. To Train the Instructors from the Lead Zonal Institutions by holding Train-The-Trainer workshops
4. It will be followed up by faculty exchanges with in the institutions as per the requirement

Description of the agreed work Programme and detailed description:

1. The hierarchical model of the collaboration between lead institution, UK partner, Indian Industry and Supporting institutions has been given in the first page of the file "Diagrams and Description.pdf"
2. Second page of the file gives the details of 11 different zones in which India has been categorized and also gives the corresponding list of institutions who are representing each zone. It also gives the names of the lead contact from different zones and also the states that will be catered by that zone.
3. Third page gives the relevance of different institutions involved in the programme
4. Fourth diagram gives the flow of activities to be undertaken in the programme

no and sample practice Mini MOOCs along with the first two MOOCs will act as the best practice examples, which can be further taken up by hub institutions.

Evaluation of the impact of MOOCs: It will give a clear results of the impact of Mini-MOOCs a) the institutions involved b) the staff involved in delivering or supporting/integrating them and c) the learners. This type of study has not been done so far in an holistic manner. It will provide a good set of recommendations to practitioners and world at large regarding these technologies.

Creating a network of instructors committed to take the higher education in India to next level of excellence

It can be of great help in National Skill Development, wherein many such courses of 2-3 weeks can be developed for immediate certification and employment in the vast skill based industry in India.

g) Likely to be followed up by new initiatives in skilled India, rural empowerment and digital India based on the success of the project

Successful implementation will create a synergy of resources, individuals and well-oiled network which can take up more challenging tasks in the near future

Choice, role of and benefits to the industry partner

Provide justification for the choice of industry sponsor including the strategic importance of this relationship to you and your institution. Specify the exact role of the industry partner in this programme. Provide details of what has been achieved so far through any existing collaboration and what is the overall perceived long term vision for this relationship.

You have up to 350 words to answer this question.

We have existing collaboration with the Industry partner from last 10 years. Till now more than a thousand students have been trained on the industry relevant technologies through the offerings under the framework of "campusconnect". There have been roadshows, faculty exchanges, Faculty Enablement Programmes, Train-The-Trainer workshops, sabbaticals. Infosys has also sponsored few programs with us. Resource persons have traveled to contribute their knowledge to and fro between us and Infosys. Infosys is already planning to go for MOOCs to strategically enhance their higher education offerings. We stand to gain by the network of institutions working under campusconnect umbrella with Infosys. That will help to impart the learning from this program to a wider audience. Infosys has wonderful physical and technical infrastructure to share. Infosys has human resources who have talent related to the project and they can be involved under the framework of our collaboration with Infosys. So, it will help in a big way on long term basis.

Choice, role of and benefits to the UK partner

Provide justification for the choice of the UK partner including the strategic importance of this relationship to you and your institution. Specify the exact role of the UK partner in this programme. Provide details of what has been achieved so far through any existing collaboration and what is the overall perceived long term vision for this relationship along with expected benefits to the UK partner and UK in general which will result from the collaboration.

You have up to 350 words to answer this question.

Our UK Partner is FutureLearn which is having very good reputation and experience in the field and domain of the project. FutureLearn wants to help and support Indian universities in improving their engineering education and is pleased to offer their expertise and platform capabilities in developing and delivering high quality social online courses to large numbers of students. FutureLearn is supporting this initiative as it aligns well with their strategy of expanding their presence in India (a major market for massive open online courses). Cultivating relationships with Indian universities who may use their platform for teaching students are their, and widening access to lifelong learning to individuals across India is one of their ambitions.

Expected benefits from Future Learn for this initiative:

- Training Thapar University on how to build massive courses according to their pedagogy, which will be delivered remotely and providing a partnership manager to advise on course design for the first two courses. To provide an expert who will fly to India to support training, principally for the design of the first massive course and also to provide Quality Assurance for the four mini-MOOCs built by Thapar University to check for technical quality and offer feedback on the courses. However, this support would not include direct course editing. Future Learn will provide relationship and administrative support to use the FutureLearn platform to deliver one run of each of the four courses developed by Thapar University. UK Partner will also provide administrative support for up to 11 other universities to have access to the course creation tools of the platform. Each university can invite a small cohort (less than 50 students) into one private course they build to test its design.

So Future Learn is strategically important in short, medium and long term for the project.

Intended ways of maximising the benefits, building capacity and sharing lessons resulting from the project

The Academy wishes to support collaborations with wide and lasting impact and requires applicants to reserve 5% of total programme costs toward this end. As such please detail plans for activities you will undertake to maximise the benefits of the programme, particularly amongst other Tier 2 and Tier 3 engineering universities. These may be other/further collaborations, dissemination activities, training workshops, public engagement, teaching, routes to exploitation/commercialisation.

Annex B: APPLICATION FORM

Additional, Amended, or Excluded Activities (if any) (see clause 3.4)

Budget Template Upload

Please upload a detailed, clear budget spreadsheet which outlines the total costs of your work programme and clearly shows the support you are requesting from the Academy and the contribution your partnership will offer.

Funding guidelines:

The total contribution from the Academy cannot exceed £50,000.

- This programme offers **financial support for travel, subsistence and salary support costs** related to your proposed activities amongst industry and academic partners in India and the UK.
- The Academy requires applicants to reserve 5% of **total** project costs for activities related to upscaling programme impact, building capacity and sharing lessons particularly amongst the wider network of Tier 2 and Tier 3 Indian engineering universities. Please cost this in to proposals and propose activities which may promote this end.
- There is no set limit on how much you can claim in any one category apart from consumables and other costs, where no more than 10% of the total cost may be requested. 'Consumables' include project specific costs of small equipment, computer software licenses or publication costs. Examples of 'other costs' are conferences and seminar fees.
- Please note that the funding provided by this scheme is **not** calculated on the basis of full economic costs.
- The totals may come to more than the maximum funding you can request under this scheme. Additional costs must be met by the participating institutions. If the amount noted is higher than the award can provide, please state the contribution to be made by each institution.
- The funding provided cannot be used to pay for purchases of large equipment and research infrastructure.

Please note that budgets submitted at the Expressions of Interest stage were only indicative and are thus non-binding. Budgets may be revised based upon above criteria and detailed project needs.

File name	Date uploaded
budget sheet Thapar.xls	10/01/2016 16:33:58

Justification of Costs

Please provide a brief explanation of all costs, covering both what the funds will be spent on and why. We require evidence that you have researched the costs for which you are seeking support; for example you could include the cost per night of accommodation. Travel costs should be based on the most suitable and economical form of travel. Subsistence costs should reflect the normal rates applied at the host institution/s.

Please Note: This programme offers support for travel, subsistence and salary support costs related to conducting collaborative activities amongst industry and academic partners in India and the UK.

University/ Academic Institution Letters of support

We require letters of support from **each University/ Academic institution** taking part in the programme.

Letters of support should be written by Applicants' respective Heads of Departments (or Heads of Faculty if either of the Applicant is the Head of Department). As a minimum the Author should include:

- Confirmation of their support for the application
- Why they support the project
- How it fits in with the department's aims.
- What form the support will take (financial, staff time, guidance, facilities)

The letters should be on headed paper, a maximum of two pages long, signed by the author, and uploaded by the Applicant as pdfs.

Please note: The quality of institutional support is a key factor in the strength of the application

File name	Date uploaded
Chitkara PSIT ACET Support letter.pdf	10/01/2016 16:51:24
supportLetter.pdf	10/01/2016 16:46:25
FORCE VIIT Keerti Support Letter.pdf	09/01/2016 17:15:40
Amrita Support Letter.pdf	09/01/2016 17:06:34
SRKR Support Letter.pdf	04/01/2016 13:48:53
NIT Silchar Support Letter.pdf	04/01/2016 13:47:49
NIST Support Letter.pdf	04/01/2016 13:47:21
Marwadi Education Foundation-Support Letter.pdf	04/01/2016 13:47:13
BIT Support Letter.pdf	04/01/2016 13:46:49

Industry Partners Letters of support

We require letters of support from **each Industry partner** institution taking part in the programme.

Letters of support should be written by the head of the relevant business unit with which the programme is to take place. As a minimum the Author should include:

- Confirmation of their support for the application
- Why they support the project
- How it fits in with the business's aims.
- What form the support will take (financial, staff time, guidance, facilities)

The letters should be on headed paper, a maximum of two pages long, signed by the author, and uploaded by the Applicant as pdfs.

Please note: The quality of institutional support is a key factor in the strength of the application

File name	Date uploaded
Infosys Support Letter.pdf	09/01/2016 17:04:43
FutureLearn Letter of Support.pdf	09/01/2016 17:04:33

11.1 This Contract shall be governed by and construed in accordance with English law and all parties agree to submit to the exclusive jurisdiction on the English Courts as regards any claim or matter arising under the Contract.

IN WITNESS whereof this Contract was signed on the below date

Lupay Garg

DIRECTOR
THAPAR UNIVERSITY,
PATIALA 147004 (INDIA)

O. Hans

[Signature]

Signature and stamp of behalf of Thapar University

Date: 18/03/2016

Name: Prakash Gopalan

Position: Director

Stamp

[Signature]

Signed on behalf of the Royal Academy of Engineering

Date: 22.3.16

Name: P.D. GREENISH

Position: CEO



ENTREPRENEURSHIP DEVELOPMENT INSTITUTE OF INDIA

Near Village Bhat, Via Ahmedabad Airport & Indira Bridge, P.O. Bhat - 382 428, Dist. : Gandhinagar,
Gujarat, India.
Tel. : +91-79-23969153, 23969158, 23969159, 23969161
E-mail : info@ediindia.org

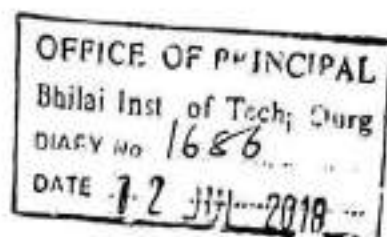
Telefax : +91-79-23969164
Website : www.ediindia.org

S. B. Sareen
Sr. Faculty & Project Director: DST-NIMAT

EDII/DST-NIMAT/18-19/007
Date: 03/07/2018

SPEED POST

Dr. Arun Arora
Principal
Bhilai Institute of Technology
G. E. Road, Bhilai House
Durg - 491 001
Chhattisgarh



Kind Attention: Dr. Ashok Kumar Chandra, Assistant Professor (Dept. of Management)

Dear Sir,

Sub: DST-NIMAT Project 2018-19: Sanction Order

Greetings from EDII, Ahmedabad!

This is with reference to your proposal submitted for conducting activities / programme(s) under the aegis of National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Govt. of India, New Delhi.

We are happy to inform you that the following activities / programmes have been sanctioned:

Sr. No.	Activity / Programme	No.	Amount in Rs.	Locations
1	Faculty Development Programme (FDP)	1	250000	1) Durg
Total		1	250000	

You are requested to please go through the enclosed Guidelines / Terms & Conditions as it is mandatory to follow the same.

Please note that the first installment is to be released on receipt of the following documents:

1. Duly Signed Agreement
2. Duly Signed "Terms & Conditions" (each Page)
3. Action Plan [Annexure-I]
4. Bank Details [Annexure-IA]

Dr. Gupta
21/7/18



The funds will be transferred through RTGS/NEFT. Please make sure that the above said documents must reach us as early as possible, but not later than ONE MONTH of receiving this sanction letter. Non receipt of the same may be considered as your unwillingness to take up the programme(s).

As per point no. 11 of the enclosed Terms & Conditions, it is expected to generate results in terms of unit establishment from programmes like; EDP, WEDP and TEDP. Hope, you will design the required strategy to show case desired result.

For any additional information, please contact either me (Email ID: sareen@ediindia.org, Mobile: 09925110040) or my colleague Mr. Prakash Solanki (Email ID: psolanki@ediindia.org, Mobile: 09723816384).

We look forward to have a long term professional relationship.

Thanking you, with regards,

(S. B. Sareen)

Encl.: a. a

Annexure - IV

DST - NIMAT Project 2018-19

UTILIZATION CERTIFICATE

(To be sent in Duplicate)

For the financial 2018-19 (ending 31st March)

1. Title of the Project / Scheme : **Entrepreneurial Skills Development for Rural Agro, Food Processing and Healthcare based Start-Ups**
2. Name of the Organization : **Bhilai Institute of Technology, Durg C.G. India**
3. Principal Investigator : **Dr. Ashok Kumar Chandra,**
Department of Management, BIT Durg
4. EDII, Ahmedabad Letter No. & date : **EDI/DST-NIMAT/18-19/007, Dated: 03.07.2018**
Sanctioning the project
5. Amount brought forward from the previous financial year :
Quoting EDII, Ahmedabad Letter No. & date in which : **EDII/DST-NIMAT/18-19/RLS-I/339**
: **DATE: 21/08/2018**
6. Amount resolved from EDII during the financial year: No. & date sanctioned Amount
(Please give No. & date of sanction showing the amount paid) : **EDII/DST-NIMAT/18-19/RLS-I/339** **2,50,000/-**
Date: 21.08.2018
7. Total amount that was available for Expenditure : **2,00,000/-**
(excluding commitment's) incurred during the financial year
(Sl.No. 5+6)
8. Actual expenditure (excluding Commitments) : **2,42,185/-**
Incurred during the financial year
9. Unspent balance refunded if any : **NA**
(Please give details of cheque No. etc.)
10. Balance amount available at the end of financial year : **NA**
11. Amount allowed to be carried forward to the next
Financial year vide letter No.
12. Balance Amount to be received from DST-NIMAT : **42,185/-**

Certified that the expenditure of Rs. 2,42,185/- (Rupees Two lakh forty two thousand one hundred eighty five only) mentioned against Col. 8 was actually incurred in the projects/scheme for the purpose I which it was sanctioned.

Date : 05/02/2019


Signature of Principal
Investigator


Signature of
Accounts Officer


Signature of the Head of
the Organization
Prof. Dr. Arun Arora
Bhilai Institute of Technology
(Seth Balkrishnan Memorial)
Bhilai House, DURG-491001
Chhattisgarh, INDIA

ACCEPTED AND COUNTERSIGNED



छत्तीसगढ़ विज्ञान एवं प्रौद्योगिकी परिषद
Chhattisgarh Council of Science & Technology

Vigyan Bhawan, Vidhan Sabha Road, Daldal Seoni, Raipur, (C. G.) 492 001
Email: dgscost@gmail.com

Raipur, Date 22/10/2017

No. CCOST/MP/17

Sanction Order

To

Principal
Bhilai Institute of Technology,
Durg (CG)

Sub: Sanction of Mini Research Project entitled 'Towards improvisation of hybrid biomass by gelation technique for preparing an integrated de-fluoridating unit to alternative the contaminants from groundwater of fluoride affected area'.

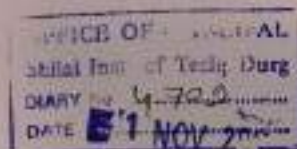
Ref: Mini Research Project proposal of Dr. Yashu Verma, Assistant Professor, Department of Applied Chemistry, Bhilai Institute of Technology, Durg (CG).

Project Investigator: Dr. Yashu Verma, Assistant Professor, Department of Applied Chemistry, Bhilai Institute of Technology, Durg (CG).

Chhattisgarh Council of Science & Technology hereby acknowledges that the Mini Research Project submitted and presented by the Principal Investigator Dr. Yashu Verma before expert committee of the Council on 28/08/2017 and as per the recommendation of the committee found it fit for sanction.

The Council hereby sanctions Rs.4,13,600/- (**Rs. Four Lakhs Thirteen Thousands Six Hundred only**) for completing the project, within a period of two years. The sanction is accorded with following terms and conditions:-

1. The Grant -in - Aid would be released through the Head of the Institution who would be responsible for proper utilization of the grant.
2. This sanction is subject to the condition that the grantee institution will furnish to the Council of Science & Technology, Financial year wise utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned/accrued on the grants received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.





छत्तीसगढ़ विज्ञान एवं प्रौद्योगिकी परिषद

Chhattisgarh Council of Science & Technology

Vigyan Bhawan, Vidhan Sabha Road, Daldal Seoni, Raipur (C. G.) 492 014

Email: dgccost@gmail.com

Prof. M. M. Hambarde

Director General

No. _____/CCOST/2017

Dated: _____ / _____ /2017

To

Principal

Bhilai Institute of Technology,

Durg (CG)

Sub: Release of first year installment (Project Fellow salary, Contingencies & equipment) of Mini Research Project.

Ref: 1. Mini Research Project of Dr. Ashutosh Narayan, Professor, Department of Applied Mathematics, Bhilai Institute of Technology, Durg (CG).

2. Council sanction letter no. 2259/CCOST/MRP/15, Raipur, dated 23.12.2015.

With reference to above cited, sanction is hereby accorded for **Rs 2,23,000.00 (Rs. Two lakhs twenty three thousand only)** Vide Cheque No. 532883 dated 11.01.2017 for first year installment (Project Fellow salary Rs. 1,20,000/-, Contingencies Rs.15,000/- and equipment Rs.88,000/-) of Mini Research Project entitled "**Stability of the oblate infinitesimal in the elliptic restricted three body problem with oblate radiating primaries**". The amount would be released in favor of Dr. Ashutosh Narayan, Professor, Department of Applied Mathematics, Bhilai Institute of Technology, Durg (CG).

Please acknowledge the receipt of above cheque and utilization certificate and progress report is submits within time.

Encl: As above.

(Prof. M.M. Hambarde)

Copy to: No/1574/सि.के.ए. 2017

1. Dr. Ashutosh Narayan, Professor, Department of Applied Mathematics, Bhilai Institute of Technology, Durg (CG).
2. Office copy.

(Prof. M.M. Hambarde)



ENTREPRENEURSHIP DEVELOPMENT INSTITUTE OF INDIA

Near Village Bhat, Via Ahmedabad Airport & Indira Bridge, P.O. Bhat - 382 428, Dist. : Gandhinagar,
Gujarat, India.
Tel. : +91-79-23969153, 23969158, 23969159, 23969161
E-mail : info@edilindia.org

Telefax : +91-79-23969164
Website : www.edilindia.org

S. B. Sareen

Sr. Faculty & Project Director: DST-NIMAT

EDII/DST-NIMAT/17-18/004

Date: 26/04/17

SPEED POST

Dr. Arun Arora

Principal

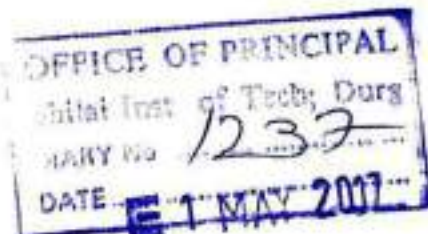
Bhilai Institute of Technology

G. E. Road, Bhilai House

Durg - 491 001

Chhattisgarh

Dr. Guha
T.S. 11/2



Kind Attention: Dr. Sanjay Guha, Chief Coordinator

Dear Dr. Arun Arora,

Sub: DST-NIMAT Project 2017-18: Sanction Order

Greetings from EDII, Ahmedabad!

This is with reference to your proposal submitted for conducting activities / programme(s) under the aegis of National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Govt. of India, New Delhi.

We are happy to inform you that the following activities / programmes have been sanctioned:

Sr. No.	Activity / Programme	No.	Amount in Rs.	Locations
1	Faculty Development Programme (FDP)	1	250000	1) Durg
Total		1	250000	

You are requested to please go through the enclosed **Guidelines / Terms & Conditions** as it is mandatory to follow the same.

Please note that the **first installment is to be released on receipt of the following documents:**

1. Duly Signed Agreement
2. Duly Signed "Terms & Conditions" (each Page)
3. Action Plan [Annexure-I]
4. Bank Details [Annexure-IA]



The funds will be transferred through RTGS/NEFT. Please make sure that the above said documents must reach us within ONE MONTH of receiving this sanction letter. Non receipt of the same may be considered as your unwillingness to take up the programme(s).

As per point no. 12 of the enclosed Terms & Conditions, it is expected to generate results in terms of unit establishment from programmes like; EDP, WEDP and TEDP. Hope, you will design the required strategy to show case desired result.

For any additional information, please contact either me (Email ID: sareen@ediindia.org, MOBILE: 099 25 11 00 40) or my colleague Mr. Prakash Solanki (Email ID: psolanki@ediindia.org, MOBILE: 097 23 81 63 84).

We look forward to have a long term professional relationship.

Thanking you, with regards,

(S. B. Sareen)
Encl.: a. a

DST - NIMAT PROJECT 2017 - 18

Implemented by:
Entrepreneurship Development Institute of India (EDI), Ahmedabad

Under the aegis of:
The National Science & Technology Entrepreneurship Development Board, DST, Govt. of India

Agreement between EDI and Programme Implementing Agency (PIA)

Entrepreneurship Development Institute of India (henceforth referred to as EDI) having its Head Office at Village & P.O. Bhat 382 428, Dist. Gandhinagar (Gujarat) and

BHILAI INSTITUTE OF TECHNOLOGY, BHILAI HOUSE,
G. E. ROAD, DISTRICT - DURG, CHHATTISGARH - 491001
[Name & address of the Programme Implementing Agency (PIA)] hereby enter into the following Agreement on **26/05/2017** (Date) at **DURG** (Place).

BHILAI INSTITUTE OF TECHNOLOGY, DURG C.G. (Name of the PIA)
has agreed to conduct EAC(s) / EDP(s) / WEDP(s) / TEDP(s) / ☒ FDP(s). The programme (s)/ activity are to be conducted as per the terms and conditions enclosed.

General Guidelines

1. The grant being released should be exclusively spent on the specified purpose for which it has been sanctioned within stipulated time. Any unspent balance out of the amount sanctioned would be surrendered to EDI, Ahmedabad. Carry forward of unspent funds to the next financial year for utilisation for the same purpose may be considered only with the specific approval of the EDI, Ahmedabad.
2. The Programme Implementing Agency will furnish progress report of the work on the programme from time to time. In addition, appropriate persons may visit the Programme Implementing Agency periodically for ascertaining the progress of work and resolve any difficulties that might be encountered in the course of implementation. During the progress of the project, the PIA will provide all facilities to the Visiting Persons. On completion of the programme, consolidated report of the work done on the subject in a bond form shall be sent to EDI, Ahmedabad.
3. The Programme Implementing Agency shall furnish to EDI, Ahmedabad, Utilisation Certificates (copy enclosed) and an Audited Statement of Accounts pertaining to the grant within three months of completion of the programme / activity sanctioned.
4. The Programme Implementing Agency will maintain separate audited accounts for this project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the EDI, Ahmedabad. The interest thus earned will be treated as a credit to the PIA to be adjusted towards further instalments of the grant, if any.
5. The Programme Implementing Agency will not entrust the implementation of the work for which the grant is being sanctioned in another organization and to divert the grant receipt as assistance to the latter institution. In case the PIA itself is not in a position to execute or complete the project, it would be required to refund the entire amount of grant-in-aid received by it to EDI, Ahmedabad.

[P.T.O.]



[Signature]
Dr. Sanjay Gupta
Head
Department of Management
Bhilai Institute of Technology

[Signature] 26/5/17 **Dr. Arun Arora**
Principal
Bhilai Institute of Technology
(Seth Balkrishan Memorial)
Bhilai House, DURG-4910
Chhattisgarh, INDIA

Now in witness whereof the parties to this present have here unto signed in this respective names and affixed their respective seal, the date and the year herein above written.
Signed, Sealed and Delivered by:

For

(Implementing Agency)
(Dr. Arun Arora)

Principal
Bhilai Institute of Technology
(Seth Balkrishan Memorial)
Bhilai House, DURG-491001
Chhattisgarh, INDIA

For

(EDI)

S. B. Sareen
Project Director, DST-NIMAT

Place: DURG

Date: 26/05/2017



Witnesses:

1.

Signature: [Signature]
26/5/17

(on the behalf of the Agency)
Name & Address of the Witness:

DR. SANJAY GUHA
Department of Management
Bhilai Institute of Technology,
Bhilai House, G.E. Road
Durg, C.G. - 491001

(Dr. Sanjay Guha)
Head

Department of Management
Bhilai Institute of Technology
Bhilai House, Durg - 491001 C.G. (INDIA)

2.

Signature: [Signature]

(on the behalf of EDI)
Name & Address of the Witness:

Prakash Solanki
Faculty & National Coordinator
Entrepreneurship Development Institute of India



TERMS AND CONDITIONS FOR CONDUCTING FACULTY DEVELOPMENT PROGRAMME (FDP)

1. FDPs of two week duration are to be conducted at the locations indicated in the Action Plan. Any change in the Action Plan will have to be informed to EDII well in advance for approval.
2. Each FDP should have about 20-25 faculty members of Science & Engineering Colleges, Polytechnics, B-Schools & institutions involved in entrepreneurship development.
3. Programme Implementing Agency may like to provide inputs as per the suggested schedule placed at EDII website (www.ediindia.org).
4. Reading/reference material to be provided to the participants and the same can be downloaded from EDII website (www.ediindia.org). In case any additional material is used during the programme, a copy of the same may please be submitted to EDII.
5. Financial assistance will be made available to the PIA @ Rs. 2,50,000/- per FDP as per the budget break-up given below:

Sr. No.	Expenditure Head	Amount in Rs.
1	Training Expenses	67,500.00
2	Travel & Factory visits	30,000.00
3	Miscellaneous & contingencies	32,500.00
4	Administrative expenses	26,000.00
5	Lodging & Boarding expenses	94,000.00
	Total	2,50,000.00

6. First installment i.e., 70% to be released on receipt of the duly signed Agreement, Terms & Conditions along with the Action Plan (as per Annexure I) and Bank detail (Annexure-I(A)).
7. Statement of Programme Completion (as per Annexure - II) should be submitted separately for each programme within one week after completion of programme.
8. Second and final installment i.e., 30% to be released on successful completion of the programme, submission of Post Programme Report within a month after completion of each programme (Soft Copy in Microsoft Word Format on CD & Hard Copy in Spiral Binding) as per the Proforma placed at EDI website; www.ediindia.org, submission of Statement of Audited Expenditure (see Annexure III) and Utilization Certificate (see Annexure IV).



26/5/17
(Dr. Arun Arora)
Principal
Bhilai Institute of Technology
(Seth Balkrishan Memorial)
Bhilai House, DURG-491001
Chhattisgarh, INDIA

26/5/17
(Dr. Sanjay Guba)
Head
Department of Management
Bhilai Institute of Technology
Bhilai House, Durg - 491001 C.G. (INDIA)

Signature of Head of the Institute
(Dr. Arun Arora)
Principal
Bhilai Institute of Technology
(Seth Balkrishan Memorial)
Bhilai House, DURG-491001
Chhattisgarh, INDIA



छत्तीसगढ़ विज्ञान एवं प्रौद्योगिकी परिषद Chhattisgarh Council of Science & Technology

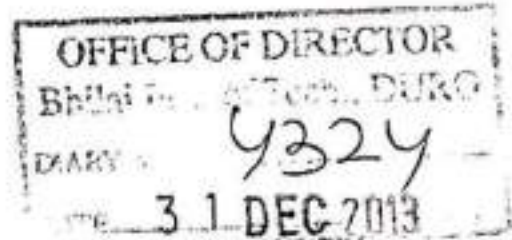
M. I G. 25, Indravati Colony, Raipur, (C. G.) 492 001
Phone: 0771 2434569; FAX: 0771 2434093; Email: dgccost@gmail.com

No. 8054 /CCOST/MRP/2013

Raipur, Date. 27 / 12 / 2013

Sanction Order

To
Principal
Bhilai Institute of Technology,
Bhilai House, Durg (CG)



Sub: Mini Research Project entitled 'Development of meteorological information system (Metls): A case for rural areas of Bilaspur' District'.

Ref: Mini Research Project proposal of **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG)

Project Investigator: **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG).

Co-Project Investigator: **Dr. Manoj Kumar Kowar**, Professor, Bhilai Institute of Technology, Durg (CG).

Sanction is hereby accorded for **Rs.4,99,500/- (Rs. Four Lakhs Ninety Nine Thousand Five Hundred only)** for three years duration. The amount is being released on the following terms and conditions:-

The Mini research projects must be pertaining to Socio-Economic Development of the State.

1. In line with the Council's objectives it is imperative to support only such Research & Development Mini Research projects which are relevant to the achievement of specific objectives of the Council as follows:

"To identify and utilize areas of science and technology for-

- Achieving socio-economic development of the state and
- To achieve the objectives of tackling the problems particularly of backwardness, unemployment and poverty in the rural areas, and among the under-privileged section of the society".

- Mini research project will be sanctioned to permanent faculty member(s).
- Suitable accommodation and other necessary facilities, equipment, etc. should be made available by the Institution for the research project. The Grant -in - Aid

Sanjeev Karmakar

would be released through the Head of the Institution who would be responsible for proper utilization of the grant.

4. Annual progress report of the work carried out is required to be submitted to the Council within one-month time limit.
5. The Council reserves the right to terminate the project if progress of the work is not found satisfactory, in the opinion of the Council.
6. Publication of the research data of the project should be done only after taking approval from the Council, for which a copy of research paper should be submitted.
7. Accounts duly supported by vouchers for the expenditure incurred on salary, contingencies, etc. should be submitted regularly through the Head of the Institution/Research Organization.
8. Procedure laid down for appointment of Staff, Purchase of equipment, materials by the Institution concerned must be strictly followed.
9. Prior approval of the Council for purchase of equipment costing more than Rs. 10,000/- would be necessary. The Council normally does not approve the purchase of any major equipment from its grants, except for exceptional cases.
10. Proper record of purchase, stock entries, breakages, & losses should be maintained for verification, and submitting the verification report to the Council. On completion of the project the equipment and other articles purchased from Council fund should be transferred to the stock books of the Institution.
11. The Institution shall be responsible for submitting the annual and final audited statement of accounts and utilization certificate for the grant released by the Council.



छत्तीसगढ़ विज्ञान एवं प्रौद्योगिकी परिषद
Chhattisgarh Council of Science & Technology

M. I. G. 25, Indravati Colony, Raipur, (C. G.) 492 001
Phone: 0771 2434569; FAX: 0771 2434093; Email: dgccost@gmail.com

Prof. M. M. Hambarde
Director General

No. 1361 /CCOST/2014
Dated: 10/10 /2014

To
Principal
Bhilai Institute of Technology,
Bhilai House, Durg (CG)

Sub: Release of grant for purchase of equipment under Mini Research Project.
Ref: Application of **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG).

Sanction is hereby accorded for Rs.57,000.00 (Rs. Fifty seven thousand only) Vide cheque no. 937412 dated 29.09.14 for purchase of equipments (Laptop, Pen drive, USB Hard disk) under the approved objectives of the mini research project entitled 'Development of meteorological information system (Metls): A case for rural areas of Bilaspur' District'. The amount would be release in favor of **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG).

The utilization certificate and progress report be submitted within time.

Encl: As above.

(Prof. M.M. Hambarde)

Copy to:

1. **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG).

2. Office copy.

(Prof. M.M. Hambarde)



छत्तीसगढ़ विज्ञान एवं प्रौद्योगिकी परिषद

Chhattisgarh Council of Science & Technology

Vigyan Bhawan, Vidhan Sabha Road, Daldal Seoni, Raipur, (C. G.) 492 001

Email: doccost@gmail.com

Prof. M. M. Hambarde

Director General

No. 1466 /CCOST/2017

Dated: 21 / 01 / 2017

To

Principal

Bhilai Institute of Technology,

Durg (CG)

293

3 FEB 2017

Sub: Release of third year installment of Mini Research Project.

Ref: 1. Mini Research Project of **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG).

2. Council sanction letter no. 8054/CCOST/MRP/13, Raipur, dated 27.12.2013.

With reference to above cited, sanction is hereby accorded for **Rs 1,32,500.00 (Rs. One Lakh thirty two thousand five hundred only)** Vide Cheque No 532939 dated 17.01.2017 for third year installment of Mini Research Project entitled '**Development of meteorological information system (Metls): A case for rural areas of Bilaspur District**'. The amount would be released in favor of **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG).

Please acknowledge the receipt of above cheque and utilization certificate and progress report is submits within time.

Encl: As above.

(Signature)
27/01/17
(Prof. M.M. Hambarde)

Copy to:

1. **Dr. Sanjeev Karmakar**, Associate Professor, Department of Computer Applications, Bhilai Institute of Technology, Durg (CG).
2. Office copy.

(Signature)
(Prof. M.M. Hambarde)

File



सत्यमेव जयते
Government of India
Department of Atomic Energy (DAE)
Board of Research in Nuclear Sciences (BRNS)

BRNS Secretariat, 1st Floor, CC,
BARC, Trombay, Mumbai-400085,
Phone: 25591140 FAX: 022-25505151,
E-mail: pdhag@barc.gov.in

No: 36(4)/14/90/2015-BRNS/36011

Date: April 22, 2019

OFFICE MEMORANDUM

Sub: R/P entitled "Spatial distribution of uranium and associated water quality parameters in DURG and five nearby dis" under Dr. Santosh Kumar Sar, Bhilai Institute of Technology, Durg, Chatisgarh bearing sanction 36(4)/14/90/2014-BRNS with NR FCC, BRNS.

In continuation of this Department's even number dated 15.09.2017, on the recommendations of Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the sanction of the President of India to incur the expenditure of Rs. 3,84,902/- (Rupees Two Lakh Forty Four Thousand Nine Hundred Two Only) as final settlement as detailed below:-

1. Remaining 7.5% overhead -	Rs. 244902/-
2. HRA for Staff Dr. Shweta Singh, for the period from 01.09.2016 to 31.08.2018 @ Rs. 7500/- p.m.	Rs. 180000/-
Total	Rs. 384902/-

- The expenditure involved is debitable to: 04 34 01 00 004 27 0231
- This issues with the concurrence of Competent Authority.

(Dhnanjay G Parulekar)
Programme Officer

Encl.: Bill

Pay & Accounts Officer,
DAE, Anushakti Bhavan,
CSM Marg, Mumbai - 400 001.

Copy forwarded to:

- Registrar, Bhilai Institute of Technology, Durg, Chatisgarh
- Principal Investigator(PI): Dr. Santosh Kumar Sar, Bhilai Institute of Technology, Durg, Chatisgarh- File is closed herewith.
- AAO(Cheque), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001.



Government of India
Department of Atomic Energy (DAE)
Board of Research in Nuclear Sciences (BRNS)

Dr. Debasis Roy
Programs Officer (NRFC)

BRNS Secretariat 1st Floor,
CC, BARC, Mumbai
Mumbai-400001/Phone:
+91-2225500946
Fax: 2225500946
Email: drroy@barc.gov.in

No: 36(4)/1405/2015-BRNS/

Date: 29/03/2016

OFFICE MEMORANDUM

Sub: R/P entitled "Spatial distribution of uranium and associated water quality parameters in groundwater/drinking water of north-eastern districts (Raigarh, Balamgar, Surguja, Jashpur) of Chhattisgarh" under **Dr. Madhuresha Pandey**, Applied Chemistry, Birla Institute of Technology, Durg, Birla House, District: Durg, PIN: 491 001 bearing sanction 36(4)/1405/2015-BRNS with NRFC, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am directed to convey the administrative approval and sanction of the President of India for the captioned project for the 2 years beginning from financial year 2015-2016 with a total grant of Rs. 18,22,500/- (Rupees eighteen lakh eighty two thousand three hundred only) for the project as under:

Born of expenditure	Year 1 (2015-2016)	Year 2 (2016-2017)
Equipments	300000	0
Staff Salary - JRF (1)	300000	300000
Technical Assistance	90000	90000
Consumables	80000	80000
Travel - FR	140000	140000
Contingencies	75000	35000
Overheads	72450	46200
Total(WRD)	1073450	697200

Note: * GPS, Radiation Survey Meter, Water quality sensors

JRF salary calculated @25,000/- p.m. for first two years and on redesignation by committee on in third year as

SRF @ 20,000/- p.m. RA salary calculated @ 30,000/- p.m.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads

(Rs. 1,18,650/-) shall be released only on meeting the requirements specified (See Annex-B).

2. I am also directed to convey the sanction of the President of India to incur an expenditure of Rs. 18,22,500/-

3. towards grant for the year 2015-2016.

4. The expenditure involved is payable to: 04 3401 02 004 05 0231

This issues with the concurrence of Scientific Secretary, BRNS and IFA.

Debasis Roy

Dr. Debasis Roy

Pay & Accounts Officer, DAE, Mumbai-400 001.

Copy forwarded to:



Public Financial Management System-PFMS

(Formerly CPMS)

(Formerly CPMS)

Welcome: Dr. AKHILESH
MISHRA
User Type: PD
Financial Year: 2021-2022



(akhileshm)
Logout
Change Password
Login History
English
Help

Adhoc Reports

Scheme Wise Contact Details

Home

CAH Reports

User Manuals

Masters

Users

Agency

Sanctions

PreSanction

Sanction Custom Fields

Printing Templates

Sanction Templates

Employee Info. System

Reports

Masters

My Schemes

Agencies

My Funds

Scheme Allocation

Register/Track Issues

Utilisation Certificate

OLD UC

Payee Details

Controller: 037-SCIENCE AND TECHNOLOGY

Sanction Status: Approved

Sanction Number: DS/TE/DOF-28/2021(C)

Sanction Date: 13/10/2021

Sanction Type: Transfer (DOO Bill)

Sanction Amount: 1277558

IFD Number: 2698/IFD/2021-22

IFD Date: 13/10/2021

Scheme: 1819-INNOVATION, TECHNOLOGY DEVELOPMENT AND DEPLOYMENT

PAO: 058296-PAO(DST), New Delhi

DDO: 258297-DEPARTMENT OF SCIENCE & TECHNOLOGY (INCLUDING NCST)

Remarks: 1st instalment Capital

☐ North East Expenditure

Account Details:

Grant	Department (For UT Grants Only)	Function Head	Object Head	Category	Amount	External PAO	Available Budget
038 - Department of Science and Technology		3425602007000 - INNOVATION TECHNOLOGY DEVELOPMENT AND DEPLOYMENT	35 - GRANTS FOR CREATION OF CAPITAL ASSETS	S - VOTED	1277558		1578158796

Agency	Bank Account No	Amount	Instrument Type
Bhilai Institute of Technology	32471126372 - BHILAI INSTITUTE OF T	1,277,558.00	RTGS

ePayment Details

Accredited Bank *	UNION BANK OF INDIA	Amount	1277558	Not Payable Before *	<input type="checkbox"/> Required
Party Name	IFSC Code	Party Account No	Amount	Payee Remarks	
BHILAI INSTITUTE (SBIN0005942	32471126372	1277558	1st instalment Capital	

Note: If the IFSC Code is not automatically shows it means bank A/C is not validated. If payment process is urgent please key in the IFSC Code and process payment. Please ensure IFSC Code is correct.

[Back](#)

12/10/2021

No. DST/TDT/DDP-28/2021(C)
Government of India
Ministry of Science & Technology
Department of Science & Technology
(Technology Development & Transfer)
(Device Development Programme)

Technology Bhavan, New Delhi
Dated 13.10.2021

ORDER

Sub: - Financial support for the project entitled "Design and development of cost-effective machine vision based smart drone recharged via wireless power transmission" by Prof. Shashwati Ray, Department of Electrical Engineering, Bhilai Institute of Technology, Chhattisgarh, G.E. Road, Durg-490020-Release of the first installment regarding.

Sanction of the President is hereby accorded to the approval to the above mention project at a total cost of **Rs.44,49,180/- (Rs. Forty-four Lakh Forty-Nine Thousand One Hundred and Eighty Only)** for the duration of **3 years..** The detailed breakup of the grant for general as well as capital components are given below:

Total Project Cost = Rs.44,49,180/-

Recurring Total Cost = Rs. 27,40,342/-

Non- Recurring Total Cost = Rs. 17,08,838/-

Non-Recurring Head (in Rs.)					
Sl. No.	Name of the equipment	1 st year	2 nd Year	3 rd Year	Total
1.	FRAME All Carbon fiber frame with power distributor	200000	-	-	200000
2.	Custom made landing gear each set: 4 legs, 300mm height	60000	-	-	60000
3.	3D printed parts, 4 motor mounts, payload bay, battery bay	150000	-	-	150000
4.	Quotation for UAV sub components	1086500	-	-	1086500
5.	Motor parts, battery and charger	1062500	-	-	1062500
Total		2559000	-	-	2559000
DST Share (Restricted)		12,77,558	2,58,292	1,72,988	17,08,838/-

2. The sanction of the President is also accorded to the release **Rs.12,77,558/- (Rs. Twelve Lakh Seventy-Seven Thousand Five Hundred and Fifty-Eight Only)** as the "Capital Component" to the "Principal, Bhilai Institute of Technology, Nagar, Chattisgarh" being the first installment of grant as mentioned above table under "Capital Component" for the above mentioned project.

3. This sanction is subject to the condition that the grantee organization will furnish to the Department of Science & Technology, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017 and audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grant received under the project. This is also subject to the condition of submission of the final statement of expenditure, utilization certificate and project completion report within one year from the scheduled date of completion of the project.

4. The grantee organization will have to enter & upload the Utilization Certificate in the PFMS portal besides sending it in physical form to this Division. The subsequent/final installment will be released only after confirmation of the acceptance of the UC by the Division and entry of previous Utilization Certificate in the PFMS.

5. If the grant has been released under capital head through separate sanction order under the same project for purchase of equipment(s), separate SE/UC has to be furnished for the release Capital head grant.

[Handwritten signature]
21/10/21

6. The grant-in-aid being released is subject to the condition that
 - a) A transparent procurement procedure in line with Provisions of General Financial Rules 2017 will be followed by the Institute/Organization under the appropriate rules of grantee organization while procuring capital assets sanctioned for the above- mentioned project and a certificate to this effect will be submitted by the Grantee organization immediately on receipt of the grant.
 - b) While submitting Utilization Certificate/Statement of Expenditure, the organization has to ensure submission of supporting documentary evidences with regard of the purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.
7. As per the GFR 2017 Rule 230 (8) the Grantee Institute should ensure that all the interests or other earnings against Grant-in-Aid or advances (other than reimbursement) released to any Grantee institution should be mandatorily remitted to the Consolidated Fund of India immediately after finalization of the accounts. Such advances will not be allowed to be adjusted against future releases.
8. As per the GFR 2017 Rule 230 (17) "the Grantee Institute should agree to make reservations for Scheduled Castes and Scheduled Tribes or OBC in the posts or services under its control on the lines indicated by the Government of India"
9. As per the GFR 2017, it is mandatory for the grantee organization to purchase the equipment through the Government e-Marketplace (GeM), to the extent available there as the project involves government funding.
10. The grantee organization will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account. For Grants released during F.Y. 2017-18 and onwards, all interests and other earnings against released Grant shall be remitted to Consolidated Fund of India (through Non-Tax Receipt Portal (NTRP), i.e. www.bharatkosh.gov.in), immediately after finalization of accounts, as it shall not be adjusted towards future release of Grant. A certificate to this effect shall have to be submitted along with Statement of Expenditure/ Utilization Certificate for considering subsequent release of Grant/ Closure of Project accounts.
11. DST reserves sole rights on the assets created out of grants. Assets acquired wholly or substantially out of government grants (except those declared as obsolete and unserviceable or condemned in accordance with the procedure laid down in GFR 2017), shall not be disposed of without obtaining the prior approval of DST.
12. The account of the grantee organization shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the DST), whenever the organization is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.
13. Due acknowledgement of technical support/ financial assistance resulting from this project grant should mandatorily be highlighted by the grantee organization in bold letters in all publication/ media release as well as in the opening paragraphs of their Annual Reports during and after the completion of the project.
14. Failure to comply with the terms and conditions of the Bond will entail full refund with interest in terms of Rule 231 (2) of GFR 2017.
15. It is mandatory to use EAT module in PFMS, failing which no further funds shall be released.
16. Goods (Consumable/Equipment) available in GeM portal are to be procured mandatorily online through GeM only as per the provisions of Rule 149 of GFR.
17. The expenditure involved is debatable to Demand No.88, Department of Science & Technology for the year 2021-22:

3425	Other Scientific Research (Major Head)
60	Others
60.200	Assistance to Other Scientific Bodies (Minor Head)
70	Innovation, Technology Development & Deployment
70.00.35	Grants-in-aid Capital for the year 21-22
	Previous: TDP-NRDMS-3425.60.200.26.01.35

10/10/24

18. The amount of release Rs.12,77,558/- (Rs. Twelve Lakh Seventy-Seven Thousand Five Hundred and Fifty-Eight Only) will be drawn by the Drawing and Disbursing Officer, DST and will be disbursed to "Principal, Bhilai Institute of Technology, Durg, Chattisgarh".

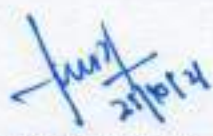
The bank details for electronic transfer of funds through RTGS are given below:

Name of A/C Holder	Principal, Bhilai Institute of Technology
Bank A/C No	32471126372
Name of the Bank & branch	SBI, Alka Departmental Store, Sector 10, Bhilai
RTGS/IFSC code	SBIN0006942
MICR code	490002007

19. As per Rule 234 of GFR 2017, the sanction has been entered at S. No. 164 in the register of grants maintained in the Division for the scheme DDP.

20. This issues with the concurrence of IFD Vide their Concurring Dy. No. 2698/IFD/2021-22 Dated 13.10.2021.

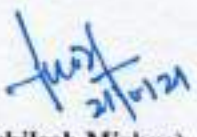
21 NGO Darpan Id of the Bhilai Institute of Technology, Chhattisgarh, Durg-490020 is CG/2017/0157665.


(Dr. Akhilesh Mishra)
Scientist-E
Tel: 011- 26590254

To
The Pay and Accounts Officer,
Department of Science & Technology,
New Delhi.

Copy of information and necessary action to: -

1. The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, LP. Estate, New Delhi.
2. Drawing and Disbursing Officer, DST, Cash Section. (two copies)
3. **Dr. Shashwati Ray,**
Professor,
Department of Electrical Engineering,
Bhilai Institute of Technology, Chhattisgarh,
G.E. Road, Bhilai House Durg-490020
4. **Principal,**
Bhilai Institute of Technology,
Durg-Bhilai Nagar, Chattisgarh
G.E. Road, Bhilai House Durg-490020.
5. Head(TDT),DST
6. Sanction folder (TDT).
7. File copy (e-33376).


(Dr. Akhilesh Mishra)
Scientist-E