

## Dr.T. THIMMAIAH INSTITUTE OF TECHNOLOGY

(Estd. 1986) Oorgaum, Kolar Gold Fields, Karnataka – 563120 (Affiliated to VTU, Belgaum, Approved by AICTE - New Delhi)

# **3.1.1** Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Si. No.	Name of the Project/ Endowments, Chairs	Name of the Principal Investigator/Co- investivator	Departmen t of Principal Investigato r	Year of Award	Name of the Funding Agency	Type (Governm ent/non- Governme nt)	Page No.
1	An Efficient IOT based Covid-19 Monitoring System using CNN Classifier An Efficient IOT based Covid-19 Monitoring System Vinutha S		Electronics & Communicati on Engineering	14.07.2021	Karnataka State Council for Science and Technology	Government	3-6
2	Leak Detection in Pipe Networks using Optimization Techniques Prof. Balasubramaniam S Students- Pradeep Swetha P Shyamili P M Sandhya R		Mechanical Engineering	30.08.2020	Karnataka State Council for Science and Technology	Government	7-9
3	IOT BasedProf. RukminiAutomatic ControlDivakaran Students-of Sun TrackingPriya DSolar Panel forPavithra NHigh PowerRamya B YGenerationMs. Dharshini R		Electronics & Communicati on Engineering	30.08.2020	Karnataka State Council for Science and Technology	Government	10-13
4	Biofuel Dr. Syed Arrif Dr. H G Shenoy		Dr. T Thimmaiah Institute of Technology	20.03.2020	Karanataka State Bioenergy Develeopment Board	Government	14-17
5	Biofuel Dr. Syed Arrif Dr. H G Shenoy		Dr. T Thimmaiah Institute of Technology	25.09.2018	Karanataka State Bioenergy Develeopment Board	Government	18-20
6	<ul> <li>IOT Based LPG</li> <li>GAS Detection and Emergency</li> <li>Response System using AVR</li> <li>Microcontroller and GSM Module</li> <li>Prof. Prasanna Balasubramanyam S Students- Aishwarya R</li> <li>Waria Swetha J</li> <li>Vinodh Prabhakaran V</li> </ul>		Electronics & Communicati on Engineering	24.07.2018	Karanataka State Bioenergy Develeopment Board	Government	21-24
7	Biofuel	Dr. Syed Arrif Dr. H G Shenoy	Dr. T Thimmaiah Institute of Technology	07.07.2017	Karanataka State Bioenergy Develeopment Board	Government	25-28

## Index



## Dr.T. THIMMAIAH INSTITUTE OF TECHNOLOGY

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8	Biofuel	Dr. Syed Arrif Dr. H G Shenoy	Dr. T Thimmaiah Institute of Technology	28.3.2017	Karanataka State Bioenergy Develeopment Board	Government	29-30
9	Biofuel	Dr. Syed Arrif Dr. H G Shenoy	Dr. T Thimmaiah Institute of Technology	09.08.2016	Karanataka State Bioenergy Develeopment Board	Government	31

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

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI - 590018 2020-2021



# A Project Report

# "An Efficient IoT Based Covid-19 Monitoring System Using CNN Classifier"

Submitted in the partial fulfilment of the requirement for the VIII Semester Project Phase 17ECP85 for the award of degree of

**Bachelor of Engineering** 

In

Electronics and Communication Engineering By

Priyanka D Priyanka S Vinutha S Chandrakala V

V 1GV17EC057 Carried at

**1GV17EC027** 

**1GV17EC029** 

1GV17EC053

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY Oorgaum, K.G.F-563120

## Under the Guidance of

Mr. Jesudas J, Assistant Professor, Department of ECE, Dr.T.T.I.T, K.G.F.



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Dr. T. T. Martine L. R. & cf. Lohabiygy Oorgaum, K. G. F- 553120

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY (Formerly Golden Valley Institute of Technology) Department of Electronics and Communication Engineering Kolar Gold Fields – 563120.



# (Formerly Golden Valley Institute ofTechnology) Oorgaum Kolar Gold Fields –563120 DEPARTMENT OF ELECTRONICS ANDCOMMUNICATION ENGINEERING.



Certified that the Project Phase Work entitled "An Efficient IoT Based COVID-19 Monitoring System Using CNN Classifier" is a bonafied work partially carried out by Priyanka D. -1GV17EC027, Priyanka S. - 1GV17EC029, Vinutha S -1GV17EC053 and Chandrakala V. - 1GV15EC057 in the partial fulfillment for the award of degree of Bachelor of Engineering in Electronics and Communication 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- 17ECP85 prescribed for the Bachelor of Engineering Degree.

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Signature of guide Mr.Jesudas J

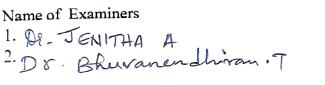
Sighature of HOD

Prof.Vijaya Bharathi M

3/220

Signature of Principal Dr. SyedAriff PRINCIPAL Dr. T. Thimmaigh Institute of Technology Oorgaum, K.G.F. - 563 12.).

Signature with Date



## 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 work.

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 extend hearty thanks to our HOD, Prof. Vijaya Bharathi M forbeing a constant support of encouragement to carry out the project work successfully.

We would like to extend hearty thanks to our guide Mrs. Jesudas J Asst.Prof, for his valuable suggestions, guidance and support in the completion of this project work.

We would also like to thank project Co-Ordinator Mrs. Jenitha.A Associate 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.

1GV17EC027

1GV17EC029

1GV17EC053

1GV17EC057

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VINUTHA.S

10/12/ W24 **CHANDRAKALA V** 

Dr. T. Thimmaiac

Dept. Of ECE, Dr.T.T.I.T, K.G.F.

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Oorgaum, K. G. F- 5631\_

# **SYNOPSIS**

As we are aware of the current pandemic situation that is Covid-19 which is spreading all over the world. Covid-19 spreads mainly by droplets produced as a result of coughing or sneezing of Covid-19 infected person, it can also spread from contact with infected surfaces or objects. Any person who comes into close contact with someone who has Covid-19 is at increased risk of becoming infected themselves.

As it is spreading widely it is difficult to get the report on required time, hence to detect Covid-19 "Positive or Negative" within 30minutes of time we are using an efficient IoT based Covid-19 Monitoring System Using CNN Classifier. In this process we are using sensors such as heart rate sensor, temperature sensor, and respiratory sensor to collect data from a person and it is transmitted wirelessly with the help of ESP8266 module and the data is received by using Arduino. These data are being processed using MATLAB and CNN Classifier is used to predict the result whether it is "Positive or Negative" based on this result, best accuracy and efficiency is achieved.

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Oorgaum, K. G. F- 563120

### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI - 590018

2019-2020



**Project Work** 

on

## "IoT Based Automatic Control of Sun Tracking Solar Panel for High Power Generation"

Submitted in the partial fulfillment of the requirement for the VIII Semester Project - 15ECP85 for the award of degree of

Bachelor of Engineering

**Electronics and Communication Engineering** 

	by
PAVITHRA N	1GV16EC033
PRIYA D	1GV16EC037
RAMYA B Y	1GV16EC040
DHARSHINI R	1GV17EC401

Carried out at

Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY

**Sponsored by KSCST** 

### Under the Guidance of

Prof. Ruckmani Divakaran, HOD and Dean (Administration) Dept. of ECE, Dr.TTIT, K.G.F. Nandini G N(Co-Guide) Assistant Professor Dept.of ECE,Dr.TTIT,K.G.F.



(1,2/2021

Dr. T. Thimmaiah Institute of Technology

Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY 565400 (Formerly Golden Valley Institute of Technology) Department of Electronics and Communication Engineering

Kolar Gold Fields – 563120.



# (Formerly Golden Valley Institute of Technology) Oorgaum Kolar Gold Fields – 563120 DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING.

## CERTIFICATE

Certified that the Project Work entitled "IoT Based Automatic Control Of Sun Tracking Solar Tracking Solar Panel For High Power Generation" is a bonafied work carried out by Pavithra N. -IGV16EC033, Priya D. - IGV16EC037, Ramya B Y. -IGV16EC040 and Dharshini R. - IGV17EC401 in the partial fulfillment for the award of degree of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belagavi during the year 2019- 2020. 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 I-15ECP78 prescribed for the Bachelor of Engineering Degree.

Signature of HOD and guide Prof. Ruckmani Divakaran

Head of the Department Dept. of Electronics and Communication Engg. 9r. T.Thimmaiah Institute of Technology Oorgaum, K.G.F.- 563 120.

Name of Examiners 1. VIJAYA GEETTIA R 2. Tanicluant. R. Signature of Principal Dr. T. The Dr. Syed Ariff Oorgoom, K.G.F. - 563 120.

Signature with Date 1

# ABSTRACT

The conversion of sun light into electric energy through solar panels is significant compared to other renewable sources. The energy extracted from the solar panel depends on solar light incident on the solar panel, but the constant variation in the sun's position decreases the power generation efficiency. In order to extract maximal energy, the solar panel should face the sunlight at normal angle throughout the day. Solar tracker tilts the panel towards the sun light direction.

The automatic sun tracking solar panel will harness a significant amount of energy from available sun light. Single axis type of solar tracker is used which has one degree of freedom of rotation. Closed loop tracking approach is used with LDR's, an ATmega2560 microcontroller and a DC motor forming the principal components of the circuit model. Based on the signals generated from LDR's, microcontroller provides signals to the motor for tilting the solar panel towards the direction of maximum incident sun rays, which will increase the power generation efficiency. The efficiency of the proposed system is 71%. The information regarding status of solar tracking system is shared through IoT.

(Aryman

Dr. T. Thimmaiah institute of Technology Oorgaum, K. G. F- 553120

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY JNANASANGAMA, BELGAVI – 590018 2019-2020



## "A PROJECT PHASE I REPORT" (15MEP78) On

# "LEAK DETECTION IN PIPE NETWORK USING OPTIMIZATION TECHNIQUES"

In partial fulfilment for the award of the degree of

BACHELOR OF ENGINEERING

In

MECHANICAL ENGINEERING

Submitted By:

SANDHYA R	(1GV15ME045)
S PRADEEP	(1GV16ME024)
SHYAMILI PM	(1GV16ME039)
SWETHA P	(1GV16ME043)

Under the Guidance of

Mr. BALASUBRAMANIAM N S ASSISTANT PROFESSOR



Dr. T. Thirmaiah Institute of Technology Oorgaum, K. G. F- 505.20

DEPARTMENT OF MECHANICAL ENGINEERING Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY OORGAUM, KOLAR GOLD FIELDS, KARNATAKA – 563120

# Dr T THIMMAIAH INSTITUTE OF TECHNOLOGY OORGAUM, KOLAR GOLD FIELDS – 563120 DEPARTMENT OF MECHANICAL ENGINEERING



CERTIFICATE

This is to certify that the Project Entitled "LEAK DETECTION IN PIPE NETWORK USING OPTIMIZATION TECHINIQUE" has carried out by

SANDHYA R

S PRADEEP

SHYAMILI PM

SWETHA P

(1GV15ME045) (1GV16ME024) (1GV16ME039) (1GV16ME043)

The students of Dr. T THIMMAIAH INSTITUTE OF TECHNOLOGY in partial fulfillment for the award of BACHELORE OF ENGINEERING in MECHANICAL ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM during the year 2019-2020. It is certified that all correction/suggestion indicated for internal assessment have been incorporated in the report deposited in the department library.

Guide

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

Dr. T. Thimmalah Institute of Technology nt Oorgaum, K.G.F. - 563 120.

# ACKNOWLEDGEMENT

We express our sincere gratitude to the following people and acknowledge them for having us in completing the project successfully.

We would like to express our deep gratitude to Dr. T. Thimmaiah Institute of Technology for the support in successful completion of this project.

We are very much thankful to **Dr. Syed Ariff, Principal, Dr. TTIT** and **Dr. P D Sudersanan**. Head of the Department, Department of Mechanical Engineering, Dr. TTIT for providing support for all project related activities.

We sincerely thank by heart and soul to our project guide Mr. Balasubramaniam N S, Assistant Professor, Department of Mechanical Engineering, Dr. TTIT whose timely support and suggestions went a long way in the completion of project.

Finally, we thank all the teaching and non-teaching staffs of Dr. TTIT, and the encouragement in our endeavor and of course, nothing could have come true without the support and cheerful encouragement of our parents and friends

SANDHYA R (1GV15ME045)
S PRADEEP (1GV16ME024)
SHYAMILI PM (1GV16ME039)
SWETHA P (1GV16ME043)

Dr. T. Thlimmaiah Institute of Michaelegy Oorgaum, K. G. F- 563 (20

10/12/2021

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# ABSTRACT

In the proposed work algorithms have been developed to minimize the placement of number of sensors to detect leaks in the looped pipe network using pressure sensitivity analysis. The proposed work starts with assumptions that leakages are constant demand that is assumed at junction and every node has a sensor. The algorithm of sensor placement uses the pressure sensitivity matrix which is the differences between the pressures calculated without leak and with leak values at nodes by EPANET simulation. The simulated pressure variations caused by all potential leaks are stored in the Fault Signature Matrix (FSM), with as many rows as sensors, ns, and as many columns as potential leaks, nl. Each value of the FSM matrix is binarized according to a threshold: '1' indicates that the sensor in row i truly detects a leak in column j ('0' indicates no detection). The minimum number of sensor is obtained using binarised matrix in such a way that every leak present in the network should be detected and isolated. The Genetic Algorithm (GA) and Particle Swarm Optimization (PSO) techniques are used to find the minimal sensor placement for identification of leaks in pipe networks, further the comparison between the two techniques has made. The implementation of present algorithms shows the placement of sensors are minimized up to 15-20 % of total number sensor placed at nodes. The problem identifies the best location of minimum number sensors in the pipe network.

Keyword: Pressure sensitivity analysis; Isolability; Detectability; EPANET; Threshold.

PRINCIPA.

Dr. T. Thimmaiah Instituie of Technology Oorgaum, K. G. F- 563/120

#### STATEMENT OF ACCOUNT

CANARA BANK Account Branch IFSC MICR

Account No Product Name Customer ID Customer Name Address

Nominee Reference num : Nominee Name : Account Title : Joint Holder's/Authorised : Person's Name 671-ROBERTSONPET KGF 563122 CNRB0000671 563015202

8651201000002 CURRENT ACCOUNT- GENERAL 70503010 Messrs BIO FUEL INFORMATION AND DEMONSTRATION CENTRE C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF KARNATAKA IN 563120

**BIO FUEL INFORMATION** 

Period :	
Name Currency	inc

01-03-2020 To 08-11-2021 INDIAN RUPEES

DATE: 08-11-21 14:42:00 PM

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TRANS DATE	VALUE	BRANCH	REF/CHQ.NO	DESCRIPTION	WITHDRAWS	DEPOSIT	BALANCE
01-MAR-20	01-MAR-20	0	· · · · · · · · · · · · · · · · · · ·	B/F	0.00	599.00	599.00
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31-MAR-20	31-MAR-20	671	Chiane	FOLIO AMT FIXED FOR CA	118.00	0.00	300,463.00
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15-OCT-20	15-OCT-20	671	000000168344	CASA. CHEQUE WITHDRAWAL - KGF ROBERTSO	9,680.00	0.00	280,783.00
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EC-20	15-DEC-20	671	000000168346	CASA. CHEQUE WITHDRAWAL - KGF ROBERTSO	9,680.00	0.00	261,423.
27-DEC-20	27-DEC-20	671	Benzahun Disineya	SMS ALERT CHARGES	30.00	0.00	261,393.00
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27-MAR-21	27-MAR-21	671		SMS ALERT CHARGES	30.00	0.00	231,733.00

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11/2021 4 PRINCIPAL Dr. T. Thiomaiah institute of Techno Oorgaum, K.G.F. - 563 120,

TRANS DATE	VALUE	BRANCH	REF/CHQ.NO	DESCRIPTION	WITHDRAWS	DEPOSIT	BALANCE
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> Dr. T. Thimmaich Institute of Technology Oorgaum, K.G.F. - 563 120,

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:7/22/2020 3:03: Date Page No.: 1

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CANARA BANK		
ROBERTSONPET	KGF	
671		

IFSC	CODE	:	CNRB0000671
MICR	CODE	:	563015202

STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

Statement of Account for the Period from 01/08/2019 to 01/07/2020

: 70503010 Customer ID

Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF

Nominee Reference Num

Nominee Name

Account Title :BIO FUEL INFORMATION Joint Holder's / Authorised :1. SYED ARIFF Person's name :2. H G SHENOY

Posting Date	Value Date	BRANCH	DESCRIPTION	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
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07/09/2019	07/09/2019	671	CASA. CHEQUE WITHDRAWAL	000000168340	9,680.00	0.00	7217.00
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31/01/2020	31/01/2020	671	CA MIN BAL SC		71.00	0.00	741.00
29/02/2020	29/02/2020	671	CA MIN BAL SC		142.00	0.00	599.00
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27/03/2020	27/03/2020	671	SMS ALERT CHARGES NEW		18.00	0.00	300581.00
31/03/2020	31/03/2020	671	FOLIO AMT FIXED FOR CA		118.00	0.00	300463.00

osting Date V	alue Date	BRANCH DESCRIP		REF/CHQ NO.			
OTAL :							
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LOSING BALANCE	:	300,463.00	Cr. Co	unt :	2 Cr. Amount:	326,577.00	
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Sweep in Balance :

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CHANGE IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE BRANCH ALONG WITH ADDRESS PROOF

Nrupatunga Road Details of Ombudsman: MessThe Banking Ombudsman C/o. RBI, 10/3/8 Bangalore-560001 E-mail: bobangalore@rbi.org.in Tel:0000 / 0000 Fax0 Dr. T. Thimmaiah Institute of Tes. Ocrgaum, K.G.F. - 563 120.

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osting Date	Value Date	BRANCH	DESCRIPTION	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
1/04/2018 0/04/2018	01/04/2018 10/04/2018	0 671	B/F CASA. CHEQUE	00000168316	0.00 15,000.00	237,927.00 0.00	237927.00 222927.00
0/04/2018	10/04/2018	671	WITHDRAWAL CASA. CHEQUE	000000168315	15,730.00	0.00	207197.00
4/05/2018	24/05/2018	671	WITHDRAWAL CASA. CHEQUE	000000168317	15,730.00	0.00	191467.00
4/06/2018	14/06/2018	671	WITHDRAWAL CASA. CHEQUE	000000168318	6,050.00	0.00	185417.00
6/07/2018	06/07/2018	671	WITHDRAWAL CASA. CHEQUE	000000168319	15,730.00	0.00	169687.00
6/08/2018	06/08/2018	671	WITHDRAWAL CASA. CHEQUE	000000168321	10,000.00	100.001	159687.00
6/08/2018	06/08/2018	671	WITHDRAWAL CASA. CHEQUE	000000168320	15,730.00		143957.00
6/09/2018	06/09/2018	671	WITHDRAWAL CASA. CHEQUE	00000168322	15,730.00	. 0.00	128227.00
5/09/2018	25/09/2018	671	WITHDRAWAL NEFT-KARNATAKA		0.00	100,000.00	228227.00
570972018	2370372018	071	STATE BIO ENERGY DEVELOPMENT BOARD-IBKL18092509		0.00	100,000.00	
0/09/2018	30/09/2018	671	2380 SMS ALERT CHARGES		12.00	0.00	228215.00
5/10/2018	05/10/2018	671	NEW CASA. CHEQUE	00000168323	15,730.00	0.00	212485.00
9/11/2018	09/11/2018	671	WITHDRAWAL CASA. CHEQUE	000000168324	15,730.00	0.00	196755.00
6/12/2018	06/12/2018	671	WITHDRAWAL CASA. CHEQUE	000000168325	15,730.00	0.00	181025.00
0/01/2019	10/01/2019	671	WITHDRAWAL CASA. CHEQUE	000000168326	15,730.00	0.00	165295.00
4/01/2019	24/01/2019	469	WITHDRAWAL TO CLG :DR T	000000168327	24,500.00	0.00	140795.00
6/02/2019	06/02/2019	671	THIMMAIAH INSTITUTE-IDBI BA CASA. CHEQUE	000000168328	15,730.00	0.00	125065.00
osting Date	Value Date	BRANCH	WITHDRAWAL	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
- / /				0000001 (00000	E 000 00	0.00	120065.00
7/02/2019	07/02/2019	671	CASA. CHEQUE WITHDRAWAL	000000168329 000000168330	5,000.00	0.00	110065.00
6/02/2019	26/02/2019	671	CASA. CHEQUE WITHDRAWAL		15,730.00	0.00	94335.00
6/03/2019	06/03/2019	671	CASA. CHEQUE WITHDRAWAL	000000168331		0.00	94317.00
7/03/2019	27/03/2019	671	SMS ALERT CHARGES NEW	0000001 (0000	18.00		84317.00
9/03/2019	29/03/2019	671	CASA. CHEQUE WITHDRAWAL	000000168332	10,000.00	0.00	
9/04/2019	09/04/2019	671	CASA. CHEQUE WITHDRAWAL	000000168333	9,280.00	0.00	75037.00
2/04/2019	22/04/2019	671	CASA. CHEQUE WITHDRAWAL	000000168334	10,000.00	0.00	65037.00
3/04/2019	23/04/2019	671	CASA. CHEQUE WITHDRAWAL	000000168335	7,000.00	0.00	58037.00
08/05/2019	08/05/2019	671	CASA. CHEQUE WITHDRAWAL	00000168336	15,730.00	0.00	42307.00
.0/06/2019	10/06/2019	671	CASA. CHEQUE WITHDRAWAL	000000168337	6,050.00	0.00	36257.00
0/07/2019	10/07/2019	671	CASA. CHEQUE WITHDRAWAL	00000168338	9,680.00	0.00	26577.00
07/08/2019	07/08/2019	671	CASA. CHEQUE WITHDRAWAL	000000168339	9,680.00	0.00	16897.00
7/09/2019	07/09/2019	671	CASA. CHEQUE	000000168340	9,680.00	0.00	1217.00

PRINCIPAL Dr. T. Thimmaiah Institute of Technolog Oorgaum, K.G.F. - 563 120. 11-10-2019

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PENING BALANCE :	237,927.00C	Dr	Count :	28 Dr. An	ount.	330,710	0.00	
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-mail: bobangalore@rbi.c	org.in							
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Dr. T. Thimmaiah Institute of Teel Organin, K.C.

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:10/5/2018 11:07: Date Page No.: 1

CANARA BANK ROBERTSONPET KGF 671

IFSC CODE : CNRB0000671 MICR CODE : 563015202

# STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

#### Statement of Account for the Period from 01/03/2018 to 05/10/2018

: 70503010 Customer ID Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF Nominee Reference Num

Nominee Name

Account Title :BIO FUEL INFORMATION Joint Holder's / Authorised :1. SYED ARIFF :2. H G SHENOY

:3.

Value Date	Posting Date	BRANCH	DESCRIPTION	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
						1	
01/03/2018	01/03/2018	0	B/F		0.00	260,157.00	260157.00
09/03/2018	09/03/2018	671	CASA. CHEQUE WITHDRAWAL	00000168314	15,730.00	0.00	244427.00
09/03/2018	09/03/2018	671	CASA. CHEQUE WITHDRAWAL	00000168313	6,500.00	0.00	237927.00
10/04/2018	10/04/2018	671	CASA. CHEQUE WITHDRAWAL	00000168316	15,000.00	0.00	222927.00
10/04/2018	10/04/2018	671	CASA. CHEQUE WITHDRAWAL	00000168315	15,730.00	0.00	207197.00
2 2018	24/05/2018	671	CASA. CHEQUE WITHDRAWAL	00000168317	15,730.00	0.00	191467.00
14/06/2018	14/06/2018	671	CASA. CHEQUE WITHDRAWAL	00000168318	6,050.00	0.00	185417.00
06/07/2018	06/07/2018	671	CASA. CHEQUE WITHDRAWAL	00000168319	15,730.00	0.00	169687.00
06/08/2018	06/08/2018	671	CASA. CHEQUE WITHDRAWAL	00000168321	10,000.00	0.00	159687.00
06/08/2018	06/08/2018	671	CASA. CHEQUE WITHDRAWAL	00000168320	15,730.00	0.00	143957.00
06/09/2018	06/09/2018	671	CASA. CHEQUE WITHDRAWAL	00000168322	15,730.00	0.00	128227.00
25/09/2018	25/09/2018	671	NEFT-KARNATAKA STATE BIO ENERGY DEVELOPMENT BOARD-IBKL18092509 2380		0.00	100,000.00	228227.00
30/09/2018	30/09/2018	671	SMS ALERT CHARGES		12.00	0.00	228215.00

Value Date	Posting Dat	e BRANCH DESCRIPT	TION REF/CHQ NO	. WITH DRAWALS	DEPOSITS	BALANCE
0						
TOTAL :						
OPENING BALANC	Е :	260,157.00C	Dr. Count :	11 Dr. Amount:	131,942.00	
CLOSING BALANC	E :	228,215.00	Cr. Count :	2 Cr. Amount:	360,157.00	
UNCLEAR BALANC	Е:					

Sweep in Balance : 0.00

UNLESS THE CONSTITUENT BRINGS TO THE NOTICE OF THE BANK ANY DISCREPANCY /ERRORS /OMMISSION /UNAUTHORISED DEBITS IMMEDIATELY, THE ENTRIES IN SUCH PASS SHEET SHALL BE DEEMED AS CORRECT AND SHALL BIND THE CONSTITUENT FOR ALL PURPOSES AND INTENTS. BEWARE OF PHISHING ATTACKS THROUGH EMAILS OR FAKE WEBSITES

IMB FACILITY USERS ARE REQUESTED TO NOTE THAT CANARA BANK DOES NOT SEEK ANY INFORMATION THROUGH EMAIL.DO NOT CLICK ON ANY LINK WHICH HAS COME THROUGH EMAIL FROM UNEXPECTED SOURCES.IT MAY CONTAIN MALICIOUS CODE OR COULD BE AN ATTEMPT TO "PHISH".ALWAYS LOGIN THROUGH WWW.CANARABANK.IN.PLEASE BEWARE OF PHISHING

CHANGE IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE BRANCH ALONG WITH ADDRESS PROOF

Details of Ombudsman: MessThe C/o. RBI, 10/3/8	Nrupatunga Banking Ombudsman	Road	
Bangalore-560001 E-mail: bobangalore@rbi.org.i	Tel:0000	/ 0000	Fax0

ARE YOU A MERCHANT / TRADER / RETAILER / SMALL VENDOR. USE DIGITAL PAYMENT CHANNEL TO RECEIVE PAYMENT FROM YOUR CUSTOMERS.CONTACT BRANCH MANAGER FOR MORE DETAILS. GO CASHLESS / CARDLESS

COMPUTER OUTPUT- DOES NOT REQUIRE SIGNATURE

-- END OF STATEMENT -----

PRINCIPA. Dr. T. Thimmaiah Institute of Technology

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

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY





## A Project Report

"To F Based LPG Gas Leakage Detection And Emergency Response System Using AVR Microcontroller And GSM Module"

Submitted in the partial fulfillment of the requirement for the VIII Semester Project Work-10ECP85 for the award of degree of

## **Bachelor of Engineering**

in

n.

# **Electronics and Communication Engineering**

AISHWARYA R	1GV14EC006
MARIA SWETHA J	1GV14EC029
VINODH PRABHAKARAN V	1GV13EC415

Under the guidance of Mr.Prasanna Balasubramanyam S, M.Tech, Asst. Prof, Dept of ECE



# Dr.T.THIMMAIAH INSTITUTE OF TECHNOLOGY Department of Electronics and Communication Engineering Kolar Gold Fields – 563120



Karnataka State Council for Science and Technology

1. 1.912/2021

Dr. T. Thimmaiah Institute of Technology Oorgaum, K. G. F- 553120



## (Formerly Golden Valley Institute of Technology) Oorgaum Kolar Gold Fields – 563120

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION **ENGINEERING.**

## **CERTIFICATE**

Certified that the Project work entitled "IoT Based LPG Gas Leakage Detection And Emergency Response System Using AVR Microcontroller And GSM Module" is a bonafide work carried out by Aishwarya R-1GV14EC006, Maria Swetha J - 1GV14EC029, Vinodh Prabhakaran V-1GV13EC415 in the partial fulfillment for the award of degree of Bachelor of Engineering in Electronics and Communication Engineering of the Visvesvaraya Technological University, Belagavi during the year 2017-2018. 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 - 10ECP85 prescribed for the Bachelor of Engineering

Signature of Guide Mr. Prasanna Balasubramanyan S

2. EASWARR. M

Degree.

Signature of HOD Prof. Ruckmani Divakaran Head of the Department Name of Examiner Dept. of Electronics and Communication Engg. Dr. T. Thimmaiah Institute of Technology 1. Ludeman Divalar

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8. 13/6/18

Signature of Principal Dr. Syed Ariff

Dr. T. Thimmaiah Institute of Technology Signature with Date

1. Luch Dwal 13. 6. 2018 2. Ashten 13/6/18

101 Based LPG Gas Leakage Detection and Emergency Response System 1 sing 43 R Microcontroller and GSM Module

2017-2018

# ACKNOWLEDGEMENT

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

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

We would like to extend hearty thanks to our **Dean and HOD**, **Prof. Ruckmani Divakaran** for being a constant support of encouragement to carry out the project successfully.

We would like to thank our guide, Mr. Prasanna Balasubramanyam.S, Asst. Prof., for his valuable suggestions, guidance and support in the completion of this project.

We would also like to thank our **project coordinator**, Mrs. Jenitha, Asst. Prof., for her valuable suggestions, guidance and support in the completion of this project.

We would like to express our sincere thanks to our sponsor Karnataka State Council for Science and Technology (KSCST), Bangalore for providing fund for successful completion of this project.

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

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

AISHWARYA R	1GV14EC006
MARIA SWETHA J	1GV14EC029
VINODH PRABHAKARAN V	1GV13EC415

1912/2021 Dr. T., Thinmaish Lothole of Technology Oolgaum, K. C. F. Em

Dept. of ECE, Dr. T.T.I.T, K.G.F.

### SYNOPSIS

In this project, we will be designing an Arduino based system for LPG Gas Leakage detection and Emergency response. Sometimes the presence of LPG leakage can be hazardous. In such case, there should be a system which detects the presence of gas and also devices a safety mechanism which can avoid any catastrophic event. This proposed system can be integrated into a unit that can give audio suggestions so as the person may not panic and follow the instructions when a gas leakage is detected, it turns ON the exhaust fan to evacuate the gas from the room, turns OFF the gas cylinder regulator knob.

The sensed gas level is transferred to a real-time web application via wireless communication technology and through the IoT application BLYNK. The data can be accessed on any standard computer connected to internet or Android smart phone using BLYNK application. BLYNK is an IoT platform to control Arduino over internet. In this project BLYNK provides a digital dashboard on the smart phone that displays real-time readings. The system also sends SMS to Family members using GSM technology which provides offline support on the cell phones which lacks internet facility. Hence, the proposed system provides both online and offline support.

Antrovi

Dr. T. Thing Semisticite of Tichnolony Oorgaum, K. G. F- 563120 CANARA BANK ROBERTSONPET KGF 671

IFSC CODE : CNRB0000671 MICR CODE : 563015202 Date :11/20/2018 11:49 Page No.: 1

#### STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

Statement of Account for the Period from 10/10/2017 to 01/03/2018

Customer ID : 70503010 Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF Nominee Reference Num

Nominee Name

Account Title :BIO FUEL INFORMATION Joint Holder's / Authorised :1 SYED ARIFF, Person's name :2. H G SHENOY

:3.

Value Date	Posting Date	BRANCH	DESCRIPTION	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
10/10/2017	10/10/2017	0	D/D				
10/10/2017			B/F		0.00	381,933.00	381933.00
	10/10/2017	671	CASA. CHEQUE WITHDRAWAL	00000168306	15,730.00	0.00	366203.00
07/11/2017	07/11/2017	671	CASA. CHEQUE	00000168307	15,730.00	0.00	350473.00
22/11/2017	22/11/2017	671	CASA. CHEQUE WITHDRAWAL	00000168308	25,000.00	0.00	325473.00
07/12/2017	07/12/2017	671	CASA. CHEQUE WITHDRAWAL	00000168309	15,730.00	0.00	309743.00
1/2018	09/01/2018	671	CASA. CHEQUE WITHDRAWAL	00000168310	13,856.00	0.0,0	295887.00
31/01/2018	31/01/2018	671	CASA. CHEQUE WITHDRAWAL	00000168311	20,000.00	0.00	275887.00
07/02/2018	07/02/2018	671	CASA. CHEQUE WITHDRAWAL	000000168312	15,730.00	0.00	260157.00

Value Date	Posting Dat	e BRANCH DESC	RIPTION	REF/CHQ NO	). V	NITH DRAWALS	DEPOSITS	BALANCE
0								
TOTAL :								
OPENING BALANCH CLOSING BALANCH UNCLEAR BALANCH	E :	381,933.00C 260,157.00	Dr. Co Cr. Co			Amount: Amount:	121,776.00 381,933.00	

Sweep in Balance :

UNLESS THE CONSTITUENT BRINGS TO THE NOTICE OF THE BANK ANY DISCREPANCY /ERRORS /OMMISSION /UNAUTHORISED DEBITS IMMEDIATELY, THE ENTRIES IN SUCH PASS SHEET SHALL BE DEEMED AS CORRECT AND SHALL BIND THE CONSTITUENT FOR ALL PURPOSES AND INTENTS. BEWARE OF PHISHING ATTACKS THROUGH EMAILS OR FAKE WEBSITES

IMB FACILITY USERS ARE REQUESTED TO NOTE THAT CANARA BANK DOES NOT SEEK ANY INFORMATION THROUGH EMAIL.DO NOT CLICK ON ANY LINK WHICH HAS COME THROUGH EMAIL FROM UNEXPECTED SOURCES.IT MAY CONTAIN MALICIOUS CODE OR COULD BE AN ATTEMPT TO "PHISH".ALWAYS LOGIN THROUGH WWW.CANARABANK.IN.PLEASE BEWARE OF PHISHING

CHANGE IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE BRANCH ALONG WITH ADDRESS PROOF

Nrupatunga Road Details of Ombudsman: MessThe Banking Ombudsman C/o. RBI, 10/3/8 Bangalore-560001 Tel:0000 / 0000 Fax0 E-mail: bobangalore@rbi.org.in

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ARE YOU A MERCHANT / TRADER / RETAILER / SMALL VENDOR. USE DIGITAL PAYMENT CHANNEL TO RECEIVE PAYMENT FROM YOUR CUSTOMERS.CONTACT BRANCH MANAGER FOR MORE DETAILS. GO CASHLESS / CARDLESS

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05/03/2018

Dr. T. Thimmaiah Institute of Technology Oorgaum, K.G.F. - 563 120. CANARA BANK ROBERTSONPET KGF 671 Date :11/20/2018 11:49 Page No.: 1

IFSC	CODE	:	CNRB0000671
MICR	CODE	:	563015202

#### STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

Statement of Account for the Period from 10/10/2017 to 01/03/2018

Customer ID : 70503010 Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF Nominee Reference Num

#### Nominee Name

Account Title BIO FUEL IN	FORM	ATION
Joint Holder's / Authorised	:1	SYED ARIFF
Person's name	:2.	H G SHENOY

:3.

Value Date	Posting Date	BRANCH	DESCRIPTION	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
	Ja .						Contra and
10/10/2017	10/10/2017	0	B/F		0.00	381,933.00	381933.00
10/10/2017	10/10/2017	671	CASA. CHEQUE WITHDRAWAL	000000168306	15,730.00	0.00	366203.00
07/11/2017	07/11/2017	671	CASA. CHEQUE WITHDRAWAL	00000168307	15,730.00	0.00	350473.00
22/11/2017	22/11/2017	671	CASA. CHEQUE WITHDRAWAL	000000168308	25,000.00	0.00	325473.00
07/12/2017	07/12/2017	671	CASA. CHEQUE WITHDRAWAL	000000168309	15,730.00	0.00	309743.00
01/2018	09/01/2018	671	CASA. CHEQUE WITHDRAWAL	000000168310	13,856.00	0.00	295887.00
31/01/2018	31/01/2019	671	CASA. CHEQUE WITHDRAWAL	000000168311	20,000.00	0.00	275887.00
07/02/2018	07/02/2018	671	CASA. CHEQUE WITHDRAWAL	000000168312	15,730.00	0.00	260157.00

Value Date	Posting Date	BRANCH DESCRIE	PTION REF/CH	HQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
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TOTAL :						· · ·	
OPENING BALANC	and the second se	381,933.00C	Dr. Count :		Amount:	121,776.00	
CLOSING BALANC UNCLEAR BALANC		260,157.00	Cr. Count :	. 1 Cr.	Amount:	381,933.00	

Sweep in Balance :

UNLESS THE CONSTITUENT BRINGS TO THE NOTICE OF THE BANK ANY DISCREPANCY /ERRORS /OMMISSION /UNAUTHORISED DEBITS IMMEDIATELY, THE ENTRIES IN SUCH PASS SHEET SHALL BE DEEMED AS CORRECT AND SHALL BIND THE CONSTITUENT FOR ALL PURPOSES AND INTENTS. SEWARE OF PHISHING ATTACKS THROUGH EMAILS OR FAKE WEBSITES

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IMB FACILITY USERS ARE REQUESTED TO NOTE THAT CANARA BANK DOES NOT SEEK ANY INFORMATION THROUGH EMAIL.DO NOT CLICK ON ANY LINK WHICH HAS COME THROUGH EMAIL FROM UNEXPECTED SOURCES.IT MAY CONTAIN MALICIOUS CODE OR COULD BE AN ATTEMPT TO "PHISH".ALWAYS LOGIN THROUGH WWW.CANARABANK.IN.PLEASE BEWARE OF PHISHING

CHANGE IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE BRANCH ALONG WITH ADDRESS PROOF

Nrupatunga Road Details of Ombudsman: MessThe Banking Ombudsman C/o. RBI, 10/3/8 Bangalore-560001 Tel:0000 / 0000 FaxO E-mail: bobangalore@rbi.org.in

ARE YOU A MERCHANT / TRADER / RETAILER / SMALL VENDOR. USE DIGITAL PAYMENT CHANNEL TO RECEIVE PAYMENT FROM YOUR CUSTOMERS.CONTACT BRANCH MANAGER FOR MORE DETAILS. GO CASHLESS / CARDLESS

COMPUTER OUTPUT- DOES NOT REQUIRE SIGNATURE END OF STATEMENT -----

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Date

Page No.: 1

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CANARA BANK ROBERTSONPET KGF 671

IFSC CODE : CNRB0000671 MICR CODE : 563015202

#### STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

#### Statement of Account for the Period from 01/04/2017 to 14/07/2017

00

Customer ID : 70503010 Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF

Nominee Reference Num

Nominee Name

Account Title :BIO FUEL INFORMATION Joint Holder's / Authorised :1. SYED ARIFF Person's name :2. H G SHENOY

Posting Date	Value Date	BRANCH	DESCRIPTION	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
				1		0	
01/04/2017	01/04/2017	0	B/F	100 min	0.00	279,914.00	279914.00
11/04/2017	11/04/2017	671	SELF	000000526099	14,300.00	0.00	265614.00
13/04/2017	13/04/2017	671	PASS SHEET ISSUE CHARGES		50.00	0.00	265564.00
13/04/2017	13/04/2017	671	PASS SHEET ISSUE CHARGES		8.00	0.00	265556.00
03/05/2017	03/05/2017	671	CASA. CHEQUE WITHDRAWAL	000000526100	14,300.00	0.00	251256.00
18/05/2017	18/05/2017	671	SC FOR CHEQUE BOOK DELIVERY		150.00	0.00	251106.00
18/05/2017	18/05/2017	671	ST ON SC PART DR/PART HOLD		23.00	0.00	251083.00
03/06/2017	03/06/2017	671	SELF	000000168301	17,160.00	0.00	233923.00
07/07/2017	07/07/2017	671	NEFT-KARNATAKA STATE BIO ENERGY DEVELOP-IBKL170707 650549		0.00	200,000.00	433923.00

Posting Date Value Date BRANCH DESCRIPTION REF/CHO NO. WITH DRAWALS DEPOSITS BALANCE TOTAL : 279,914.00C OPENING BALANCE : Dr. Count : Cr. Count : 7 Dr. Amount: 2 Cr. Amount: 45,991.00 CLOSING BALANCE : 433,923.00 479,914.00 UNCLEAR BALANCE : Sweep in Balance : 0.00 UNLESS THE CONSTITUENT BRINGS TO THE NOTICE OF THE BANK ANY DISCREPANCY /ERRORS /OMMISSION /UNAUTHORISED DEBITS IMMEDIATELY, THE ENTRIES IN SUCH PASS SHEET SHALL BE DEEMED AS CORRECT AND SHALL BIND THE CONSTITUENT FOR ALL PURPOSES AND INTENTS. BEWARE OF PHISHING ATTACKS THROUGH EMAILS OR FAKE WEBSITES IMB FACILITY ÙSERS ARE REQUESTED TO NOTE THAT CANARA BANK DOES NOT SEEK ANY INFORMATION THROUGH EMAIL.DO NOT CLICK ON ANY LINK WHICH HAS COME THROUGH EMAIL FROM UNEXPECTED SOURCES.IT MAY CONTAIN MALICIOUS CODE OR COULD BE AN ATTEMPT TO "PHISH".ALWAYS LOGIN THROUGH WWW.CANARABANK.IN.PLEASE BEWARE OF PHISHING CHANGE IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE BRANCH ALONG

CHANGE IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE BRANCH ALONG WITH ADDRESS PROOF

Nrupatunga Road Details of Ombudsman: MessThe Banking Ombudsman C/o. RBI, 10/3/8 Bangalore-560001 Tel:0000 / 0000 Fax0 E-mail: bobangalore@rbi.org.in

RINCIPAL aiah Institute m, K -Dr. T. Thinmaiah Instituto of Technolo Oorgaum, K.G.F. - 563 120

:10/10/2017 3:14

Date

Page No.: 1

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CANARA BANK ROBERTSONPET KGF 671

IFSC CODE MICR CODE .

DE : CNRB0000671 DE : 563015202

> STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

Statement of Account for the Period from 07/07/2017 to 10/10/2017

Customer ID : 70503010 Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM 20ST DR TTIT OORGAUM KGF Nominee Reference Num

Nominee Name

Account Fitle :BIO FUEL INFORMATION Joint Holder's / Authorised :1. SYED ARIFF Person's name :2. H G SHENOY

osting Date	Value Date	BRANCH	DESCRIPTION	REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE
7/07/2017	07/07/2017	0	B/F		0.00	233,923.00	233923.00
7/07/2017	07/07/2017	671	NEFT-KARNATAKA STATE BIO ENERGY DEVELOP-IBKL17070 650549	1	0.00	260,000.00	433923.00
570772017	15/07/2017	671	CASA. CHEQUE WITHDRAWAL	00000168302	13,730.00	0.00	419193.00
470872017	14/08/2017	671	CASA. CHEQUE WITHDRAWAL	00000168303	15,730.00	0.00	402463.00
0/08/2017	30/08/2017	683	SB ACS		0.00	5,000.00	407463.00
4/09/2017	04/09/2017	671	CASA. CHEQUE WITHDRAWAL	000000168304	9,800.00	0.00	397663.00
8/09/2017	08/09/2017	671	CASA. CHEQUE WITHDRAWAL	000000168305	15,730.00	0.00	381833.00
0/10/2017	10/10/2017	671	CASA. CHEQUE WITHDRAWAL	00000168306	15,730.00	0.64	366203.00

Posting Date Value Date BRANCH DESCRIPTION REF/CHQ NO. WITH DRAWALS DEFOSITS BALANCE TOTAL: OPENING BALANCE : 233,923.00C Dr. Count : 5 Di. Amount: 73,720.00 CLOSING BALANCE : 366,203.00 Cr. Count : 3 Cr. Amount: 438,923.00 UNCLEAR BALANCE :

Fax

Sweep in Balance : 0.00

UNLESS THE CONSTITUENT BRINGS TO THE NOTICE OF THE BANK ANY DISCREPANCY /ERRORS /OMMISSION /UN/U"HORISED DEBITS IMMEDIATELY, THE ENTRIES IN SUCH PASS SHEET SHALL BE DEEMED AS CORRECT AND SHALL BIND THE CONSTITUENT FOR ALL PURPOSES AND INTENTS. BEWARE OF PHISUING ATTACKS THROUGH EMAILS OR FAKE WEBSITES

IMB FACILITY USERS ARE REQUESTED TO NOTE THAT CANARA BANK DOES NOT SHEK ANY INFORMATION THROUGH EMAIL.DO NOT CLICK ON ANY LINK WHICH HAS COME THROUGH EMAIL FROM UNEXPECTED SOURCES.IT MAY CONTAIN MALICIOUS CODE OS COULD BE AN ATTEMPT TO "PHISH".ALWAYS LOGIN THROUGH WWW.CANALABANK.IN.PLEASE BEWARE OF PHISHING

CHANGE IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE FRANCE ALONS WITH ADDRESS PROOF

Nrupatunga Road Details of Ombudsman: MessThe Banking Ombudsman C/o. RBI, 10/3/8 Bangalore-560001 Tel:0000 / 0000 E-mail: bobangalore@rbi.org.in Lot 15 ho H

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

Date :4/13/2017 11:15: Page No.: 1

200,000.00

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0.00

CANARA BANK ROBERTSONPET KGF 671

: CNRB0000671 IFSC CODE : 563015202 MICR CODE

STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

Statement of Account for the Period from 08/12/2016 to 31/03/2017

Customer ID : 70503010 Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF Nominee Reference Num

03/03/2017

28/03/2017

Nominee Name

03/03/2017

28/03/2017

Account Title :BIO FUEL INFORMATION Joint Holder's / Authorised :1. SYED ARIFF :3. :2. H G SHENOY Person's name BALANCE DEPOSITS WITH DRAWALS REF/CHQ NO. BRANCH DESCRIPTION Posting Date Value Date 142814.00 142,814.00 0.00---) 0.00 134014.00 B/F ... 08/12/2016 0 8,800.00\* 08/12/2016 000000526093 128514.00 RAJAN S 0.00 671 05/01/2017 5,500.00-05/01/2017 526095 114214.00 CLG 0.00 671 14,300.00° 20,000.00° 06 /2017 0 /2017 06/01/2017 000000526096 94214.00 SELF 0.00 671 07/02/2017 000000526097 79914.00 0.00 671 03/03/2017 14,300.00 03/03/2017 000000526098 279914.00

SELF 671 SELF NEFT-KARNATAKA 671 STATE BIO ENERGY DEVELOP-IBKL170328 851417

OTAL : PENING BALANCE : LOSING BALANCE : NCLEAR BALANCE :	142,814.00C 279,914.00	Dr. Count : Cr. Count :	5 Dr. Amount: 2 Cr. Amount:	62,900.00 342,814.00	
UNLESS THE CONSTITUENT BRIN DEBITS IMMEDIATELY, THE EN CONSTITUENT FOR ALL PURPOSI BEWARE OF PHISHING ATTACKS IMB FACILITY USERS ARE REQ NOT CLICK ON ANY LINK WHIC OR COULD BE AN ATTEMPT TO	ES AND INTENTS. THROUGH EMAILS UESTED TO NOTE I	OR FAKE WEBSITES	NOT SEEK ANY INFORMATI	ION THROUGH EMAIL.DO	3/04/2819

Date :1/4/2017 4:12:4 Page No.: 1

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CANARA BANK ROBERTSONPET KGF 671

IFSC CODE : CNRB0000671

MICR CODE : 563015202

STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL

Statement of Account for the Period from 05/08/2016 to 04/01/2017

Customer ID : 70503010 Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TIIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF Nominee Reference Num

Nominee Reference in

Nominee Name

Account Title :BIO FUEL INFORMATION

Joint Holder's / Authorised :1. SYED ARIFF Person's name :2. H G SHENOY

BALANCE WITH DRAWALS DEPOSITS BRANCH DESCRIPTION REF/CHO NO. Posting Date Value Date 33,329.00 33329.00 0.00 B/F ... CASA. CHEQUE 05/08/2016 0 05/08/2016 14,300.00 0.00 19029.00 000000526082 05/08/2016 671 05/08/2016 WITHDRAWAL 219029.00 0.00 200,000.00 RTGSIW: KARNATAKA 09/08/2016 1879 09/08/2016 STATE BIO ENERGY DEVELOP-IBKLR92016 080900098546 204729.00 0,00 14,300.00 000000526083 > SELF 671 08/09/2016 08/09/2016 0.00 198129.00 000000526084 . 12/09/2016 671 SELF 183829.00 0.00 12/09/2016 14,300.00 000000526085. CASA. CHEQUE 06/10/2016 06/10/2016 671 WITHDRAWAL 175029.00 0.00 0000005260884 8,800.00 485 TO CLG : RAJAN 29/11/2016 30/11/2016 0.00 169529.00 164029.00 29/11/2016 526089. 5,500.00 671 JYOTHI 5,500.00 30/11/2016 06/12/2016 
 JYOTHI
 020039\*

 To CLG : JYOTHI
 00000526091.

 To CLG : HG SHENOY
 00000526090.

 To CLG : RAJAN S
 00000526092
 0.00 671 485 06/12/2016 151614.00 0.00 142814.00 07/12/2016 07/12/2016 0.00 8,800.00 485 07/12/2016 07/12/2016

Posting Date V	Value Date	BRANCH DESCRIP	TION REF/CHQ NO.	WITH DRAWALS	DEPOSITS	BALANCE	
Posting Date		1	× 7/			1	
TOTAL : OPENING BALANCE CLOSING BALANCE UNCLEAR BALANCE	1	33,329.00C 142,814.00	Dr. Count : Cr. Count :	9 Dr. Amount: 2 Cr. Amount:	90,515.00 233,329.00		
DEBITS IMMEDIATE CONSTITUENT FOR BEWARE OF PHISE	TITUENT BRIN ELY, THE ENT ALL PURPOSE ING ATTACKS	TRIES IN SUCH PASS ES AND INTENTS. THROUGH EMAILS OF	OF THE BANK ANY DISCRE S SHEET SHALL BE DEEMED R FAKE WEBSITES				
IMB FACILITY US NOT CLICK ON AN OR COULD BE AN	ERS ARE REQU Y LINK WHICH ATTEMPT TO '	JESTED TO NOTE THA I HAS COME THROUGH "PHISH".ALWAYS LO	AT CANARA BANK DOES NOT H EMAIL FROM UNEXPECTED GIN THROUGH WWW.CANARAE	SEEK ANY INFORMATION SOURCES.IT MAY CONTA BANK.IN.PLEASE BEWARE (	THROUGH EMAIL.DO IN MALICIOUS CODE OF PHISHING		
CHANGE IN THE A WITH ADDRESS PR	ADDRESS OF AG	CCOUNT HOLDER/PA	HOLDER, IF ANY, MAY PLE	EASE BE INFORMED TO TH	E BRANCH ALONG	Jon Die OI	iol
Details of Omb C/o. RBI, 10/3	oudsman: Mes 3/8	Nru ssThe Banking Ombu	upatunga Road udsman		C	PRINCIPAL	

Dr. T. Thingmaish Institute of Yechnology Oorgaum, K.G.F. - 563 120.

C/o. RBI, 10/3/8 Bangalore-560001 Te:0000 / 0000 Fax0 E-mail: bobangalore@rbi.org.in

# http://172.16.37.161/Host-Reports/CH220-04161244.427,671.rep

04-01-2017

:8/22/2016 3:32: Date Page No.: 1 CANARA BANK ROBERTSONPET KGF 671 Toll Free No: 1800 425 0018 : CNRB0000671 IFSC CODE : 563015202 MICR CODE STATEMENT OF ACCOUNT Account No : 8651201000002 Product Name : CURRENT ACCOUNT- GENERAL Statement of Account for the Period from 10/06/2016 to 22/08/2016 : 70503010 Customer ID Customer Name : BIO FUEL INFORMATION Customer Address : C/O Dr TTIT INSTITUTE OF TECHNOLOG OORGAUM POST DR TTIT OORGAUM KGF 563120 Nominee Reference Num Nominee Name Account Title :BIO FUEL INFORMATION Joint Holder's / Authorised :1. SYED ARIFF :3. :2. H G SHENOY Person's name BALANCE DEPOSITS REF/CHQ NO. WITH DRAWALS Posting Date BRANCH DESCRIPTION Value Date 61929.00 61,929.00 0.00 B/F ... 10/06/2016 0 10/06/2016 47629.00 671 SELF 0.00 14,300.00 000000526080 33329.00 19029.00 🗲 10/016 04/0016 10/06/2016 14,300.00 0.00 000000526081 671 04/07/2016 SELF 0.00 14,300.00 000000526082 CASA. CHEQUE 671 05/08/2016 05/08/2016 WITHDRAWAL 219029.00 200,000.00 0.00 RTGSIW: KARNATAKA 09/08/2016 1879 09/08/2016 STATE BIO ENERGY DEVELOP-IBKLR92016 080900098546 TOTAL : 42,900.00 3 Dr. Amount: 2 Cr. Amount: Dr. Count : 61,929.00C OPENING BALANCE : 261,929.00 Cr. Count : CLOSING BALANCE : 219,029.00 UNCLEAR BALANCE : UNLESS THE CONSTITUENT BRINGS TO THE NOTICE OF THE BANK ANY DISCREPANCY /ERRORS /OMMISSION /UNAUTHORISED DEBITS IMMEDIATELY, THE ENTRIES IN SUCH PASS SHEET SHALL BE DEEMED AS CORRECT AND SHALL BIND THE CONSTITUENT FOR ALL PURPOSES AND INTENTS. BEWARE OF PHISHING ATTACKS THROUGH EMAILS OR FAKE WEBSITES IMB FACILITY USERS ARE REQUESTED TO NOTE THAT CANARA BANK DOES NOT SEEK ANY INFORMATION THROUGH EMAIL.DO NOT CLICK ON ANY LINK WHICH HAS COME THROUGH EMAIL FROM UNEXPECTED SOURCES.IT MAY CONTAIN MALICIOUS CODE OR COULD BE AN ATTEMPT TO "PHISH".ALWAYS LOGIN THROUGH WWW.CANARABANK.IN.PLEASE BEWARE OF PHISHING CHAN IN THE ADDRESS OF ACCOUNT HOLDER/PA HOLDER, IF ANY, MAY PLEASE BE INFORMED TO THE BRANCH ALONG DDRESS PROOF WIT Details of Ombudsman: MessThe Banking Ombudsman Nrupatunga Road C/o. RBI, 10/3/8 /0000 Fax:0 Bangalore-560001 Tel:0000 E-mail: bobangalore@rbi.org.in COMPUTER OUTPUT- DOES NOT REQUIRE SIGNATURE ---- END OF STATEMENT ------BALANCE DEPOSITS WITH DRAWALS REF/CHQ NO. Posting Date BRANCH DESCRIPTION Value Date

terinorpal ish institute b. K. C. Dr. T. Thimpaleh Institute of Technols Oorgaum, K.G.F. - 503 120.