3.2.1 Institute has created an ecosystem for innovations and has initiative for establishment and transfer of knowledge

Response:

Dr T Thimmaiah Institute of Technology is very encouraging in creating anappropriate environment for research innovations and entrepreneurship. It nurtures the interest and ideas of the researchers / entrepreneurs. The institute provides anappropriate space along with the necessary infrastructure and also aid for exchange of information between research centers. The institute provides high speed internet LAN and Wi-Fi facilities for both faculty and students.

The institute has an excellent library facility consisting about 44400 volumes, 9400 titles of Research, Technical and Management books. The library has also subscribed for e-books, conference journals, IEEE journals and supportive material for research which can be used by students, faculty and researchers. The institute has VTU Consortium journal subscription and Turnitin plagiarism checker. Accordingly the institute caters the need for materials for research scholars. Research centre under VTU has been established in all departments which promotes research culture among students and faculty and facilitate to carry out research work. The institute also has start-up supporting Mechanism of Higher Educat Institutes (HEI's). The main goal is to encourage, motivate, and nurture young students assisting them in developing new ideas and prototyping them. It organizes Hackathons, idea pitching etc with the involvement of industries.

Institute also has Pre Incubation centre where Biodiesel plant, Biofuel Research, Information and Demonstration Centre (BRIDC) has been established under the project initiated by Karnataka State BioFuel Development Board (KSBDB) with technical support provided by KSCST in April 2011.

Institute also has students/faculty associated with IIC with exclusive opportunity to participate in various innovation related initiatives and competitions organized by MOE.

The IPR cell in the institute conducted awareness session on IPR for both faculty and student community. Institute also conducted different types of Innovation and Entrepreneurship & IPR activities like How to plan for start-up and associated legal & ethical aspects.

Orientation session for all student and faculty of institute was conducted by innovation ambassador, Session on why IP is important in Academia and Leadership talks were conducted.

The institute organizes cultural festival named GOLD RUSH every year to give a platform to student to exhibit their talents. The institute also organizes International Conference ICRTTEAS every year to promote research.

The best IIC project entitled "Regenerative Breaking System on E (Electric)-Bike" has been selected for Chhatra Vishwakarma Award by AICTE.

Innovative Projects made by the Students of different Departments of Engineering are as follows:

1. An Improved Technique For Identifying Fake News On Social Media Netwok Using Supervised Machine Learning Concepts.

2. Design and Prototype Of Smart Automated Pill Dispenser.

3.Face Mask Detection Using CNN And Temperature Screening.

4. Development and Optimization of Hybrid Power Generation and Storage To Promote Clean Energy

Sl no	Innovative project	Description	Page no
1	Regenerative Breaking System on E(Electric)-Bike	Regenerative braking refers to system in which kinetic energy of vehicle is stored temporarily as an accumulative energy . This extends to a range of vehicles.	1-10
2	An Improved Technique For Identifying Fake News On Social Media Network Using Supervised Machine Learning Concepts	Fake news in the form of dark journalism or propaganda that comprises of fraud spread here technique for identifying fake news on social media network and checking for realness of use using Machine Learning techniques	11-15
3	Design And Prototype Of Smart Automated Pill Dispenser	In the era of modern medicine where humans are largely dependent on the use of pills or tablets, we focus on smart automated machine which will help a person to take his or her pills on time according to schedule.	16-26
4	Face Mask Detection Using CNN And Temperature Screening	Face mask detection has evolved a very popular problem so we decided to use computer vision on CC TV fields to monitor and detect violations, this describes an efficient and economic approach of using AI to create safe environment.	27-31
5	Development And Optimization Of Hybrid Power Generation And Storage To Promote Clean Energy	Energy is critical to economic growth and social development of any country so here stand alone power generation systems make use of solar PV and turbines to produce and store the energy for future use	32-36

Sl no	Other Activities	Description	Page no
1	Bio fuel awareness program	Biodiesel plant. Biofuel Research, information and demonstration centre (BRIDC) is a project initiated by Karnataka State BioFuel Development Board(KSBDB) with technical support provided by KSCST	37-41
2	IPR sessions and why IP is important to academia.	IPR activities like How to plan for start-up and legal & ethical steps. Orientation session for all student and faculty of institute by innovation ambassador	42-50
3	World entrepreneur ‘s day	To address the student and faculty community’s interest in awareness of World entrepreneur‘s day.	51-63
4	International Conference	International Conference on recent trends in technology, engineering and applied science (ICRTTEAS) is organized every year.	64-65
5	Gold Rush	An annual 3 days Techno-Cultural fest is organized every year.	66-68

Regenerative Braking System on E(Electric)-Bike

Dr.Lakshmipathy.N

Team Name : EEE Project(Praveen Reddy N-1GV17EE012, Shubham Prakash shinde-1GV17EE016, Srinivas A-1GV17EE018, Sundaresha-1GV18EE403 and Dr. Lakshmipathy . N)

Institution Name : Dr. T. Thimmaiah institute Of Technology Oorgaum K. G. F- 563120

Sub Category Name : Reskilling or up skilling for ensuring livelihood

Project Brief upto 200 words – The title of our project is Regenerative Braking System(RBS) on E-bike which has the control strategy and the output driven mechanism Objective of our project is to regenerate the kinetic energy during the braking system and convert to electrical energy. To implement the objective we have used i)Bicycle ii)PMDC motor iii)Motor controller Circuit iv)Li-ion battery(24V,10AH) v)Relays(5V,10A) vi)Freewheel vii)Accelerator viii)Braking mechanism. The output of PMDC motor is 250watts with the operating voltage 24V DC. Methodology used here is integration of electrical and mechanical knowledge, where the RBS is used to change the kinetic energy to chemical energy which is stored in the battery, later it can be used to rotate the motor. These motor can be upturned and acts as a generator to slow down the vehicle speed In this procedure, the electric motor acts as a generator, the generated power is stored in the battery with the mechanism of RBS. The power calculated during Regenerative braking was 74.6watts and the Efficiency was calculated as 29.84%. All the components were mounted on the bicycle and the objective was implemented with vehicle having 29.84% efficiency.

Advantage: Noise and pollution free, running and maintenance cost is economical and it is durable.

Future scope: In existing E-bikes and IC engines, we can apply RBS mechanism.

Project has been selected for Chhatra Vishwakarma Award by AICTE

13/1/22

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. - 563 120.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI - 590018

2020-2021

Project Report

on

"REGENERATIVE BRAKING SYSTEM ON E-BIKE"

Submitted in the partial fulfillment of the requirement for the VII Semester Project - 17EEP85 for the award of degree of

Bachelor of Engineering

in

Electrical and Electronics Engineering

by

PRAVEEN REDDY	**1GV17EE012**
SHUBHAM PRAKASH SHINDE	**1GV17EE016**
SRINIVAS A	**1GV17EE018**
SUNDARESHA RAM	**1GV18EE403**

Carried at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Dr. N LAKSHMIPATHY

HOD, Dept. of EEE,

Dr. TTIT, K.G.F.

12/1/2022

PRINCIPAL

Dr T Thimmaiah Institute of Technology

Oorgaum K G F 563 120

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Department of Electrical and Electronics Engineering

Kolar Gold Fields – 563120

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Oorgaum Kolar Gold Fields – 563120

DEPARTMENT OF ELECRTICAL AND ELECTRONICS ENGINEERING

CERTIFICATE

Certified that the **Project Work** entitled *"REGENERATIVE BRAKING SYSTEM ON E-BIKE"* is a bonafied work carried out by **Praveen Reddy- 1GV17EE012, Shubham Prakash Shinde- 1GV17EE016, Srinivas A- 1GV17EE018** and **Sundaresha Ram- 1GV18EE403** in the partial fulfillment for the award of degree of Bachelor of Engineering in **Electrical and Electronics Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2020-2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of **Project Work- 17EEP85** prescribed for the Bachelor of Engineering Degree.

Signature of Cordinator	Signature of HOD/Guide	Signature of Principal
Mrs.Jillian Rufus J	Dr.N.Lakshmipathy Head of the Department Dept. of Electrical Engineering Dr. T. Thimmaiah Institute of Technology, Oorgaum, K.G.F.-563 120.	Dr. Syed Ariff PRINCIPAL Dr. T. Thimmaiah Institute of Technology Oorgaum, K. G. F- 563120

Name of Examiners | Signature with Date

1. Dr. N. Lakshmipathy 11/8/21
2. Jillian Rufus J. 11/8/21

12/1/2022

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ACKNOWLEDGEMENT

It is with the deep feeling of gratitude we would like to express our sincere thanks to our institution **Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY, K.G.F** for providing excellent infrastructure for the partial completion of the Project Work.

We wish to express a wholehearted thanks to our Principal **Dr.Syed Ariff** for providing good infrastructure for undertaking this Project Work in college.

We would like to extend hearty thanks to our **HOD and Guide Dr. N Lakshmipathy,** for his valuable suggestions, guidance and support in the completion of Project Work.

We would also like to thank **Project Coordinator Mrs. Jillian Rufus J, Assistant Prof.** for her timely support in the completion of this Project Work.

We would like to thank all teaching and non-teaching staff who was directly and indirectly supported for carrying out this Project Work successfully.

We extend our hearty thanks to our parents, friends for all the moral support provided during the preparation for the Project Work.

PRAVEEN REDDY	1GV17EE012
SHUBHAM PRAKASH SHINDE	1GV17EE016
SRINIVAS A	1GV17EE018
SUNDARESHA RAM	1GV18EE403

12/1/2021
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ABSTRACT

As the basic law of Physics says 'energy can neither be created nor be destroyed it can only be converted from one form to another'. During huge amount of energy is lost to atmosphere as heat. It will be good if we could store this energy somehow which is otherwise getting wasted out and reuse it next time we started to accelerate. Regenerative braking refers to a system in which the kinetic energy of the vehicle is stored temporarily, as an accumulative energy, during deceleration, and is reused as kinetic energy during acceleration or running. Regenerative braking is a small, yet very important, step toward our eventual independence from fossil fuels.

These kinds of brakes allow batteries to be used for longer periods of time without the need to be plugged into an external charger. These types of brakes also extend the driving range of fully electric vehicles. Regenerative braking is away to extend range of the electric vehicles. In many hybrid vehicles cases, this system is also applied hybrid vehicles to improve fuel economy. A normal car is only about 20% efficient, meaning some 80% of the energy it expends is wasted as heat created by friction. Regenerative braking could reclaim as much as half of that wasted energy, which equates into more motion produced by the fuel we are paying for instead of using that fuel to create heat that is being dissipated uselessly into the environment.

प्रतिभागिता प्रमाण पत्र

अभातशिप राष्ट्र स्तरीय
छात्र विश्वकर्मा पुरस्कार 2020

डॉ० एन० लक्ष्मीपति

टीम – ईईई प्रॉजेक्ट, डॉ० टी. थिम्मैया इंस्टीट्यूट ऑफ टेक्नोलॉजी, कर्नाटक

को "आत्मनिर्भर भारत अभियान में सहयोग हेतु कोविड महामारी के पश्चात भारतीय अर्थव्यवस्था में सुधार प्राप्ति हेतु पलायन प्रतिवर्ती एवं पुनर्वास योजना" विषय के अंतर्गत "आजीविका सुनिश्चित करने के लिए पुन: कौशल या उच्च कौशल प्रदान करना" श्रेणी में "रीजेनरेटिव ब्रेकिंग ऑन इ–बाइक" प्रोटोटाइप/ अभिनव समाधान प्रस्तुत करने हेतु प्रतिभागिता प्रमाण पत्र प्रदान किया जाता है।

Certificate of Participation

AICTE National Level
Chhatra Vishwakarma Awards 2020

DR. N. LAKSHMIPATHY
TEAM-EEE PROJECT, DR. T.THIMMAIAH INSTITUTE OF TECHNOLOGY, KARNATAKA

is hereby awarded with **Participation Certificate** in the category **"Reskilling or Up Skilling for Ensuring Livelihood"** for presenting a prototype/ innovative solution of **""Regenerative Breaking on E-Bike""** under the theme **"India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat".**

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ANIL D SAHASRABUDHE
Chairman

M P POONIA
Vice Chairman

RAJIVE KUMAR
Member Secretary

प्रतिभागिता प्रमाण पत्र

अभातशिप राष्ट्र स्तरीय
छात्र विश्वकर्मा पुरस्कार 2020

शुभम प्रकाश शिंदे

टीम – ईईई प्रॉजेक्ट, डॉ० टी. थिम्मैया इंस्टीट्यूट ऑफ टेक्नोलॉजी, कर्नाटक

को "आत्मनिर्भर भारत अभियान में सहयोग हेतु कोविड महामारी के पश्चात भारतीय अर्थव्यवस्था में सुधार प्राप्ति हेतु पलायन प्रतिवर्ती एवं पुनर्वास योजना" विषय के अंतर्गत "आजीविका सुनिश्चित करने के लिए पुनः कौशल या उच्च कौशल प्रदान करना" श्रेणी में "रीजेनरेटिव ब्रेकिंग ऑन इ–बाइक" प्रोटोटाइप/ अभिनव समाधान प्रस्तुत करने हेतु प्रतिभागिता प्रमाण पत्र प्रदान किया जाता है।

Certificate of Participation

AICTE National Level
Chhatra Vishwakarma Awards 2020

SHUBHAM PRAKASH SHINDE
TEAM-EEE PROJECT, DR. T.THIMMAIAH INSTITUTE OF TECHNOLOGY, KARNATAKA

is hereby awarded with **Participation Certificate** in the category **"Reskilling or Up Skilling for Ensuring Livelihood"** for presenting a prototype/ innovative solution of **""Regenerative Breaking on E-Bike""** under the theme **"India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat"**.

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ANIL D SAHASRABUDHE
Chairman

M P POONIA
Vice Chairman

RAJIVE KUMAR
Member Secretary

प्रतिभागिता प्रमाण पत्र

अभातशिप राष्ट्र स्तरीय
छात्र विश्वकर्मा पुरस्कार 2020

सुंदरेशा

टीम – ईईई प्रॉजेक्ट, डॉ० टी. थिम्मैया इंस्टीट्यूट ऑफ टेक्नोलॉजी, कर्नाटक

को "आत्मनिर्भर भारत अभियान में सहयोग हेतु कोविड महामारी के पश्चात भारतीय अर्थव्यवस्था में सुधार प्राप्ति हेतु पलायन प्रतिवर्ती एवं पुनर्वास योजना" विषय के अंतर्गत "आजीविका सुनिश्चित करने के लिए पुन: कौशल या उच्च कौशल प्रदान करना" श्रेणी में "रीजेनरेटिव ब्रेकिंग ऑन इ–बाइक" प्रोटोटाइप/ अभिनव समाधान प्रस्तुत करने हेतु प्रतिभागिता प्रमाण पत्र प्रदान किया जाता है।

Certificate of Participation

AICTE National Level
Chhatra Vishwakarma Awards 2020

SUNDARESHA
TEAM-EEE PROJECT, DR. T.THIMMAIAH INSTITUTE OF TECHNOLOGY, KARNATAKA

is hereby awarded with **Participation Certificate** in the category **"Reskilling or Up Skilling for Ensuring Livelihood"** for presenting a prototype/ innovative solution of **""Regenerative Breaking on E-Bike""** under the theme **"India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat".**

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ANIL D SAHASRABUDHE
Chairman

M P POONIA
Vice Chairman

RAJIVE KUMAR
Member Secretary

प्रतिभागिता प्रमाण पत्र

अभातशिप राष्ट्र स्तरीय
छात्र विश्वकर्मा पुरस्कार 2020

प्रवीण रेड्डी एन०

टीम – ईईई प्रॉजेक्ट, डॉ० टी. थिम्मैया इंस्टीट्यूट ऑफ टेक्नोलॉजी, कर्नाटक

को **"आत्मनिर्भर भारत अभियान में सहयोग हेतु कोविड महामारी के पश्चात भारतीय अर्थव्यवस्था में सुधार प्राप्ति हेतु पलायन प्रतिवर्ती एवं पुनर्वास योजना"** विषय के अंतर्गत **"आजीविका सुनिश्चित करने के लिए पुनः कौशल या उच्च कौशल प्रदान करना"** श्रेणी में **"रीजेनरेटिव ब्रेकिंग ऑन इ–बाइक"** प्रोटोटाइप/ अभिनव समाधान प्रस्तुत करने हेतु प्रतिभागिता प्रमाण पत्र प्रदान किया जाता है।

Certificate of Participation

AICTE National Level
Chhatra Vishwakarma Awards 2020

PRAVEEN REDDY N.
TEAM-EEE PROJECT, DR. T.THIMMAIAH INSTITUTE OF TECHNOLOGY, KARNATAKA

is hereby awarded with **Participation Certificate** in the category **"Reskilling or Up Skilling for Ensuring Livelihood"** for presenting a prototype/ innovative solution of **""Regenerative Breaking on E-Bike""** under the theme **"India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat".**

13/1/22
PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaum K.G.F. 563 120

ANIL D SAHASRABUDHE
Chairman

M P POONIA
Vice Chairman

RAJIVE KUMAR
Member Secretary

प्रतिभागिता प्रमाण पत्र

अभातशिप राष्ट्र स्तरीय
छात्र विश्वकर्मा पुरस्कार 2020

श्रीनिवास ए०

टीम – ईईई प्रॉजेक्ट, डॉ० टी. थिम्मैया इंस्टीट्यूट ऑफ टेक्नोलॉजी, कर्नाटक

को "आत्मनिर्भर भारत अभियान में सहयोग हेतु कोविड महामारी के पश्चात भारतीय अर्थव्यवस्था में सुधार प्राप्ति हेतु पलायन प्रतिवर्ती एवं पुनर्वास योजना" विषय के अंतर्गत "आजीविका सुनिश्चित करने के लिए पुनः कौशल या उच्च कौशल प्रदान करना" श्रेणी में "रीजेनरेटिव ब्रेकिंग ऑन इ–बाइक" प्रोटोटाइप/ अभिनव समाधान प्रस्तुत करने हेतु प्रतिभागिता प्रमाण पत्र प्रदान किया जाता है।

Certificate of Participation

AICTE National Level
Chhatra Vishwakarma Awards 2020

SRINIVAS A.
TEAM-EEE PROJECT, DR. T.THIMMAIAH INSTITUTE OF TECHNOLOGY, KARNATAKA

is hereby awarded with **Participation Certificate** in the category **"Reskilling or Up Skilling for Ensuring Livelihood"** for presenting a prototype/ innovative solution of **""Regenerative Breaking on E-Bike""** under the theme **"India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat".**

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ANIL D SAHASRABUDHE
Chairman

M P POONIA
Vice Chairman

RAJIVE KUMAR
Member Secretary

An Improved Technique For Identifying Fake News on Social Media Network Using Supervised Machine Learning Concepts

Team Members

Team Name : Detector

Team Members : Avinash. S (1GV17CS009),
M. Shoaib Numaamulla Baig (1GV17CS033)
N. Mamatha.CH (1GV17CS035)
O. Vaishnavi (1GV17CS046)

Team Head : Dr. Sreedhar Kumar S

Institution Name: Dr. T. Thimmaiah Institute of Technology, KGF, Karnataka-563120

Sub Category Name: Reskilling or Up Skilling For Ensuring Livelihood

Department : Computer Science and Engineering

Year : 2020-2021

Team Head

Project Summary

Fake News in the form of dark journalism or propaganda that comprises of intentional or frauds spread via conventional print and broadcast news media or online social media. The concocted data is primarily spread by social media but is periodically dispersed through mainstream media. Fake information is written and issued with the intention to inform in order to barter the authority, entity, or individual, and/or increase financially or politically, frequently applying sensationalist, dishonest, or outright fabricated headlines to increase readership, online sharing, and net stop revenue. This project presents an improved technique for identifying fake news on social media networks and checking for the realness of news that we consume on our routine day based on the supervised machine learning concepts. The proposed system consists of four phases likely pre-processing, training, matching and validation respectively. In the first phase, the proposed system has identify the relevant words over the each individual data element or document in the input data set based on predetermined key words model and ignore the irrelevant words in the respective document. In the second phase, the proposed system has train the pre-processed data set through the process of separating the data set into two classes namely fake and real based on probability technique. Next phase, the system has identifying the given test news document belongs into which existing class label over the training data set based on improved Naive Bayes technique. In the last phase, validation of the processed antonyms output is done for concluding the legitimate news among the questionable media news. According to the experiment conducted and results obtained, the Natural Language Processing Techniques used to clean the unstructured data and the Countvectorizer, TF-IDF Vectorizer used to obtain the features were efficient enough to detect the news as FAKE or REAL. The proposed model was trained based on the Naïve Bayes classifier. In addition, along with Naïve Bayes the work was extended to use a few more classification algorithms such as Passive Aggressive classifier, Decision Tree classifier, Logistic Regression Gradient Boosting classifier etc. However, the Decision Tree and Passive aggressive classifier gave much better prediction scores compared to Naïve Bayes.

13/1/21

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. - 563 120.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI - 590018

2020-2021

A Final Project Report

on

"An Improved Technique for Identifying Fake News on Social Media Network using Supervised Machine Learning Concepts"

Submitted in the partial fulfilment of the requirement
for the VIII Semester Project – 17CSP85 for the award of degree of

Bachelor of Engineering

in

Computer Science and Engineering

by

Avinash S	**1GV17CS009**
M Shoaib Numaanulla Baig	**1GV17CS033**
Mamatha CH	**1GV17CS035**
P Vaishnavi	**1GV17CS046**

Carried at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance of

Dr. Sreedhar Kumar S

Professor & HOD (CSE)

Dept. of CSE, Dr. TTIT, K.G.F

DR. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Formerly Golden Valley Institute of Technology)

Department of Computer Science and Engineering

Kolar Gold Fields – 563120.

12/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

DR. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Oorgaum, Kolar Gold Fields – 563122

(Approved by AICTE, New Delhi, affiliated to VTU-Belagavi,
Approved by Govt Of Karnataka and ISO 21001-2018 Certified)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING.

CERTIFICATE

Certified that the **Project Work** entitled "An Improved Technique for Identifying Fake News on Social Media Network using Supervised Machine Learning Concepts" is a bonafied work carried out **by Avinash S - 1GV17CS009, M Shoaib Numaanulla Baig - 1GV17CS033, Mamatha CH - 1GV17CS035 and P Vaishnavi-1GV17CS046** in the partial fulfilment for the award of degree of Bachelor of Engineering in **Computer Science and Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2020-2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of **Project Work- 17CSP85** prescribed for the Bachelor of Engineering Degree.

.....	.....	..... 04/04/22
Signature of Guide	**Signature of HOD**	**Signature of Principal**
Dr. Sreedhar Kumar S	Dr. S. Sreedhar Kumar B.E., M.Tech (Aero Univ. C) Head of the Department Dept. of Computer Science & Dr. T. Thimmaiah Institute of Technology Oorgaum, K.G.F. - 563 120.	**Dr. Syed Ariff** PRINCIPAL Dr. T. Thimmaiah Institute of Technology Oorgaum, K.G.F. - 563 120.

Name of Examiners	Signature with Date
1.	1.
2.	2. 12/4/22

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaum K.G.F. 563 120

ACKNOWLEDGEMENT

It is with the profound feeling of gratitude we would like to express our sincere thanks to our institution **Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY, K.G.F** for providing excellent infrastructure for the successful completion of project.

We wish to express a wholehearted thanks to our principal **Dr. SYED ARIFF** for his kind support in carrying out this project work.

We would like to thank **Dr. S SREEDHAR KUMAR**, Professor & HOD, Dept. of CSE, for his valuable suggestions, guidance and encouragement in the completion of this project.

We would like to extend hearty thanks to our Guide, **Dr. S SREEDHAR KUMAR,** Professor & HOD, Dept. of CSE, for his valuable suggestions, guidance and support in the completion of this project.

I would like to extend my profound gratitude to our project Coordinator **Mrs. MERCY FLORA PRITHEBA,** Asst. Professor, Dept. of CSE, for her timely support in the completion of this project.

We would like to thank all the teaching and non-teaching staff who directly and indirectly supported for carrying out this project successfully.

We extend our hearty thanks to our parents, friends for all the moral support provided during the preparation for the project.

Avinash S	**1GV17CS009**
M. Shoaib Numaanulla Baig	**1GV17CS033**
Mamatha.CH	**1GV17CS035**
P. Vaishnavi	**1GV17CS046**

ABSTRACT

Fake News in the form of dark journalism or propaganda that comprises of intentional or frauds spread via conventional print and broadcast news media or online social media. The concocted data is primarily spread by social media but is periodically dispersed through mainstream media. Fake information is written and issued with the intention to inform in order to barter the authority, entity, or individual, and/or increase financially or politically, frequently applying sensationalist, dishonest, or outright fabricated headlines to increase readership, online sharing, and net stop revenue. In the latter case, it is interconnected to shocking online clickbait headlines and relies upon ad revenue generated from the process, irrespective of the truthfulness of these printed, posted and shared stories. Deliberately misleading and misleading fake news differs from overt humour or parody, which is meant to entertain rather than inform its people. If writing a narrative with a false message attracts users, the benefits advertisers and improves ratings. Simple access to online advertising-income escalated political polarization, and the quality of social media, mainly those Twitter and Facebook information Feed, have all been implicated in this distribution of fake news, which competes with legitimate news stories. Hostile regime actors have also been implicated in generating and spreading fake information, especially within elections. This paper presents an improved technique for identifying fake news on social media network and checking for the realness of news, that we consume on our routine day based on the supervised machine learning concepts. During the first phase, we manage our data and prepare it into the required format for the next phase, which is processing the data using supervised machine learning concepts i.e., Naïve Bayes technique, and in the last phase, we validate the processed antonyms output for concluding the legitimate news amongst the questionable media news.

12/7/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Design and Prototype of

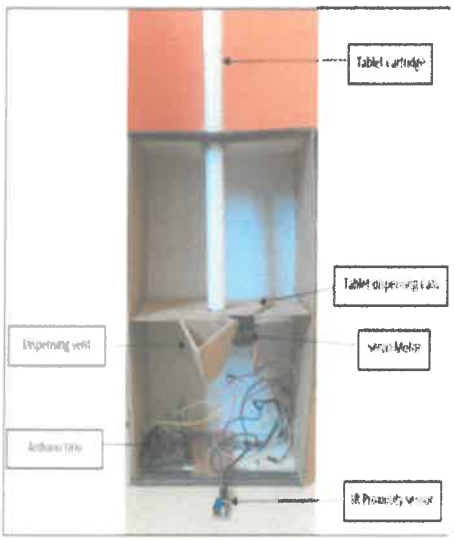
Smart Automated Pill Dispenser

Team Name : Mechanical Project (R Hemanth Kumar-1GV17ME015, Wasi Ulla Khan Junaid -1GV17ME036, S Kishore Raj-1GV17ME020, S Subashkaran-1GV18ME417 S Suresh Kumar and Dr. Manjunatha Babu NS.)

Institution Name : Dr. T. Thimmaiah Institute of Technology, Ooraguam KGF-563120

Sub Category Name : Barriers in Accessing Adequate Health Care Services.

Project Brief up to 200 words: In this era of modern medicine where humans are largely dependent on the use of pills/tablets. We know at least 1 or more who have to take their medication for a long term in order to live and stay healthy. In this project, we focus on a Smart Automated Machine which will help a person to take his/her pills on time according to their desired scheduling and it mainly focuses on making sure that our loved ones who are either old aged or having memory loss or have difficulty in remembering the medicines schedule, take their pills on proper time from the touch of your phone around the world. Our project is especially designed in order to solve the problem of taking in time and adequate dosage of medicine (specifically tablets) for chronic patients. This device is user friendly with alert buzzers in it which acts as remainders for tablets intake, timers for keeping a log on the daily basis time schedule and a LCD screen for viewing and to explore other features. The device is also WIFI, Bluetooth enabled for better connectivity with devices and its smartness increases when it is linked with IOT. The preliminary design is to be done by SOLIDWORKS or AUTOCAD.



Dept. of Mechanical project has been selected by All India Council of Technical Education.

13/1/22

PRINCIPAL

Dr. T. Thimmaiah Institute of Technology

Oorgaum, K.G.F. - 563 120.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY,

"Jnana Sangama, Belagavi-590018"

Design and Prototype of Smart Automated Pill Dispenser

A Project Report

Submitted in Partial Fulfillment of the Requirement for the

award of

BACHELOR OF ENGINEERING

IN

MECHANICAL ENGINEERING

BY

R. Hemanth Kumar	**1GV17ME014**
S. Kishore Raj	**1GV17ME020**
Wasi Ulla Khan Junaid	**1GV17ME036**
S. Subashkaran	**1GV18ME417**

Under the Guidance of

S. Suresh Kumar

Associate Professor
Department of Mechanical Engineering

Dr T Thimmaiah Institute of Technology

Oorgaum, Kolar Gold Fields – 563120

2017 – 2021

12/7/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

DECLARATION

We declare that the matter embodied in this report is a bonafide record of fully independent and original work carried out by us at the Department of Mechanical Engineering, Dr T Thimmaiah Insitute of Technology, Bangalore, under the guidance of **S. Suresh Kumar**, during the period 2017-2021.

The matter contained in this report has not been submitted elsewhere for the award of any degree.

Place: KGF

Students Name with USN

R.Hemanth Kumar	1GV17ME015
S. Kishore Raj	1GV17ME020
Wasi Ulla Khan Junaid	1GV17ME036
S.Subashkaran	1GV18ME417

12/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Dr T Thimmaiah Insitute of Technology

Department of Mechanical Engineering

Oorgaum, Kolar Gold Fields -563120

Certified that the project work entitled **"Design and Prototyping Of Smart Automated Pill Dispenser"** carried out byby Mr. R HEMANTH KUMAR (1GV17ME015), S. KISHORE RAJ (1GV17ME020), WASI ULLA KHAN JUNAID (1GV17ME036) and S. SUBASHKARAN (1GV18ME417), a bonafide students of Department of Mechanical Engineering, Dr T Thimmaiah Institute of Technology, in partial fulfillment for the award of **Bachelors Degree in MECHANICAL ENGINEERING**, of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year **2017-2021.** To the best of our knowledge, the work reported has not been submitted by me elsewhere for the award of the degree and is not the repetition of the work carried out by others.

Certified that the above declaration made by us is true to the best of our knowledge.

12/1/2022

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Signature
Professor and Head

Head of the Department
Dept. of Mechanical Engineering
Dr. T. Thimmaiah Institute of Technology,
Oorgaum, K.G.F.-563 120.

Dr T Thimmaiah Insitute of Technology

Department of Mechanical Engineering

Oorgaum, Kolar Gold Fields -563120

CERTIFICATE

We hereby declare that the work to be submitted in the project is in line with the synopsis and topic, **"Design and Prototyping Of Smart Automated Pill Dispenser"**. The project work to be submitted to the institution is the original work and has not been submitted by us anywhere and to the best of our knowledge has not been carried out by anybody else and reported.

Place: KGF

Date:

Students Name	USN	Signature
R.Hemanth Kumar	1GV17ME015	
S. Kishore Raj	1GV17ME020	
Wasi Ulla Khan Junaid	1GV17ME036	
S.Subashkaran	1GV18ME417	

12/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Dr T Thimmaiah Insitute of Technology

Department of Mechanical Engineering

Oorgaum, Kolar Gold Fields -563120

DECLARATION

We hereby declare that the project work embedded in this report entitled, **"Design and Prototyping Of Smart Automated Pill Dispenser"**, which is submitted for the award of the degree of **Bachelor's** in **Mechanical Engineering** under the Visvesvaraya Technological University, Belagavi, has been carried out under the guidance of **S. Suresh Kumar,** Associate Professor, Department of Mechanical Engineering, Dr T Thimmaiah Insitute of Technology, KGF-563120, Karnataka India, further declare that the Thesis is based on team work, which is previously unpublished. We also declare that the results of this work have not been submitted in part or in full for the award of any diploma or degree of this or any other institution.

Place: KGF

Date:

Students Name	USN	Signature
R.Hemanth Kumar	1GV17ME015	
S. Kishore Raj	1GV17ME020	
Wasi Ulla Khan Junaid	1GV17ME036	
S.Subashkaran	1GV18ME417	

12/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ACKNOWLEDGMENTS

The ancient Vedic Seers of India declare:

"Gurubrahma Guruvishnuhu Gurudevo Maheswaraha,
Gurussakshaat Para Bramha Tasmai Shree Gurave Namaha"

Loosely translated, this means "Teacher is the creator, preserver, path guider and dissolver. A teacher is verily supreme absolute". Blessed as we are by such teachers,We like to offer my sincere "Pranams" to them.

Gratitude is the hardest feeling to express and one does not find ample words to convey that one feels. It gives us incredible contentment in acknowledging the priceless support extended to us by various persons in the successful completion of our project.

We sincerely express our gratitude towards Management, Dr T Thimmaiah Institute of Technology for giving us an opportunity to carry out the project in an esteemed institution.

In listing acknowledgments, at first, We would like to express our sincere gratitude to our honorific guide **S. Suresh Kumar,** Associate Professor, Department of Mechanical Engineering, Dr T Thimmaiah Institute of Technology, KGF, for taking us under his wing and providing us an opportunity to work under his adept guidance. Words seem insufficient to describe our gratitude to him. From finding an appropriate subject in the beginning until the completion of this thesis, it was his innovative ideas, constant encouragement, timely suggestions and moral support that propelled us on the right track.

We sincerely thank **Dr. H G Shenoy** – Professor and Head, Dr T Thimmaiah Institute of Technology, KGF, for his unstinted timely support, continuous help in arranging facilities for experimentation at institution and valuable guidance for completing the project work.

We are grateful to our beloved Principal **Dr. Syed Ariff**, Dr. T Thimmaiah Institute of Technology, K.G.F, for his support and continuous help to carry out the project work in building up our future career.

Our hearty thanks to the family members have given us their unequivocal support, as always, for which a simple expression of gratitude is not sufficient. Whatever we have achieved until now is because of their unconditional love, prayers, and confidence in us. We owe all the good things in our life to them and thus, We dedicate all our achievements to them.

Our special regards to the faculties because of whose teaching at different stages of education has made it possible for us to see this day. Because of their kindness we feel, was able to reach a stage where we could write this report.

Before concluding, though to only some of them it was possible to give particular mention here, We would like to thank everyone who has directly or indirectly helped us to achieve our aspiration.

Students Name with USN

R.Hemanth Kumar	1GV17ME015
S. Kishore Raj	1GV17ME020
Wasi Ulla Khan Junaid	1GV17ME036
S.Subashkaran	1GV18ME417

12/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF ABBREVIATIONS

- SAPD – Smart Automated Pill Dispenser.
- NCD – Non Communicable Diseases.
- PLC – Programmable Logic Controller.
- PVC – Poly vinyl Chloride.
- IOT – Internet of Things.
- SMD – Smart Medicine Dispenser.
- ARD – Arduino Uno.
- IR – Infrared Rays.
- LCD – Liquid Crystal Display.
- LED – Light Emitted Diode.
- CNC – Computerized Numerical Control.

ABSTRACT

In this era of modern medicine where humans are largely dependent on the use of pills/tablets we know at least 1 or more who have to take their medication in the form of pills/tablets in order to live a healthy life.

In this project, we focus on a Smart automated machine which will help a person to take his/her pills on time according to a schedule and mainly focusing on making sure that your loved ones who are either old aged or having memory loss or have difficulty in remembering the medicine schedule take their pills on time from the touch of your phone around the world.

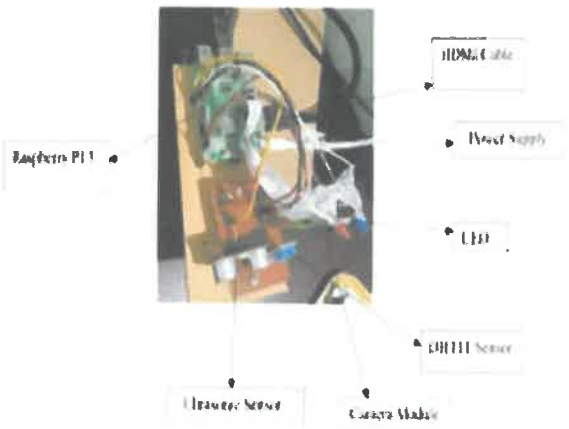
The project includes designing and fabrication of the body and the parts of the final product. Design will be done using software's like Solid Works or AutoCAD. The physical product will have PLC circuits and a Bi-directional rotating mechanism which will be enclosed inside the body of the product. This product will also be WI-FI enabled and has a dedicated smart app which can be downloaded on the phone. It also has a colored LCD panel screen which is mounted on the body and be accessed with the buttons provided on the body.

Face Mask Detection using CNN and Temperature Screening.

Team Members: Charls Reynold J - 1GV17CS011, Jananey - 1GV17CS023, Poovarasi S - 1GV17CS048, Preethi N - 1GV17CS050.

Project Guide: Mrs. Sharmila Kumari N, Assistant Professor Dept. of CSE.

Institution Name: Dr. T. Thimmaiah Institute of Technology, Oorgaum Post, KGF-563120.



Face Mask Detection has evolved as a very popular problem in Image Processing and Computer Vision. Many new algorithms are being devised using Convolutional Architectures have made it possible to extract even the pixel details. We aim to design a Binary Face Classifier which can detect any Face Mask Present in the Frame irrespective of its Alignment. We present a Method to generate accurate Face Segmentation Masks from any arbitrary size input image. Beginning from the RGB image of any size, the Method uses Predefined Training Weights of MobileNetV2 Architecture for Feature Extraction. Training is performed through Convolutional Neural Networks to Semantically Segment out the Faces present in the Image. Gradient Descent is used for training while Binomial Cross Entropy is used as a Loss Function. Further the Output Image from the CNN is processed to remove the Unwanted Noise and avoid False Prediction if any and make Bounding Box around the Faces. The Ultrasonic Sensor is used to detect Target Object and DHT11 Sensor is for screening Temperature.

Presented our Project work in NATIONAL PROJECT EXHIBITION SKIT EXPO-2021

13/1/22

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaum, KGF. - 563 120.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI – 590018

2020–2021

A

Phase II Project Report on

"Face Mask Detection Using CNN And Temperature Screening."

Submitted in the partial fulfilment of the requirement for the VIII Semester Project – 17CSP85 for the award of degree of

Bachelor of Engineering

in

Computer Science and Engineering

by

CHARLS REYNOLD J	**1GV17CS011**
JANANEY B	**1GV17CS023**
POOVARASI S	**1GV17CS048**
PREETHI N	**1GV17CS050**

Carried at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the guidance of

Mrs. SHARMILA KUMARI N, Assistant Professor,
Department of Computer Science and Engineering.

Dr. T. Thimmaiah Institute of Technology
Oorgaum Post, K.G.F-563120
(Approved by AICTE, New Delhi, Affiliated to VTU- Belagavi, Approved by Govt. Of Karnataka and ISO 21001-2018 Certified)

12/1/2022
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Dr. T. Thimmaiah Institute of Technology

Oorguam Post, K.G.F-563120

(Approved by AICTE, New Delhi, Affiliated to VTU-Belagavi,
Approved by Govt. Of Karnataka and ISO 21001-2018 Certified)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING.

CERTIFICATE

Certified that the Project Work entitled *"Face Mask Detection Using CNN And Temperature Screening ."* is a bonafied work carried out by **Charls Reynold J- 1GV17CS011, Jananey B - 1GV17CS023, Poovarasi S- 1GV17CS048 and Preethi N- 1GV17CS050** in the partial fulfillment for the award of degree of Bachelor of Engineering in **Computer Science and Engineering of Visvesvaraya Technological University, Belagavi**, during the year 2020-2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of project work phase II - 17CSP85 prescribed for the Bachelor of Engineering Degree.

Signature of Guide	Signature of HOD	Signature of Principal
Mrs. Sharmila Kumari N	Dr. S Sreedhar Kumar	Dr. Sunil Kumar S

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorguam K.G.F. - 563 120.

Name of Examiners	Signature with date
1.	1. .....
2.	2. .....

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorguam K G F 563 120

ACKNOWLEDGEMENT

It is with the profound feeling of gratitude We would like to express our sincere thanks to our institution **Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY, K.G.F** for providing excellent infrastructure for the successful completion of Phase II Project Work.

We wish to express a whole hearted thanks to our Principal **Dr. SYED ARIFF,** for providing lab facilities and requirements in carrying out this Phase II Project work.

We would like to extend hearty thanks to **HOD Dr S. SREEDHAR KUMAR, Professor, Dept. of CSE** for being a constant support of encouragement to carry out the Phase II Project work .

We would like to extend hearty thanks to our guide,**Mrs.SHARMILA KUMARI N, Assistant Professor, Dept. of CSE** for their valuable suggestions, guidance and support in the completion of this Phase II Project work .

I would like to extend hearty thanks to our coordinator **Mrs. MERCY FLORA PRITHEBA, Assistant Professor, Dept. of CSE**, for their valuable suggestions, guidance and support in the completion of this Phase II Project work.

We would also like to thank all teaching and non-teaching staff who was directly and indirectly supported for carrying out this Phase II Project work successfully.

We extend our hearty thanks to our parents and friends for all the moral support provided during the preparation for the Phase II Project work.

CHARLS REYNOLD J (1GV17CS011)
JANANEY B (1GV17CS023)
POOVARASI S (1GV17CS048)
PREETHI N (1GV17CS050)

12/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ABSTRACT

Face Mask Detection has evolved as a very popular problem in Image Processing and Computer Vision. Many new algorithms are being devised using Convolutional Architectures have made it possible to extract even the pixel details. We aim to design a Binary Face Classifier which can detect any Face Mask Present in the Frame irrespective of its Alignment. We present a Method to generate accurate Face Segmentation Masks from any arbitrary size input image. Beginning from the RGB image of any size, the Method uses Predefined Training Weights of MobileNetV2 Architecture for Feature Extraction. Training is performed through Convolutional Neural Networks to Semantically Segment out the Faces present in the Image. Gradient Descent is used for training while Binomial Cross Entropy is used as a Loss Function. Further the Output Image from the CNN is processed to remove the Unwanted Noise and avoid False Prediction if any and make Bounding Boxaround the Faces.

The COVID-19 pandemic forced government across the world to impose lockdowns to prevent virus transmissions. This resulted in the shutdown of all economic activity and accordingly the production at manufacturing plants across most sectors was halted. While there is an urgency to resume production, there is an even greater need to ensure the safety of the work force at the plant site. Reports indicate that wearing Face Masks while at work clearly reduces the risk of transmission. We decided to use Computer Vision on CCTV feeds to monitor worker activity and detect violations which trigger real time voice alerts on the shop floor. This project describes an efficient and economic approach of using AI to create a safe environment in a manufacturing setup.

The Ultrasonic Sensor sends out 8 pulses of Ultrasonic Sound when you pull the trigger line high these Sound Waves travel with the speed of sound. When the waves hit an obstacle, they bounce back and the sensor receives the waves. The sensor then pulls the echo pin high for a few milliseconds. When connecting this sensor to an Raspberry pi, it is possible to measure the time between sending and receiving the pulses. Once we detect a person with the use of temperature sensor will detect the temperature of that person.

12/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

A. List if any break through Innovations / Technology Developed at the institute

1.Project has been selected as best paper in 3rd Virtual International Conference.
Project has been selected and awarded 2nd Prize in National level Virtual Expo.

Development and optimization of hybrid power generation and storage to promote clean energy

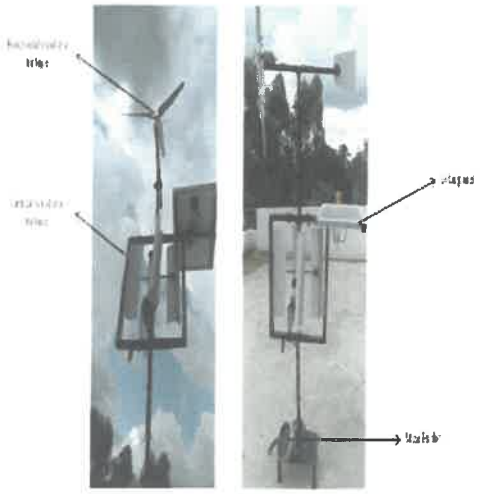
Team Name : Electrical Project (C Nishan- 1GV17EE004, Kishore Kumar N-1GV17EE008, Kruthik NL- 1GV17EE009, Arun Kumar R-1GV18EE400 and Subhashini S)

Institution Name : Dr. T. Thimmaiah Institute of Technology, Ooraguam KGF-563120

Project Brief up to 200 words: Energy resources must be utilized to their full potential in order to lessen reliance on fossil fuels, while also addressing economic, environmental, and societal constraints. This has piqued interest in increasing research and development as well as investments in the renewable energy industry in order to meet rising energy demand while reducing reliance on fossil fuels. Because of the abundance, availability, and convenience of harnessing the energy for electrical power generation, wind, hydro, and solar energy are becoming increasingly popular. Solar PV and turbines are used in stand-alone power generation systems to produce and store energy for later use. Solar has limitations in that it cannot produce electricity at night or during the cloudy season. To overcome this limitation, we will combine wind, solar, and hydropower such that if one source fails, the others will continue to provide electricity in all weather conditions. It is a hardware design for a small independent stand-alone power age framework that utilizations wind, hydro, and sun based assets. Here this system can be used in enterprises and homes where wind and solar energy is obtained through turbines and PV-cells, and rainwater is permitted to flow through a mini-turbine, which produces electricity during the rain. Finally absolute energies will be obtained all the while for charging the batteries and is used for fulfilling the electrical requests of homegrown and rustic regions. Uninterrupted power can be supplied in industries and factories using an inverter

Project has been selected as best paper in 3rd Virtual International Conference.

Project has been selected and awarded 2nd Prize in National level Virtual Expo.



13/1/22
PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. - 563 120.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI - 590018

2020 -2021

A

Project Phase Report I

on

"DEVELOPMENT AND OPTIMIZATION OF HYBRID POWER GENERATION AND STORAGE TO PROMOTE CLEAN ENERGY"

Submitted in the partial fulfillment of the requirement
For the VII Semester Project Phase 1 - 17EEP78 for the award of degree of

Bachelor of Engineering

in

Electrical and Electronics Engineering

By

C NISHAN	1GV17EE004
KISHORE KUMAR N	1GV17EE008
KRUTHIK NL	1GV17EE009
ARUN KUMAR R	1GV18EE400

Carried at

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

Under the Guidance

of

Mrs. Subhashini S, Asst. Prof,
Dept. of EEE, Dr.TTIT, K.G.F.

12/1/2022

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Dr.T.Thimmaiah Institute of Technology
Oorgaum Post, K.G.F-563120
(Approved by AICTE,New Delhi, Affiliated to VTU-Belagavi,
Approved by Govt. of Karnataka and ISO 21001-2018 Certified)

Dr.T.Thimmaiah Institute of Technology
Oorgaum Post, K.G.F–563120
(Approved by AICTE,New Delhi, Affiliated to VTU-Belagavi,
Approved by Govt. of Karnataka and ISO 21001-2018 Certified)

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CERTIFICATE

Certified that the **Project Work** entitled "*Development And Optimization Of Hybrid Power Generation And Storage To Promote Clean Energy*" is a bonafied work carried out by **C.Nishan- 1GV17EE004, Kishore Kumar N- 1GV17EE008, Kruthik NL- 1GV17EE009 and Arun Kumar R– 1GV17EE400,** in the partial fulfillment for the award of degree of Bachelor of Engineering in **Electrical and Electronics Engineering** of the **Visvesvaraya Technological University,** Belagavi during the year 2020-2021. It is certified that all corrections/suggestions indicated for the assessment have been incorporated in the report deposited in the departmental library. The Project report has been approved as it satisfies the academic requirement in respect of **Project Phase 1-17EEP78** prescribed for the Bachelor of Engineering Degree.

Signature of Guide	Signature of HOD	Signature of Principal
Mrs. Subhashini S	Dr.N.Lakshmipathy	Dr. Syed Ariff

PRINCIPAL 12/1/22
Dr.T.Thimmaiah Institute of Technology
Oorgaum K.G.F 563 120

Name of Examiners	Signature with Date
1.	1.
2.	2.

ACKNOWLEDGEMET

It is with the deep feeling of gratitude we would like to express our sincere thanks to our institution **Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY, K.G.F** for providing excellent infrastructure for the partial completion of the Project Work.

We wish to express a wholehearted thanks to our president **Dr. T. Venkat Vardan** and Principal **Dr. Syed Ariff** for providing good infrastructure for undertaking this Project Work in college.

We would like to extend hearty thanks to our **HOD Dr. N Lakshmipathy** and **guide Mrs. Subhashini S, Assistant Prof.** for their valuable suggestions, guidance and support in the completion of Project Work.

We would also like to thank **Project Co-ordinator Mrs. Jillian Rufus J, Assistant Prof.** for her timely support in the completion of this Project Work.

We would like to thank all teaching and non-teaching staff who were directly and indirectly supported for carrying out this Project Work successfully.

We extend our hearty thanks to our parents, friends for all the moral support provided during the preparation for the Project Work.

C NISHAN	1GV17EE004
KISHORE KUMAR N	1GV17EE008
KRUTHIK NL	1GV17EE009
ARUN KUMAR R	1GV18EE400

12/1/2021
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ABSTRACT

Energy is critical to the economic growth and social development of any country. Indigenous energy resources need to be developed to the optimum level to minimize dependence on imported fuels, subject to resolving economic, environmental and social constraints. This led to an increase in research and development as well as investments in the renewable energy industry in search of ways to meet the energy demand and to reduce the dependency on fossil fuels. Wind, hydro and solar energy are becoming popular owing to the abundance, availability and ease of harnessing the energy for electrical power generation.

Stand-alone power generation systems make use of solar PV and turbines to produce and store the energy for future use. Solar electricity has regulations that it could not produce power within the night and in the cloudy season so we want to triumph over this drawback we will use each wind, solar and hydro together so that any individual of source fails every other supply will maintain generating the electricity and in accurate weather situation. It is a hardware proposed design of a compact stand-alone hybrid power generation system using wind-hydro-solar resources. This system can be implemented in industries/houses where the wind and solar energies are obtained by turbine and PV-Cells , during the rain the water is allowed to flow through a mini-turbine which in-turn produce energy during the rain fall. Finally total energies will be acquired simultaneously for charging the batteries and is utilized for satisfying the electrical demands of domestic and rural areas. Uninterrupted power can be supplied in industries and factories using an inverter.

12/1/2021

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

LIST OF EQUIPMENTS / MACHINES

1. Bio-Diesel unit (50ltr per batch capacity)
2. Seed Decorticator (30 to 40 kg per hour)
3. Oil Extraction unit
4. Laboratory set
5. Bio-Diesel Testing equipments
6. Accessories, tools and tackles.

Staff Incharge : Mr. Rozer Binny
Faculty Incharge: Mr. Suresh Kumar S.

13/12/2

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

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. 7.1.03/SPP/403 10th November 2021

Mr. Suresh Kumar S
Assiant Professor
Department of Mechanical Engineering
Dr.T.Thimmaiah Institute Of Technology,
Oorgum Post,
Kolara – 563 120

Dear Sir,

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

We are pleased to inform you that KSCST has successfully completed the 44th series of SPP and wish to thank you for your continued cooperation.

Now, KSCST is inviting project proposals from the final year students of B.E., M.Tech, M.Sc, M.Tech.,/M.Sc., (Agriculture) & M.B.A. under the 45th series of SPP. The projects are invited under 14 broad themes / areas and the project proposal format is available for download from KSCST website.

We have enclosed herewith the SPP posters containing the themes and information on the 45th series of SPP. We request you to display the posters on the notice boards in all the departments of your institution to bring it to the notice of the students and faculty members. From current series (45th series) the project proposals are accepted in the form of softcopy by Google Forms and email (both modes are mandatory). There is no need to send the hardcopy of the proposals. The project proposal shall reach KSCST on or before 15th January 2022.

It is requested to designate one of the faculty member as SPP coordinator to communicate with students and KSCST in coordinating the SPP projects.

Thanking you and with best regards,

Yours Sincerely,

(H. Hemanth Kumar)

13/11/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

13/11/2021
PRINCIPAL
PRINCIPAL
Dr.T.Thimmaiah Institute of Technology

Encl : SPP Poster

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಜೈವಿಕ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ಮಂಡಳಿ
Karnataka State Bioenergy Development Board

ಆಡಳಿತ ಕಛೇರಿ: ಮಹಾತ್ಮ ಗಾಂಧಿ ಗ್ರಾಮೀಣ ಇಂಧನ ಮತ್ತು ಅಭಿವೃದ್ಧಿ ಸಂಸ್ಥೆ (ಎಂ.ಜಿ.ಐ.ಆರ್.ಇ.ಡಿ),
ಶ್ರೀರಾಮಪುರ ಕ್ರಾಸ್, ಜಕ್ಕೂರು, ಬೆಂಗಳೂರು -560064
ದೂರ: 080-23629200, 23621212, ಇ-ಮೇಲ್: pschairmanbiofuels@gmail.com, ವೆಬ್‌ಸೈಟ್: www.biofuelkarnataka.com

No. KSBDB/BRIDC/CR-10-Vol.IV/2017-18/134 Date : 04.07.2019

ಗೆ

ಪ್ರಾಂಶುಪಾಲರು/ ಡೀನ್/ ಕುಲಸಚಿವರು / ಸಂಸ್ಥೆಯ ಮುಖ್ಯಸ್ಥರು,
ಜೈವಿಕ ಇಂಧನ ಸಂಶೋಧನೆ, ಮಾಹಿತಿ ಹಾಗೂ ಪ್ರಾತ್ಯಕ್ಷಿಕೆ ಕೇಂದ್ರ (ಬಿ.ಆರ್.ಐ.ಡಿ.ಸಿ.),

. . . . . .

ಮಾನ್ಯರೇ,

ವಿಷಯ: ಬಿ.ಆರ್.ಐ.ಡಿ.ಸಿ. ಕೇಂದ್ರಗಳಿಗೆ 2019-20 ನೇ ಸಾಲಿನಲ್ಲಿ ಸಂಬಳ ಮತ್ತಿತರ ವೆಚ್ಚಗಳಿಗೆ ಅನುದಾನ -- ಕುರಿತು.

ಉಲ್ಲೇಖ: 1. No. KSBDB/BRIDC/CR-10-Vol.IV/2017-18/102, Date : 20.06.2019

2. No. KSBDB/BRIDC/CR-10-Vol.IV/2017-18/45, Date : 16.04.2019

***

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮಂಡಳಿಯು ಬಿ.ಆರ್.ಐ.ಡಿ.ಸಿ. ಕೇಂದ್ರಗಳಿಗೆ ಜೈವಿಕ ಇಂಧನ ಉತ್ಪಾದನೆಗೆ ಅಗತ್ಯ ಯಂತ್ರೋಪಕರಣಗಳು, ಗುಣಮಟ್ಟ ಪರೀಕ್ಷಾ ಉಪಕರಣಗಳ ಖರೀದಿಕೆ ಮಾಡಿರುವುದು ತಮಗೆ ತಿಳಿದ ವಿಷಯವಾಗಿದೆ. ಜೈವಿಕ ಇಂಧನ ಉತ್ಪಾದನೆಗಾಗಿ ಕಚ್ಚಾವಸ್ತುಗಳನ್ನು ಸಂಗ್ರಹಿಸಲು ಸುತ್ತು ನಿಧಿಯನ್ನು ಸಹ ಒದಗಿಸಲಾಗಿದೆ. ಹಾಗೆಯೇ ಉತ್ಪಾದನೆ, ಜಾಗೃತಿ ತರಬೇತಿ ಕಾರ್ಯಗಳನ್ನು ಕೈಗೊಳ್ಳಲು ಸಿಬ್ಬಂದಿಯ ವೆಚ್ಚದ ಜೊತೆಗೆ ಕಾರ್ಯಕ್ರಮಗಳ ಆಯೋಜನೆಗೂ ಸಹ ಅನುದಾನ ನೀಡಿರುವುದನ್ನು ಸ್ಮರಿಸಿದೆ.

ಮಂಡಳಿ ಮತ್ತು ಆಯಾ ಕೃಷಿ ವಿಶ್ವವಿದ್ಯಾಲಯಗಳು, ಇಂಜಿನಿಯರಿಂಗ್ ಸಂಸ್ಥೆಗಳು ಹಾಗೂ ಸಂಸ್ಥೆಗಳ ನಡುವೆ ಮಾಡಿಕೊಳ್ಳಲಾಗಿರುವ ಒಡಂಬಡಿಕೆ (MoU) ಪ್ರಕಾರ ಬಿ.ಆರ್.ಐ.ಡಿ.ಸಿ. ಕೇಂದ್ರಗಳು ಆರಂಭದಿಂದ 2-3 ವರ್ಷಗಳಲ್ಲಿ ಸುಸ್ಥಿರವಾಗಿ ಮುಂದುವರೆಯಬೇಕೆಂದು ಸೂಚಿಸಲಾಗಿದೆ. ರಾಜ್ಯದಲ್ಲಿ 32 ಬಿ.ಆರ್.ಐ.ಡಿ.ಸಿ.ಗಳ ನಿರ್ವಹಣೆಗಾಗಿ ಸರ್ಕಾರವು 2011 ರಿಂದ ಇಲ್ಲಿಯವರೆಗೆ ಒಟ್ಟು ಸುಮಾರು ರೂ.15 ಕೋಟಿಗಳ ಅನುದಾನ ಬಿಡುಗಡೆ ಮಾಡಲಾಗಿದೆ. ಮುಂದುವರೆದು ಈಗಾಗಲೇ ಮಾಡಲಾಗಿರುವ ವೆಚ್ಚಗಳಿಗನುಗುಣವಾಗಿ ಕೇಂದ್ರಗಳಿಂದ ಪರಿಣಾಮಕಾರಿ ಅನುಷ್ಠಾನ ಕಾರ್ಯಗಳು ನೆರವೇರದಿಲ್ಲದಿರುವುದು ಕಂಡುಬಂದಿದೆ.

ಈ ಸಂದರ್ಭದಲ್ಲಿ ಸರ್ಕಾರವು ಬಿ.ಆರ್.ಐ.ಡಿ.ಸಿ.ಗಳಿಗೆ ಒದಗಿಸಲಾದ ಅನುದಾನ ಮತ್ತು ಕಾರ್ಯಚಟುವಟಿಕೆಗಳ ಪರಿಣಾಮಗಳ ಬಗ್ಗೆ ತೀವ್ರ ಅತೃಪ್ತಿಯನ್ನು ವ್ಯಕ್ತಪಡಿಸಿ ಈ ಸಂಬಂಧ ವಿವರಣಾತ್ಮಕ ವರದಿಯನ್ನು ನೀಡುವಂತೆ ಮಂಡಳಿಗೆ ಸೂಚಿಸಿರುತ್ತದೆ. ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ಮಂಡಳಿಯು 2019-20 ನೇ ಸಾಲಿನಲ್ಲಿ ಬಿ.ಆರ್.ಐ.ಡಿ.ಸಿ. ಕೇಂದ್ರಗಳ ಮುಂದುವರಿಕೆ, ನಿರ್ವಹಣಾ ವೆಚ್ಚಗಳು/ಸಂಬಳ/ಕೂಲಿ ಇತ್ಯಾದಿಗಳಿಗಾಗಿ ನಿರ್ದಿಷ್ಟ ನಿಶ್ಚಿತ ಅನುದಾನ ಒದಗಿಸದಿರುವ ನಿರ್ಧಾರಕ್ಕೆ ಬಂದಿರುತ್ತದೆ.

BRIDC / My Suggestion (ME)

6/7/2019

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology

13/1/19

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

ನಂ. 1 ಕನ್ನಡ ದಿನಪತ್ರಿಕೆ
ವಿಜಯವಾಣಿ
ಕೋಲಾರ ಲೋಕಲ್ ಎಕ್ಸ್

ರಾಜ್ಯ ಜೈವಿಕ ಇಂಧನ ಅಭಿವೃದ್ಧಿ ಮಂಡಳಿ ಕೋರಿಕೆ ಮೇರೆಗೆ ಜಿಪಂಗೆ ಸುತ್ತೋಲೆ

ಡೀಸೆಲ್ ವಾಹನಕ್ಕೆ ಜೈವಿಕ ಇಂಧನ

■ ವಿಜಯವಾಣಿ ಸುದ್ದಿಜಾಲ ಕೋಲಾರ

ಜಿಪಂನ ಸರ್ಕಾರಿ ಡೀಸೆಲ್ ವಾಹನಗಳಿಗೆ ಜೈವಿಕ ಇಂಧನ (ಬಯೋ ಡೀಸೆಲ್) ಬಳಸುವಂತೆ ನಿರ್ದೇಶನ ನೀಡಿದ್ದು, ಕೆಜಿಎಫ್‌ನಲ್ಲಿರುವ ಜೈವಿಕ ಇಂದನ ಮತ್ತು ಸಂಶೋಧನೆ, ಮಾಹಿತಿ ಮತ್ತು ಪ್ರಾತ್ಯಕ್ಷಿಕೆ ಕೇಂದ್ರಕ್ಕೆ ಇಂದನ ಪೂರೈಸುವ ಜವಾಬ್ದಾರಿ ವಹಿಸಲಾಗಿದೆ.

ರಾಜ್ಯ ಜೈವಿಕ ಇಂದನ ಅಭಿವೃದ್ಧಿ ಮಂಡಳಿ ಕೋರಿಕೆ ಮೇರೆಗೆ ಆರ್‌ಡಿಪಿಆರ್ ಕಾರ್ಯದರ್ಶಿ ಎಲ್.ಕೆ. ಅತೀಕ್ ಜಿಪಂಗಳಿಗೆ ಸುತ್ತೋಲೆ ಹೊರಡಿಸಿ ಸರ್ಕಾರಿ ಡೀಸೆಲ್ ವಾಹನಗಳಿಗೆ ಜೈವಿಕ ಇಂಧನ ಬಳಸುವಂತೆ ನಿರ್ದೇಶನ ನೀಡಿದ್ದಾರೆ. ವಾಹನಗಳಿಗೆ ಬಯೋ ಡೀಸೆಲ್ ಬಳಸುವ ಬಗ್ಗೆ ಜಿಪಂ ವಾಹನ ಚಾಲಕರಿಗೆ ಸೂಕ್ತ ತರಬೇತಿ ನೀಡುವ ಜವಾಬ್ದಾರಿ ಪ್ರಾತ್ಯಕ್ಷಿಕೆ ಕೇಂದ್ರಗಳದ್ದಾಗಿದೆ. ಜೈವಿಕ ಇಂದನವನ್ನು ಡೀಸೆಲ್ ಜತೆಗೆ ಶೇ.5 (100 ಲೀಟರ್ ಡೀಸೆಲ್‌ಗೆ 5 ಲೀ.) ಪ್ರಮಾಣದಲ್ಲಿ ಮಿಶ್ರಣ ಮಾಡಿ ಬಳಸುವಂತೆ ಮಾರ್ಗಸೂಚಿ ನಿರ್ದೇಶಿಸಿದೆ.

ಜಿಲ್ಲೆಯಲ್ಲಿ ಹೇಗೆ?: ಕೆಜಿಎಫ್‌ನ ಬಿ. ಕಿಮ್ಮಯ್ಯ ಇನ್‌ಸ್ಟಿಟ್ಯೂಟ್ ಆಫ್ ಟೆಕ್ನಾಲಜಿಯಲ್ಲಿ ಜೈವಿಕ ಇಂದನದ ಬೇಡಿಕೆಗಳ ಸಂಗ್ರಹಣೆ ಕಾರ್ಯ ಇಂದನ ಅಭಿವೃದ್ಧಿ ಮಂಡಳಿ ಸಹಾಯದನದಿಂದ 2011ರಲ್ಲೇ ಜೈವಿಕ ಇಂದನ ಮತ್ತು ಸಂಶೋಧನೆ, ಮಾಹಿತಿ ಮತ್ತು ಪ್ರಾತ್ಯಕ್ಷಿಕೆ ಕೇಂದ್ರವನ್ನು 10 ಲಕ್ಷ ರೂ. ವೆಚ್ಚದಲ್ಲಿ ಸ್ಥಾಪಿಸಿತ್ತು. ಪ್ರಸ್ತುತ ಘಟಕ ನಿರ್ವಹಣೆಗೆ 2 ಲಕ್ಷ ರೂ.ಗಳನ್ನು ಸರ್ಕಾರ ನೀಡುತ್ತಿದೆ.

ಇಷ್ಟು ದಿನ ಕಾಲೇಜು ವಿದ್ಯಾರ್ಥಿಗಳ ಕಲಿಕೆಗೆ ಬಳಕೆಯಾಗುತ್ತಿದ್ದ ಘಟಕ ಇನ್ನು ಮುಂದೆ ಸರ್ಕಾರದ ಡೀಸೆಲ್ ವಾಹನಗಳಿಗೆ ಇಂದನ ಪೂರೈಸುವ ಜವಾಬ್ದಾರಿ ನಿರ್ವಹಿಸಲಿದೆ.

ಘಟಕದಲ್ಲಿ ಇಬ್ಬರು ಸಿಬ್ಬಂದಿ ಇದ್ದು, ಜೈವಿಕ ಇಂದನದ ಬೇಡಿಕೆಗಳ ಸಂಗ್ರಹಣೆ ಕಾರ್ಯ

ಕೆಜಿಎಫ್ ನಗರದ ಬಿ ಕಿಮ್ಮಯ್ಯ ಇನ್‌ಸ್ಟಿಟ್ಯೂಟ್ ಆಫ್ ಟೆಕ್ನಾಲಜಿಯಲ್ಲಿ ಸ್ಥಾಪಿಸಿರುವ ಜೈವಿಕ ಇಂದನ, ಮಾಹಿತಿ ಪ್ರಾತ್ಯಕ್ಷಿಕೆ ಕೇಂದ್ರ

ಜಿಲ್ಲಾ ಪಂಚಾಯಿತಿಯ ಸರ್ಕಾರಿ ಡೀಸೆಲ್ ವಾಹನಗಳಿಗೆ ಜೈವಿಕ ಇಂದನ ಬಳಸುವ ಮೂಲಕ ಬಯೋ ಡೀಸೆಲ್ ಬಳಕೆ ಉತ್ತೇಜಿಸಲು ಕಾರ್ಯಕ್ರಮ ರೂಪಿಸಲಾಗಿದ್ದು, ಅಂತೆಯೇ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ಇಂದನ ಬಳಕೆ ಬಗ್ಗೆ ತಾಲೂಕಿಗೆ ಕಾರ್ಯಾಗಾರ ರೂಪಿಸಿ ತಿಳಿವಳಿಕೆ ನೀಡುವಂತೆ ನಿರ್ದೇಶನ ನೀಡಲಾಗಿದೆ.

ಎಚ್. ಸುರೇಶ್‌ಕುಮಾರ್,
ಸದಸ್ಯಕಾರ್ಯದರ್ಶಿ, ಜೈವಿಕ ಇಂದನ ಅಭಿವೃದ್ಧಿ ಮಂಡಳಿ (ಖಾಸಗಿ), ಬೆಂಗಳೂರು

ಸಂಸ್ಥೆಯಲ್ಲಿ ಸ್ಥಾಪಿಸಿರುವ ಘಟಕ್ಕೆ ತಿಂಗಳಿಗೆ 200 ಲೀಟರ್ ಜೈವಿಕ ಇಂದನ ಉತ್ಪಾದಿಸುವ ಸಾಮರ್ಥ್ಯವಿದೆ. ಈಗಾಗಲೆ ಸಂಸ್ಥೆಯ 3 ಬಸ್‌ಗಳಿಗೆ ತಿಂಗಳಿಗೆ ಸರಿಸುಮಾರು 90 ಲೀ. ಬಳಸಲಾಗುತ್ತಿದೆ. ಜಿಪಂ ಅಧಿಕಾರಿಗಳ ಜತೆ ಚರ್ಚಿಸಿ ಜಿಪಂ ವಾಹನ ಚಾಲಕರಿಗೆ ತಿಂಗಳಾಂತ್ಯದೊಳಗೆ ತರಬೇತಿ ನೀಡಿ ಮುಂದಿನ ದಿನಗಳಲ್ಲಿ ಅಗತ್ಯತೆಗೆ ತಕ್ಕಂತೆ ಜೈವಿಕ ಇಂದನ ಪೂರೈಸಲಾಗುವುದು.

ಎಂ. ಸುರೇಶ್‌ಕುಮಾರ್,
ಜೈವಿಕ ಇಂದನ ಮತ್ತು ಸಂಶೋಧನೆ ಕೇಂದ್ರ ಸಂಯೋಜಕ, ಕೆಜಿಎಫ್

ನಡೆಯುತ್ತಿದೆ. ಜೈವಿಕ ಇಂದನ ಬಳಕೆಯಿಂದ ವಾಹನದ ಕಾರ್ಯಕ್ಷಮತೆ ಹೆಚ್ಚುವ ಜತೆಗೆ ಹಣ ಉಳಿತಾಯವಾಗುತ್ತದೆ ಎನ್ನುತ್ತಾರೆ ಕಾಲೇಜು ಸಹಾಯಕ ಪ್ರಾಧ್ಯಾಪಕ ಎನ್. ಸುರೇಶ್ ಕುಮಾರ್.

ಸಾಧನೆಗೆ ನಿರ್ದಿಷ್ಟ ಗುರಿ ಇರಲಿ

ಶ್ರೀನಿವಾಸಗೌಡಗೆ ನೋಟಿಸ್

ಬೆಂಗಳೂರು: ಬಿಜೆಪಿ ಮುಖಂಡರು 5 ಕೋಟಿ ರೂ. ಅಕ್ರಮವಾಗಿ ಮನೆಯಲ್ಲಿಟ್ಟು

Photograph of seminar Mr. Srinivasa Venkata Giri

Dr.H.G.Shenoy
Vice Principal & President Dr. TTIT's IIC

Dr. Syed Ariff
Principal

12/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Golden Valley Educational Trust
Dr.T.Thimmaiah Institute of Technology
(Affiliated to Visvesvaraya Technological University,
Recognized by Govt .of Karnataka& Approved by AICTE, New Delhi)
Oorguam Post, KGF – 563120

Title: One Day Seminar on "IPR Filing and Validating Innovation as Patent"
Date: 26/02/2021
Venue: Dr.TTIT student's center
Timing: 11.00am to 3.00pm

Objectives of the Workshop

The main objectives is to import knowledge in the field of "IPR Filing and Validating Innovation as patent and Evaluation "under the following criteria.

- Importance of IPR Filing
- Scope on Validating Innovation and IPR Filing and types of patent and Innovation which are patentable
- How to file patent.

Around 20 faculty and 80 students from Dr.T.Thimmaiah Institute of Technology has participated in the program. **Mr. Srinivasa Venkata Giri**, DGM (HR) has 32yrs experience in core functional areas of BEML (Bharath Earth Movers Limited) .He has been trained instructor in the field on Intellectual Property Rights (IPR), he has attended programmes on IPR-both basic and advanced conducted by RGNIIPM at Nagpur, and now actively involved in disseminating this knowledge among BEML by conducting similar training program across company. And currently he heads Centre of Excellence at KGF. The CoE has two schools i.e. school of Hydraulics and School of structural welding and imparts training through structured program in technical and behavioral skills. And **Mr. V. Jagannathan**, Senior Manager has done his M. Tech (Thermal Sciences) in college of Engineering, Guindy, Anna University, Chennai. And he has guided students and Research Scholars for the period of 4Years.

In the present seminar Mr. Srinivasa Venkata Giri and Mr. V. Jagannathan briefly explains about the importance and scope of IPR. The classifications of IPR and Patent filing were briefly explained and the importance of patent filing, Patentable search, types of patent, procedures of drafting and filing patent were, highlighted in the webinar.

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorguam K G F 563 120

Golden Valley Educational Trust
Dr.T.Thimmaiah Institute of Technology
(Affiliated to Visvevaraya Technological University,
Recognized by Govt .of Karnataka& Approved by AICTE, New Delhi)
Oorguam Post, KGF – 563120

INSTITUTION'S INNOVATION COUNCIL

Title:One day Webinar on "Research & Innovation Driven IPR & Patent"
Date: 18/11/2020
Venue: Online Virtual (Google Meet)

Objectives of the Workshop

The main agenda of this webinar is to import knowledge in the field of "Research & **Innovation Driven, IPR and Patent**" under the following:

- Importance of Research and Innovation
- Scope of patent & IPR and Viability , types of patent and Innovations which are patentable
- How to draft a patent, patent filing.

Around 76 participants took part in this webinar among which 60 faculty and 16 students from various institutions participated in the program, **Dr. Paramashivam K** , Prominent speaker from **Kumaraguru College of Technology** , Coimbatore , has introduced about patent filing. He had lectured and still lecturing many aspiring minds in many parts of Tamil Nadu. The Webinar was mainly organized to inculcate and motivate the faculty on how to draft and file the patents.

In the present workshop Dr.Paramashivam K briefly explained about the importance and scope of IPR. The classifications of IPR and Patent filing were briefly explained and the importance of patent filing, Patentable search, types of patent , procedures of drafting and filing patent were , highlighted in the webinar.

Dr.H.G.Shenoy
Vice Principal & President Dr. TTIT's IIC

Dr. Syed Ariff
Principal

13/11/20
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorguam K G F 563 120

Golden Valley Educational Trust

Dr.T.Thimmaiah Institute of Technology

(Affiliated to Visvevaraya Technological University,
Recognized by Govt .of Karnataka& Approved by AICTE, New Delhi)
Oorguam Post, KGF – 563120

INSTITUTION'S INNOVATION COUNCIL

One Day workshop on "Awareness on IPR and Patent for Students and Faculty"

Date: 10 /04/2019
Venue: Dr.TTIT Edusat Room and Students centre
Time: 10.30am to 3.30 pm

An awareness workshop on IPR and Patent on 10th April 2019 was organized. About 125 participants participated from all the departments in the program. The aim of this lecture was to instill and inspire faculty and students to file patents.

Mr. S. V. Giri, Deputy General Manager, BEML Ltd explained about the awareness and Scope of IPR & Patent Filing. List of Intellectual Property Rights: Patents, Trade/Service marks Copy rights, Industrial Design, IC layout design, Industrial design, Geographical indications. How to file a patent, a person can have copyrights for 60 years and after his death copy rights will be transferred to his legal heir and so on.

Photograph of seminar Mr. S.V. Giri

Dr. H.G.Shenoy
Vice Principal & Dr.Ttit's IIC President

Dr. Syed Ariff
Principal

12/1/20

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorguam K G F 563 120

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

MoHRD's INNOVATION CELL
GOVERNMENT OF INDIA

Golden Valley Educational Trust

Dr.T.Thimmaiah Institute of Technology

Affiliated to Visvesvaraya Technological University, Belagavi
Oorgaum Post KGF 563120

Institution's Innovation Council (IIC) and IPR Cell

organizes

"SESSION ON WHY IP IS IMPORTANT TO ACADEMIA"

8TH SEP 2021

3.00PM - 4.00PM

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Resource Person

Dr.C.R. RENE ROBIN
Professor and Dean(Innovation)
Sairam Group of Institutions,
Chennai

Registration Link

https://forms.gle/NMVsrsWAA8JkzodJA

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

MoRD's INNOVATION CELL
GOVERNMENT OF INDIA

Golden Valley Educational Trust

Dr.T.Thimmaiah Institute of Technology

Affiliated to Visvesvaraya Technological University, Belagavi

Oorgaum Post KGF 563120

"WORLD ENTREPRENEURS DAY CELEBRATION 2021"

Institution's Innovation Council (IIC) & Entrepreneurship Development Cell (EDC)

13/1/22
Principal
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

organizes

Poster Making Competition

26th August 2021

Registration Link : https://forms.gle/iYbTTE8xHRcCPPFm6

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

MoHRD's INNOVATION CELL
(GOVERNMENT OF INDIA)

Golden Valley Educational Trust

Dr.T.Thimmaiah Institute of Technology

Affiliated to Visvesvaraya Technological University, Belagavi

Oorgaum Post KGF 563120

"WORLD ENTREPRENEURS DAY CELEBRATION"

Institution's Innovation Council (IIC) & Entrepreneurship Development Cell (EDC)

organizes

"Write the cases of Successful/Failure Start up Founders"

All the participants will receive Participation Certificates

Special Certificates will be given to the prize winners

26TH AUGUST 2021

Registration Link : https://forms.gle/MbSGnDGebb5WMr3A7

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

MHRD'S INNOVATION CELL (GOVERNMENT OF INDIA)

INSTITUTION'S INNOVATION COUNCIL
MHRD'S INNOVATION CELL

INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

Dr. Timmaiah Institute of Technology
SESSION ON WHY IP IS IMPORTANT IN ACADEMIA?

OVERVIEW

Objective:	To give a wide knowledge on importance of IP	**Benefit in terms of learning/Skill/Knowledge obtained:**	Participants gained knowledge regarding IP
Academic Year:	2020-21	**Program driven by:**	MIC driven Activity
Month:	April	**Program /Activity Name:**	Session on Why IP is important in academia?
Program Type:	Leadership Talk	**Other:**	null
Program Theme:	IPR	**Other:**	NA
Date & Duration (Days):	09/08/2021-09/08/2021-0	**External Participants, If any:**	5

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Student Participants:	32	**Faculty Participants:**	16
Expenditure Amount, If any:	3000	**Remark:**	null

STAR PERFORMER

Faculty:	NA	**Student:**	NA

ATTACHMENTS

Video:	https://youtu.be/UCDL4G9WyL4	**Photograph1:**	
Photograph2:		**Session plan, If any:**	https://api.mic.gov.in/uploads/institutes/monthlyReport/report/1599-IC201811227.jpg

This report is electronically generated against report submitted on Institution's Innovation Council Portal.

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

15/09/2024

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

Golden Valley Educational Trust

Dr.T.Thimmaiah Institute of Technology

Affiliated to Visvesvaraya Technological University, Belagavi

Oorgaum Post KGF 563120

"World Entrepreneurs' Day Celebration 2021"

Institution's Innovation Council (IIC) & Entrepreneurship Development Cell (EDC)

organizes

"LEADERSHIP TALK ON HINDRANCES FACED BY ENTREPRENEURS"

25th August 2021

3.00PM - 4.00PM

Resource Person

Dr.Vinoth, M.S, Ph.D.,

Startup Venture builder

Chief Startup Designer

Pongu Ventures Pvt Ltd

PRINCIPAL
Dr. T. Thimmaiah Institute of Technology
Oorgaum, K.G.F. 563 120

Estd. 1986

Golden Valley Educational Trust
Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY
Approved By AICTE Govt. of India New Delhi
Affiliated to Visvesvaraya Technological University Belagavi
ISO 21001: 2018 Certified
Oorgaum, Kolar Gold Fields - 563120
Ph: 08153 265413 | principal@drttit.edu.in | www.drttit.edu.in

World Entrepreneur's Day Celebration

"Poster Making Competition"

Objective:

The objective of the competition was to address the community's interest in an issue, reveal an issue and raise awareness of an issue in a way that is visual, inclusive and fun.

Description:

Whole event was organized on 26th August, 2021 from 02:00 PM to 03:30 PM through virtual mode. The students expressed their views and thoughts about the entrepreneurship and great entrepreneurs on the day of celebration. One could see and feel the enthusiasm that the students had in their presentation. This activity kept the student engaged and it was organized to explore and encourage creativity in students and offer them a platform to showcase their skills. It inspired them to think and work creatively in order to promote artistic excellence.

Prize Winners:

1st Prize: S Suhas Rahul S(CSE)

2nd Prize: Sangeetha K R(EEE)

3rd Prize: Poornima .N (CSE)

Desired Outcome:

A visual display of current states of community knowledge of an issue, community expectations and visions, and provides an opportunity to answer questions about that issue.

13/1/22

Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Estd. 1986

Golden Valley Educational Trust
Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY
Approved By AICTE Govt. of India New Delhi
Affiliated to Visvesvaraya Technological University Belagavi
ISO 21001: 2018 Certified
Oorgaum, Kolar Gold Fields - 563120
Ph: 08153 265413 | principal@drtti.edu.in | www.drtti.edu.in

World Entrepreneur's Day Celebration

Debate Competition

Objective:

The primary goal of a debate is for students to generate effective critical thinking into primary issues in the given topic. Also to compare and discriminate between ideas x and y, verify the value of evidence for concept x or y, resolve controversies, recognize strengths and weaknesses of arguments,

Description:

Whole event was organized on 26th August, 2021 from 10:00 PM to 12:00 PM through virtual mode. The students expressed their views and thoughts about the entrepreneurship and great entrepreneurs on the day of celebration. The student's discussion on a subject on which several people share their different opinions, it can be favorable towards the topic or it can be non-favourable.

Prize Winners:

1st Prize: Swaroop Rani M(CIV)

2nd Prize: Prathibha N V(CSE)

3rd Prize: Sindhuja(ECE)

Desired Outcome:

Debate Competition for students is very influential as it was very helpful for them to boost their confidence, remove the fear of speaking in public, develop critical thinking, how to think and communicate under pressure.

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

INSTITUTION'S INNOVATION COUNCIL

INNOVATION CELL GOVERNMENT OF INDIA

AICTE

Golden Valley Educational Trust

Dr.T.Thimmaiah Institute of Technology

Affiliated to Visvesvaraya Technological University, Belagavi

Oorgaum Post KGF 563120

"WORLD ENTREPRENEURS DAY CELEBRATION"

Institution's Innovation Council (IIC) & Entrepreneurship Development Cell (EDC)

organizes

Debate Competition

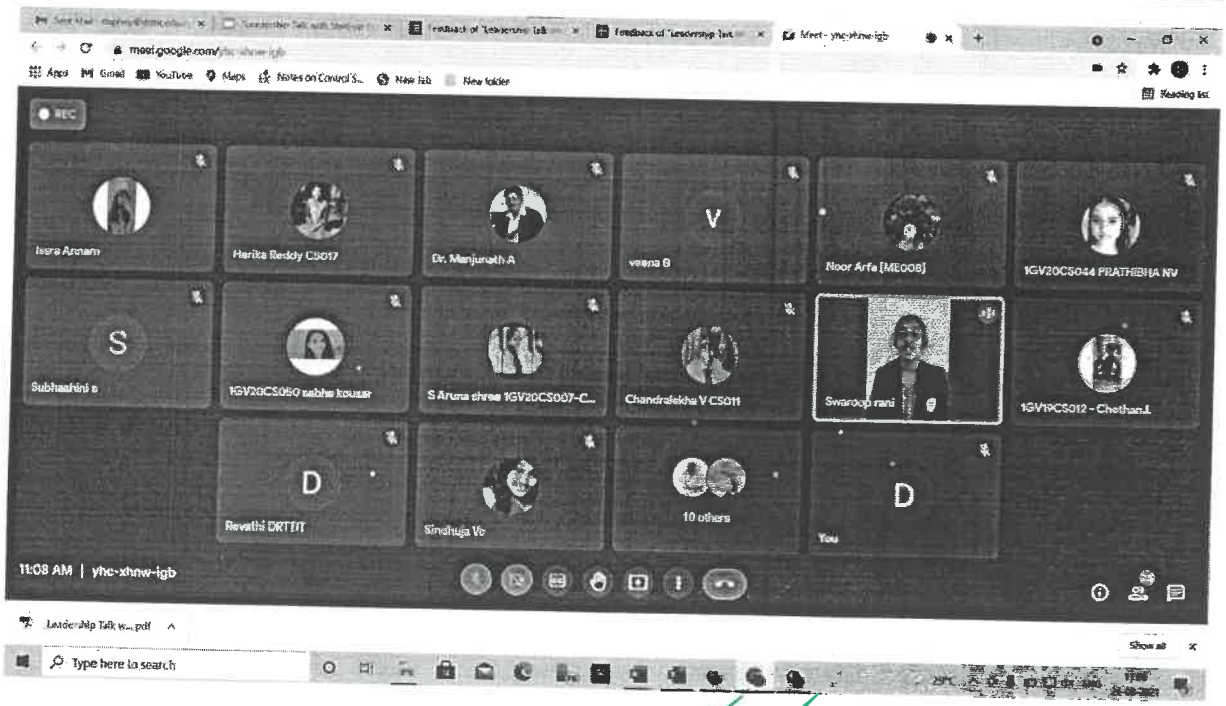
All the participants will receive Participation Certificates

Special Certificates will be given to the prize winners

26th August 2021

Registration Link

https://forms.gle/a9HQcxha4cDY2pz17



PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Estd. 1986

Golden Valley Educational Trust
Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY
Approved By AICTE Govt. of India New Delhi
Affiliated to Visvesvaraya Technological University Belagavi
ISO 21001: 2018 Certified
Oorgaum, Kolar Gold Fields - 563120
Ph: 08153 265413 | principal@drtit.edu.in | www.drtit.edu.in

World Entrepreneur's Day Celebration

"Write the cases of Successful/Failure Start-up Founders"

Objective:

The objective of the competition is to encourage creativity and leadership skills through essay writing. The competition brings out the ability to think quickly, write persuasively and present well-connected ideas while presenting well-connected ideas in a compact fashion. A good writing style will be the key differentiating factor in determining the winners.

Description:

Whole event was organized on 26th August, 2021 from 12:15 PM to 01:00 PM through virtual mode. The students wrote their views and thoughts about the success, struggle and failure of entrepreneurs on the day of celebration.

Prize Winners

1st Prize: Yashwanth Singh B(CSE)

2nd Prize: Ritu Rani B(CSE)

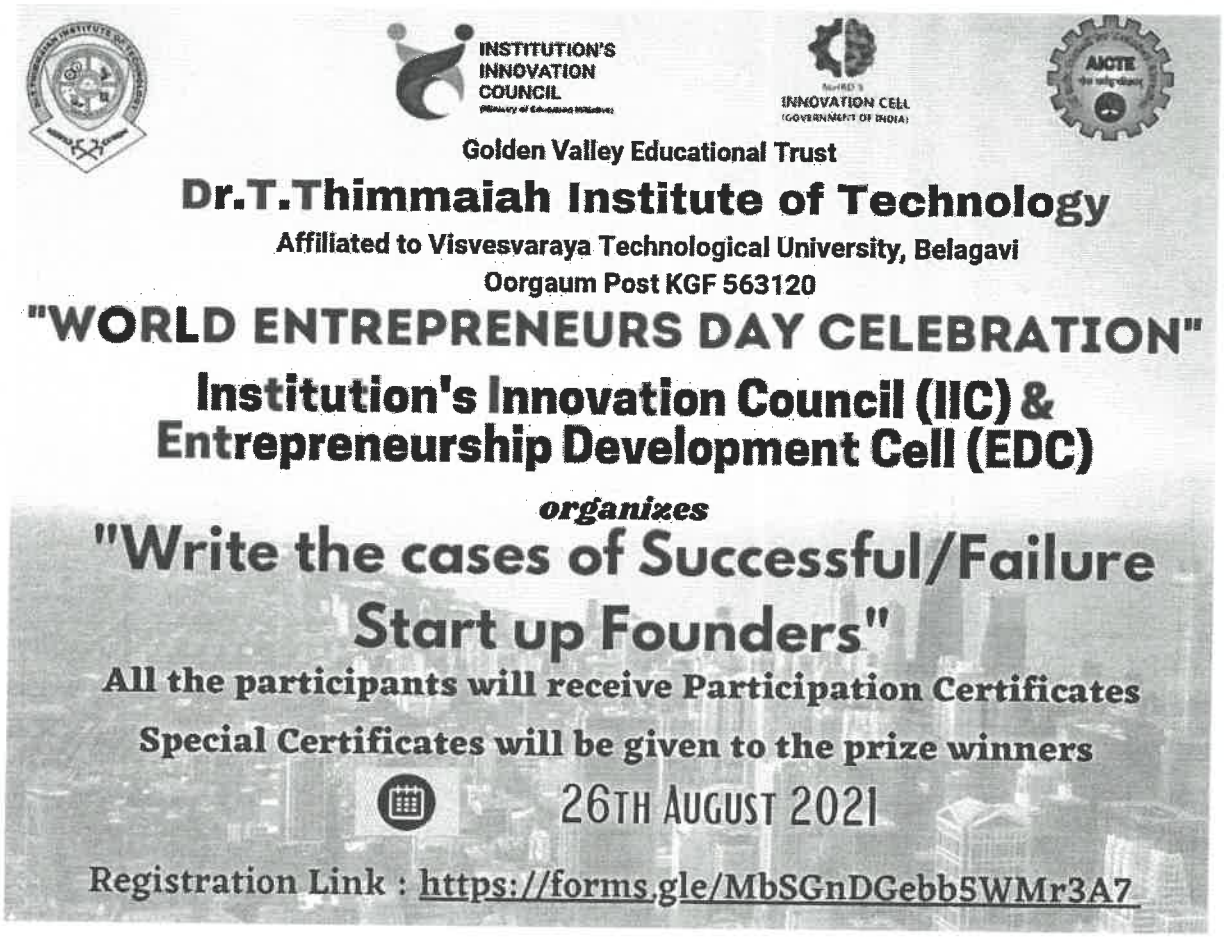
3rd Prize: Rubic Rani.R (CSE)

Desired Outcome:

Essay writing enables students to build up a formal and organized method of writing that passes information without a doubt, it helped students to build their vocabulary, and a distinct writing style.

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120



13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

"Leadership talk with Start-up Founder"

Date: 24/08/2021
Time: 3.00pm - 4.00pm

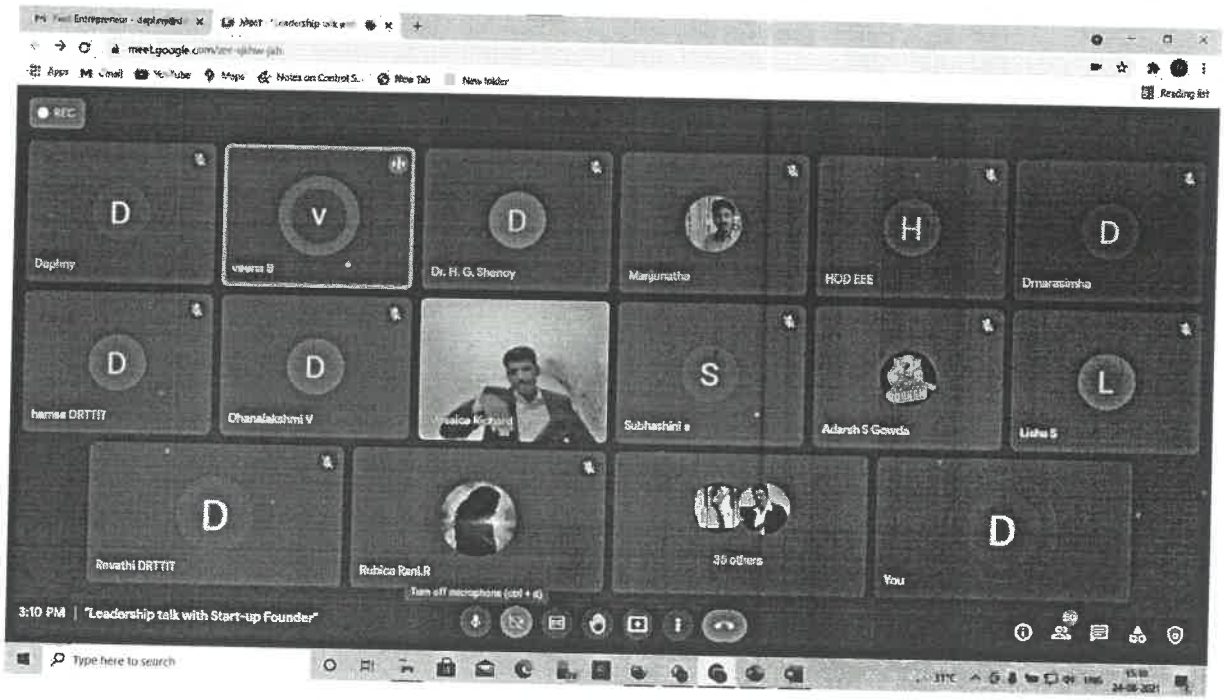
Resource Person

Richard Babu (Dubai)

Chairman of the Richam Eco Trd &

Mfg. Pvt Ltd. KGF

Number of Participants : 61



PRINCIPAL
Dr. T. Thimmaiah Institute of Technology

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

INSTITUTION'S INNOVATION COUNCIL
(Ministry of Education Initiative)

Golden Valley Educational Trust

Dr.T.Thimmaiah Institute of Technology

Affiliated to Visvesvaraya Technological University, Belagavi

Oorgaum Post KGF 563120

"World Entrepreneurs' Day Celebration 2021"

Institution's Innovation Council (IIC) & Entrepreneurship Development Cell (EDC)

organizes

"LEADERSHIP TALK WITH START-UP FOUNDER"

24th August 2021 3.00PM - 4.00PM

Resource Person

Richard Babu (Dubai)

Chairman of the Richam Eco Trd & Mfg. Pvt Ltd. KGF

Registration Link

https://forms.gle/onj7dh7KLZCkvRzn6

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

"Leadership Talk on Hindrances faced by Entrepreneurs"

Date: 25/08/2021
Time: 3.00pm - 4.00pm

Resource Person

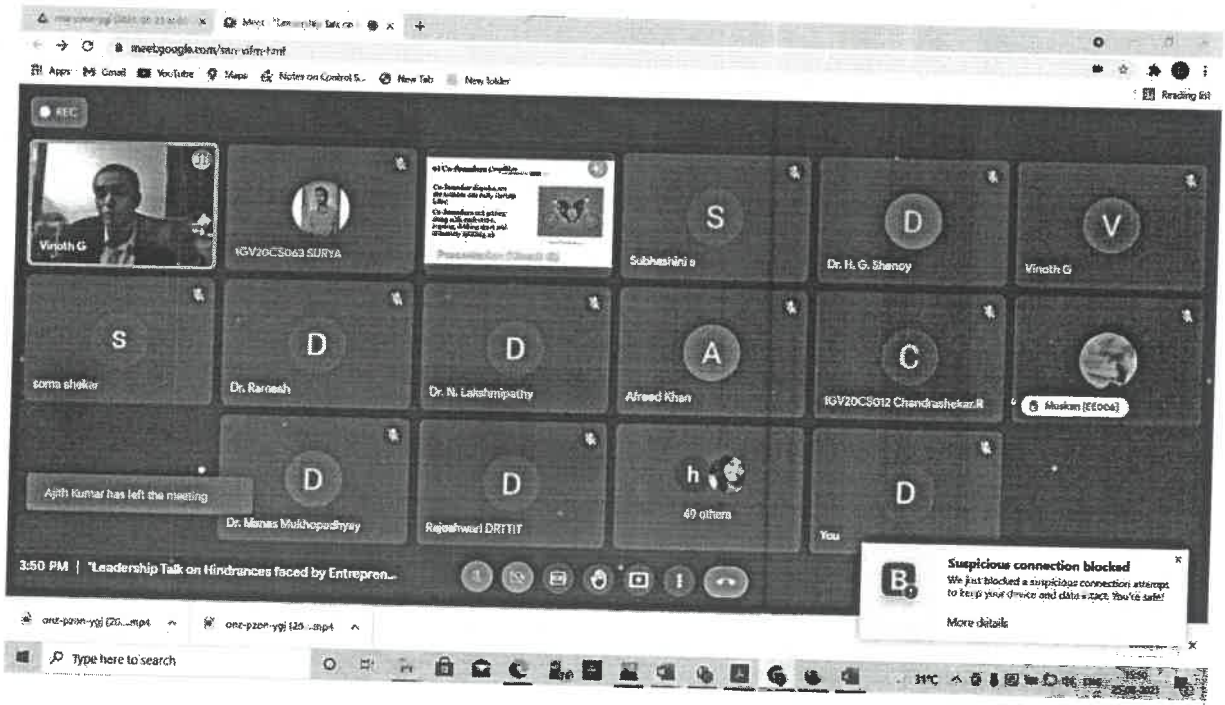
Dr.Vinoth, M.S, Ph.D.,

Startup Venture builder

Chief Startup Designer

Pongu Ventures Pvt Ltd

Number of Participants : 70



13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

MHRD'S INNOVATION CELL (GOVERNMENT OF INDIA)

INSTITUTION'S INNOVATION COUNCIL
MHRD'S INNOVATION CELL

INSTITUTION'S INNOVATION COUNCIL (Ministry of HRD Initiative)

Dr. Timmaiah Institute of Technology
WORLD ENTREPRENEURS DAY CELEBRATION

OVERVIEW

Objective:	To create awareness among students and faculties on Entrepreneurship	**Benefit in terms of learning/Skill/Knowledge obtained:**	Participants were motived to establish startups
Academic Year:	2020-21	**Program driven by:**	MIC driven Activity
Month:	August	**Program /Activity Name:**	World Entrepreneurs Day Celebration
Program Type:	Leadership Talk	**Other:**	null
Program Theme:	Entrepreneurship	**Other:**	NA
Date & Duration (Days):	08/24/2021-08/26/2021-2	**External Participants, If any:**	5

13/1/22

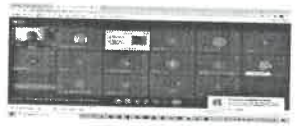
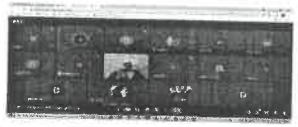
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

Student Participants:	55	**Faculty Participants:**	40
Expenditure Amount, If any:	3000	**Remark:**	null

STAR PERFORMER

Faculty:	NA	**Student:**	NA

ATTACHMENTS

Video:	null	**Photograph1:**	
Photograph2:		**Session plan, If any:**	https://api.mic.gov.in/uploads/institutes/monthlyReport/report/9053-IC201811227.pdf

This report is electronically generated against report submitted on Institution's Innovation Council Portal.

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

15/09/2021

Workshop on Entrepreneurship

A One day Workshop on "Entrepreneurship" was conducted on 29-03-2019 at Students Centre by Mr. Rajesh D. Nayak, Educator Life Coach and Author from Bangalore, who elaborated on Recent business trends and challenges. Around 100 students participated. Prof. Veena. B, Associate Professor, EEE, Co-ordinator, Entrepreneurship Development Cell, organized the workshop.

Students with resource person during Entrepreneurship Workshop

A One day Workshop on "Entrepreneurship" was conducted on 8th April 2019 at Students Centre. Dr. Chidanand C. Gavimath, special officer, ED, cell, VTU Belagavi was the resource person. Around 75 students attended the program and was certified by VTU. The program was Co-ordinated by Prof. Veena. B, Associate Professor, EEE.

Dr. Chidanand C.Gavimath interacting with students during Entrepreneurship workshop

13/1/20

Dr T Thimmaiah Institute of Technology
Oorgaum K.G.F 563 120

Fire and Rescue Awareness Program

Fire Safety awareness program was conducted by Karnataka state fire and emergency services, K.G.F on 29/03/2019 for the students, faculty and non teaching Staff of our college in students centre.

Principal along with fire and rescue team personnel

Mr. B.N. Manjunath, Associate Professor of Mechanical Department welcomed the gathering. Students and staff members were given hands on training on how to use fire extinguishers and fight fire accidents. Dr. syed Ariff, Principal gave vote of thanks.

Demonstration of rescue from fire accidents

Mock CET - Prize Distribution

Mock CET was conducted by Dr.TTIT for the first time on 17th April 2019 for the 2nd PUC Students to encourage and prepare for the KEA CET – 2019. The top ten students were awarded with attractive prizes like laptop, tabs and scientific calculator.

Mock CET Toppers with Parents, President Dr.T Venkat Vardhan, Principal Dr. Syed Ariff, Treasurer Mr. S Harisha Prabhu and Faculty members.

Project Exhibition – 2019

Our Final Year students exhibited their innovative projects in the Project Exhibition – 2019 which was held on 8th June 2019. The Exhibition was inaugurated by Mr. Neharu Babu, GM, BEML and Mr. Rajan Babu, Scientist, NIRM who were also the judges for the event.

Inaguration of project exhibition 2019 by Mr.Neharu Babu, Mr. Rajan Babu and Dr.Syed Ariff , Principal

EEE students with their project model

Principal, HODs with the judges of project exhibition

ECE students exhibiting their projects

Mechanical students with their model of vacuum cleaner and dryer

Mining Students with their model

Judges evaluating in Computer science department

Civil engineering students demonstrating their project

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

College Day - 2019

The college day was celebrated on 16th of March 2019. Mr. Anil Haridass, Managing Director, Bill Forge Private Limited was present as the chief guest to grace the occasion. While addressing the audience he commended the developments that Dr. T. Venkat Vardhan has done in the college and he was proud to announce that some of his best employees are the alumni of this college.

During the function, the annual class toppers, the Sports achievers and VTU Rank holders were awarded.

Release of newsletter on College day by the dignitaries


Annual class toppers with the chief guest and dignitaries

First International Conference

The First International Conference on Recent trends in Technology, Engineering and Applied science (ICRTTEAS-2019) was held on April 12th and 13th 2019 in Dr.Thimmaiah Institute of technology, KGF.

The papers were collected in seven tracks of Engineering and Science disciplines from various Engineering colleges of India.

The Program was inaugurated by Dr. T. Venkat Vardhan, President, Golden Valley Education Trust, Prof. Ganapathy Pande, Professorial fellow,IIT, Bhubaneswar was the Chief Guest. Mr. Charles E.E. Devanish, Chairman, Australian Indian Resources Pvt, Ltd, Dr. H. S. Venkatesh, Director, National Institute of Rock Mechanics, Bengaluru and Dr. Gurumurthy Hegde, CNR Rao Chair Professor, BMS College of engineering, Bengaluru were the chief Guests. The Proceeding of ICRTTEAS-2019 was released by the Dignitaries.

Prof. Ganapathy Pande has delivered key note address after the Inaugural function and has explained about the various kinds of research possibilities in mere future, followed by the presentations from participants from various institutions and organizations.

On 13th April 2019, The session began with keynote address by Prof. H. P. Kincha, Former Vice Chancellor, Visveswaraya Technological University,Belagavi. He stressed the importance of technological development in multiple disciplines to serve for human kind, followed by the presentations.

The best papers were selected in all tracks and certificates were distributed by Dr. Syed Ariff, Principal and Prof. Ruckmani Divakaran, Dean(Administration). The two day convention ended with vote of thanks by Dr. H. G. Shenoy, Vice Principal.


Inauguration of First International Conference


Releasing of Proceedings during First International Conference

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

PHOTO GALLERY
GOLD RUSH - 2019

13/1/22

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

College Activities

GOLDRUSH

The Three Day Techno Cultural Fest **"GOLD RUSH 2019"** from 14th to 16th March began with the inauguration of **"TECHNO RUSH 2019"** by the Chief Guest Shri. Syed S. Hussainy, Asst. General Manager, BESCOM Kolar .

The Annual Technical Fest of Dr.TTIT "TECHNO RUSH" was held on 14.03.2019.This year, the fest was organised by the department of Electrical and Electronics Engineering. Many Technical Events like Paper presentation, Technical Quiz, Tech Extempore, Solid Modeling, Labyrinth Quest etc., were conducted in which the students participated enthusiastically and won cash prizes.

Dr. Syed Ariff, Principal , Shri. Syed S Hussainy ,Dr.N Lakshmipathy HOD EEE

Students Participating in Techno Rush activities

Cultural Activities

An amalgamation of fun, learning and entertainment, Gold Rush-2019, cultural Fest which provides countless opportunities to students to unleash their potential and showcase their talent in multifarious fields.Various competitions like Rangoli, face painting, singing ,dance, mehandi , fashion show etc., were conducted with the fabulous DJ show.

During the Skit

During the Face painting competition

Group Dance

Group Dance

PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120

PHOTO GALLERY
GOLD RUSH - 2019

13/1/22
PRINCIPAL
Dr T Thimmaiah Institute of Technology
Oorgaum K G F 563 120