ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ
(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)
THE VEERASAIVA VIDYAVARDHAKA SANGHA'S
RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE
(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)
CANTONMENT, BALLARI - 583104. (KARNATAKA)
(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)
Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148
e-mail: principalrymec@gmail.com, principal@rymec.in
Website: www.rymec.in

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)

KEY INDICATOR – 3.1 Resource mobilizations for Research (10)

3.1.1 Grants received from government and non-governmental agencies for research projects / endowments in the institution during the last five years.

slno	Documents maintained	Link
1	Sanctioned Letters with fund details of research projects of last five years 2017-2022	https://rymec.edu.in/wp-content/uploads/2022/12/DVV-3.1.1-Grants

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

2017-2018

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science Campus, Bengaluru – 560 012
Website: http://www.kscst.iisc.ernet.in/spp.html || Email: spp@kscst.iisc.ernet.in || Phone: 080-23600978

LIST OF PROJECTS SANCTIONED UNDER THE 41ST SERIES OF STUDENT PROJECT PROGRAMME: 2017-18

97. RAO BAHADDUR Y. MAHABALESHWARAPPA ENGINEERING COLLEGE, BALLARI

Sl. No.	PROJECT REFERENCE NO.	PROJECT TITLE	BRANCH	DEGREE	NAME OF THE GUIDE	NAME OF THE TEAM LEADER	SANCTIONED AMOUNT (in Rs.)
373.	41S_BE_0031	DESIGN AND DEVELOPMENT OF ANAEROBIC BIODIGESTER FOR A INDIVIDUAL HOUSE IN KOLAGALLU VILLAGE, BALLARI DISTRICT USING THE AVAILABLE DOMESTIC BIODEGRADABLE WASTE	CIVIL ENGINEERING	BE	Mrs. ASHWINI.R	Mr. NAGARJUNA N	5000.00
374.	41S_BE_1089	AGRICULTURE ROBOTICS	COMPUTER SCIENCE AND ENGINEERING	BE	Mrs. SUNITHA.S	Ms. VIDHYA SHREE.M	5000.00
375.	41S_BE_1091	DESIGN AND DEVELOPMENT OF WIRELESS SENSOR NODE FOR ANTI- POACHING	COMPUTER SCIENCE AND ENGINEERING	BE	Prof. SRIDEVI MALIPATIL	Mr. MALLIKARJUN N	5000.00
376.	41S_BE_1187	ANTI THEFT SYSTEM FOR VEHICLES USING FINGERPRINT SENSOR	ELECTRONICS AND COMMUNICATION ENGINEERING	BE	Mrs. SUVARNA S PATIL	Mr. ANANDKUMAR HARTI	5000.00
377.	41S_BE_1990	WATERLESS WASHING MACHINE	ELECTRICAL AND ELECTRONICS ENGINEERING	BE	Mr. PRADEEP B JYOTHI	Mr. MURTHY K	7000.00
378.	41S_BE_2475	TO INVESTIGATE ON THE VERMICOMPOSTING PROCESS BY USING VARIOUS NATURAL AND AGRICULTURAL PRODUCTS BY EMPLOYING DIFFERENT EARTHWORM SPECIES	CIVIL ENGINEERING	BE	Prof. M.R.VIJAYA KUMAR	Mr. YERISWAMY G	5000.00
379.	41S_BE_2602	PROTECTION OF CROPS USING IoT	INSTRUMENTATION TECHNOLOGY	BE	Mrs. RAKHEE PATIL	Ms. NAGA SAI LATHA K.V	4000.00

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

KSCST

Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849 ♦ Telefax: 080-23348840

Email: office@kscst.iisc.ernet.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. S. G. Sreekanteswara Swamy
Executive Secretary

28th March, 2018

Ref: 7.1.01/SPP/08

The Principal,
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary – 583 104.

Dear Sir,

Sub : Sanction of Student Project - 41st Series: Year 2017-2018
Your Project Proposal Reference No. : 41S_BE_1089

Ref : Your Project Proposal entitled " **AGRICULTURE ROBOTICS**

I am happy to inform that your project proposal referred above, has been approved by the Secretary, KSCST for "Student Project Programme - 41st Series" and has been sanctioned with a budgetary break-up as detailed below:

Students	Ms. Vidhya Shree.M and others	**Budget**	**Amount (Rs)**
		Materials/Consumables	4,000.00
Guide/s	Mrs. Sunitha.S	Labor	-
		Travel	-
Department	Computer Science And Engineering	Miscellaneous	500.00
		Report	500.00
		TOTAL	5,000.00
	RUPEES FIVE THOUDSAND		

The following are the guidelines to carryout the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project sanction reference number printed above** in all your future correspondences.

e) Important: After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following points:

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

To, project file

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

5) Introduction / background

41S_BE_1089

(with specific reference to the project, work done earlier, etc) - about 20 lines

6) Objectives (about 10 lines)

7) Methodology (about 20 lines)

(materials, methods, details of work carried out, including drawings, diagrams etc)

8) Results and Conclusions

(about 20 lines with specific reference to work carried out)

9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

e) Projects selected for Seminar / Exhibition will be awarded.

The following are the extract of comments / suggestions of the expert. The students and project guides are hereby directed to implement the same and will be looked into during evaluation of the project.

DEMO OF THE PROJECT WITH ALL CASES.

The sanctioned amount will be sent separately by our Accounts Department.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly by email / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Yours sincerely,

(S.G.S. Swamy)

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

Copy to:

1) The Head of the Department of
Computer Science And Engineering
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary – 583 104.

2) Mrs. Sunitha.S
Department of Computer Science And Engineering
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary – 583 104.

3) The Finance Officer, KSCST, Bengaluru

Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru - 560 012

KSCST

Telephone: 080-23341652, 23348848, 23348849 ♦ **Telefax:** 080-23348840

Email: office@kscst.iisc.ernet.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. S. G. Sreekanteswara Swamy
Executive Secretary

28th March 2018

Ref: 7.1.01/SPP/08

The Principal,
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary - 583 104.

Dear Sir,

Sub : Sanction of Student Project - 41st Series: Year 2017-2018
Your Project Proposal Reference No. : 41S_BE_1187

Ref : Your Project Proposal entitled " **ANTI THEFT SYSTEM FOR VEHICLES USING FINGERPRINT SENSOR**

I am happy to inform that your project proposal referred above, has been approved by the Secretary, KSCST for "Student Project Programme - 41st Series" and has been sanctioned with a budgetary break-up as detailed below:

Student / s	Mr. Anandkumar Harti and others	**Budget**	**Amount (Rs)**
		Materials/Consumables	4,000.00
Guide/s	Mrs. Suvarna S Patil	Labor	-
		Travel	-
Department	Electronics And Communication Engineering	Miscellaneous	500.00
		Report	500.00
		TOTAL	5,000.00
	RUPEES FIVE THOUDSAND		

The following are the guidelines to carryout the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project sanction reference number printed above** in all your future correspondences.

e) **Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

KSCST

Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849 ♦ Telefax: 080-23348840
Email: office@kscst.iisc.ernet.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Dr. S. G. Sreekanteswara Swamy
Executive Secretary

28th March 2018

Ref: 7.1.01/SPP/08

The Principal,
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary – 583 104.

Dear Sir,

Sub : Sanction of Student Project - 41st Series: Year 2017-2018
Your Project Proposal Reference No. : 41S_BE_2475

Ref : Your Project Proposal entitled " **TO INVESTIGATE ON THE VERMICOMPOSTING PROCESS BY USING VARIOUS NATURAL AND AGRICULTURAL PRODUCTS BY EMPLOYING DIFFERENT EARTHWORM SPECIES**

I am happy to inform that your project proposal referred above, has been approved by the Secretary, KSCST for "Student Project Programme - 41st Series" and has been sanctioned with a budgetary break-up as detailed below:

Student / s	Mr. Yeriswamy G and others	**Budget**	**Amount (Rs)**
		Materials/Consumables	4,000.00
Guide/s	Prof. M.R.Vijaya Kumar	Labor	-
		Travel	-
Department	Civil Engineering	Miscellaneous	500.00
		Report	500.00
		TOTAL	5,000.00
	RUPEES FIVE THOUDSAND		

The following are the guidelines to carryout the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project sanction reference number printed above** in all your future correspondences.

e) **Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines

41S_BE_2475

6) Objectives (about 10 lines)

7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)

8) Results and Conclusions
(about 20 lines with specific reference to work carried out)

9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

e) Projects selected for Seminar / Exhibition will be awarded.

The sanctioned amount will be sent separately by our Accounts Department.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,

(S.G.S. Swamy)

Copy to:

1) The Head of the Department of
Civil Engineering
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary – 583 104.

2) Prof. M.R.Vijaya Kumar
Department of Civil Engineering
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary – 583 104.

3) The Finance Officer, KSCST, Bangalore

2018-2019

NAAC RYMEC <naac@rymec.in>

Fwd: Schedule of FOSS Project Competition 2020

1 message

shiva kumar V <shiva.vadla@gmail.com> Thu, Feb 9, 2023 at 3:34 PM
To: naac@rymec.in

---------- Forwarded message ---------
From: <foss@vtu.ac.in>
Date: Sun, 27 Sep 2020, 6:02 pm
Subject: Schedule of FOSS Project Competition 2020
To: Principal-RYMEC <principalrymec@gmail.com>, <shiva.vadla@gmail.com>

Greeting from VTU FOSS Group!

The schedule and details of project demo are as follows:

1. Your Project Id: **CS02** (You are disclosing only this id and your project title only and should not disclose your college details during the demo)

Date: 29th September 2020

Time: 2.30 pm- 2.50 pm(Only 20 minutes are allowed, students should be instructed to adhere to the time limit and prepare accordingly)

Requirements: 1.Executable project and the PPT
2. Good interconnect connection

Your demo meeting link is:

Join Zoom Meeting
https://us04web.zoom.us/j/78851136863?pwd=b2VTa0VTeXdWanBwNUQ2WkJEcVlZUT09

Meeting ID: 788 5113 6863
Passcode: 0HX65L

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science Campus, Bengaluru – 560 012
Website: http://www.kscst.iisc.ernet.in/spp.html || Email: spp@kscst.iisc.ernet.in || Phone: 080-23600978

42nd Series of Student Project Programme: 2018-19

List of Projects Sanctioned Under Stream C

91. RAO BAHADDUR Y. MAHABALESHWARAPPA ENGINEERING COLLEGE, BALLARI

Sl. No.	PROJECT REFERENCE NO.	PROJECT TITLE	BRANCH	DEGREE	NAME OF THE GUIDE	NAME OF THE TEAM LEADER	TOTAL (in Rs.)
1.	42S_BE_0060	EXPERIMENTAL INVESTIGATION ON FLEXURAL BEHAVIOUR OF NATURAL FIBRES REINFORCED CONCERTE BEAMS (M20)	CIVIL ENGINEERING	BE	Dr. SRISHAIL J M	Mr. DIWAKAR REDDY U	6000.00
2.	42S_BE_0285	DYNAMIC TRAFFIC LIGHT CONTROLLER SYSTEM FOR AMBULANCE BASED ON IOT	ELECTRONICS AND COMMUNICATION ENGINEERING	BE	Dr. S.PRABHAVATHI	Ms. PADMASHREE	7000.00
3.	42S_BE_2077	A NEW PATHWAY TO SUSTAINABLE DEVELOPMENT OF AQUACULTURE AND AGRICULTURE IN AN AQUAPONIC SYSTEM COUPLED WITH MICROBIAL FUEL CELL	CIVIL ENGINEERING	BE	Mr. SUNIL UMACHAGI	Ms. J R. SANDHYASHREE	4500.00
4.	42S_BE_3030	LPG GAS LEAKAGE DETECTION & AUTOMATIC GAS BOOKING USING ARDUINO UNO	ELECTRONICS AND COMMUNICATION ENGINEERING	BE	Mr. NAGARAJ GOWDA	Mr. JABIWULLA .S	7000.00

Note:

1. The sanctioned amount will be sent by KSCST to the College by crossed Cheque in the name of the Principal.
2. The evaluation of above projects will be conducted in the Nodal Centre in the month of May / June 2019. During nodal centre evaluation projects will be selected for state level Seminar & Exhibition which will be conducted in the month of July / August 2019.
3. After completion of the projects, the hard copy of the report and soft in .pdf format needs to be sent to KSCST without fail.

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

2019-2020

Sl. No.	PROJECT REFERENCE NO.	PROJECT TITLE	BRANCH	DEGREE	PROJECT STREAM	NAME OF THE GUIDE(s)	NAME OF THE STUDENTS	SANCTIONED AMOUNT (in Rs.)

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science campus, Bengaluru – 560 012

Website: http://www.kscst.iisc.ernet.in/spp.html || Email: spp@kscst.iisc.ernet.in || Phone: 080-23600978

43rd Series of Student Project Programme: 2019-20

LIST OF STUDENT PROJECT PROPOSALS APPROVED FOR SPONSORSHIP

118) RAO BAHADUR Y. MAHABALESHWARAPPA ENGINEERING COLLEGE, BALLARI

657.	43S_BE_2406	TEXT RECOGNITION FROM SILENT SPEECH	COMPUTER SCIENCE AND ENGINEERING	B.E.	STREAM A	Mr. ROSHAN D	Ms. SAI DEEPTHI K Ms. SUSHMITHA S Ms. S ANUSHA Ms. M SINDHUJA	2000.00
658.	43S_BE_2412	PREDICTION OF KYPHOSIS DAISIES USING MACHINE LEARNING	COMPUTER SCIENCE AND ENGINEERING	B.E.	STREAM A	Ms. D V SWETHA RAMANA	Ms. PAVITRA CHATTER Ms. SUMALTHA P V Ms. SUZAIN S	2500.00
659.	43S_BE_2467	WIRELESS HEAD MOTION CONTROLLED SMART WHEELCHAIR FOR DISABLED PERSON	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	STREAM A	Dr. SAVITA SONOLI	Ms. MUSHAHIRA Ms. TATTI PRAGNYA Ms. THIMMALAPURAM MATAM AISHWARYA Ms. GOUSIYA BANU R	5000.00
660.	43S_BE_3169	AUTOMATED BIO ORGANIC FERTILIZER GENERATING UNIT	ELECTRICAL AND ELECTRONICS ENGINEERING	B.E.	STREAM A	Mr. HANUMANTH REDDY Dr. KOTRESH.S	Mr. VARUN.P Ms. MEGHANA M HARSHA K.M	4500.00
661.	43S_BE_3672	TO STUDY THE ENGINEERING PROPERTIES OF BLOVKS AND RAMMED EARTH MADE BY CLAYS, FIBERS AND POZZOLANS BY APPLYING LOW COST HOUSING TECHNOLOGY	CIVIL ENGINEERING	B.E.	STREAM A	Mr. M R VIJAY KUMAR	Mr. SHRAVAN K Mr. KATTEGOWDA R Mr. RENUKAPRASANNA G B	5500.00
662.	43S_BE_4220	TREATMENT AND REMOVAL OF COLOR FROM TEXTILE INDUSTRIAL EFFLUENTS BY RICE HUSK AND RICE HUSK ASH	CIVIL ENGINEERING	B.E.	STREAM A	Mr. MANOHAR P	Mr. VINESH M Mr. VISHNU K Mr. MONESH REDDY M Mr. SANDEEP HOOGAR	5000.00

Note:

- *The sanctioned amount will be sent separately by KSCST to the College in the name of the principal by NEFT transfer. The details of transaction no. and date will be intimated.*
- *The evaluation of above projects will be conducted at the nodal centres in the month of May / June 2020. Participation in the evaluation process at the nodal centres is mandatory, failing to which the sanctioned project will be withdrawn from the list and sanctioned amount shall be returned to KSCST.*
- *Further projects will be shortlisted for state level seminar & exhibition which will be conducted during July / August 2020.*
- *After completion of the projects, the hard copy and soft copy (PDF format only) of the report needs to be sent to KSCST without fail.*
- *Any corrections with respect to the names of the guide and students should be requested at spp@kscst.iisc.ernet.in.*

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

ಕರ್ನಾಟಕ ಆವಿಷ್ಕಾರ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಸೊಸೈಟಿ
Karnataka Innovation & Technology Society
Department of Information Technology,
Biotechnology and Science & Technology
Government of Karnataka

K-tech

To,
The Principal,
Rao Bahadur Y.Mahabaleshwarappa engineering college,
Ballari - 583104

Date: 29-10-2020

Dear Sir,

Sub: Declaration of Batch-1 project results reg.

We are pleased to inform you that the projects submitted by the NAIN center of your college have been evaluated. Please find the enclosed hereby the list of projects that have qualified for the students project fund under NAIN scheme.

Kindly ensure that the project cost should not surpass the grant limit of Rs. 3 Lakh per project as per the guidelines.

Thanking You

Yours faithfully

[Praveen K N]
GM- Skilling, KITS

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

Rao Bahadur Y. Mahabaleshwarappa Engineering College, Ballari		
Sl. No	**Project Name**	**Amount Approved by GoK**
1	Wireless Head Motion Controlled Smart Wheel Chair for Disabled Person	300000
2	Combinational Rover	100000
3	Indian Sign Language Character Recognition	200000
4	Abnormal Activity Detection In ATM Centers	220000
5	Automated Bio-Organic Fertilizer Generating Unit	300000
6	Electricity Generation From Plastic Waste in The Treatment of River Ganga using Steam Turbine Coupled	250000
7	Analysis of On-Street and off-Street Parking in Ballari using Vissim Software	210000
8	Rejuvenation of Lake by Artificial Floating Island	60000
9	Distribution Board of 3 Phase and 1 Phase System With Display	26500
10	Automated Sericulture Incubation and Rearing System	280000
Total		**1946500**

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

2020-2021

Karnataka State Council for Science and Technology
(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)
Indian Institute of Science Campus, Bengaluru - 560 012
Telephone: 080-23341652, 23348848, 23348849, 23348840
Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

24th April 2021

Ref: 7.1.01/SPP/10

The Principal
Rao Bahadur Y Mahabaleswarappa Engineering College
Cantonment
Ballari – 583 104

Dear Sir/Madam,

Sub : Sanction of Student Project - 44th Series: Year 2020-2021
Your Project Proposal Reference No. : ***44S_BE_1768***
Ref : Your Project Proposal entitled " ***SMART ELECTRIC CART FOR STREET VENDORS***

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 44th Series" with a budgetary break-up as detailed below:

Student / s	Mr. K V Manoj Kumar	**Budget**	
	Mr. Mohammad Moeiz Ahemad	**Particulars**	**Amount (Rs.)**
	Mr. Ajay Kumar.C	Materials/Consumables	4,000.00
	Mr. Akash.S	Labour	500.00
Guide/s	Mr. Linganagouda R	Travel	500.00
		Miscellaneous	-
Department	Electrical And Electronics Engineering	Report	500.00
		Total	**5,500.00**
	FIVE THOUSAND FIVE HUNDRED RUPEES ONLY		

The following are the guidelines to carryout the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and softcopy of the full report in a CD (single file .pdf format only) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project reference number printed above** in all your future correspondences.

e) **Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

44S_BE_1768

6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
6) Objectives (about 10 lines)
7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

The sanctioned amount will be sent to the Principal / Head of the Institute by NEFT details provided by the college/institution.

The sponsored projects evaluation will be held in the Nodal Centre /online platform and the details of the same will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,

(H. Hemanth Kumar)

Copy to (by email):

1) Dr. Kori Nagaraj
SPP Coordinator
Rao Bahadur Y Mahabaleswarappa Engineering College
Cantonment
Ballari – 583 104

2) Mr. Linganagouda R
Department of Electrical And Electronics Engineering
Rao Bahadur Y Mahabaleswarappa Engineering College
Cantonment
Ballari – 583 104

3) The Finance Officer, KSCST, Bangalore

Encl: As Above

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

Karnataka State Council for Science and Technology
(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)
Indian Institute of Science Campus, Bengaluru - 560 012
Telephone: 080-23341652, 23348848, 23348849, 23348840
Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

24th April 2021

Ref: 7.1.01/SPP/10

The Principal
Rao Bahadur Y Mahabaleswarappa Engineering College
Cantonment
Ballari – 583 104

Dear Sir/Madam,

Sub : Sanction of Student Project - 44th Series: Year 2020-2021
Your Project Proposal Reference No. : ***44S_BE_3153***
Ref : Your Project Proposal entitled " ***TO STUDY THE ENGINEERING PROPERTIES OF HEMPCRETE BLOCKS AND SLABS PRODUCED USING HEMP,JUTE,ACACIA NILOTICA AND SISAL FIBER'S WITH***

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 44th Series" with a budgetary break-up as detailed below:

Student / s	Mr. Akarsh K V	**Budget**	
	Ms. Kannari Venkatesh Reddy	**Particulars**	**Amount (Rs.)**
	Mr. Harshavardahan K	Materials/Consumables	3,000.00
	Mr. Harish K	Labour	500.00
Guide/s	Prof. M.R.Vijaya Kumar	Travel	500.00
		Miscellaneous	500.00
Department	Civil Engineering	Report	500.00
		Total	**5,000.00**
	FIVE THOUSAND RUPEES ONLY		

The following are the guidelines to carryout the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and softcopy of the full report in a CD (single file .pdf format only) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project reference number printed above** in all your future correspondences.

e) **Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

44S_BE_3153

6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
6) Objectives (about 10 lines)
7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

The sanctioned amount will be sent to the Principal / Head of the Institute by NEFT details provided by the college/institution.

The sponsored projects evaluation will be held in the Nodal Centre /online platform and the details of the same will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,

(H. Hemanth Kumar)

Copy to (by email):

1) Dr. Kori Nagaraj
SPP Coordinator
Rao Bahadur Y Mahabaleswarappa Engineering College
Cantonment
Ballari – 583 104

2) Prof. M.R.Vijaya Kumar
Department of Civil Engineering
Rao Bahadur Y Mahabaleswarappa Engineering College
Cantonment
Ballari – 583 104

3) The Finance Officer, KSCST, Bangalore

Encl: As Above

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science Campus, Bengaluru – 560 012
Website: http://www.kscst.iisc.ernet.in/spp.html || Email: spp@kscst.iisc.ernet.in || Phone: 080-23341652, 23348840/48/49

44th Series of Student Project Programme: 2020-21

List of Student Project Proposals Approved for Sponsorship

127. RAO BAHADUR Y. MAHABALESWARAPPA ENGINEERING COLLEGE, BALLARI

Sl. No.	PROJECT REFERENCE No.	PROJECT TITLE	BRANCH	COURSE	NAME OF THE GUIDE(S)	NAME OF THE STUDENT(S)	SANCTIONED AMOUNT (IN Rs.)
822.	44S_BE_1120	VOICE AND GESTURE CONTROLLED SMART VEHICLE FOR PHYSICALLY CHALLENGED INTEGRATED WITH HOME AUTOMATION.	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	Dr. S PRABHAVATHI	Ms. SREELAKSHMI Ms. VIDYASHREE Ms. ANISHA Mr. ASIF AHMED	6000.00
823.	44S_BE_1339	DETECTING PROFANITY IN SOCIAL MEDIA FOR WOMEN SAFETY	COMPUTER SCIENCE AND ENGINEERING	B.E.	Prof. D VENKATA SWETHA RAMANA	Ms. SHRUTHI SM Ms. POOJA SALERU Ms. KAVERI	3000.00
824.	44S_BE_1340	PRECESION AGRICULTURAL TECHNIQUES FOR MONITORING PLANTS HEALTH	INFORMATION SCIENCE AND ENGINEERING	B.E.	Dr. SREEPATHI B Ms. SHEELA B P	Ms. RAJANI S	4500.00
825.	44S_BE_1377	AUTOMATED WASTE SEGREGATOR	ELECTRICAL AND ELECTRONICS ENGINEERING	B.E.	Mr. ALADALLI SHARANABASAPPA	Ms. JAYALAKSHMI B K Ms. ISHRATH FATHIMA Mr. GHOUSE PEER Ms. JYOTHI PRABHA L.G	5500.00
826.	44S_BE_1757	TOI STEREOPTICON FOR RURAL E-LEARNING EDUCATION SYSTEM	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	Mr. PRASHANTH KENI	Mr. BALAJI.B Ms. C RUCHITHA Ms. G S TANUJA	8000.00
827.	44S_BE_1768	SMART ELECTRIC CART FOR STREET VENDORS	ELECTRICAL AND ELECTRONICS ENGINEERING	B.E.	Mr. LINGANAGOUDA R	Mr. K V MANOJ KUMAR Mr. MOHAMMAD MOEIZ AHEMAD Mr. AJAY KUMAR.C Mr. AKASH.S	5500.00
828.	44S_BE_3126	AUTOMATIC EYEBALL CONTROLLED ASSISTIVE SYSTEM FOR THE DIFFERENTLY ABLED	ELECTRONICS AND COMMUNICATION ENGINEERING	B.E.	Mrs. SUVARNA S PATIL	Mr. SRI CHARAN R Mr. NITIN REDDY T Ms. SRI LAKSHMI PRASANNA B Mr. REVANASIDDAPPA	6000.00
829.	44S_BE_3153	TO STUDY THE ENGINEERING PROPERTIES OF HEMPCRETE BLOCKS AND SLABS PRODUCED USING HEMP,JUTE,ACACIA NILOTICA AND SISAL FIBER'S WITH LIME, AGGREGATES AND CEMENT	CIVIL ENGINEERING	B.E.	Prof. M.R.VIJAYA KUMAR	Mr. AKARSH K V Ms. KANNARI VENKATESH REDDY Mr. HARSHAVARDAHAN K Mr. HARISH K	5000.00

Note:

- *Transaction details of sanctioned amount of **Rs. 43500/-** credited on **28th May 2021** by **NEFT DR- P148210110028995- RAO BAHADUR Y M COLLEGE BALLAR- PKGB0010884- BLR IISc** .*
- *The evaluation of above projects will be conducted during July / August 2021 via online mode and participation in the online evaluation process is mandatory, failing to which the sanctioned project will be withdrawn from the list and sanctioned amount shall be returned to KSCST.*
- *Submit **softcopy of Synopsis in pdf (as per the format preferred in the KSCST website) and report (PDF format in a single file)** of project by **20th July 2021**, which will be uploaded in **KSCST SPP portal**.*
- *Synopsis and report must be named with Reference ID provided by KSCST (Eg:**44S_BE_0001**).*

Visvesvaraya Technological University

(State University Government of Karnataka Established as per VTU Act 1994)
"Jnana Sangama", Belagavi - 590 018, Karnataka

Prof. A S. Deshpande B.E., M.Tech., Ph.D.
REGISTRAR

Phone : (0831) 2498100
Fax : (0831) 2405467

Ref: VTU/BGM/PS/2021-22/ 545

Date : 6 MAY 2021

CIRCULAR

Sub: Financial Assistance for Innovative Projects for Final Year under Graduate students for the year 2020-21 – reg...

Ref: 1. Executive Resolution No. 4.1 of 27-11-2017
2. Hon'ble Vice-Chancellor's Approval dated 29.04.2021

This is with reference to the above. The project proposals are invited from the final year students studying in all the affiliated, autonomous, constituent engineering colleges of VTU for award of financial assistance under **"Financial Assistance for the Final Year Student Innovative Projects Scheme of VTU" for the year 2020-21.**

The following are the salient features of the proposed financial assistance:

1. The Financial Assistance shall be for the projects of Under Graduate final year students only.
2. Sum of Rs. 5,000 (Rupees Five thousand only) per project with a maximum of two projects per branch/ program shall be sanctioned and given by the University.
3. The Financial Assistance shall be available for all branches at Under Graduate level offered by the College.
4. Best two innovative projects (in each branch) shall be chosen by the Selection Committee at respective College.
5. Committee may consider the projects proposal for selection the on following topics/themes ***Energy conversion/Harvesting, Environment safety methods, Automobile/ Machineries/ Mechanics, Agriculture equipment/Advancement in Agriculture, Water resource management/ Purification/Recycle, Waste management/Disposal, User friendly devices for aged or physically challenged people, Low-cost modified transport system for village / rural / disabled community, Technologies relevant in the aftermath of Covid-19, Low-cost, eco-friendly potable water filtration, Domestic bio / non-bio waste treatment / recycling***
   - ✓ **Selection Committee can consider any other good proposal beyond these areas, on the basis of merit.**

6. University will not accept the Project proposals of following categories.

   Computer simulation based/Programming Based, Literature surveys / Data collection based/ Case study projects, Compilation of Internet downloaded information, Repetition of previous VTU Projects, Without Physical modal, Non-scientific projects.

7. Each College shall constitute the Selection Committee and the composition shall be as follows.

   i) Principal -Chairman

   ii) HoD of the respective Branch - Member

   iii) Two subject experts / Senior Professors/ Industries as deemed for by the Institution in each branch -Members

   iv) VTU Nominee to supervise the entire process – Member

8. Selected projects report shall be submitted in the prescribed format (Annexure -1).
9. All the selected projects would be invited for State Level Project Exhibition at VTU.
10. Selected project team along with the guide shall participate in the exhibition.
11. During the state level project exhibition **"Best Project of the Year"** will be awarded.

    The details of selected projects along with proceedings shall be submitted to the undersigned on or before 15/06/2021 in the following format.

    ***Documents to be attached along with Annexure -I**

    a) Affiliation notification issued by VTU for 2020-21
    b) Proceedings of the Committee for selection of Projects.

12. The proposal received after the last date will not be considered.

06/07/2021

REGISTRAR

To SCB.

To,
The Principals of all the affiliated/Autonomous/Constituent Colleges of VTU, Belagavi

Copy FWCs to:

1. The Secretary to VC, VTU Belagavi, for information.
2. The Registrar (Evaluation), VTU Belagavi, for information and needful
3. The Finance Officer, VTU, Belagavi
4. The In-charge Regional Directors (Bangalore, Belagavi Mysore & Kalaburgi) with a request to circulate the same to all colleges
5. The Concerned Case-worker of Academic Section, VTU, Belagavi
6. CNC to Upload on VTU website.

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
("ಶ ಆ ಬಂ ಅಧಿನಿಯಮ ೧೯೯೪" ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿಸಲ್ಪಟ್ಟ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ, ಭಾರತ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" , Belagavi-590 018, Karnataka State, India

Prof. A. S. Deshpande B.E., M.Tech., Ph.D.
REGISTRAR

Phone: (0831) 2498100
Fax: (0831) 2405467

Ref: VTU/Aca/A4/2021-22/ 2629/1

Date: 20 SEP 2021

To,

The Principal,
Rao Bahadur Y. Mahabaleshwarappa
Engineering College,
Formerly Vijayanagar
Engineering College Cantonment,
Ballari-583104.

Sir,

Sub: Sanction of Financial Assistance for 2020-21 to the
Innovative Project of UG Final Year students of your Institution..reg.
Ref: No.VTU/BGM/PS/2021-22/545, dated 06.05.2021

With reference to the above subject, please find herewith a D.D Bearing No 643470, dated 09.09.2021 of Rs. 45,000/- (Rupees Forty Fifty Thousand Only) towards the sanction of financial assistance to the selected Innovative projects of UG final year students of BE / B.Tech.

Further, you are hereby informed to distribute the amount to the concerned students and get an acknowledgement for the same.

Original copy of the acknowledgements should be submitted to the undersigned on or before 30th September 2021.

Encl: as above

REGISTRAR

V.V. Sangha's
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ. ಮಹಬಲೇಶ್ವರಪ್ಪ ಇಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜ್, ಬಳ್ಳಾರಿ
Rao Bahadur Y. Mahabaleswarappa Engineering College, Ballari
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi and Govt. of Karnataka)
Certified by NAAC with B++, Cantonment, Ballari-583104. Tel:08392-244809. Fax: 08392-242148

Ref: RYMEC/PCC/PROC/2020-21/01

Date: 29/06/2021

Proceedings of the Committee for Selection of Projects

As per the VTU circular vide No. VTU/BGM/PS/2021-22/545, dated 06/05/2021, the proceedings of the meeting conducted by Project Committee Coordinator (PCC) with Chairman of Selection Committee (Principal-RYMEC), VTU Nominee, HODs of all the departments, Subject experts and Members of Selection Committee are as follows:

Meeting date: 29-06-2021

Projects Presentation Time: 10:30 AM to 1:30 PM.

Selection Committee Meeting Time: 3:00 PM to 3:30 PM.

Mode: G-Meet online Meeting

SL No	Department	Titles of Projects Selected by the Committee	Names of the Students
1	CSE	TRACKING OF MINING ACTIVITIES AND WORKER SAFETY USING IOT	1. Chaitra K 2. Preethi B R 3. Keerthi H 4. Pooja
		IOT BASED SMART HEALTH CARE MEDICAL BOX FOR ELDERLY PEOPLE	1. Supriya K 2. Chandana Murthy 3. Pooja Mudgal 4. Supritha Kumar
2	Civil	TO STUDY THE ENGINEERING PROPERTIES OF HEMPCRETE BLOCKS AND SLABS PRODUCED USING HEMP,JUTE,ACACIANILOTICA AND SISAL FIBER'S WITH LIME, AGGREGATES AND CEMENT	1. Harshavardhan. K 2. Akarsh K V 3. K.Venkateshareddy 4. Harish K
		"PHYSICO-CHEMICAL PARAMETERS OF INDUSTRIAL WASTE WATER & ITS TREATMENT BY ADSORPTION METHOD"	1. Ravi Kumar B 2. Poornima 3. Jayalaxmi 4. Karishma M 5. Umme Zaiba Nusrath
3	E&CE	MICROCONTROLLER BASED CHILD RESCUE SYSTEM FROM OPEN BORE WELL USING ROBOT.	1. Pallavi Nayaka B 2. Nagarathna 3. Shobha 4. Sneha Tambeka

		DESIGN AND FABRICATION OF LOW COST MEMS BASED LISTENING DEVICE FOR HEARING IMPAIRED	1. Seema P 2. K Swetha 3. Triveni 4. Sonia s
4	**EEE**	SMART ELECTRIC CART STREET VENDORS	1. K.V Manoj Kumar 2. Mohammad Moeiz Ahemad 3. Ajay Kumar .C 4. Akash.S
		PORTABLE ENERGY METER	1. Jeevan Vikas B 2. Prem Kumar Sg 3. Mohammad Shams Tabraiz 4. Bhaskar
5	**ISE**	"PRECISION AGRICULTURAL TECHNIQUES FOR MONITORING PLANTS HEALTH"	1. Rajani.S

Dr. Chidananda. H
IPC Coordinaor

11/1/21
Dr.T. Hanumantha Reddy
Chairman
Selection Committee

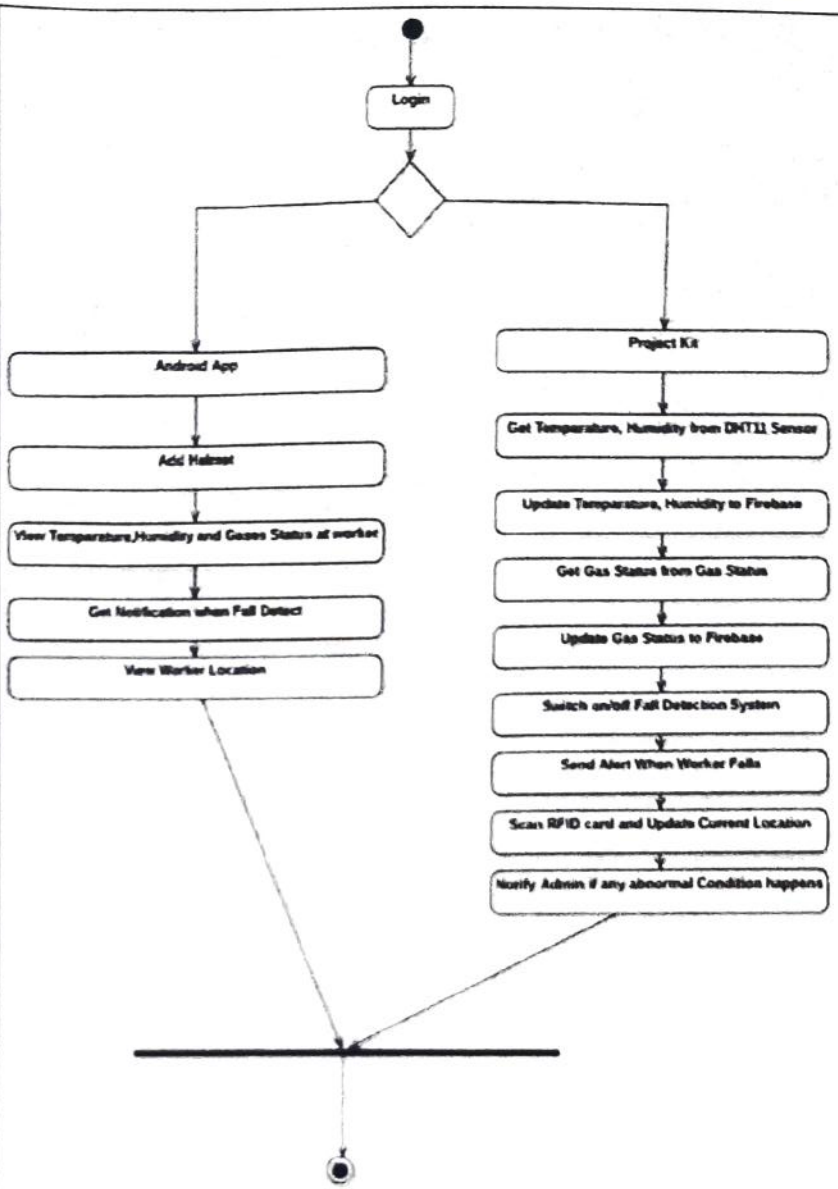
PRINCIPAL
R. Y. M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, BELLARY-583 104

Visvesvaraya Technological University
"JnanaSangama"
Belagavi: 590018
Karnataka, India.
Tele: 0831-2498225 ,2405454

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021	
02	Semester :	8th Semester	
03	Name of the College :	RYM Engineering College, Bellary	
04	Branch:	Computer Science and Engineering	
05	Project Title:	Tracking of Mining activities and Workers Safety using Iot	
06	Project Discipline:	IOT	
07	Principal	Name:	Dr. Hanumanth Reddy
		Contact No:	9448844232
		Email id:	principalrymec@gmail.com
08	HOD	Name:	Dr.Girisha H
		Contact No:	9449135047
		Email id:	hosalligiri@gmail.com
09	Project Guide	Name:	Dr. Veeragangadhara Swamy
		Contact No:	9449950591
		Email id:	swamytm@gmail.com
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	Dr. Chidananda. H
		Contact No:	9449380527
		Email id:	hrymecprojects@gmail.com

12	Name of project group Members	
	1.Group leader and Member	
	Name: Chaitra K USN No. : 3VC17CS019 Contact No: 8951622018 Email id: chaitra019.cse.rymec@gmail.com	
	2.Member	
	Name: Preethi BR USN No. : 3VC17CS067 Contact No: 8618700316 Email id: preethibr067.cse.rymec@gmail.com	
	3.Member	
	Name: Keerthi H USN No. : 3VC17CS035 Contact No: 9148514501 Email id: hkeerthi.cse.rymec@gmail.com	
	4.Member	
	Name: Pooja USN No. : 3VC17CS062 Contact No: 9113920530 Email id: pooja062.cse.rymec@gmail.com	
	5.Member(If any)	
	Name: USN No. : Contact No: Email id:	
13	Scope / Objectives of the project:	• To track the worker - that is to know the location of the worker • Determining the temperature humidity and gas status of the worker's area • To determine the posture or activity of the person • Accessing the information and status of the worker's condition
14	Methodology of work: (Including diagram, flow chart and design calculations)	


Login
Android App
Project Kit
Add Helmet
View Temperature,Humidity and Gasses Status at worker
Get Notification when Fall Detect
View Worker Location
Get Temperature, Humidity from DHT11 Sensor
Update Temperature, Humidity to Firebase
Get Gas Status from Gas Status
Update Gas Status to Firebase
Switch on/off Fall Detection System
Send Alert When Worker Falls
Scan RFID card and Update Current Location
Notify Admin if any abnormal Condition happens

15	Expected Outcome of the project:	Using Internet of things, we can implement different applications which are useful in the society. This technology can also be applied in tracking mining and implementing safety measures for the employees. A real time monitoring system is developed to provide clear and more point to point perspective of the underground mine system and also provide communication between mine workers.
16	Application of the project :	To reduce accidents in mining areas.
17	Budget details with Materials required:	Materials : 5000 Travel : 2000 Report : 2000 Miscellaneous : 2000
18	Date of commencement of the Project :	1/09/2020
19	Probable date of completion of the project :	1/07/2021
20	Duration of project work :	10 months
21	Pert chart for completion of the project in said duration as per	

Planned Activities:

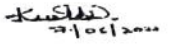
Sl.No	Activities Planned	1 and 2 Month	3 and 4 Month	5 and 6 Month	7 and 8 Month	9 Month	10 Month
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake toinform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false oruntrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Chaitra K	
02	Preethi BR	
03	Keerthi H	
04	Pooja	

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ

ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ

(ಹಿಂದಿದ್ದ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)

THE VEERASAIVA VIDYAVARDHAKA SANGHA'S

RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE

(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)

CANTONMENT, BALLARI - 583104. (KARNATAKA)

(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)

Principal 9448043949
(08392) - 246328
Off. 244009
Fax 242148

e-mail: principalrymec@gmail.com, principal@rymec.in

Website: www.rymec.in

20400

ENDORSEMENT

This is to certify that Chaitra K, Preethi B R, Keerthi H, Pooja are bonafide students of Department of Computer Science and Engineering, of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory/ Computer/ infrastructure support in our college /Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional center and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional center and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
(CHITHA RAMANA) PROJECT COORDINATOR	30.6.21	30/6/21
Dr. Veeragangadhara Swamy	Dr.Girisha H	Dr.T Hanumantha Reddy

Professor and Head
Department of Computer Science
R.V.M. Engineering College
(Formerly Vijayanagar Engg. College)
Cantonment, BALLARI-583 104.

R.V.M. Engineering College
(Formerly Vijayanagar Engg. College)
Cantonment, BALLARI-583 104.

Visvesvaraya Technological University
"JnanaSangama" Belagavi:
590018
Karnataka, India.
Tele: 0831-2498225 ,2405454

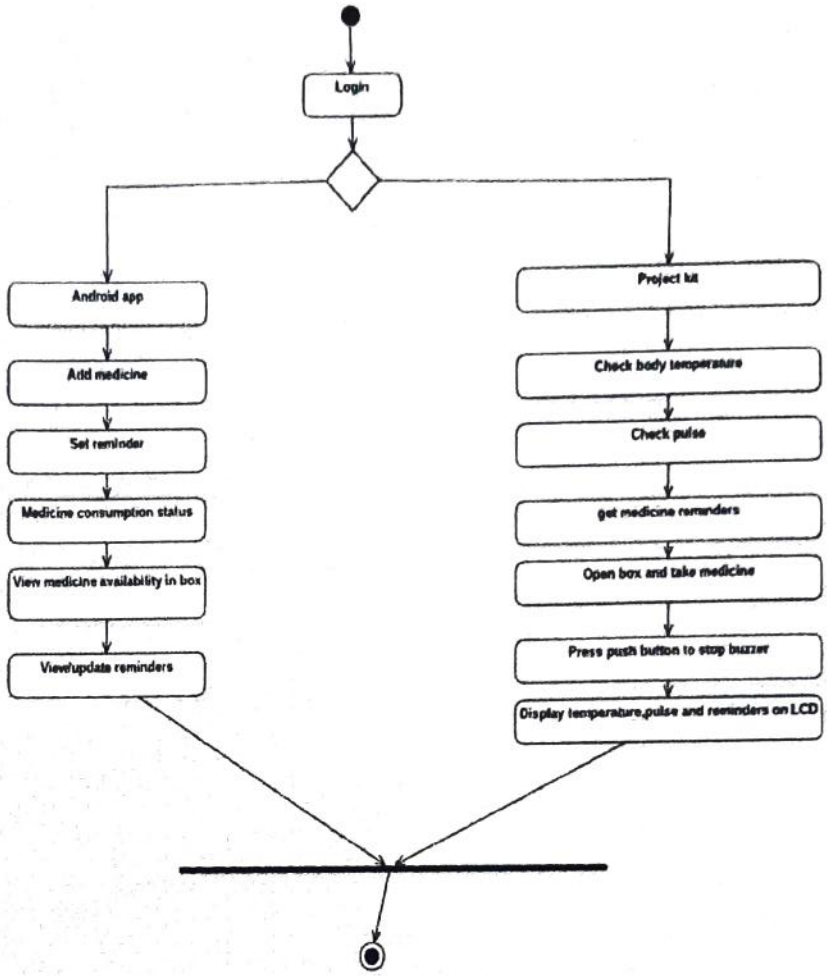
VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021	
02	Semester :	8th Semester	
03	Name of the College :	RYM Engineering College, Bellary	
04	Branch:	Computer Science and Engineering	
05	Project Title:	IOT based Smart medical box for elderly People.	
06	Project Discipline:	IOT	
07	Principal	Name:	Dr. T Hanumantha Reddy
		Contact No:	9448844232
		Email id:	principalrymec@gmail.com
08	HOD	Name:	Dr. Girisha H
		Contact No:	9449135047
		Email id:	hosalligiri@gmail.com
09	Project Guide	Name:	Pampapathi B M
		Contact No:	9844575796
		Email id:	bm.pampapathi7@gmail.com
10	Project Co-Guide(If any)	Name:	NIL
		Contact No:	
		Email id:	

11	Project Committee coordinator (Identified by the college) :	Name:	Dr. Chidananda H
		Contact No:	9449380527
		Email id:	rymecprojects@gmail.com

12	Name of project group Members	
	1.Group leader and Member	
	Name: Supriya K USN No. : 3VC17CS089 Contact No: 9738250900 Email id: supriyak.cse.rymec@gmail.com	
	2.Member	
	Name: Chandana Murthy USN No. : 3VC17CS020 Contact No: 9113836035 Email id: chandu.cse.rymec@gmail.com	
	3.Member	
	Name: Pooja Mudgal USN No. : 3VC17CS063 Contact No: 9980393195 Email id: poojachandrakanth123@gmail.com	
	4.Member	
	Name: Supritha Kumar USN No. : 3VC17CS045 Contact No: 9972306903 Email id: supritha.k007@gmail.com	

13	Scope / Objectives of the project:	• The Objective of this project is focusing on proper medication of a patient. Older people who need regular monitoring of these medication will be benefited through this project. • Server for storing medication time and other information, mail transferring protocol, temperature sensor for proper monitoring of patient body temperature has been integrated in this project.
14	Methodology of work: (Including diagram, flow chart and design calculations)	**Android Application:** • Guardian can check whether the user can take medicine or not from an Android Application. • Android Application is using a data base Firebase real time data base. **Medical Box:** • Users can check the body temperature and pulse anytime through the sensors which are integrated with the medical box. • . **Performance and scalability:** This system has high Performance and one guardian can maintain more than one medical box. Doctor can use this to track the patients. • **Portability and compatibility:** Medical box will work with 5v charge so we can keep this box with the user while travelling also. **Reliability, availability, maintainability:** We are integrating a medical box with firebase cloud. If the network is available it synchronizes the data with cloud continues. Check body temperature and pulse. The Internet is not required


Login
Android app
Add medicine
Set reminder
Medicine consumption status
View medicine availability in box
View/update reminders
Project kit
Check body temperature
Check pulse
get medicine reminders
Open box and take medicine
Press push button to stop buzzer
Display temperature,pulse and reminders on LCD

15	Expected Outcome of the project:	Using Internet of things, we can implement different applications which are useful in the society. This project has given a solution for elder people who cannot consult doctor every now n then. There is no need to depend on anyone. Time to time medications will be taken which actually controls in any risk of patient health. By this there is reduction in readmission rate because of remote patient monitoring on heart failure patients.
16	Application of the project :	• Medical box advise patients as to how and when they should take medicine • Alarm based on the medicine time • Instant pulse checkup • Instant body temperature checkup
17	Budget details with Materials required:	Raspberry pi : 3388 (https://rb.gy/bmyyjj) Memory Card : 299 (https://rb.gy/m4uv7j) LCD Display : 199 (https://rb.gy/l12pdt) DS18B20 : 216 (https://rb.gy/a2eiiz) Buzzer : 75 (https://rb.gy/upfdbl) Push Button : 69 (https://rb.gy/i8dtnj) Jumper wires : 228 (https://rb.gy/va1ctp) Box : 149 (https://rb.gy/loplmx)

18	Date of commencement of the Project :	1/09/2020
19	Probable date of completion of the project :	1/07/2021
20	Duration of project work :	10 months
21	Pert chart for completion of the project in said duration as per	

Planned Activities:

Sl.No	Activities Planned	1 and 2 Month	3 and 4 Month	5 and 6 Month	7 and 8 Month	9 Month	10 Month
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ
(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)
THE VEERASAIVA VIDYAVARDHAKA SANGHA'S
RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE
(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)
CANTONMENT, BALLARI - 583104. (KARNATAKA)
(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)
Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148
e-mail: principalrymec@gmail.com, principal@rymec.in
Website: www.rymec.in

20399

ENDORSEMENT

This is to certify that Supriya K, Chandana Murthy, Pooja Mudgal, are bonafide students of Department of Computer Science and Engineering, of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory/Computer/infrastructure support in our college /Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional center and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional center and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
Pampa 30/6/21	30.6.21	30/6/21
Prof. Pampapathi B M	Dr.Girisha H	Dr.T Hanumantha Reddy

Professor and Head
Department of Computer Science & Engineering,
R. Y. M. Engineering College,
(Formerly Vijayanagar Engg. College)
BELLARY-583 104.

PRINCIPAL
R. Y. M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, BELLARY-583 104

Visvesvaraya Technological University"JnanaSangama"
Belagavi: 590018 Karnataka, India.
Tele: 0831-2498225 ,2405454

VTU Sponsored Student Project Proposal

01	Academic Year :	2020-21	
02	Semester :	8th semester	
03	Name of the College :	**RAO** BHAHADDUR Y. MAHABALESWARAPPA ENGEERING COLLEGE, BALLARI	
04	Branch:	Civil ENGINEERING	
05	Project Title:	***"To study the Engineering Properties of Hempcrete Blocks and Slabs produced using Hemp,jute,acacianilotica and sisal fiber's with lime, aggregates andcement".(Project sponsored by KSCST,IISc,Bengaluru)***	
06	Project Discipline:	Non-conventional and/or composite building materials / structures, Innovative materials for acoustics and noiseControl,	
07	Principal	Name:	Dr. T HANUMANTHA REDDY
		Contact No:	9448043949
		Email id:	principal@rymec.in
08	HOD	Name:	Prof. DR. H M MALLIKARJUNA
		Contact No:	9448356741
		Email id:	malli3765@gmail.com
09	Project Guide	Name:	Prof. / Mr. M R Vijay Kumar
		Contact No:	9886893258
		Email id:	mrvk.rymec@gmail.com
10	Project Co-Guide(If any)	Name:	No Co Guide
		Contact No:	-
		Email id:	-

11	Project Committee coordinator (Identified by the college) :	Name:	Dr.Chidananda.H
		Contact No:	9449380527
		Email id:	Chidably999@gmail.com

12 Name of project group Members

1.Group leader and Member

Name: Akarsh k v
USN No. :3VC17CV006
Contact No:8317489756
Email id:akarsh0933@gmail.com

2.Member

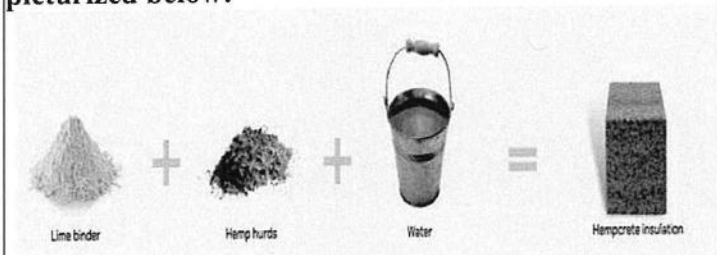
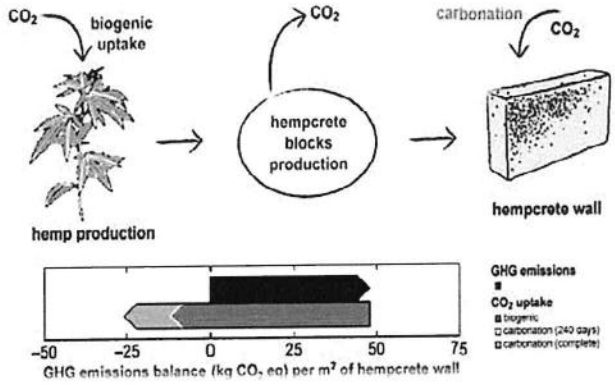
Name: : kannarivenkateshreddy
USN No. : .: 3VC17CV034
Contact No: 7022314313
Email id: kvenkateshreddy999@gmail.com

3.Member

Name: Harshavardan K
USN No. :3VC16CV024
Contact No:8310348155
Email id: harshavardhan.kr7@gmail.com

4.Member

Name: :Harish K
USN No. : 3VC18CV413
Contact No: 7892325765
Email id: kurubaharish20@gmail.com

13	Scope / Objectives ofthe project:	**PROJECT CONCEPT:** **Over all process of Hempcrete Blocks formation is picturized below:**  The hemp fiber,(Bast fiber) Hydraulic lime make reaction in presence of water and leads to formation of **Hempcrete**. The detailed process of hempcrete formation is Illustrated in the Figure below:  Basically, the hemp plant grows by absorbing CO_2 and the fibers of the same plant are obtained after processing and hard, highly resistant and durable cellulose fibers are obtained. The Reactions that occur are, The reaction takes place between lime binder and atmospheric Carbon di-oxide in the presence of water, results in the binder setting and gluing the hard particles, fibers etc all together and leads to formation of Calcium carbonate. When the setting process begins so called Hempcrete will start absorbing the carbon dioxide (CO2) from the atmosphere and binds all the ingredients added before. The absorption reaction leads to the formation of materials like calcium carbonate and so on.

The middle stage of release of carbon di-oxide is due to the reasons like work done by labor, machines (which may require some fuels etc) required **to** press the concrete etc and to compaction the concrete**, etc.**

In present day scenario, with sustainable building materials and appropriate building technologies being more relevant than ever, hempcrete type of novel and innovative concrete has found its place as an important construction material in the field of civil engineering. The hempcrete has been recognized since ancient times because of its unique properties such as thermal insulation, acoustic insulation, light weight and considerably strong, durable, long lasting and doesn't decay and also absorbs carbon dioxide from atmosphere and reduces carbon footprint, nature friendly and it is an energy efficient construction material.

The following is the list of materials intended to use in composting process:

- Cement(verylowquantity)
- Lime(good qualityhydrauliclime)
- Aggregates(fineaggregates)
- Water
- Pozzolanas(fly ash,ggbs,ricehuskash)
- Hempfibre
- Sisalfibre
- Babulplantfibre
- Jutefibre.

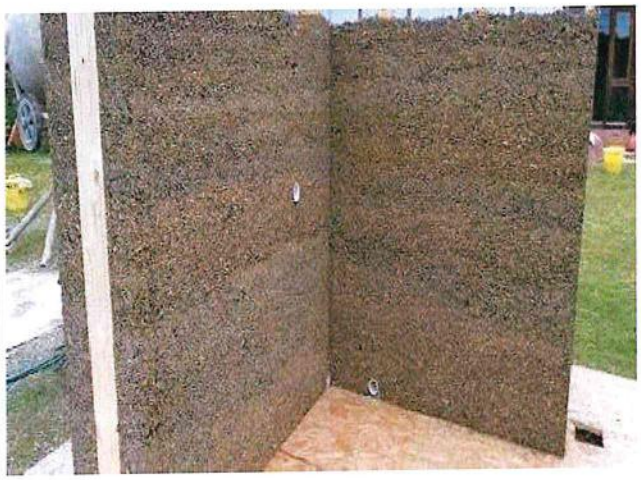
The aim of the project is to develop the composition of Hempcrete that provides efficient and excellent engineering properties that puts it into an innovative and novel concrete using local available materials.

1) It is intended to produce solid blocks of size 204mm height,152mmwidth,304mmlength.
2) To produce panels of hempcrete of size 75mm or 100mm thickness and0.6mside.
3) To produce hempcrete bricks of 100mm thickness,180mm to 200mmheight,304mmlength.
4) To construct a composite hempcretemodular wall of length152mm and 101mm to

125mmheight.

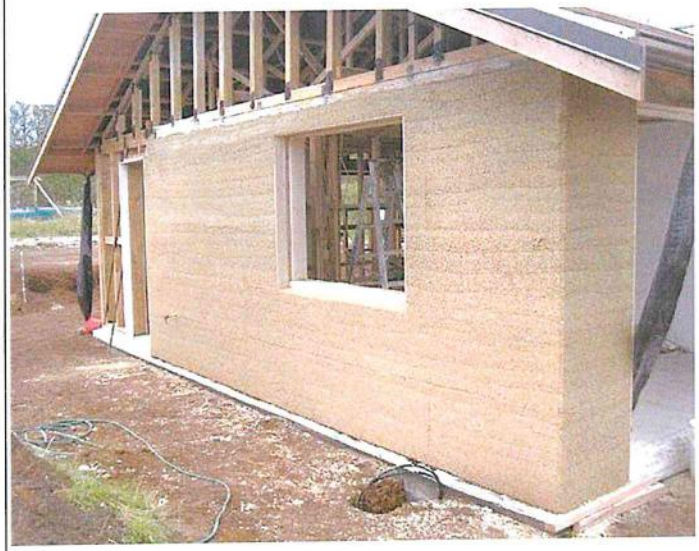
5) itis intended to investigate thermal insulation and acoustic insulation of hempcrete wall built in the project.

Hempcrete Blocks.



Hempcrete Walls

HEMPCRETE HOUSES



14	Methodology of work: (Including diagram, flow chartand design calculations)	➧To study the engineering properties of hempcrete. ➧It is proposed to mix the various raw materials as listed above at different percentages by volume or weight and a hempcrete composition is established possessing different novel engineering properties. ➧It is proposed to develop hempcrete concrete having unit weights varying from 500kg/m^3 and upto 1500kg/m^3. ➧The percentages of the said ingredients are varied to achieve hempcrete with compressive strength varying from 35kg/cm^2(3.5N/mm^2) to 200kg/cm^2(20.0N/mm^2). **As there is no standard mix design procedure available to make Hemp Crete concrete, to arrive at certain strength and unit weight, combination of different ingredients is made to develop the HempCreteconcrete.** The variation in the percentages of ingredients is also made to achieve hempcrete for different unit weight: Combinations proposed in the study:

Materials	Combination I (M10) %	Combination II (M15)%	Combination III (M20)%
Cement	1-2%	3-4%	4-5%
Lime	25-30	30-40	40-50
Fine aggregate	5-10	10-15	15-20
Water	5-8	8-10	10-12
Fly ash	5-10	10-15	15-20
GGBS	5-10	10-15	15-20
Rice husk ash	5-10	10-15	15-20
Hemp fibre	20-30	30-40	40-50
Sisal fibre	20-30	30-40	40-50
Babul plant fibre	5-10	10-15	15-20
Jute fibre	5-10	10-15	15-20

The proportions of various ingredient exhibited above are tentative and after initial trail studies the composition will be modified or adjusted to achieve desirable results and finalized.

Using the finalized composition the making of Blocks, bricks and Construction of the composite wall will be taken up in the project.

15	Expected Outcome ofthe project:	1) It is intended to produce solid blocks of size 204mmheight, 152mm width,304mmlength. 2) To produce panels of hempcrete of size 75mm or 100mm thickness. 3) To produce hempcrete bricks of 100mm thickness,180mm to200mm height,304mm length. 4) To construct a composite hempcrete modular wall of length152mm and 101mm to 125mmheight. 5) It is intended to investigate thermal insulation and acoustic insulation of hempcrete wall built in the project. **Note:** If this project is an improvised work of the previously awarded project, then please give a brief comparison of the results of earlier work and improvised work proposed by you.
16	Application of theproject :	1. **ConstructionIndustry:**Yes 2. **Health:**No 3. **Agriculture:**No 4. **Disaster Management:** Notapplicable 5. **Societal:**Yes 6. **Education / Academic:** Yes (You mayprovide detailsalso) Hempcrete is a different type of breathable concrete which is eco friendly, lightweight, energy efficient and excellent moisture handling. Hempcrete is produced by different types of construction materials and fibres. It posesses the engineering properties such as thermal insulation, noise insulation reduction. The use of hemcrete in civil engineering constructions helps very much to reduce of greenhouse gases (reduction of carbon footprint)emission into the atmosphere because cement is not used or used very minimum in the preparation of hempcrete.

<table>
<tr><td></td><td></td><td colspan="2">1)The hempcrete bricks or blocks or slabs made in the project can be used in the construction of housing, partition walls ,compound walls , parapet walls ,road cuttings filling material ,trench filling ,chejja ,bathroom doors etc</td></tr>
<tr><td>17</td><td>Budget details with Materials required:</td><td>Budget</td><td>Amount</td></tr>
<tr><td></td><td></td><td>Materials/Consumables</td><td>6,000</td></tr>
<tr><td></td><td></td><td>Labour</td><td>1,500</td></tr>
<tr><td></td><td></td><td>Travel Expenditures</td><td>1,000</td></tr>
<tr><td></td><td></td><td>Report preparation</td><td>500</td></tr>
<tr><td></td><td></td><td>Miscellaneous Expenditure</td><td>500</td></tr>
<tr><td></td><td></td><td>Total :</td><td>9,500</td></tr>
<tr><td></td><td></td><td colspan="2">The following is the list of materials intended to use in composting process:
• Cement(very low quantity)
• Lime(good quality hydraulic lime)
• Aggregates(fine aggregates)
• Water
• Pozzolanas (fly ash ,ggbs ,ricehuskash)
• Hemp fibre
• Sisal fibre
• Babul plant fibre
• Jute fibre.</td></tr>
<tr><td>18</td><td colspan="2">Date of commencement of the Project :</td><td>2 SEPTEMBER 2020</td></tr>
<tr><td>19</td><td colspan="2">Probable date of completion of the project :</td><td>22 JULY 2021</td></tr>
<tr><td>20</td><td colspan="2">Duration of project work :</td><td>11 MONTHS</td></tr>
</table>

21	Pert chart for completion of the project in said duration as per planned activities:						
Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3-6Month/ Week	6-9 Month/ Week	9-10 Month/ Week	10-11 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report &Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertaketo inform VTU, of any changes there in the project title, students name willbe intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

Weareawarethattheprojectgrouphastoexhibit/demonstratetheprojectfor evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibitionin VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement formto VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Akarsh k v	 19/6/21
02	Kannari Venkateshreddy	K. Vinay 19/06/2021
03	Harshavardan K	K. Harsha 19-06-2021
04	Harish K	Harish. K DATE 19/6/21

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ
(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)
THE VEERASAIVA VIDYAVARDHAKA SANGHA'S
RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE
(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)
CANTONMENT, BALLARI - 583104. (KARNATAKA)
(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)
e-mail: principalrymec@gmail.com, principal@rymec.in
Website: www.rymec.in
Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148

2261

ENDORSEMENT

(Endorsement to be taken in the institution on Department Letter head)This is to certify that

1)AKARSH KV

2)KANNARI VENKATESHREDDY

3)HARSHAVARDANK

4)HARISHK

Are bonafide students of Department in CIVIL ENGINEERING of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
(M. R. VIJAYA KUMAR) 29/6/21	29/06/2021	29/6/21
Name: M. R. VIJAYA KUMAR	Name: Dr. Mallikarjuna	Name: Dr. T. HANUMANTHA REDDY

Head of the Department
CIVIL ENGINEERING,
R. Y. M. Engineering College,
(Formerly Vijayanagar Engg. College),
BELLARY-583 104.

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, BELLARY-583 104

Visvesvaraya Technological University
"JnanaSangama"
Belagavi: 590018
Karnataka, India.
Tele: 0831-2498225 ,2405454

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2020-2021	
02	Semester :	8th semester	
03	Name of the College :	R.Y.M.ENGINEERING COLLEGE , BALLARI	
04	Branch:	CIVIL ENGINEERING	
05	Project Title:	"PHYSICO-CHEMICAL PARAMETERS OF INDUSTRIAL WASTE WATER & ITS TREATMENT BY ADSORPTION METHOD"	
06	Project Discipline:	ENVIRONMENTAL PROJCT	
07	Principal	Name:	Dr. T HANUMANTHA REDDY
		Contact No:	9448844232
		Email id:	principalrymec@gmail.com
08	HOD	Name:	Dr. H M MALLIKARJUNA
		Contact No:	9448356741
		Email id:	malli3765@gmail.com
09	Project Guide	Name:	ADANAGOUDA
		Contact No:	9972612107
		Email id:	goudacivil@gmail.com
10	Project Co-Guide(If any)	Name:	---
		Contact No:	---
		Email id:	---
11	Project Committee coordinator (Identified by the college) :	Name:	Dr. Chidananda G
		Contact No:	9449380527
		Email id:	Chidably999@gmail.com

2	Name of project group Members	
	1.Group leader and Member	
	Name: POORNIMA USN No. : 3VC18CV429 Contact No:916360247345 Email id: poornima21998@gmail.com	
	2.Member	
	Name: B UMME ZAIBA NUSRATH USN No. :3VC17CV016 Contact No:7411379885 Email id: aibanusrath.civil.rymec@gmail.com	
	3.Member	
	Name: JAYALAXMI USN No. : 3VC18CV415 Contact No:9482981639 Email id:jayajaya79948@gmail.com	
	4.Member	
	Name: KARISHMA M USN No. :3VC18CV416 Contact No: 9686707678 Email id: karishmama87@gmail.com	
	5.Member	
	Name: RAVIKUMAR B USN No. : 3VC18CV432 Contact No: 6363100924 Email id:ravikumarab99@gmail.com	

13	Scope / Objectives of the project:	1. To make waste water portable so that it is discharged sagely into the river or nay water bodies. 2. To reduce health effects by removing color and reducing chromium and fluorides content from the waste water. 3. For safe discharge of wastewater with damaging aquatic life and other parameters of environment. 4. Determining physico-chemical parameters to know the further treatment required.
14	Methodology of work: (Including diagram, flow chart and design calculations)	1. Dip in bags are made up of cotton cloth containing adsorbent (tamarind seed powder). 2. The tamarind seeds powder passing of 75 micron is prepared. 4. Take a 100 ml of wastewater in a neat conical flask. 5. Then dip the cotton bag containing of 5g tamarind seed powder &Leave for a day to see the changes. 6. Then the water become light brown color. 7. Then in order to remove the brown color 8 to 10 drops of hydroporoxide is used. 8. Then repeat the same procedure by varying the content of tamarind seed powder in gm.eg-5, 10, 15 and 20 gms 9. Then check the color of sample, pH and fluoride value.
15	Expected Outcome of the project:	1.Removable of color. 2.Removal of minerals and harsh chemicals. 3.Planning for further physico chemical parameters for which the treatment in further is decided. 4.Reduction in cost of treatment.

16	Application of the project :	1.Removal of color from wastewater. 2.Removal of chromium and fluorides content to certain limit. 3.Making wastewater safe to discharge into the streams and reuse.
17	Budget details with Materials required:	Chemicals and material cost is Rs. 6,000.00 (six thousands only)
18	Date of commencement of the Project :	2 Sept 2020
19	Probable date of completion of the project :	22 July 2021
20	Duration of project work :	11 months
21	Pert chart for completion of the project in said duration as per planned activities:	

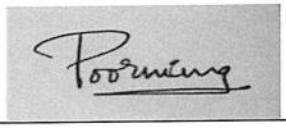
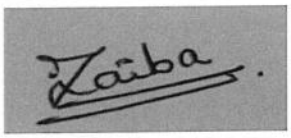
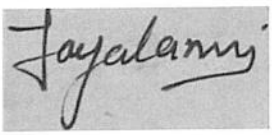
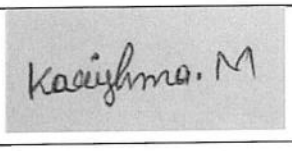
Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake toinform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false oruntrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately.

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL. No	Name of the Student	Signature with date
01	POORNIMA K	
02	B UMME ZAIBA NUSRATH	
03	JAYALAXMI	
04	KARISHMA M	
05	RAVIKUMAR B	

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.

Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148

ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ

(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)

THE VEERASAIVA VIDYAVARDHAKA SANGHA'S

RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE

(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)

2263

CANTONMENT, BALLARI - 583104. (KARNATAKA)

(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)

e-mail: principalrymec@gmail.com, principal@rymec.in

Website: www.rymec.in

ENDORSEMENT

This is to certify that

1. POORNIMA K
2. B UMME ZAIBA NUSRATH
3. JAYALAXMI
4. KARISHMA M
5. RAVIKUMAR B

Are bonafide students of Department in **CIVIL ENGINEERING** of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
29/06/2021	29/06/2021	29/6/21.
Name: Adanagouda	Name: Dr.H M Mallikarjuna	Name: Dr. T. Hanumantha Reddy

Head of the Department
CIVIL ENGINEERING,
R. Y. M. Engineering College,
(Formerly Vijayanagar Engg. College)
BELLARY-583 104.

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, BELLARY-583 104

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.

Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148

ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ

(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)

THE VEERASAIVA VIDYAVARDHAKA SANGHA'S

RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE

(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)

CANTONMENT, BALLARI - 583104. (KARNATAKA)

(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)

e-mail: principalrymec@gmail.com, principal@rymec.in

Website: www.rymec.in

500

Ref No: RYMEC/2021-22/

Date: 01-06-2021

To,

The Registrar
Visvesvaraya Technological University
"Jnana Sangama"
Belagavi-590 018
Phone: 0831-2498100

Respected Sir,

Sub: Submission of project Proposal for Financial assistance for innovative projects for final year under Graduate students for the year 2020 - 2021-Reg

Ref No: VTU/BGM/PS/2021-22/545, Dated: 06-05-2021

With reference to the above Subject, here with submitting the project proposal for Financial assistance for innovative projects for final year under Graduate students for the year 2020 – 2021 with the project Title "**Design and fabrication of low cost MEMS based listening device for hearing impaired** "as per the prescribed format by Electronics and Communication Engineering department students.

The project is **User friendly device for physically challenged people**

Kindly consider the Proposal for approval and oblige.

Thanking you sir,

f/r Savita
Principal
1/6/21

PRINCIPAL
R.Y.M. Engineering College.
(Formerly Vijayanagar Engg. College)
Cantonment, BALLARI-583 104.

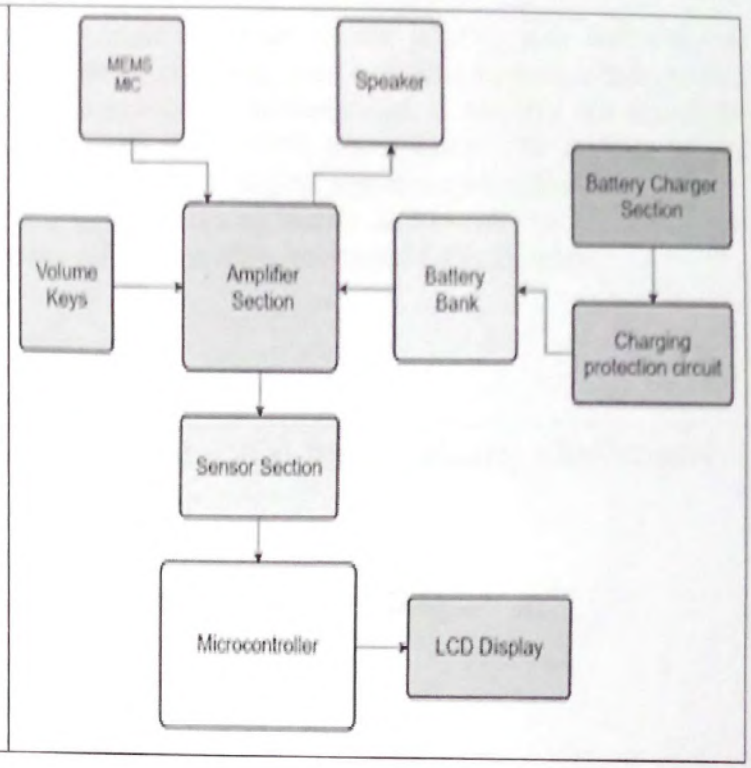
	Visvesvaraya TechnologicalUniversity "JnanaSangama" Belagavi: 590018

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2020-21	
02	Semester :	8	
03	Name of the College :	**RAO BAHADUR Y MAHABALESHWARAPPA ENGINEERING COLLEGE, BALLARI**	
04	Branch:	ELECTRONICS AND COMMUNICATION ENGINEERING	
05	Project Title:	**"DESIGN AND FABRICATION OF LOW COST MEMS BASED LISTENING DEVICE FOR HEARING IMPAIRED"**	
06	Project Discipline:	***User friendly device for physically challenged people***	
07	Principal	Name:	Dr. T HANUMANTHA REDDY
		Contact No:	9448043949
		Email id:	principalrymec@gmail.com
08	HOD	Name:	Dr. SAVITA SONOLI
		Contact No:	9343553487
		Email id:	savitachitriki@gmail.com
09	Project Guide	Name:	Dr. SAVITA SONOLI
		Contact No:	9343553487
		Email id:	savitachitriki@gmail.com
10	Project Committee coordinator (Identified by the college) :	Name:	Dr. S PRABHAVATHI
		Contact No:	8105289789
		Email id:	rymec.ece@gmail.com

11	Name of project group Members	
	1.Group leader and Member	
	Name: Ms. SEEMA P USN No. : 3VC17EC062 Contact No: 9972947442 Email id: pseema.ece.rymec@gmail.com	
	2.Member	
	Name: Ms. K SWETHA USN No. : 3VC17EC025 Contact No: 7892457429 Email id: swetha.ece.rymec@gmail.com	
	3.Member	
	Name: Ms. TRIVENI USN No. : 3VC17EC078 Contact No: 9449287246 Email id: triveni.ece.rymec@gmail.com	
	4.Member	
	Name: Ms. SONIA S USN No. : 3VC17EC069 Contact No: 9379555562 Email id: sonias.ece.rymec@gmail.com	

12	Scope / Objectives of the project:	1. Electret condenser microphone (ECM) technology is most widely used in Hearing aids, but this technology remained unchanged since 1960's.Their performance, stability over temperature and other environmental conditions are not very good. Current project addresses the problems caused due to ECM technology. This project intent is to make the Hearing loss patient more benefited by MEMS Hearing aids which has the excellent advantages and can surpass ECM technology in many areas.
13	Methodology of work: (Including diagram, flow chart and design calculations)	The methodology for the proposed system is discussed as follows: • MEMS Microphone will provide signal to LM386N amplifier input section. • The LM386N Audio amplifier will amplify those low signals into high signals. • Signal level will get change with the help of volume keys. • Audio frequency sweep from 20 hz to 11khz generated using an android app called 'Frequency', is captured from the LM386N audio amplifiers with MEMS microphone. • Then the frequency is feed to the computer audio card through MEMS microphone port and recorded using free version software name Audacity™. • Using the inbuilt 'Spectrogram plot' function of the software, the recorded sounds are plotted. • The analog output is been converted to digital output signals with the help of microcontroller atmega328. • Output signals are displayed in LCD Display section.



14	Expected Outcome of the project:	In the implementation of the hearing aid, and for the development of a low-cost amplifier system, a low-power audio amplifier is implemented to amplify the electrical signal from the MEMS microphone. The analog output will get convert to digital signal output signals. User will be able to Verify and check the digital output using microcontroller interfaced LCD Display.
15	Application of the project :	• Hearing Aid for physically challenged people • Loudspeaker • Public address system • Mobile phone • Walkie talkie
16	Budget details with Materials required:	**Budget** / **Amount** a) Materials / Consumables — 3000.00 b) Fabrication — 2000.00 c) Labor — 500.00 d) Travel — 800.00 e) Report — 1000.00 f) Miscellaneous — 500.00 g) Paper Publication — 1000.00 **Total** — 8800.00 **IN WORDS : EIGHT THOUSAND EIGHT HUNDRED ONLY**
17	Date of commencement of the Project :	05/12/2020
18	Probable date of completion of the project :	10/06/2021
19	Duration of project work :	6-7 Months

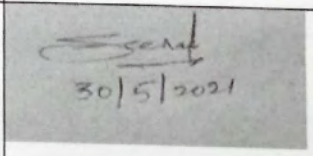
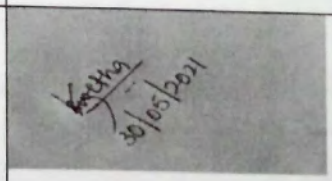
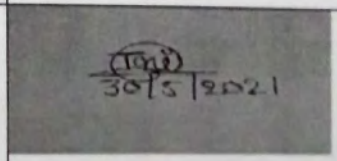
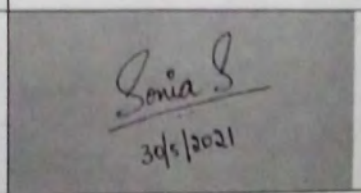
20.	Pert chart for completion of the project in said duration as per planned activities:						
Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report &Submissio n						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Ms. SEEMA P	
02	Ms. K SWETHA	
03	Ms. TRIVENI	
04	Ms. SONIA S	

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ
(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)
THE VEERASAIVA VIDYAVARDHAKA SANGHA'S
RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE
(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)
CANTONMENT, BALLARI - 583104. (KARNATAKA)
(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)
Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148
e-mail: principalrymec@gmail.com, principal@rymec.in
Website: www.rymec.in

4739

ENDORSEMENT

This is to certify that

1] Ms. SEEMA P
2] Ms. K SWETHA
3] Ms. TRIVENI
4] Ms. SONIA S

Are bonafide students of Department in ELECTRONICS AND COMMUNICTION ENGINEERING of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
VICE PRINCIPAL R.Y.M. Engineering College, (Formerly Vijayanagar Engg. College) Cantonment, BALLARI-583 104.	VICE PRINCIPAL R.Y.M. Engineering College, (Formerly Vijayanagar Engg. College) Cantonment, BALLARI-583 104.	f/r PRINCIPAL 2/6/21 R.Y.M. Engineering College, (Formerly Vijayanagar Engg. College) Cantonment, BALLARI-583 104.
Name: Dr.SAVITA SONOLI	Name: Dr.SAVITA SONOLI	Name: Dr.T. HANUMANTHA REDDY

BANK ACCOUNT DETAILS OF THE INSTITUTION

1.	Name and Address of the College	:	Rao Bahadur Y Mahabaleswarappa Engineering college, cantonment, Ballari.
2.	Name of the Account Holder as per Bank account	:	PRINCIPAL,RYMEC,BALLARI
3.	Bank SB / Current Account No.	:	SAVINGS BANK 10884100000001
4.	IFS Code No.	:	PKGB0010884
5.	MICR Code No.	:	583697102
6.	Bank Branch Address	:	KARNATAKA GRAMINA BANK RYMEC EXTENSION COUNTER

Date :02-06-2021

Signature of Principal 2/6/21

Email id :principalrymec@gmail.com

Office No.: (08392)-244809

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, BALLARI-583 104.

	**Visvesvaraya Technological University** **"JnanaSangama"** **Belagavi: 590018** **Karnataka, India.** **Tele: 0831-2498225 ,2405454**

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2020-2021	
02	Semester :	8	
03	Name of the College :	Rao Bahadur Y. Mahabaleshwarappa Engineering College.	
04	Branch:	Electronics & Communication Engineering	
05	Project Title:	"Microcontroller Based Child Rescue System from Open Borewell using Robot"	
06	Project Discipline:	Rescue Operation	
07	Principal	Name:	Dr.T.Hanumantha Reddy
		Contact No:	9448844232
		Email id:	principalrymec@gmail.com
08	HOD	Name:	Dr.Savita Sonoli
		Contact No:	9343553487
		Email id:	savitachitriki@gmail.com
09	Project Guide	Name:	Dr.S.Prabhavathi
		Contact No: Email id:	8105289789 prabkir@gmail.com
10	Project Committee coordinator (Identified by the college) :	Name:	Dr.Chidananda H
		Contact No:	9449380527
		Email id:	Chidably999@gmail.com

11	Name of project group Members

1.Group leader and Member

Name: Pallavi Nayaka B	
USN No. : 3VC17EC042	
Contact No: 6362491108	
Email id: pallavinayaka.ece.rymec@gmail.com	

2.Member

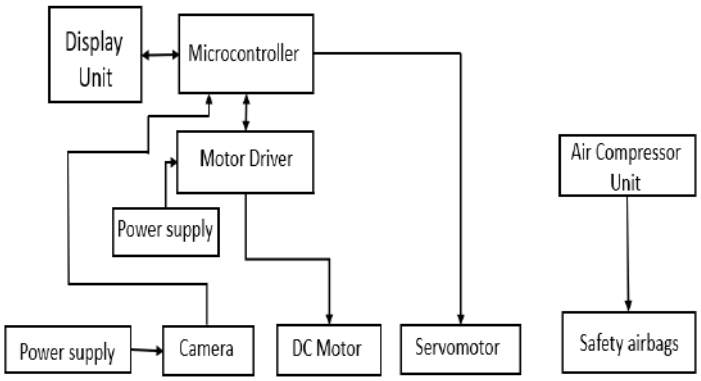
Name: Nagarathna	
USN No. : 3VC17EC037	
Contact No:	
Email id: nagarathna.ece.rymec@gmail.com	

3.Member

Name: Shobha	
USN No. : 3VC17EC066	
Contact No: 9113952224	
Email id: shobha.ece.rymec@gmail.com	

4.Member

Name: Sneha Tambekar	
USN No. : 3VC17EC068	
Contact No: 9538438184	
Email id: sneha.ece.rymec@gmail.com	

12	Scope / Objectives of the project:	The objective of our entitled "Child Rescue System from Open Borewells" are as follows: 1. The rescue the child who have fallen inside the borewell. 2. To use robotic arms and safety airbag with minimal time. 3. To manually monitor the child with the help of camera and controlling unit of robot. 4. To avoid further fall of the child once the child is held by the system. 5. Less time of operation and then increased chance of survival. 6. To communicate with the robot by sending appropriate commanda to it and activate the suitable motors.
13	Methodology of work: (Including diagram, flow chart and design calculations)	Block diagram of child rescue system  Working: • Fix the position of stand and pulley arrangement. • Tie the robot to the rope and send inside the borewell with continuous monitoring. • Trace out the gap between a child and wall of the borewell. • Insert rod into traced gap. • Safety airbag is blown using air compressor. • Hold the child with robtic arms and slowly pull-up the entire arrangement.

14	Expected Outcome of the project:	By adapting this system, the life of the child can be saved with minimal time. This system also performs lifesaving action in addition to rescuing. The main highlight of this project is the inclusion of safety airbag avoiding further falling down of baby during the rescue operation. Once the child is found, the robot is fixed at the desired position and further rotational or longitudinal movement of the robot will not be allowed. The operation time is minimal and the oxygen concentrator will help in supplying required oxygen to the baby. It can save lives of many innocent children. So, it is very beneficial to use this robot.
15	Application of the project :	1.As bore well child saver-The main application of the machine is in the rescue operation of the child from the borewell. 2.As pipe cleaning machine-This machine can be used in pipe cleaning. It can drive through long pipes and with a rotary brush as an end effecter fitter at front will serve the cleaning operation of dirty pipes.As the inside surface of the pipes may be wet and slippery the high quality wheels are capable to grip on the wet surface. 3.In manufacturing industries. 4.In under water operation.
16	Budget details with Materials required:	Budget Amount 1.Materials/consumable = 15,000 2.Labour = 2,000 3.Travel = 1,000 4.Report = 1,000 5. Miscellaneous = 1,000 Total = 20,000

17	Date of commencement of the Project :	24/12/2020
18	Probable date of completion of the project	24/06/2021
19	Duration of project work :	6 months
20	Pert chart for completion of the project in said duration as per	
	planned activities:	

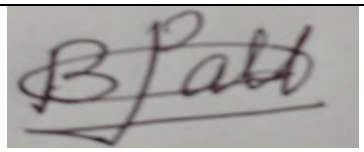
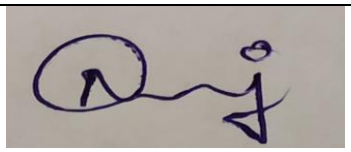
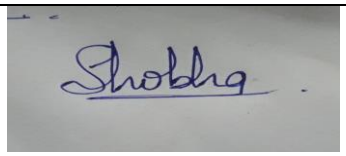
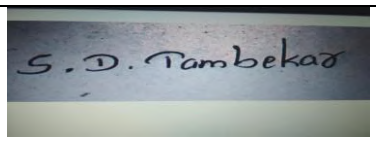
Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Pallavi Nayaka B	 (08/06/2021)
02	Nagarathna	 (08/06/2021)
03	Shobha	 (08/06/2021)
04	Sneha Tambekar	 (08/06/2021)

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ
(ಹಿಂದಿದ್ದ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)
THE VEERASAIVA VIDYAVARDHAKA SANGHA'S
RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE
(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)
CANTONMENT, BALLARI - 583104. (KARNATAKA)
(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)
Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148
e-mail: principalrymec@gmail.com, principal@rymec.in
Website: www.rymec.in

058

ENDORSEMENT

Date: 30/07/2021

This is to certify that

1. Pallavi Nayaka B
2. Nagarathna
3. Shobha
4. Sneha Tambekar

Are bonafide students of Department in Electronics & Communication Engineering, of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
Prabhu	Savita	T. Reddy
Name: Dr.Prabhavathi S	Name: Dr.Savita Sonoli Head of the Department, Electronics & Communication Engg. R. Y. M. Engineering College, (Formerly Vijayanagar Engg. College) BELLARY-583 104	Name: Dr.T.Hanumatha Reddy PRINCIPAL R.Y.M. Engineering College, (Formerly Vijayanagar Engg. College) Cantonment, BELLARY-583 104

Visvesvaraya Technological University
"JnanaSangama"
Belagavi: 590018
Karnataka, India.
Tele: 0831-2498225 ,2405454

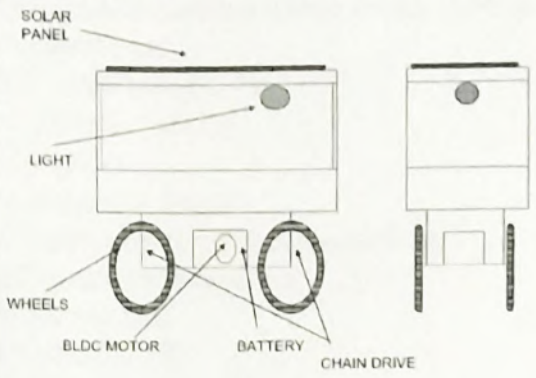
VTU Sponsored Student Project Proposal Format

01	Academic Year :	2020-21	
02	Semester :	8th sem	
03	Name of the College :	Rao Bahadur Y Mahabaleswarappa Engineering college	
04	Branch:	Electrical and Electronics Engineering	
05	Project Title:	'SMART ELECTRIC CART FOR STREET VENDORS'	
06	Project Discipline:	**Low-cost** modified transport system for village.	
07	Principal	Name:	Dr. T.Hanumantha Reddy
		Contact No:	9448043949
		Email id:	principalrymec@gmail.com
08	HOD	Name:	Dr. S. KOTRESH
		Contact No:	9986275325
		Email id:	kotreshshanbhog@gmail.com
09	Project Guide	Name:	Mr. LINGANAGOUDA.R
		Contact No:	9844580222.
		Email id:	gouda402@rymec.in
10	Project Co-Guide(If any)	Name:	NA
		Contact No:	NA
		Email id:	NA
11	Project Committee coordinator (Identified by the college) :	Name:	Dr.Chidananda H
		Contact No:	9449380527
		Email id:	Chidably999@gmail.com

12	Name of project group Members	
	1.Group leader and Member	
	Name: K.V. MANOJ KUMAR USN No. : 3VC17EE030 Contact No: 8971033422 Email id:manojkv2399@gmail.com	
	2.Member	
	Name: MOHAMMAD MOEIZ AHEMAD USN No. : 3VC16EE041 Contact No: 7795044152 Email id:moize.bly@gmail.com	
	3.Member	
	Name: AJAY KUMAR.C USN No. : 3VC17EE002 Contact No: 9036728423 Email id:ajaykumarcherry02@gmail.com	
	4.Member	
	Name: AKASH.S USN No. : 3VC17EE004 Contact No:8892424628 Email id:akashsimpi46@gmail.com	
13	Scope / Objectives of the project:	The **scope** of our project is the it will provide the basic opportunity and job fullness to so many unemployed people and street vendors out there to market and sell their goods, ventures, and ideas not only being stationary but also on the move. Project when implemented on large scale will prove to be an economy booster at any given circumstances. It will provide him a fair chance to compete for him well fairness and gain him the most dignity which was denied by the public authorities. The **future work** of the project will be to improve the drive and power capacity, adding some advance features like cooling system for storage container etc. The project very well fits in many Government well fair related scheme in for backward and minority administrations.

14	Methodology of work: (Including diagram, flow chart and design calculations)	The movement of the cart will be operated through a DC drive and also it contains basic facilities like mobile charging, lighting, microphone system, cooling fan etc. **SOLAR PANEL** Solar panels are composed of silicon-based semiconductors and when the radiation comes in contact with the silicon atoms, the photons are absorbed and the electrons are separated from the rest of the atoms. These free electrons responsible for carrying and creating an electrical current the electricity generated is most usually stored in batteries to be used later. **BATTERIES** An electrochemical power source or battery is a device that enables the energy liberated in the chemical reaction to be converted directly into electricity. We are going to use four 12v batteries in series. **BLDC MOTOR WITH CONTROLLER** Electric machines are a means of converting energy. Motors take electrical energy and produce mechanical energy. We are using 750w brushless DC motor for our project. **CHAIN DRIVE** The chain drive is a way of transmitting mechanical power from one place to another.Here chain drive is used for transmitting the motion from the motor to the wheel via chain drive. **MILD STEEL RODS** Steel is an alloy of iron in which carbon being the primary alloying element, up to 2.1% by weight. Body of the cart is made up mild steel rods for the above reason.

4.DIAGRAM



DESIGN AND CALCUALTION

The following parameters are considered for the construction of smart electriccart

Torque Required

Gross weight of vehicle, (GVW) = 120kg
Radius of the wheel, (R_w) = 0.4064m
Desired top speed, (v) =20km/hr. = 5.55m/sec
Desired acceleration time, (ta) = 20 sec
Maximum inclination angle, (α) = 10°
Co-efficient of static friction, (μ) = 0.7
Acceleration due to gravity, (g) = 9.81m/ sec2
Rolling resistance coefficient, (C_{rr}) = 0.02 (for motorcycle tyres)
TTE= Total Tractive Effort
TTF = RR+ GR+ FA …. (1)
RR= Force Necessary to Overcome Rolling Resistance
GR= Force Required to Climb Grade
FA= Force Required to Accelerate to Final Velocity
f= fraction of total weight acting on driving wheel of vehicle
Rolling Resistance
The Rolling resistance can be calculated as:
$RR = GVW \times C_{rr}$… (2)
$= 150 \times 0.02 \times 9.81$
$= 23.544N$

Grade Resistance

The grade resistance acting on the vehicle can be calculated as:

GR = GVW×sinα ... (3)

= 120×9.81×sin10

= 204.41N

Acceleration Force

Acceleration force is calculated as:

AF= mass×acceleration …. (4)

We know that

v= u+at …. (5)

Were

v= Final velocity

u= initial velocity

a= acceleration due to gravity

5.55=0+ a×20

a= 0.2775m/s^2

AF= 120 ×0.2775

= 33.3N

Total Torque Required To Drive the Wheel

The Total Tractive Effort can be calculated as:

TTE= RR+ GR+ FA

= 23.544+ 204.41+ 33.3

= 261.25N

The torque that is required on the drive wheel will be the one that the drive motor requires to produce so as to obtain the desired drive characteristics. The torque is:

Torque (τ) = TTE×R_w…. (6)

= 261.25 ×0.4064

= 106.172N-m

This torque can be obtained by directly mounting a motor with the torque value on the chain drive to magnify a lesser torque to this value before it drives the wheel.

Reality Check

The maximum torque is given as:

τ_{max}=(μ×GVW×f×R_w)/2…. (7)

= (0.7×120×9.81×75×0.4064)/2

= 12558.36N-m

		$\tau_{max} >>> \tau$ Hence no slip will occur. Angular velocity (ω) = $\frac{V}{r}$.... (8) Where, r = radius of wheel = 0.4064 m Linear velocity of vehicle (v) = 20km/hr = 5.55m/sec Therefore, $\omega = \frac{5.55}{0.4064}$ = 13.6564rads/sec Now, frequency of motor, $f=\omega/2\pi$ = $13.6564/2\pi$ = 2.173 rpm. Hence, the speed of the BLDC motor needed is 2.173 rpm. Here the speed and frequency of motor is less because the desired speed of the cart is less. Number of teeth on driving sprocket (n1) =14 teeth Number of teeth on driven sprocket (n2) =46teeth Gear ratio (i) = n2/n1..... (9) = 46/14 =23:7 Motor torque × gear ratio = torque at wheel .... (10) Motor torque=743.204/23 = 32.313N-m Power (P) = $\tau \times \omega$ ..... (11) = 32.313×13.6564 = 441.27 W = 0.591hp Hence it is concluded that the motor with power of 441.27 W is needed to drive the cart.

15	Expected Outcome of the project:	The main motto of our project are to standardize the outlook of the public towards the street vendors by providing a cart that contains facilities like mobile charging light motor driven and canopy. Traditional cart used human effort to move and does not have facility if lights, these because vendors depend upon the street light or other source of alternatives. vendors are a medium between farmer and consumer who cannot afford their products sale in big markets. we can reduce unemployment if we can target the mid-range people involves in this type of business.As the cost of a cart is high but we can reduce the cost if we go for mass production and the government provide the subsidy. Government can provide different identification system to manage the vendors and to manage the business.
16	Application of the project:	Used by street vendors to sell vegetables and fruits, And also used by vendors who sell household products, Transportation small goods etc..

17	Budget details with Materials required:	**Budget**	**Amount**
		a) Materials / Consumables	35000.00
		b) Labor	2000.00
		c) Travel	1000.00
		d) Report	1000.00
		e) Miscellaneous	1000.00
		Total	40000.00
18	Date of commencement of the Project:		01.06.2021
19	Probable date of completion of the project:		30.08.2021
20	Duration of project work:		2 months.
21	Pert chart for completion of the project in said duration as per planned activities:		

SL NO	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature Review						
02	Planning/ Designing						
03	Assembly / Fabrication Work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition inVT Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	K V MANOJ KUMAR	K.V. Manoj Kumar 20/05/21
02	MOHAMMAD MOEIZ AHEMAD	20/05/2021
03	AJAY KUMAR.C	Ajay Kumar.C 20/05/2021
04	AKASH.S	20/05/2021

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.

Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148

ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ

(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)

THE VEERASAIVA VIDYAVARDHAKA SANGHA'S

RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE

(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)

CANTONMENT, BALLARI - 583104. (KARNATAKA)

20969

(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)

e-mail: principalrymec@gmail.com, principal@rymec.in

Website: www.rymec.in

ENDORSEMENT

This is to certify that

1) K V MANOJ KUMAR (3VC17EE030)

2) MOHAMMAD MOEIZ AHEMAD(3VC16EE041)

3) AJAY KUMAR C(3VC17EE002)

4) AKASH S (3VC17EE004)

Are bonafide students of Department inELECTRICAL AND ELECTRONICS ENGINEERING, of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centered for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional center and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

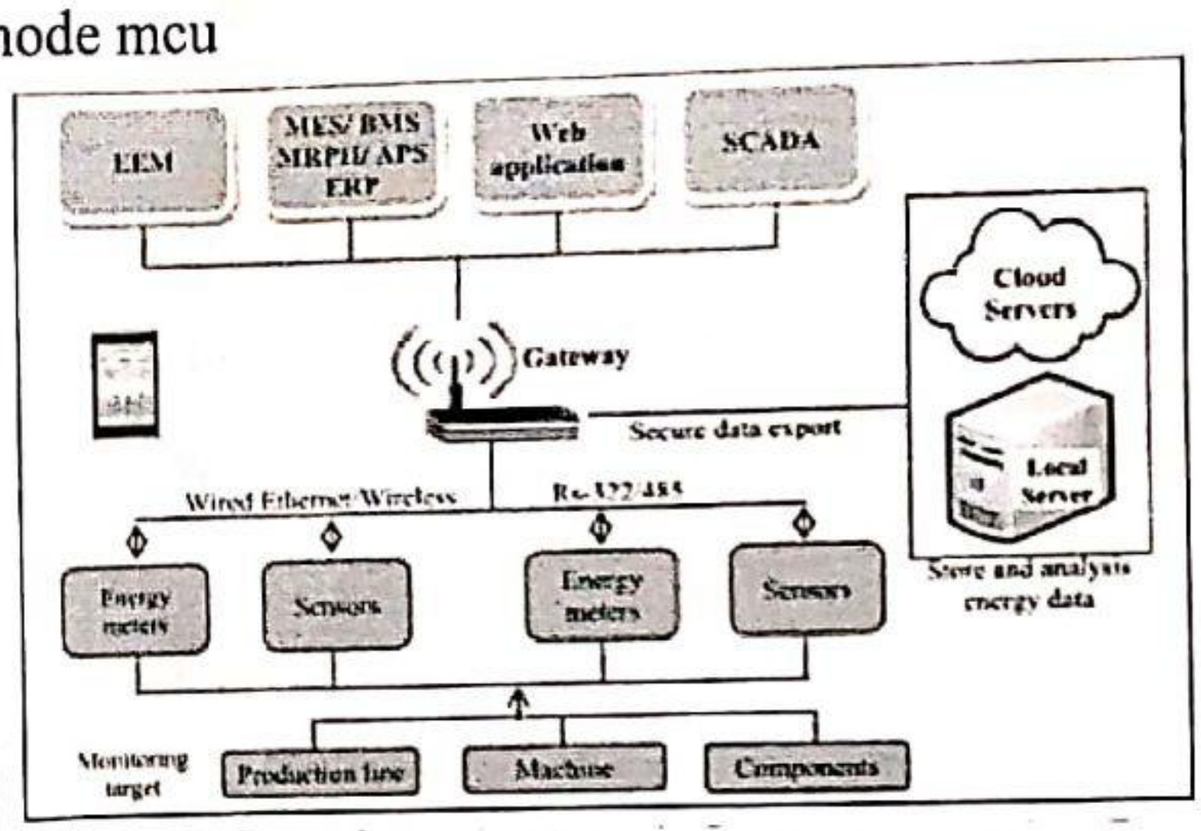
Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
30.08.2021	30/8/2021	
Mr. LINGANAGOUDA.R	Dr. S. KOTRESH Head of the Department, Electrical & Electronics Engineering, R. Y. M. Engineering College, (Formerly Vijayanagar Engg. College) BELLARY-583 104.	Dr. T. Hanumantha Reddy PRINCIPAL R.Y.M. Engineering College, Formerly Vijayanagar Engg. College Cantonment, BELLARY-583 104.

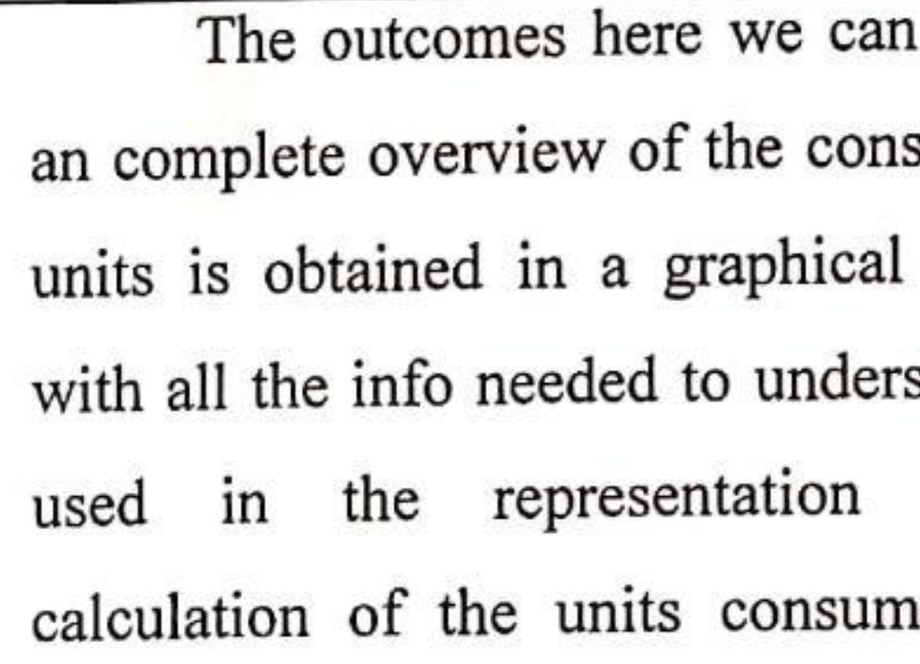
Visvesvaraya Teleological
University "Jnana Sangama"
Belagavi:
590018
Karnataka,
India.
Tele: 0831-2498225
,2405454

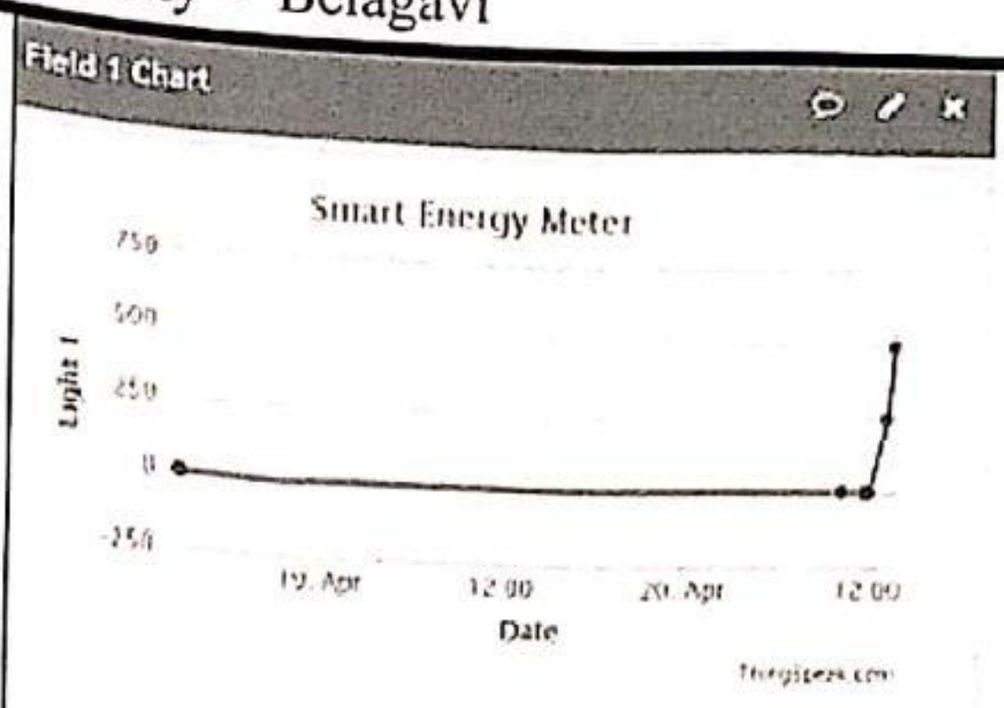
VTU Sponsored Student Project Proposal Format

01	Academic Year:	2020-21	
02	Semester:	8th sem	
03	Name of the College:	Rao Bahadur Y Mahabaleswarappa Engineering college	
04	Branch:	Electrical and Electronics	
05	Project Title:	'PORTABLE ENERGY METER	
06	Project Discipline:	***ENERGY MANAGEMENT***	
07	Principal	Name:	Dr. T. Hanumantha Reddy
		Contact No:	9448043949
		Email id:	principalrymec@gmail.com
08	HOD	Name:	Dr. S. KOTRESH
		Contact No:	9986275325
		Email id:	kotreshshanbhog@gmail.com
09	Project Guide	Name:	Mr.VINAY KUMAR HAVINAL
		Contact No:	9900975830.
		Email id:	vinayhavinal@rymec.in
10	Project Co-Guide (If any)	Name:	NA
		Contact No:	NA
		Email id:	NA
11	Project Committee co Ordinator (Identified by the college):	Name:	Dr. Chidananda H
		Contact No:	9449380527
		Email id:	Chidably999@gmail.com

12	Name of project group Members	
	I.Group leader and Member Name: JEEVAN VIKAS B USN No.: 3VC17EE027 Contact No: 7026866926 Email id: jeevanvikas.eee.rymec@gmail.com	
	2. Member Name: PREM KUMAR SG USN No.: 3VC16EE066 Contact No: 6361927842 Email id: sgpremkumar.eee.rymec@gmail.com	
	3. Member Name: MOHAMMAD SHAMS TABRAIZ USN No.: 3VC17EE0036 Contact No: 9008449014 Email id: mohammedshamstabraiz.eee.rymec@gmail.com	
	4.Member Name: BHASKAR USN No.: 3VC18EE407 Contact No:9606550346 Email id: bhaskara453@gmail.com	
13	scope *i* objectives of the project:	the main objective of the project is that to ensure that every consumer must be able to review his consumption on a daily basis so that the consumer will be able to control his power consumption there by maintaining a economic condition of the power consumption. The future scope of this project is that it can be implemented to a large scale there by a live data can be acquired there by informing the consumer his usage which helps t maintain the economic balance of the firm it can also reduce the power wastage

14	Methodology of work:	The methodology here involved is acquiring the data from the energy meter of the household and then updating it to the server which here we used is a ubidots iot server which helps us to store the collected data to the cloud which can be reviewed by the consumer on logging in to the sever and computation process is done using a node mcu which acts as a wifi module here the reason we use wifi module is to uplaod the collected data to the server which is ubidots , in order to do the computing process we have written a program which is wriiten using the C language with the help of a software called audruino ide which acts as editor and compiler to the program wriiten it also helps us to upload the written program into the node mcu  At the bottom layer of this architecture, there are smart meters and sensors, which may be connected through wired or wireless networks. Smart energy meters available on the market can attain several parameters (e.g. power consumption, max/min of peak voltage and power factor), hence they provide a high level of flexibility in monitoring and analyzing energy consumption Eventually, data are fed into EEM software for

		analysis, into other enterprise systems such as Building Management Systems (BMS), Advanced Production and Scheduling systems (APS), Manufacturing Execution Systems (MES), Manufacturing Resource Planning (MRPII), or simply into the Enterprise Resource Planning (ERP). The data from smart metering systems can also be integrated with a supervisory control and data acquisition system (SCADA).
16	Expected Outcome ofthe project:	The outcomes here we can expect is that an complete overview of the consumed watts or units is obtained in a graphical representation with all the info needed to understand the terms used in the representation with precise calculation of the units consumed and tarrifs used to calculate the electricity bill Channel ESP8266 by McuOnEclipse Channel for ESP8266 data 

		
17	Application of the project:	Every household can now monitor his/her consumption details on a smartphone precisely and accurately on a daily basis with improved analyzed data in a eco friendly manner
18	Budget details withMateria ls required:	

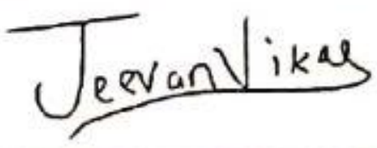
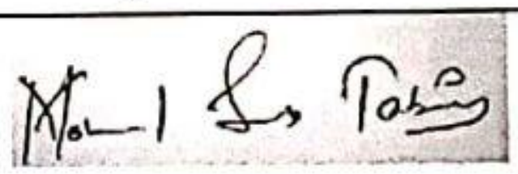
Budget	Amount
a) Materials / Consumables	4000.00
b) Labor	3000.00
c) Travel	1000.00
d) Report	1000.00
e) Miscellaneous	1000.00
Total	10000.00

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL No	Name of the Student	Signature with date
01	JEEVAN VIKAS B	
02	MOHAMMAD SHAMS TABRAIZ	
03	SG PREM KUMAR	
04	BHASKARA	

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.

Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148

ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ

(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)

THE VEERASAIVA VIDYAVARDHAKA SANGHA'S

RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE

(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)

CANTONMENT, BALLARI - 583104. (KARNATAKA)

(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)

e-mail: principalrymec@gmail.com, principal@rymec.in

Website: www.rymec.in

897

ENDORSEMENT

This is to certify that

1] JEEVAN VIKAS B (3VC17EE027)

2] MOHAMMAD SHAMS AHEMAD (3VC17EE036)

3] SG PREM KUMAR (3VC16EE036)

4] BHASKARA (3VC18EE407)

Are bonafide students of Department in ELECTRICAL AND ELECTRONICS ENGINEERING, of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional center and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional center and exhibition at VTU Belagavi, the suppo1ted project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date date
30-06-2021		
VINAY KUMAR HAVINAL	Dr. S. KOTRESH Head of the Department, Electrical & Electronics Engineering, R. Y. M. Engineering College, (Formerly Vijayanagar Engg. College), BELLARY-583 104.	Dr. T. Hanumantha Reddy PRINCIPAL R.Y.M. Engineering College, Formerly Vijayanagar Engg. Colle Cantonment, BELLARY-583 104

Visvesvaraya Technological University "JnanaSangama"
Belagavi: 590018
Karnataka, India.
Tele: 0831-2498225 ,2405454

Student Project Proposal for VTU Sponsorship

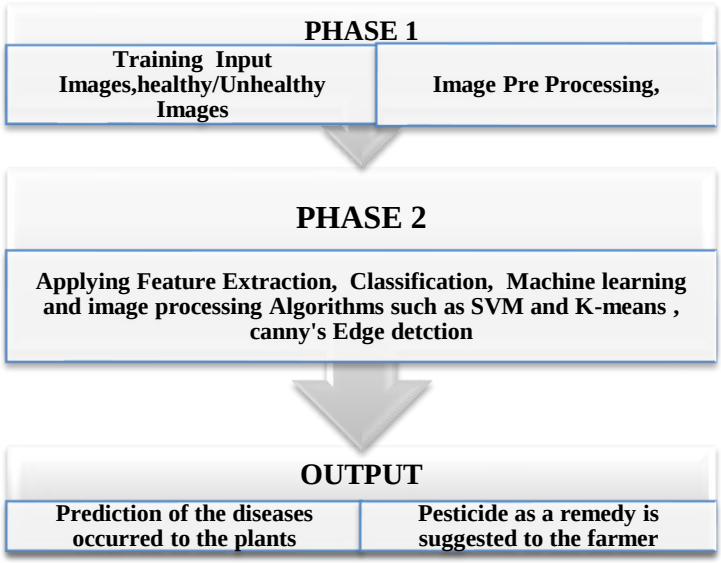
01	Academic Year :	**RAJANI.S**	
02	Semester :	8th SEM	
03	Name of the College :	Rao Bahadur Y Mahabaleswarappa Engineering College, Ballari	
04	Branch:	Information Science and Engineering	
05	Project Title:	**"PRECISION AGRICULTURAL TECHNIQUES FOR MONITORING PLANTS HEALTH"**	
06	Project Discipline:	**NEW CONCEPTS IN AGRICULTURE**	
07	Principal	Name:	**Dr T.Hanumatha Reddy**
		Contact No:	9448844232
		Email id:	principalrymec@gmail.com
08	HOD	Name:	**Dr.Sreepathi. B**
		Contact No:	9448173113
		Email id:	sreepathib@gmail.com
09	Project Guide	Name:	**Mrs. SHEELA.B.P**
		Contact No:	9449545915
		Email id:	sheelabp@rymec.in
10	Project Co-Guide(if any)	Nil	
11	Project Committee coordinator (Identified by the college) :	Name:	**Dr Chidananda. H**
		Contact No:	9449380527
		Email id:	chidably999@rymec.in

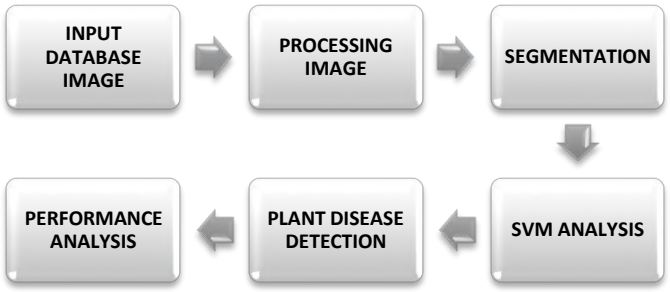
<table>
<tr><td rowspan="8">12</td><td colspan="2">Name of project group Members</td></tr>
<tr><td colspan="2">1. Group leader and Member</td></tr>
<tr><td>Name: RAJANI.S</td><td rowspan="6">  </td></tr>
<tr><td>USN No. :3VC15IS017</td></tr>
<tr><td>Contact No: 9148519233</td></tr>
<tr><td>Email id: rajanis.rymec.ise15@gmil.com</td></tr>
<tr><td>USN No. : Nil</td></tr>
<tr><td>Contact No: Nil</td></tr>
<tr><td>13</td><td>Scope / Objectives of the project:</td><td colspan="2"><u>Project Title:</u> “PRECISION AGRICULTURAL TECHNIQUES FOR MONITORING PLANTS HEALTH”

Diagnosis is always a concern for farmers in India. At the same time due to fear of attack of pests/diseases, farmer uniformly sprays pesticides/fertilizers in whole farm which may lead to damage of soil as well as plant. The aim of this project is to make the farmer to spray a limited and enough pesticide/fertilizer at a specified target area where either pest/disease is present or maybe an occurrence of attack in future. This helps the farmers mainly to prevent any such attacks on his farm as well as eliminate them if present any by spraying in limited amount and not polluting soil and other parts of plants. Major advantage of this is to increase farmer’s annual monetary revenue and minimizing crop loss caused by pests/disease attacks.

The plants health monitoring system is to periodically monitor the cultivated field to detect the ailments associated with the plants .Crop diseases are detected in early stage by using different Machine learning techniques ,system is utilizing image processing feature such as RGB values to get the details.

Objective:
1. To predict the diseases occurred to the plants.
2. To suggest pesticide as a remedy to the farmer for infected diseases to control it.</td></tr>
</table>

14	**Methodology of work:** (Including diagram, flow chart and design calculations)	To find out whether the plant is diseased or healthy, certain steps must be followed. i.e., Pre processing, Feature extraction, Training of classifier and Classification. The system must use the machine learning concept to detect the crop dieses. The proposed system works in two phases: 1. The first phase deals with training data input images. This includes, training both healthy and as well as diseased images as input. 2. The second phase deals with monitoring the crop and identifying the disease using Canny's edge detection algorithm.  Fig1 : Methodology Of The Proposed Project The proposed system focus on early detection of disease on the plants, the captured images will be considered for further extraction there are many features of images that are to be extracted ,but we in our proposed system are going to consider some of them. Different types of images of crops are considered as the input data set to the train the model. The proposed systems to use Machine learning and image processing Algorithms such as SVM and K-means for processing the defected crop images for early detection of disease.

		The following figure shows the Block diagram of the system model  Fig 2: Block diagram of proposed model.
15	**Expected Outcome of the project:**	Expected outcome of the project is prediction of the diseases occurred to the plants and suggests pesticides as a remedy is to the farmer to deal with the unhealthy crop. **Advantages:** 1. The proposed system uses the machine learning concept which will give higher accuracy to detect dieses in plant. 2. The process takes less time and it is robust in nature. 3. The proposed method is cost effective. 4. This System provides easy detection of plant diseases and which leads to less manpower. 5. Increase in productivity of plant.
16	Application of the project :	• Advancement in agricultural techniques. • Crop diseases are predicted and detected.
17	**Budget details with Materials required**:	Materials /consumables : 3000 Labor Charges : 1000 Travel : 1000 Report : 1500 Miscellaneous : 2000 ========== Total in Rupees = **Rs 8500 /-** ==========

18	Date of commencement of the Project :	1/9//2020
19	Probable date of completion of the project :	30/7/2021
20	Duration of project work :	10 Months
21	Pert chart for completion of the project in said duration as per Planned activities as follows:	

Sl. No	Activities Planned	1 Month	2 Month	3 Month	4 Month	5 Month	6 Month	7 Month	8 Month	9 Month	10 Month
01	Literature review										
02	Planning/ Designing										
03	Assembly/ Fabrication work										
04	Final Testing										
05	Result & Calculation/ Conclusion										
06	Preparation of Report & Submission										

ವೀರಶೈವ ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ಬಳ್ಳಾರಿ.
Principal :9448043949
(08392) - 245328
Off: 244809
Fax: 242148
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ.ಮಹಾಬಲೇಶ್ವರಪ್ಪ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಬಳ್ಳಾರಿ
(ಪೂರ್ವದಲ್ಲಿ ವಿಜಯನಗರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ)
THE VEERASAIVA VIDYAVARDHAKA SANGHA'S
RAO BAHADUR Y.MAHABALESWARAPPA ENGINEERING COLLEGE
(FORMERLY VIJAYANAGAR ENGINEERING COLLEGE)
CANTONMENT, BALLARI - 583104. (KARNATAKA)
(AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI & APPROVED BY AICTE, NEW DELHI)
e-mail: principalrymec@gmail.com, principal@rymec.in
Website: www.rymec.in

2701

ENDORSEMENT

This is to certify that ...RAJANI.S.....

A bonafide student of Department in Information Science engineering.., of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
Sheela 28/06/21	Bsgpathi 28/6/2021	T. Reddy
Name: SHEELA B.P.	Name: Dr. SREEPATHI B	Name: Dr. T. HANUMANTHA REDDY

Dr. B. Sreepathi, BE,M.Tech,Ph.d.
Professor & HOD-ISE,
R.Y.M. Engineering College,
Cantonment, BELLARY-583 104.

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, BELLARY-583 104

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform

VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstratethe project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibitionin VTUBelagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	RAJANI.S	Rajini.S

Financial Assistance for the Final Year UG Students Innovative Projects scheme of VTU" for the year 2020-21.

Department: Information Science and Engineering

SL No	Titles of Projects presented	Names of the Students
1	**"Precision Agricultural Techniques for Monitoring Plants Health"**	**RAJANI.S (USN: 3VC15IS017)**

Signature of the Project Guide

29/06/21

Mrs. Sheela. B. P
Asst. Professor, ISE,
RYMEC

Signature of The HOD

DrSreepathi. B
Professor, Dean Exam,
RYMEC

Dr. B. Sreepathi, BE,M.Tech,Ph.d.
Professor & HOD-ISE,
R.Y.M. Engineering College,
Cantonment, BELLARY-583 104.

V.V. Sangha's
ರಾವ್ ಬಹದ್ದೂರ್ ವೈ. ಮಹಬಲೇಶ್ವರಪ್ಪ ಇಂಜಿನಿಯರಿಂಗ್ ಕಾಲೇಜ್, ಬಳ್ಳಾರಿ
Rao Bahadur Y. Mahabaleswarappa Engineering College, Ballari
(Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi and Govt. of Karnataka)
Certified by NAAC with B++, Cantonment, Ballari-583104. Tel:08392-244809, Fax: 08392-242148

Ref:RYMEC/PC/2020-21/02

Date: 28/06/2021

Circular

As per the VTU circular vide No. VTU/BGM/PS/2021-22/545, dated 06/05/2021 following committee is constituted for the selection of Innovative projects under the **"Financial Assistance for the Final Year UG Students Innovative Projects scheme of VTU"** for the year 2020-21.

SL No	Name & Designation	Role
1.	**Dr. T Hanumantha Reddy**, Principal-RYMEC	**Chairman**
2.	**Dr. M.A. Devani**, Prof.& HOD - Chemical Engineering Department, BKIT, Bhalki	**Member, VTU Nominee**
3.	**Dr. H.M. Mallikarjuna,** Prof & HOD – Civil Engineering	Member
4.	**Mr. M.R, Vijaya Kumara,** Assc Prof, Department of Civil Engineering	Member
5.	**Dr. J.M Srishaila,** Assc Prof, Department of Civil Engineering	Member
6.	**Dr. B. Sreepathi,** Prof & HOD – Information Science & Engineering	Member
7.	**Mrs. B.P Sheela. N, Asst Prof,** Department of Information Science & Engineering	Member
8.	**Mrs. Manjula Patil, Asst Prof,** Department of Information Science & Engineering	Member
9.	**Dr. Savita Sonoli**, Prof & HOD – Electronics & Communication Engineering	Member
10.	**Dr. S. Prabhavathi,** Prof, Department of Electronics & Communication Engineering	Member
11.	**Mrs. Rakhee Patil,** Asst Prof, Department of Electronics & Communication Engineering	Member
12.	**Dr. S.Kotresh,** Prof & HOD – Electrical & Electronics Engineering	Member
13.	**Dr.U.M.Netravathi,** Prof, Department of Electrical & Electronics Engineering	Member
14.	**Dr. B. Doddabasavana Goud,** Prof, Department of Electrical & Electronics Engineering	Member
15.	**Dr. Kori Nagaraj,** Prof & HOD – Mechanical Engineering	Member
16.	**Dr. Veerabhadrappa Algur,** Assc Prof, Department of Mechanical Engineering.	Member
17.	**Dr. M Balaji, Asst Prof,** Department of Mechanical Engineering.	Member
18.	**Dr H.Girisha,** Prof & HOD, Computer Science & Engineering	Member

19.	**Dr S.G.Anuradha,** Prof, Department of Computer Science & Engineering	Member
20.	**Dr.Sapna B Kulkarni,** Assc Prof, Department of Computer Science & Engineering.	Member

Further all the members are hereby informed to attend the selection committee meeting through online on 29/06/2021 @ 10:30 AM, link will be shared later.

Dr. Chidananda. H

IPC Coordinaor

28/6/2021.

Dr.T. Hanumantha Reddy

Principal

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College
Cantonment, BELLARY-583 104

Copy to:

1. All HODs – for information

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the State Legislative VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka State, India
Tele Phone: (0831) 2498112, Fax: (0831) 2405467, Website: vtu.ac.in

Financial Assistance for Innovative Projects of Final year under Graduate Students for the year 2020-21

Non –Disclosure Form

I **Dr. M. A. DEVANI** working as a Professor in the department of **Chemical Engineering at Bheemanna Khandre Institute of Technology, Bhalki** will attend the Students Projects Selection Committee Meeting organized by **Rao Bahadur Y Mahabaleswarappa Engineering College, Ballari** on **29.06.2021** through online and solemnly declare that, I will not disclose any information about Idea/Design/Statistics/Literature or any information related to Students Innovative Projects presenting in the meeting.

Signature and Name of VTU Nominee

Devani 23/06/21

Dr. M. A. Devani

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the State Legislative VTU Act, 1994)
"Jnana Sangama" Belagavi-590018, Karnataka State, India
Tele Phone: (0831) 2498112, Fax: (0831) 2405467, Website: vtu.ac.in

Financial Assistance for Innovative Projects of Final year under Graduate Students for the year 2020-21

Non –Disclosure Form

I Dr. Chidananda. H working as Associate Professor in the department of Computer Science & Engineering at Rao Bahadur Y Mahabaleswarappa Engineering College, Ballari will attend the Students Projects Selection Committee Meeting organized by Bheemanna Khandre Institute of Technology, Bhalki on 30/06/2021 through online and solemnly declare that, I will not disclose any information about Idea/Design/Statistics/Literature or any information related to Students Innovative Projects presenting in the meeting.

(Signature and Name of VTU Nominee)

Dr. Chidananda. H

ಕರ್ನಾಟಕ ಆವಿಷ್ಕಾರ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಸೊಸೈಟಿ
Karnataka Innovation & Technology Society
Department of Information Technology,
Biotechnology and Science & Technology
Government of Karnataka

K-tech

To,
The Principal,
Rao Bahadur Y.Mahabaleshwarappa engineering college,
Ballari - 583104

Date: 29-10-2020

Dear Sir,

Sub: Declaration of Batch-1 project results reg.

We are pleased to inform you that the projects submitted by the NAIN center of your college have been evaluated. Please find the enclosed hereby the list of projects that have qualified for the students project fund under NAIN scheme.

Kindly ensure that the project cost should not surpass the grant limit of Rs. 3 Lakh per project as per the guidelines.

Thanking You

Yours faithfully

[Praveen K N]
GM- Skilling, KITS

Rao Bahadur Y. Mahabaleshwarappa Engineering College, Ballari		
Sl. No	**Project Name**	**Amount Approved by GoK**
1	Wireless Head Motion Controlled Smart Wheel Chair for Disabled Person	300000
2	Combinational Rover	100000
3	Indian Sign Language Character Recognition	200000
4	Abnormal Activity Detection In ATM Centers	220000
5	Automated Bio-Organic Fertilizer Generating Unit	300000
6	Electricity Generation From Plastic Waste in The Treatment of River Ganga using Steam Turbine Coupled	250000
7	Analysis of On-Street and off-Street Parking in Ballari using Vissim Software	210000
8	Rejuvenation of Lake by Artificial Floating Island	60000
9	Distribution Board of 3 Phase and 1 Phase System With Display	26500
10	Automated Sericulture Incubation and Rearing System	280000
Total		**1946500**

2021-2022

Karnataka State Council for Science and Technology
(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)
Indian Institute of Science Campus, Bengaluru – 560 012
Telephone: 080-23341652, 23348848, 23348849, 23348840
Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

11th May, 2022

Ref: 7.1.01/SPP/91

The Principal,
Rao Bahadur Y Mahabaleswarappa Engineering College,
Cantonment,
Ballary – 583 104

Dear Sir/Madam,

Sub : Sanction of Student Project - 45th Series: Year 2021-2022

Project Proposal Reference No. : **45S_BE_1142**
Ref : Project Proposal entitled **TO TREAT SEWAGE/SYNTHETIC WASTEWATER BY USING DIFFERENT ALGAE ALONG WITH OTHER TREATMENT PROCESSES**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 45th Series". The project details are as below:

Student(s)	Mr. JAYANTH G	**Department**	CIVIL ENGINEERING
	Mr. M SAI VARDHANA		
	Mr. V SANJAY		
	Mr. Y JAGANNATH	**Sanctioned Amount (in Rs.)**	10,000.00
Guide(s)	Mr. M R. VIJAY KUMAR		

Comments / Suggestions of the Experts

Should use only secondary treated sewage after sludge recycle. Should attempt to harvest and remove algae grown after thre algal treatment and determine clarification and harvest efficiencies.

Instructions:

a) The project should be performed based on the objectives of the proposal submitted.
b) Any changes in the project title,objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
c) Please quote your project reference number printed above in all your future correspondences.
d) After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link https://forms.gle/YMn9K7XETu96i8KbA. The synopsis should include following:
   1) Project Reference Number
   2) Title of the project
   3) Name of the College & Department

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

4) Name of the students & Guide(s)

5) Keywords

6) Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines

7) Objectives (about 10 lines)

8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)

9) Results and Conclusions (about 20 lines with specific reference to work carried out)

10) Scope for future work (about 20 lines).

e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.

f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.

g) The sponsored projects evaluation will be held in the Nodal Centre/Online Mode and the details of the same will be intimated shortly by email / Website announcement.

h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and studetn(s) shall be uploaded in the following Google Forms Link https://forms.gle/PciAaAVisn6bn8AM7. The report should be prepared in the format prescribed by the university.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.org.in

Thanking you and with best regards,

Yours sincerely,

(H. Hemanth Kumar)

Copy to:

1) The HoD
CIVIL ENGINEERING
RAO BAHADUR Y. MAHABALESWARAPPA ENGINEERING COLLEGE, BALLARI

2) Mr. M R. VIJAY KUMAR
CIVIL ENGINEERING
RAO BAHADUR Y. MAHABALESWARAPPA ENGINEERING COLLEGE, BALLARI

3) THE ACCOUNTS OFFICER
KSCST, BENGALURU

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science Campus, Bengaluru – 560 012
Website: www.kscst.org.in || Email: spp@kscst.org.in || Tel: 080-2334 1652,2334 8848/49/40

45th series of Student Project Programme (SPP): 2021-22

List of Student Project Proposals Approved for Sponsorship

123. RAO BAHADUR Y. MAHABALESWARAPPA ENGINEERING COLLEGE, BALLARI

Sl. No.	PROJECT REFERENCE NO.	PROJECT TITLE	COURSE	BRANCH	NAME OF THE GUIDE(S)	NAME OF THE STUDENT(S)	BUDGET RECOMMENDED
867.	45S_BE_1142	TO TREAT SEWAGE/SYNTHETIC WASTEWATER BY USING DIFFERENT ALGAE ALONG WITH OTHER TREATMENT PROCESSES	B.E.	CIVIL ENGINEERING	Mr. M R. VIJAY KUMAR	Mr. JAYANTH G M.SAI VARDHANA Mr. V SANJAY Mr. Y JAGANNATH	10,000.00
868.	45S_BE_4316	VIRTUAL CARETAKER FOR DIFFERENTLY ABLED PEOPLE	B.E.	COMPUTER SCIENCE AND ENGINEERING	Ms. APARNA K.S	AMRUTHA M M Mr. IFTHIYAR SM Mr. AJITH KUMAR.K Mr. MANIKANTA G.S	6,000.00

Note:

- *The sanctioned amount will be credited to the college bank account by NEFT.*
- *The evaluation of the above projects will be conducted via online mode during May / June 2022.*
- *Participation in the online evaluation process is mandatory, failing which the project will be considered incomplete and will be withdrawn from the list and sanctioned amount shall be returned to KSCST.*
- *After completion of the projects, a softcopy of the report prepared as per the format prescribed by RESPECTIVE UNIVERSITIES shall be uploaded (PDF format in a single file only) in the GOOGLE FORMS provided on the website.*
- *Any corrections with respect to the names of the guide and students shall be requested at spp@kscst.org.in.*

Transaction Details:

NAME OF THE ACCOUNT	DATE OF TRANSACTION	DESCRIPTION	TRANSFERRED AMOUNT
RAO BAHADUR Y. MAHABALESHWARAPPA ENGINEERING COLLEGE, BALLARI	03-06-22	NEFT DR- P154220172605869- RAO BAHADUR Y. MAHABA- PKGB0010884-BLR IISCNULL	16,000.00

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ
("ವಿ ಟಿ ಯುಅಕ್ಟ ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)
"Jnana Sangama" , Belagavi-590 018, Karnataka State, India

Prof. A. S. Deshpande B.E., M.Tech., Ph.D
REGISTRAR

Phone : (0831) 2498100
Fax : (0831) 2405467

Ref: VTU/BGM/Aca/A-12/ VTU RGS /DIS -EEE/2021-22/ 2666/15 Date : 28 MAR 2022

To,
The Principal,
Rao Bahadur Y Mahabaleswarappa Engineering College, Ballari.

Sub: Grants for Research Proposal for the year 2021-22
Ref:. 1. VTU/Aca./2021-22/ PS/2019-20/9707, dated 18-3-2020.
2. Hon'ble Vice-Chancellor's approval dt:11-02-2022.

At the outset please accept our congratulations and greetings.

We are pleased to inform you that, the grant of **Rs. 8.00 Lakhs (Rupees Eight Lakh only)** is being sanctioned for the research proposal entitled as "**A Novel Algorithm to Improve Image Retrieval System in CBIR for Secured Crime Preventation and Defence Application...**" submitted by **Dr.Savitha Sonoli (PI) and Mrs. Manasa K Chigateri (CoI)** under VTU Research Grants Scheme -2021.

The expenditure of the sanctioned amount needs to be planned as under.

Expenditure Particulars		First Year (Rs. in Lakhs)	Second Year (Rs. in Lakhs)	Total (Rs. in Lakhs)
Non - Recurring	Fellowship for Research Scholar	1.20	1.20	2.40
	Equipments/Software/Instruments **(Purchase of Desktops/Laptops are not Permitted)**	4.00	0.50	4.50
Recurring	Consumables (Glass wares/Chemicals)	0.25	0.35	0.60
	Others (Expenditure towards/ testing / consultancy / publications of research work in terms IPR Registrations (**not for paper publications in journals**) / TA-DA to present a paper in conferences or workshop or symposia in India .	0.25	0.25	0.50
Total (Rs. in Lakhs)		**5.70**	**2.30**	**8.00**
VTU Contribution (75% of the Sanctioned Amount) This amount will be released after receiving the acceptance letter and compliance of Point Number 10,11 &12 mentioned in "Terms and Conditions"		4.275	1.725	6.00
Institution Contribution (25% of the Sanctioned Amount) Please Refer Point number 10,11 &12 in the "**Terms and Conditions**" and comply accordingly		1.425	0.575	2.00

To, Savitha Sonoli
copy to ECE dept & Manasa K C.
& A/cs

Applicable Terms and Conditions:

1. The grant will be released in the name of the Principal of the Institute and Principal Investigator of the project.
2. The grant shall be utilized for the purpose for which it has been sanctioned.
3. The research activities of the sanctioned projects will be evaluated at the end of each year by committee constituted by VTU. Also, the LIC team of VTU may review the progress.
4. Change in heads of expenditure mentioned in the table on the previous page is not permitted.
5. The grantee institute has to abide by the guidelines of VTU Research Grant Scheme.
6. VTU reserves all the rights to change/modify rules/guidelines in this regard.
7. The Principal of the institute shall submit year wise Utilization Certificate (UC) and in the prescribed format and Audit Report (Duly signed by CA) to the undersigned. The subsequent grant will be released only after submission of UC for the grant released earlier along with details of expenditure and satisfactory work progress report.
8. The project will last for two years from the day that the Grantee Institute receives the amount of first Installment.
9. Any correspondence by the Investigators to the Registrar of VTU shall be routed through the Principal of the Grantee Institute
10. VTU shall release the amount of first installment, after an exclusive Joint Bank Account for the sanctioned project is opened and remitted the Institute share of 25% of the First Year Installment as mentioned in the above table and same shall be intimated to VTU by submitting copy of account statement.
11. The exclusive Bank Account must be Join Account in the name of Principal of the Institute and Principal Investigator with the title of the project mentioned as purpose.
12. Grantee Institute shall submit account details in the *mandate form (enclosed)* along with duly signed *acceptance letter (Format Enclosed)*. These are required for issuing the order and release of fund from our end.

Thanking you,

Yours faithfully,

Registrar

Encl:
1) Format of Mandate Form
2) Format of Acceptance letter

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

KSCST

Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

H. Hemanth Kumar
Executive Secretary

No. KSCST/COE-CS/597 25th January, 2022

Sub: Sanction of seed fund for the shortlisted projects of CySeck Research Development Programme (RDP) - reg.

Ref: 1. Note dated 04-01-2022 of Mr. Karthik Rao Bappanad, Centre Head, CoE-CS.
2. Minutes of the Technical Committee Meeting dated 16-09-2021 & approval dated 17-09-2021.

Preamble:

In furtherance of its objectives, the Centre of Excellence in Cyber Security (CySeck) proposed Research Development Programme to aid capacity building and creation of a research eco-system in the State. The proposal has been approved by the Technical Committee in its meeting held on 16-09-2021 & 17-09-2021.

Accordingly, CySeck had requested proposals from various institutions on Research Development Programme (RDP) and the RDP Panel of Experts shortlisted seven (07) projects for mentoring and award of CySeck Research Development Programme grant of Rs. 60,000/- (Rupees Sixty Thousand only) to be credited to the account of the Institution. The detailed guidelines and phases of project implementation are as per Annexure – 1 attached herewith. Hence the order:

ORDER

With reference to the above, approval of the Competent Authority has been accorded for sanction of payment/transfer of seed fund of Rs. 60,000/- (Rupees Sixty Thousand Only) to each of the following institutions for conducting the Research Development Programme on CySeck as per the guidelines attached to this order:

Sl. No.	Project Title	Subject Area	PIs Institute Name	Mentor
1.	A secure Lightweight distributed framework for auditing shared data of smart applications using fully Homomorphic Encryption in Cloud Storage.	Cryptography Cloud Computing	M.S. Ramaiah Institute of Technology Bengaluru	Prof. Srinivas Vivek
2.	Design and Development of model for Deepfake video detection by eye blinking rate detection using CNN & RNN.	Multimedia Forensics	Sahyadri College of Engineering & Management, Mangaluru	Dr. Raghu Krishnapuram
3.	Design and Implementation of Security Service in 5G wireless Networks.	Computer Network and Web Security	Basaveshwar Engineering College (Autonomous), Bagalkot	Prof. Joy Kuri

To, Dr Ken Nagaraj Sir
Mr. Phani (PI)

4.	Quantum key distribution scheme for securing smart grid communication.	Cyber Security	R.V. College of Engineering, Bengaluru.	Prof. Urvashi Sinha (RRI)
5.	Hardware and Implementation of Network Intrusion Detection System using Artificial Intelligence.	Machine Learning and Deep Learning Techniques	Rao Bahadur Y Mahabales-warappa Engineering College, Ballari	Mr. Srikanth Nalluri
6.	Trust based context aware user access control system for IoT Application Security.	Authentication and Access control for IoT Applications	New Horizon College of Engineering, Bengaluru	Dr. Arun Babu
7.	Cyber Security Threat Detection in Smart Agriculture using Machine Learning Approaches.	Computer Network and Web Security	Basaveshwar Engineering College (Autonomous), Bagalkot.	Mr. Ravi Trivedi

The Bank details for electronic transfer funds through RTGS/NEFT are given here:

Sl. No.	Name of the Account holder	Name of the Bank & Branch	Bank Account Number	IFSC /MICR Code
1.	The Principal M.S. Ramaiah Institute of Technology	Bank of Baroda MSRIT Branch, MSR Nagar, Mathikere, Bangalore	SB-89250100011983	560012052
2.	Sahyadri College of Engineering & Management	Canara Bank Sahyadri Campus, Adyar, Mangalore Branch	3448101000016	CNRB0003448
3.	The Principal, Basaveshwar Engineering College (Autonomous), Bagalkot.	Bank of Baroda,Vidyagiri, Bagalkot	37550100012102	BARB0BAGALK /587012103
4.	The Principal, R.V. College of Engineering	Kotak Mahindra Bank Ltd, R.V. College of Engg Branch, Mysore Road	SB-136010112055	KKBK0008053/ 560485068
5.	The Principal, Rao Bahadur Y Mahabales-warappa Engineering College Ballary.	Karnataka Gramina Bank, RYMEC Campus	10884100000001	PKGB0010884/ 583698102
6.	New Horizon College of Engineering Research Grant A/c.	Indian Bank New Horizon College of Engineering Panathur Post, Bengaluru	SB-6123112792	IDIB000N112

The Utilisation Certificate and Statement of Expenditure (SoE) duly signed by the Head of the Institution shall be furnished to KSCST.

(H. Hemanth Kumar)

To,
The concerned institutions.

Copy to: 1. Mr. Karthik Rao Bappanad, Center Head, COE-CS, KSCST
2. The Accounts Officer, KSCST - for Infn & n/a.

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

Annexure – 1

The Detailed Guidelines and phases for implementation of Research Development Programme on CySeck:

1. **Pre-Project Phase:**

   - ✓ The First six months of the CySeck Research Development Programme would constitute the pre-project phase, within which the Project Investigators are required to submit revamped project proposals, failing which the project will cease to be a part of the CySeck RDP.
   - ✓ The Pre-project Phase offers the PIs/Co-PIs the opportunity to be paired with a mentor who would be an expert from industry or academia.
   - ✓ The mentors would act as a sounding board and offer support and guidance to the respective projects in outlining the project, framing problem statements, research methods, identifying issues of proposed research etc.

2. **Communication during pre-project phase:**

   The PIs are required to establish a method of communication that suits both parties including the frequency and mode of interaction. It is the responsibility of the PI to drive forward the partnership.

3. **Actual project phase:**

   The process of monitoring and reviewing the projects during the actual project phase has been defined below:

   - ✓ The PIs are required to submit quarterly project progress reports to CySeck and the project review committee, comprising of the CySeck RDP panel of experts.
   - ✓ A detailed report is to be submitted by the PIs at the end of each milestone based on which the project review committee assesses alignment to research objectives, monitor progress and recommends the project for additional grant.
   - ✓ The PIs are advised to take necessary action on the recommendations of the reviewers.
   - ✓ Grant Utilization reports are to be shared with the project review committee on completing each milestone.
   - ✓ On the completion of the project, project completion reports are to be sent to panel of experts for feedback and comments.

4. **Funding:**

   CySeck will provide a seed fund of Rs. 60,000/- for the shortlisted projects, that will be transferred to the account of the institute, and the Institute will be required to provide an Utilization Certificate and any unutilized fund amount shall be transferred back to KSCST.

Executive Secretary
Karnataka State Council for
Science and Technology
Indian Institute of Science Campus

CySecK Cyber Security Karnataka | K-Tech CoE for Cyber Security

K-tech

IISc

KSCST

2 June 2021

CySecK Research Development Programme

Proposals shortlisted for the 2nd round of evaluation

Government of Karnataka's K-Tech Centre of Excellence in Cybersecurity (CySecK) issued a call for research and development project proposals in the area of Cybersecurity on 18 March 2021.

In total, 53 proposals were received against the call for which last date was 10 May 2021. Based on scientific merit, value and relationship of the project to the society and complementarities of the project objectives, scientific strengths of the project coordinators, the CySecK RDP Panel of Experts have shortlisted 20 proposals for the 2nd round of evaluation.

The Project investigators and Co-Investigators of the shortlisted proposals are required to prepare and deliver a 10-minute presentation, not exceeding 10 slides, to the CySecK RDP Panel of experts.

The presentation must cover the below mentioned aspects at a minimum:

- Value and relationship of the project to the society
- Research design and methodology
- Objectives, targets and milestones
- Potential for application - Provide an estimate of return-on-investment, in terms of money / public good / countering denial regime / self-reliance / national pride etc.
- Value - Provide an estimate of infrastructure (HR, finance, time, policy, management) that would be required to scaleup, test and implement a usable solution.

Please email a copy of your presentation (in PDF format) and your proposal submission (in doc format) to pm.cyseck@karnataka.gov.in by 15 June 2021.

The presentations are tentatively scheduled for the 3rd week of June. The shortlisted PIs will receive an email communication with the detailed schedule.

PRINCIPAL
R.Y.M. Engineering College,
(Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.

List of shortlisted proposals for round 2 evaluation

Sl No	Project Title	Subject Area	PI's Institute	Name of PI	Name of Co-PI
1	Privacy enhanced federated vehicular network for intelligent transportation	Vehicular Ad-hoc Network	M S Ramaiah Institute of Technology	Dr Shilpa Chaudhari	Dr. Janamejaya Channegowda
2	Towards Light Weight Fully Homomorphic Encryption Algorithms and Methods in Internet of Things	Cryptography: Homomorphic Encryption	KLS Gogte Institute of Technology, Belagavi	Mr Gajendra Deshpande	Dr. Veena Desai
3	A Secure Lightweight distributed framework for auditing shared data of Smart applications using Fully Homomorphic Encryption in Cloud Storage	Cryptography, Cloud computing	M S Ramaiah Institute of Technology	Dr J Geetha	Mr Hanumantharaju R
4	A comprehensive SCI-MQTT dataset for detecting the malicious attacks in public utility systems.	Cyber Security in Smart Cities	BMS College of Engineering	Dr. R. Ashok Kumar	Mrs Nalini. M. K
5	Detection of AI generated fake influential images in Social media using GAN	Cyber security and Artificial Intelligence	RV College of Engineering	Dr. Mamatha G S	Prof. B K Srinivas
6	Development of a Novel forensics framework for Extracting knowledge from Mobile Devices to Perform forensically sound Investigations	Cyber forensics (sub domain-Mobile forensics)	SECAB INSTITUTE of ENGINEERING & TECHNOLOGY, VIJAYAPURAA	Dr Syed Zakir Ali	Mr Aslam Karjagi
7	Detecting and Preventing Phishing Email Using Machine Learning Techniques-MailSieve	Cyber Security	East Point College of Engineering and Technology	Dr. C Emilin Shyni	Dr T K Sateesh
8	Software solution for analyzing and visualizing Call Data Records	Cyber Security	RVCE Bangalore	Dr. Ashok Kumar A R	Dr. Ramakanth Kumar P

9	Design and Development of model for Deepfake video detection by eye blinking rate detection using CNN & RNN	Multimedia Forensics	Sahyadri College of Engineering & Mngmt	Dr G Ananth Prabhu	Mr Naitik S T
10	Study and analysis of hybrid covert channels using entropy analytics for detection	Network Forensics	B M S Institute of Technology and Management	Dr Anjan Krishnamurthy	Dr Sunanda Dixit
11	SWIN : Towards a Safer Wearable IoT Network	IoT Security	Siddaganga Institute of Technology	Dr.Pramod T.C	Dr N R Sunitha
12	Pattern based Anomaly Detection in Mobile Adhoc Networks using Computational Intelligence Techniques - PADMAN	Network Security, Cyber Security	M S Ramaiah Institute of Technology	Dr. Vijaya Kumar B P	Dr. Naresh E
13	Cyber Forensic Analysis and Investigation Using Raspberry Pie kit	Digital Forensic Analysis and Investigation	Government Engineering College, Hassan	Mr Annaiah H	Dr Chethan K C
14	Verifying the Authentication of health advisors audio using convolutional neural network	Cyber space audio security using machine learning	New Horizon College of Engineering	Dr.Senthil Kumar R	Dr S J Subhashini
15	Quantum Key Distribution Scheme for Securing Smart Grid Communications	Cyber Security	R V College of Engineering	Dr. B Sathish Babu	Dr. Sandhya S
16	Hate speech deters decision-makers from participating in public debate	Data Analytics	RNS Institute of Technology, Bangalore	Dr Prakasha S	Dr S Sathish Kumar
17	Design and Implementation of Security Service in 5G wireless Networks	Computer Network and Web Security	Basaveshwar Engineering College (Autonomous), Bagalkot	Dr. Shivakumar V	Dr. Sanjeevakumar M. Hatture

18	Hardware Implementation of Network Intrusion Detection System using Artificial Intelligence.	Machine Learning and Deep Learning Techniques	Rao Bahadur Y Mahabaleswarappa Engineering College,	Mr Phanindra Reddy K	Mr Noorullah Shariff C
19	Trust Based Context Aware User Access Control System for IoT Application Security	Authentication and Access control for IoT Application	New Horizon College of Engineering	Dr R Thirukkumaran	Ms S Sridevi
20	Cyber Security Threat Detection in Smart Agriculture Using Machine Learning Approaches	Computer Network and Web Security	Basaveshwar Engineering College(Autonomous), Bagalkot	Dr. Sanjeevakumar M. Hatture	Dr. Shivakumar V

PRINCIPAL
R.Y.M. Engineering College,
Formerly Vijayanagar Engg. College)
Cantonment, Bellary-583 104.