



## BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR

FOUNDER CHANCELLOR  
**Dr. Patangrao Kadam**  
M.A., LL. B., Ph. D.

Accredited by NAAC With 'A' Grade  
Approved by AICTE, New Delhi & Affiliated to Shivaji University, Kolhapur  
Near Chitranagari, Kolhapur - 416013 (MS)  
DTE INSTITUTE CODE : EN-6288  
Tel.No.: (0231) 2638893, 2638894, Fax : 2636050  
Web : <http://coekolhapur.bharatividyaapeeth.edu> E- mail : [coekolhapur@bharatividyaapeeth.edu](mailto:coekolhapur@bharatividyaapeeth.edu)

PRINCIPAL  
**Dr. Vijay Ghorpade**  
M.E., Ph. D. (Computer)

# NAAC SSR CYCLE- 2



<b>Criterion 6</b>	<b>Governance, Leadership and Management</b>
<b>Key Indicator 6.4</b>	<b>Financial Management and Resource Mobilization</b>
6.4.1 Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ non- government organizations) and it conducts financial audits regularly (internal and external)	

**Academic Year: 2020-21**



## BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR

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PRINCIPAL  
**Dr. Vijay Ghorpade**  
M.E., Ph. D. (Computer)



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## **AEROBOTIX TECHSOLUTIONS, KOLHAPUR**

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To,  
The Principal  
Bharati Vidyapeeth's College of Engineering, Kolhapur

**Subject: Financial Assistance for the project titled “An IOT Based Approach in Cold Storage Management With Authenticated User Access”**

Dear Sir,

This is to inform that our company is sponsoring the final year student project of Computer Science and Engineering department which is titled “**An IOT Based Approach in Cold Storage Management With Authenticated User Access**” with maximum amount/ expenses of Rs. **25,000/- (Twenty Five Thousand Only)**.

The sponsorship will be in terms of software's, devices, high testing and expert resources or workshop needed for project. The sanctioned amount is to be utilized for the above project and during the academic year 2020-2021 only. The duration for completion of above project will be one year.

Kindly allow the following group of students to work under the Guidance/ Principal investigator of Mr A.M Patravale Assistant professor Bharati Vidyapeeth's College of Engineering, Kolhapur.

Name of Students:

1. Ms.Priya S Bide
2. Ms Vaishali D Jadhav
3. Ms. Geeta K Mane
4. Ms. Archana N Pasare
5. Ms.Srushti S Shinde

Kindly consider letter as sanction letter, this is for your kind information and further needful

Thanks and Regards



Yours faithfully,  
*Ajinkya Dixit*  
Ajinkya Dixit  
Founder – Aerobotix Techsolutions, Kolhapur

# **AN IOT BASED APPROACH IN COLD STORAGE MANAGEMENT WITH AUTHENTICATED USER ACCESS**

## **A Project Report**

*submitted in partial fulfillment of the requirements*

*for the award of the degree of*

**Bachelor of Engineering**

in

**Computer Science & Engineering**

by

**Ms. Priya Shankar Bide**

**Ms. Vaishali Dinkar Jadhav**

**Ms. Geeta Kabir Mane**

**Ms. Archana Narayan Pasare**

**Ms. Srushti Sidram Shinde**

under the guidance of

**Amol Patravale**



Department of Computer Science & Engineering  
BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR  
**YEAR: 2020-21**



## CERTIFICATE

This is to certify that the project report entitled “An IoT based Approach in Cold Storage Management with authenticated user access” submitted by Ms. Priya Shankar Bide, Ms. Vaishali Dinkar Jadhav, Ms. Geeta Kabir Mane, Ms. Archana Narayan Pasare, Ms. Srushti Sidram Shinde for the partial fulfillment of the requirement for the award of degree of Bachelor of Engineering in Computer Science & Engineering to the Shivaji University Kolhapur.

This report is record of students team work carried out by them under my supervision and guidance.

Date: 27/03/2021

Place: Kolhapur

  
Amol Patravale  
**Guide**

  
Prof. S. M. Mulla  
**HOD**

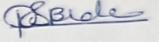
  
Dr. V. R. Ghorpade  
**Principal**

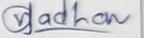
## ACKNOWLEDGEMENT

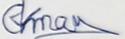
It is our privilege to acknowledge with deep sense of gratitude to our project **Guide Amol Patravale** for his valuable suggestions and guidance throughout our course of study and project.

We express our gratitude to **HOD Prof. S. M. Mulla** for her kind help and co-operation and special thanks to our **Principal Dr. V. R. Ghorpade** for giving us an opportunity to work on this topic.

We are highly obliged to the entire staff of the Computer Science & Engineering Department for their kind co-operation and help. We also take this opportunity to thank all our colleagues, who backed our interest by giving useful suggestions and all possible help.

Ms. Priya Shankar Bide 

Ms. Vaishali Dinkar Jadhav 

Ms. Geeta Kabir Mane 

Ms. Archana Narayan Pasare 

Ms. Srushti Sidram Shinde 



## AEROBOTIX TECHSOLUTIONS, KOLHAPUR

Outward Number : ATS/20-21/001

Date:- 22 / 09 / 2020

To,  
Principal,  
Bharati Vidyapeeth's College of Engineering, Kolhapur.

Subject:- Sponsorship and Internship for final year project of engineering.

Respected Sir,

We are pleased to inform you that our organization "Aerobotix Techsolutions, Kolhapur" has chosen following students for being sponsored and given Internship under our Student Development and Encouragement Program for completing their final year project.

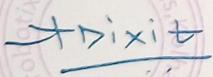
1. Priya Shankar Bide.
2. Vaishali Dinkar Jadhav.
3. Geeta Kabir Mane.
4. Archana Narayan Pasare.
5. Srushti Sidram Shinde.

The Project is "An IoT Based Cold Storage Management with Authenticated User Access", which is actually an IoT based automated system with online data logging and authentication facility. It is kind of innovative project in many terms & its surely going to help metro city civilians & smart city planners, to overcome the current problem of storage management and food processing etc.

After completing the project we shall consider a demonstration of the project and if it fits to our organization's requirements we shall buy this project from students in the future. The expenses provided by us should be spent on the study materials, stationary and instruments required for establishing setup of the project.

Thanking You.

Regards,

  
Ajinkya Dixit  
(Managing Director)

Plot No 9, Deep Sarovar Colony, Devkar Panand, Kolhapur-416012.

Contact: +91-8983817322, +91-7972863407 Email: dixitad88@gmail.com,

Website : [www.aerobotixtechsolutions.com](http://www.aerobotixtechsolutions.com)



## AEROBOTIX TECHSOLUTIONS, KOLHAPUR

### COMPLETION LETTER

Outward Number : ATS/20-21/001

Date: 05 / 07 / 2021

**To whomsoever it may concern,**

This is to certify that below mentioned students have successfully completed an academic project entitled "An IoT Based Approach In Cold Storage Management With Authenticated User Access" with our organization. The project work was genuine & legitimate by below mentioned team and was completed successfully in the month of July-2021.

During the tenure of their project with our company, they have shown the great passion and understanding towards their work and they all were sincere, punctual and honest with work allocated to them from time to time. The team has demonstrated high academic understanding & creative skills in carrying out the assigned project.

Name of the students :

1. Srushti Shinde.
2. Archana Pasare.
3. Geeta Mane.
4. Vaishali Jadhav.
5. Priya Bide.

I wish the Team the best of luck in all their future endeavors.

Thanking You.

Yours faithfully,

Ajinkya Dixit

Founder – Aerobotix Techsolutions, Kolhapur

Plot No 9, Deep Sarovar Colony, Devkar Panand, Kolhapur-416012.

Contact: +91-8983817322, +91-9611168935 Email: dixitad88@gmail.com,

Website : [www.aerobotixtechsolutions.com](http://www.aerobotixtechsolutions.com)

A  
PROJECT REPORT  
ON  
"DEVELOPMENT OF WP PULLEY (MAHINDRA)"

Submitted to

**SHIVAJI UNIVERSITY, KOLHAPUR**

In partial fulfillment of degree of

**BACHELOR OF MECHANICAL ENGINEERING**

Submitted by

Mr. Ulape Rohit Arjun (Roll No.60)

Mr. Rathod Rushikesh Vitthalsing (Roll No.46)

Mr. Ulape Rushikesh Raghunath (Roll No.57)

Mr. Dakare Pranav Anil (Roll No.12)

Mr. Patil Tejas Nivas (Roll No.43)

Under the Guidance of

**Prof. A. A. Desai**

**DEPARTMENT OF MECHANICAL ENGINEERING**



**BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR.**

**(2020 – 2021)**

BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING,  
KOLHAPUR.

DEPARTMENT OF MECHANICAL ENGINEERING



This is to certify that the project report entitled

**"DEVELOPMENT OF WP PULLEY (MAHINDRA)"**

Is a bonafide work of 1) Mr. Ulape Rohit Arjun 2) Mr. Rathod Rushikesh Vitthalsing 3) Mr. Ulape Rushikesh Raghunath 4) Mr. Dakare Pranav Anil 5) Mr. Patil Tejas Nivas. In the partial fulfillment of the requirements for the award of degree of bachelor of engineering in Mechanical Engineering of the Shivaji University, Kolhapur. He has carried out the work under my supervision and guidance, during academic year 2020-2021.

Asst. Prof. A. A. Desai

Project Guide

Dr. S. J. Kadam  
(Head of Department)

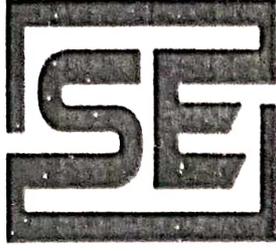
External Examiner

Asst. Prof. A. A. Desai

Project Coordinator

Dr. V. R. Ghorpade

Principal



# SUNRISE ENTERPRISES

AUTHORISED CHANNEL PARTNER OF TOOLING PLANET PVT. LTD.  
ABOVE OMKAR ELECTRICALS, SHIROLI MIDC, KOLHAPUR. 416122

Email: sunriseKolhapur@gmail.com

Phone no: 9766833932

PAN: BWIPD2567E1

SE/2021/0013

DATE: 04/07/2021

## TO WHOMSOEVER IT MAY CONCERN

This is to certify that the group of this students from "Bharati Vidyapeeth College of Engineering" studying in Bachelor of Engineering in Mechanical Engineering Department has successfully completed their Project work of "Development of WP Pulley (Mahindra)" in S. J. Industries Shirolī MIDC with our organization during the period from 05 Jan. 2021 to 18 Jun. 2021.

Mr. Ulape Rohit Arjun

Mr. Rathod Rushikesh Vitthalsing

Mr. Ulape Rushikesh Raghunath

Mr. Dakare Pranav Anil

Mr. Patil Tejas Nivas

We wish them all the best for their successful future carrier.



**MR. YOGESH A. PATIL**

SUNRISE ENTERPRISES

## TOOLING COST

SR NO	TOOL NAME	QTY	PRICE
1	DCLNL 2525 M12 TURNING TOOL	2 NOS	2800
2	S32 DCLNL M12 BORING BAR	1 NOS	2700
3	S18 PCCNL M09 BORING BAR	1 NOS	1600
4	S15 PCCNL M06 BORING BAR	1 NOS	1500
5	RDMW100 PROFILE TOOL $\phi 18 - \phi 90$	1 NOS	2100
6	DRILL 5MM	1 NOS	325
7	TAP M6	1 NOS	450
8	CHAMFER TOOL	1 NOS	1200
		TOTAL	12675/-



# TIRUPATI ENTERPRISES

Reg. Off. :F - 7, Sankalp Apartment, Bhoir Colony, Chinchwad,  
Pune -33. ☎:(020) 2745 9225 Email-tirupatipune@yahoo.co.in  
Branch Off.: Office No. 101, Rhea Apartment, 5, Aundh-Khadki  
Road, Khadki, Pune-20 ☎:(020) 25812252 Mob: 9890281157

Authorised Dealers in Electrical & Electronics testing & measuring instruments,  
Dealers for all types of Electrical & Electronics goods

REF No. TE/LAT/2020-21/05

Date: 05/10/2020

To,  
The Principal  
Bharati Vidyapeeth's College of Engineering, Kolhapur

**Subject: Financial Assistance for the project titled "Power Harvesting Tiles Using  
Micro Generator".**

Dear Sir,

This is to inform that our company is sponsoring the final year student project of Electronics and Telecommunication Engineering department which is titled "**Power Harvesting Tiles Using Micro Generator**" Under the Guidance/ Principal investigator: Mr.V.D.Patil, Assistant professor Bharati Vidyapeeth's College of Engineering, Kolhapur. The maximum amount/ expenses of **Rs. 40,000/- Rs. Forty Thousand Only**. The sponsorship is terms electronics component, Equipment testing cost, site visit and expert resources utilized for the above project during the academic year 2020-2021. The duration for complication of project will be one year.

Following students will be working on project

1. Ms. Prabhulkar Firoza Allisab
2. Ms. NikamSayali N.
3. Ms. Solapure Shivani Balwant

Kindly consider this as sanction letter; this is for your information and further needful action

**Thanking you.**  
**Yours faithfully,**



**(FOR TIRUPATI ENTERPRISES).**  
**Jaydip B. Shelke**  
**9890281157**  
**(Email: tirupatipune@yahoo.co.in)**



A  
REPORT  
PROJECTON

**“Power Harvesting Tile Using Micro generator”**

SUBMITTED TO THE SHIVAJI UNIVERSITY, KOLHAPUR  
IN THE PARTIAL FULFILMENT OF REQUIREMENTS FOR  
THE AWARD OF THE DEGREE

OF

**BACHELOR OF ENGINEERING**

IN

**ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

**SUBMITTED BY**

**Miss.Sayali N. Nikam**

**Roll No.37**

**Miss.Foroza A. Prabhulkar**

**Roll No.52**

**Miss.Shivani B. Solapure**

**Roll No.61**

**UNDER THE GUIDANCE OF**

**Mr.V.D.Patil**

**DEPARTMENT OF**

**ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

**BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, KOLHAPUR**

**NEAR CHITRANAGARI KOLHAPUR-416013**

**2020-2021**



**BHARATI VIDYAPEETH'S**

**COLLEGE OF ENGINEERING, KOLHAPUR**

**DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING**

## **CERTIFICATE**

This is to certify that, project report entitled, **“Power Harvesting Tile Using Micro generator”** submitted by **Miss. Sayali Nivrutti Nikam, Miss. Firoza Allisab Prabhulkar, Miss. Shivani Balavant Solapure** is bonafied work carried out by the under the guidance of **Mr.V.D.Pati** and it is approved for partial fulfillment of the requirement of the Shivaji University, Kolhapur for the award of the Bachelor's Degree of Engineering in Electronics and Telecommunication Engineering.

**Mr. V. D. PATIL**

GUIDE

**Dr. K. R. DESAI**

H.O.D.

**Dr. V. R. GHORPADE**

PRINCIPAL

DATE: 11 /08 / 2021  
PLACE: -KOLHAPUR

# VENKATESHWARA CONSTRUCTION AND CONTRACTORS

Er. Sangram Rangrao Divase.  
DCE, BE Civil  
Mb.No. 8856850702  
Info.venkateshwaracons@gmail.com

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**A/P.: Dighanchi, Tal.: Atpadi, Dist.: Sangali**

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**Ref. No.: 368/2020**

**Date: 19/8/2020**

To,  
The Principal,  
Bharati Vidyapeeth's College of Engineering, Kolhapur.

Subject: Financial assistance for the project titled "USE OF BAGASSE ASH AND POLYSTER FIBRE IN CONCRETE"

Dear Sir,

This is to inform that our company is sponsoring the final year student project of Civil Engineering department which is titled "USE OF BAGASSE ASH AND POLYSTER FIBRE IN CONCRETE" with maximum amount/ expenses of **Rs.13,000/- (Rs. Thirteen Thousand Only)**. The sponsorship will be in terms of purchase of project materials such as cement, sand, aggregate and adhesive/ chemical also Project testing cost, site visit and expert resources. The amount to be utilized for the above project and during the academic year 2020-21 only. The duration for completion of project will be one year.

Kindly allow the following group of students to work under the Guidance/ Principal investigator of A.M.Jadhav, Assistant professor Bharati Vidyapeeth's College of Engineering, Kolhapur.

- 1 Ghunake Vrushali Ravindra
- 2 Sawant Trupti Baliram
- 3 Mane Swati Bhagwan
- 4 Patil Tushar Yuvraj

Kindly consider this as sanction letter; this is for your information and further needful action

Thanks and Regards



Proprietor

A  
PROJECT REPORT  
ON  
“USE OF BAGASSE ASH AND POLYESTER FIBER IN  
CONCRETE”

SUBMITTED  
TO  
SHIVAJI UNIVERSITY KOLHAPUR  
IN PARTIAL FULFILMENT OF THE DEGREE

**BACHELOR OF ENGINEERING IN CIVIL ENGINEERING**

**BY**

1. Miss. Vrushali R. Ghunake
2. Miss. Swati B. Mane
3. Miss. Trupti B. Sawant
4. Mr. Tushar Y. Patil

**Under the guidance of  
Prof. A. M. Jadhav**



**DEPARTMENT OF CIVIL ENGINEERING  
BHARATI VIDYAPEETHS COLLEGE OF ENGINEERING  
KOLHAPUR**

**2020-2021**

**Department of Civil Engineering**

**CERTIFICATE**

This is to certify that the project report entitled

**“USE OF BAGASSE ASH AND POLYESTER FIBER IN  
CONCRETE”**

Submitted by

Roll No	PRN NO.	Name of student
17	2018093109	Vrushali R. Ghunake
36	2017050301	Swati B. Mane
50	2018093072	Trupti B. Sawant
63	2018093162	Tushar Y. Patil

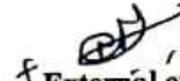
Is a bonafide work carried out by the above mentioned students under the guidance of  
Prof. A.M.Jadhav and it has been completed successfully.

  
Project Guide

(Prof. A. M. Jadhav)

  
Project Coordinator

(Prof. N.A. Mohite)

  
External examiner

  
Head of Department

(Prof. V.S.Kadam)

  
Principal

(Prof. Dr. V. R. Ghorpade)

Date: 13/08/2021

Place: Kolhapur



# PATIL CONSTRUCTION

Builder and designer

Flat NO. 25, Patil Complex, Near Mahadevnagar,  
Dhamani Road, Sangli, Maharashtra 416415 Email  
ID: patilconsttuction@gmail.com

**Ref. No.: 368/2020**

**Date: 19/8/2020**

To,  
The Principal,  
Bharati Vidyapeeth's College of Engineering, Kolhapur.

Subject: Financial assistance for the project titled EXPERIMENTAL STUDY ON STRENGTHENING OF BEAM BY USING COIR FIBRE ROPE.”

Dear Sir,

This is to inform that our company is sponsoring the final year student project of Civil Engineering department which is titled “EXPERIMENTAL STUDY ON STRENGTHENING OF BEAM BY USING COIR FIBRE ROPE.” with maximum amount/ expenses of **Rs10,000/- (Rs. Ten Thousand Only)**. The sponsorship will be in terms of purchase of project materials such as cement, sand, aggregate and adhesive/ chemical also Project testing cost, site visit and expert resources. The amount to be utilized for the above project and during the academic year 2020-21 only. The duration for completion of project will be one year. Kindly allow the following group of students to work under the Guidance/ Principal investigator of S.S.Kotwal, Assistant professor Bharati Vidyapeeth's College of Engineering, and Kolhapur.

- 1 Prasad Subhash Kadam
- 2 Swapnil Vinayak Kadam
- 3 Rushikesh Annasaheb Rukadikar
- 4 Akash Sunil Patil
- 5 Amar Anandrao Mane

Kindly consider this as sanction letter; this is for your information and further needful action

Thanks and Regards

Proprietor

A  
PROJECT REPORT  
ON  
EXPERIMENTAL STUDY OF BEAM STRENGTHNING BY USING COIR FIBER  
ROPE

SUBMITTED  
TO  
**SHIVAJI UNIVERSITY KOLHAPUR**  
IN PARTIAL FULFILMENT OF THE DEGREE  
BACHELOR OF ENGINEERING IN CIVIL ENGINEERING

By  
KADAM PRASAD SUBHASH  
KADAM SWAPNIL VINAYAK  
RUKADIKAR RUSHIKESH ANNASAHEB  
MANE AMAR ANANDARAO  
PATIL AKASH SUNIL  
GHODAKE RAVIKIRAN SHASHIKANT

Under the guidance of  
Prof. S.S. KOTWAL



DEPARTMENT OF CIVIL ENGINEERING  
BHARATI VIDYAPEETHS COLLEGE OF ENGINEERING KOLHAPUR  
2020-2021

Department of Civil Engineering

CERTIFICATE

This is to certify that the project report entitled

"EXPERIMENTAL STUDY OF BEAM STRENGTHNING BY USING COIR  
FIBER ROPE"

Submitted by

Roll No.	PRN No.	Name
23	2018093062	Kadam Prasad Subhash
65	2018093042	Kadam Swapnil Vinayak
47	2018093074	Rukadikar Rushikesh Annasaheb
34	2017050261	Mane Amar Anandrao
60	2017050244	Patil Akash Sunil
72	2016096627	Ghodake Ravikiran Shashikant

is a bonafied work carried out by the above mentioned students under the guidance of  
Prof. S.S.Kotwal and it has been completed successfully.



Coordinator

(Prof. N. A. Mohite)

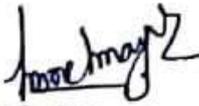


Guide

(Prof. S. S. Kotwal)



External examiner



Head of Department

(Prof. V. S. Kadam)



Principal

(Prof. Dr. V. R. Ghorpade)

Date:

Place: Kolhapur