

Dt.21.11.18 [www.maersktraining.com](http://www.maersktraining.com)  
Reg. No. : U74210TN2006PTC059795

To,  
VELS UNIVERSITY,  
School of Maritime Studies  
Rajiv Gandhi Salai ,  
Off OMR (IT Highway)  
Near Navalur, Thalambur,  
Chennai – 603 103


Dear Sir,

Please find enclosed cheque No.007023 dt.21.11.2018 for Rs. 69,160 drawn on HDFC Bank Ltd. in your favour towards payment for your bill as per details given below:

Date	Bill No.	Amount
24/08/2018	VELS/2018/364	29500
24/08/2018	VELS/2018/365	7000
09/10/2018	VELS/2018/389	1180
16/11/2018	VELS/2018/400	7000
16/11/2018	VELS/2018/401	29500
	<b>Total</b>	<b>Rs.74,180</b>
	Less : TDS	(5,020)
	<b>Net Amount Payable</b>	<b>Rs. 69,160</b>

Kindly acknowledge receipt of the same

Thanking you,  
Yours faithfully,  
For Maersk Training India Private Limited

  
S. Raj  
Manager - Finance

Encl. : As above



759, ITC CENTRE ANNA SALAI,  
OPP. T.V.S CHENNAI - 600002, TAMIL NADU  
RTGS / NEFT IFSC : HDFC0000004

A/c. PAYEE ONLY

2	1	1	1	2	0	1	8
D	D	M	M	Y	Y	Y	Y

Valid for 3 months only

Pay Vels University

Or Bearer

Rupees रुपये Sixty nine thousand one hundred  
and sixty only —————

या धारक को

अदा करें

₹ 69,160/-

A/c No.

00040310004450

Brn: 0004 Pdt: 031  
C/A

Payable at par through clearing/transfer at all branches of HDFC BANK LTD

For MAERSK TRAINING INDIA PRIVATE LIMITED

Authorized Signatories  
Please sign above / कृपया यहाँ हस्ताक्षर करें

⑈007023⑈ 600240002⑈ 902267⑈ 30



# HE-MAN ENGINEERS

SINCE 1988

Phone : 0484 2258809  
E-mail : hemanengineers1988@gmail.com

Contact Number: 9061828993

AN ISO 9001 : 2008 CERTIFIED COMPANY

## PURCHASE ORDER

HE/PO/156/19-20

19-12-19

To,

**Dr. A. Mohammed Faisal**  
Department of MBA,  
School of Management Studies and Commerce,  
VISTAS, Chennai.  
P.V. Vaithiyalingam Road  
Pallavaram  
Chennai - 600 117  
Tamil Nadu, India

**Sub: PO For ISO 9001: 2015 QMS Compliance Consultancy Services.**

Sir,

We thank you, for your offer. We are pleased to place order, as per the offer we have received from your side.

SL NO	ITEM DESCRIPTION	QUANTITY IN NOS.	RATE	AMOUNT
1	<b>Fees for ISO 9001: 2015 QMS Compliance Consultancy Services</b>  <b>Scope of Work:</b> <b>Pre-certification: Consultancy services for design, development, establishment and implementation of Quality Management System, which includes; supply of QMS documents in compliance with the standard, review and revision of Quality Management System up to recommendation for certification</b>	1	28000	28000

## **Terms& Conditions:**

- 1. Duration: 90 days for QMS implementation and certification from the date of confirmation of order / agreement.**
- 2. Billing Address: He-Man Engineers, Vattekkadu, Mookkannoor PO, Angmaly, Ernakulam Dist. Kerala 683577.**
- 3. GST NO: 32AGKPJ8761D1ZF .**
- 4. GST 18% extra (if applicable).**
- 5. Payment: 50% as advance balance against invoice after completing the ISO certification.**
- 6. Any Additional Charges Will Not Be Paid by He-Man.**

Thanking you,

For He-Man Engineers,



Authorized Signatory

	Sathiyabama Institute	5	2500	
	Sreevidyanikethan college of pharmacy	1	500	
	TBML College, Porayar	4	2000	
	University of Madras	50	23400	
	WCC	1	500	
<b>Total</b>		<b>509</b>	<b>5,30,450</b>	<b>5,30,450</b>

**CIL yearly Report- June 2019 - March 2020**

<b>S. No</b>	<b>Name of the Instrument/ Analysis</b>	<b>Name of the Institute/ Industry</b>	<b>No of analysis</b>	<b>Amount generated (Rs.)</b>	<b>Total (Rs.)</b>
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1	<b>ATOMIC FORCE MICROSCOPE (AFM)</b>	VISTAS	13	15600	<b>34,600</b>
		MCC	4	4000	
		SCSVMV University	4	6000	
		PanimalarEngg. College	1	1500	
		VelammalEngg. College	5	7500	
2	<b>BET SURFACE AREA ANALYSIS</b>	VISTAS	10	13600	<b>146900</b>
		AC Tech., Anna Univ.	4	7000	
		Active Char Product PVT LTD.,	1	5000	
		Anna University	1	2500	
		Annamalai University	9	22500	
		Avinashilingam Institute	2	5000	
		ChikkaiahNaicker College, Erode	5	12500	
		Cochin University	4	8000	
		CSIR-CLRI	1	2500	
		Hindusthan University	1	2500	
		Kamaraj College of Engg. & Tech., Trichy	2	5000	
		MCC	21	26800	
		MKU	7	17500	
		NIT, Trichy	2	4000	
		SRM Univ.,	3	6500	
		SSN college	2	4500	
		University of Madras	1	1500	
3	<b>CONTACT ANGLE METER</b>	VISTAS	6	1200	<b>13100</b>
		Sri Krishna Arts and Science Coll., Kovai	18	5400	
		MCC	4	800	
		MS university	3	900	

		Anna University	18	3600	
		SRM, Vadapalani	4	1200	
4	<b>DYNAMIC LIGHT SCATTERING (DLS) ANALYSIS</b>	VISTAS	13	12200	<b>51400</b>
		BS Abdur Rahman Crescent Universiy	3	4500	
		CL.BaidMetha College	1	1000	
		KVCET	3	3000	
		Loyola College	3	4000	
		MCC	1	1500	
		RajalakshmiEngg. College	2	3000	
		SCSVMV univ., Kanchipuram	6	9000	
		SreeSastha Institute of Engg. & Tech.	1	1200	
		SSN College	5	7500	
		St. Josephs college of arts ans science for women	3	4500	
5	<b>DIFFERENTIAL SCANNING CALORIMETER (DSC)</b>	VISTAS	5	6000	
		Jaya College of Pharmacy	2	2400	
		Anna University	1	1500	
		Hinsutan University	1	2000	
		DCW Limited, Sahupuram, Thoothukudi	10	20000	
		St. Josph institute	6	6000	
6	<b>FIELD EMISSION SCANNING ELECTRON MICROSCOPE (FESEM) WITH ENERGY DISPERSIVE X-RAY SPECTROMETER (EDS)</b>	VISTAS	66	84100	<b>317950</b>
		Adhi College of Engg.,	1	1500	
		Alagappa University	7	5000	
		Anna University	3	6000	
		BharathUnivesity	10	15500	
		Combat Vehicles Research and development, DRDO	4	10000	
		Dr. MGR University	9	14000	

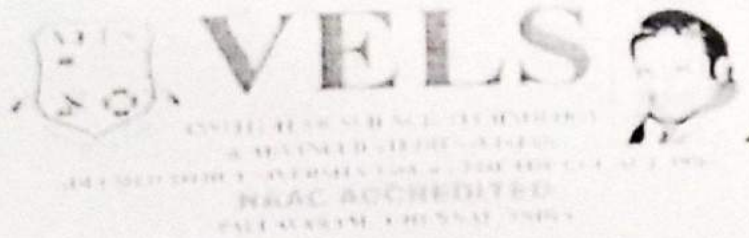
		Govt. Arts., Nandhnam	2	4000	
		Hindustan University, Chennai	6	10000	
		IITM	6	4500	
		India Piston Ltd., sembian, Ch-11	5	8000	
		KalasalingamUniv	1	2000	
		LNG College, Ponneri	16	20450	
		Loyola College	2	3000	
		MCC, Chennai	16	19200	
		MKU	3	2250	
		Noorul Islam University	10	20000	
		Par Pharmacy Pvt Ltd	3	12000	
		Presidency College	1	2000	
		SATHIYABAMA UNIERSITY	7	12500	
		SCSVMV University	3	4500	
		SSN college of Engg.	6	6500	
		St. Xaviers college, Palayankottai	5	8250	
		SVCE	2	3000	
		Swarnandhra College of Engg. &Tech, West Godavari, Narspur	1	1500	
		Thai Moogambigai Dental College	7	10500	
		University of Madras	20	26200	
		WCC	1	1500	
7	<b>ATTENUATED TOTAL REFLECTANCE FOURIER TRANSFORM INFRA-RED SPECTROMETER (ATR-FTIR)</b>	VISTAS	92	46740	<b>81940</b>
		A.C. Tech., Anna University	17	5000	
		Alagappa University	6	1200	
		Anna University	10	2200	
		AsanMemeorial College	1	300	
		BharathUnivesity	14	4800	
		C. L. Baid College of Pharmacy	9	1800	



		Combat Vehicles Research and development, DRDO	6	4200	
		Dr. MGR University	1	300	
		EswariEngg. Coll.	6	1800	
		Hindustan University, Chennai	14	4400	
		IITM.	3	900	
		L. N. Govt. College, Ponneri	4	800	
		MCC	14	3000	
		Presidency college	1	400	
		SIST	4	1300	
		SSN college of Engg.	8	2800	
8	<b>ELECTROCHEMICAL WORKSTATION</b>	Anna Univ.	3	900	<b>900</b>
9	<b>HIGH PERFORMANCE THIN LAYER CHROMOTOGRAPHY (HPTLC)</b>	VISTAS	2	2500	<b>9500</b>
		Sri Ramachandra ....	2	4000	
		KalasalingamUniv	1	1500	
		BharathUniv	1	1500	
10	<b>CONFOCAL RAMAN MICROSCOPE IMAGING/SPECTROMETER</b>	VISTAS	20	18800	<b>35000</b>
		Dr. MGR University	3	6000	
		MCC	10	8000	
		Hindusthan University	1	1000	
		University of Madras	2	1200	
11	<b>SIMULTANEOUS THERMOGRAVIMETER/ DIFFERENTIAL SCANNING CALORIMETER (TGA-DSC)</b>	VISTAS	20	22000	<b>73500</b>
		A. C Tech	2	2000	
		Amara Raja Battries Limited, tirupathi	1	1500	
		Anna University	4	5000	
		BharathiWomens College	5	5000	
		Bharathidasan Univ.	2	4000	
		Combat Vehicles Research and	4	8000	

		development, DRDO			
		Hindustan University, Chennai	2	3000	
		L. N. Govt. College, Ponneri	10	12000	
		Lady Doak College	2	3000	
		MCC	2	2000	
		NIT Trichy	2	3000	
		Presidency College	1	1500	
		SRM Univ.	1	1500	
12	<b>UV-VIS SPECTROPHOTOMETER</b>	VISTAS	8	1200	<b>1200</b>
13	<b>POWDER X-RAY DIFFRACTOMETER (P-XRD)</b>	VISTAS	85	33800	<b>161500</b>
		AC tech, annauniv	2	1000	
		Adhi College of Engg.,	1	500	
		AMET University	2	1000	
		Anna University	8	4000	
		Bharath Institute of Science and Technology, chennai	31	14200	
		EswariEngg. Coll.	6	3000	
		Gesra Labs India PvtLtd	1	1000	
		Govt. Arts., Nandhnam	2	1000	
		Hindustan University, Chennai	3	1500	
		KMS Health Centre PVT LTD	2	2000	
		KVCET	3	1500	
		L. N. Govt. College, Ponneri	14	6400	
		Lady Doak College	3	1500	
		Loyola College	4	2000	
		MCC	26	10800	
		Meenakshi College/ Anna University-Project	3	1500	

	MKU, Madurai	8	4000	
	NIT Trichy	1	500	
	Novitium Labs Pvt Ltd	8	8000	
	Nuray chemicals Pvt Ltd	32	32000	
	PanimalarEngg College	1	500	
	Presidency College	1	500	
	Sastra Deemed University	3	1500	
	Sathyabama Univ.	14	6300	
	Sri ManakulaVinayagarEngg. Coll.,	5	2500	
	Sri Venkateswara College of Engineering	3	1500	
	SRM Dental College, Ramapuram	4	2000	
	SSN college of Engg.	2	1000	
	St. Jospeh institute	6	2400	
	St. Maryscillege, Thoothukudi	5	2500	
	University of Madras	19	7100	
	VelammalEngg College	3	1500	
	WCC	2	1000	
	<b>Total</b>	<b>1,079</b>	<b>9,65,390</b>	<b>9,65,390</b>



Date 29.11.2018

To  
The Managing Director,  
HITEC INDUSTRIAL FAN AND SYSTEMS,  
#1/393, 4<sup>th</sup> street, Karthikeyapuram, Madipakkam,  
Chennai 91.

Dear sir,

Sub: Department of Mechanical Engineering- Vels University-Submission of completed consultancy work-Reg.

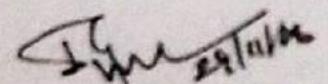
Ref:

1. Your offer Letter, dated 12.11.2018.
2. Your Professional order letter dated 26.11.2018

Warm greetings

We thank you, for giving us opportunities for technical consultancy work with your term. We wish to inform you that the assigned works is accepted by our technical research team for further progress as the earliest. We are looking forward your continuous support and encouragement.

With thanks and regards.

  
HOD Mechanical Engineering  
HEAD OF THE DEPT. OF MECH.  
MECHANICAL ENGRG. CENTRE,  
SCHOOL OF ENGINEERING,  
VELS UNIVERSITY, VELAYUTAPURAM,  
P.V. VAYALAR, CHENNAI - 600 127.  
PALLAVARAI, CHENNAI - 600 127.

VELS INSTITUTE OF SCIENCE TECHNOLOGY AND ADVANCED STUDIES (VISTAS)

Receipt Voucher

Voucher # : Rcpt/2018-19/MAR/0279

Dated : 26-MAR-2019

Particulars	Debit	Credit
To Consultancy Receipts		1,000.00
Cash Dr	1,000.00	
Party Name: Consultancy Receipts	1,000.00	

On Account of:

Being cash received from Ms.Durgalakshmi towards the consultancy project fee for the project on Water quality assessment for construction work ,Dept of civil Engg

Prepared by

Checked by

Authorised by

Received by



26.04.19

From

Dr. S. Jayakumari, M. Pharm., Ph.D.  
Head of the Department  
Department of Pharmacognosy  
School of Pharmaceutical Sciences  
VISTAS  
Pallavaram, Chennai-117.

To

The Registrar  
VISTAS  
Pallavaram, Chennai-117.

Through The Director, School of Pharmaceutical Sciences

Respected Sir

Subject: Requisition of permission for Internship/ Consultancy regarding.

This is to bring to your kind notice that 8 number of students of M.Sc I Year, Ethiraj College for Woman, Chennai approached our department to learn Phytochemical analysis of herbal drugs. In this regard we seek your permission to conduct training for 15 days (May 2<sup>nd</sup> to May 20<sup>th</sup> 2019) charging Rs. 2000/ per candidate (Total Rs. 16,000/-).

Thanking you

Yours Kindly

*Jant*  
26.4.19

(Dr. S. JAYAKUMARI)

yes  
VISTAS 29 4/19  
R

Forwarded  
to registrar

26.04.2019

FROM

THE STUDENTS OF ETHIRAJ COLLEGE,  
1<sup>st</sup> M.SC,  
DEPARTMENT OF PLANT BIOLOGY AND PLANT BIOTECHNOLOGY,  
ETHIRAJ COLLEGE FOR WOMEN,  
CHENNAI.

TO

THE REGISTRAR,  
VISTAS,  
PALLAVARAM, CHENNAI.

THROUGH

THE DIRECTOR,  
SCHOOL OF PHARMACEUTICAL SCIENCES,  
VISTAS,  
PALLAVARAM, CHENNAI.

RESPECTED SIR,

SUB: Requesting for internship in Phytochemical Analysis in the Department of Pharmacognosy, School of Pharmaceutical Sciences. - Reg

We request you to give us internship for 15 days from (May 2<sup>nd</sup> to May 20<sup>th</sup> 2019). As this internship will be useful for our research, we request you to grant permission for doing internship in the Department of Pharmacognosy, School of Pharmaceutical Sciences, VISTAS, Pallavaram, Chennai.

Thanking you,

Yours faithfully,

*Suganya*  
[S. SUGANYA]  
Students of 1<sup>st</sup> M.Sc.

Enclosure : List of Students  
Student bonafide letter,

*Forwarded  
to registrar*



REDMI NOTE 9 PRO  
AI QUAD CAMERA

*26/4/19*

From

Principal,  
Ethiraj College for Women,  
Chennai-600008

To

The Registrar,  
VISTAS,  
Vels University,  
Pailavattam,  
Chennai.

Respected Sir/Madam,

**Sub:** Requesting permission for our students to do their internship in your Institution during the month of May 2019- Reg.

Warm regards from Ethiraj College.

For I M.Sc., students, Internship Programme for a period of one month after second semester during the summer vacation is part of their curriculum. The following eight students of our I M.Sc. Plant Biology and Plant Biotechnology are interested in doing their internship in your esteemed institution. I request you to kindly grant permission and allow them to do the same.

**LIST OF STUDENTS:**

1. A.Akhila.
2. K.Aswathy
3. V.M.Gayathri
4. N.T.Malarvizhi
5. V.Oviya
6. R.Rashmi
7. S.Shynu Shajimon
8. D.Suganya

Thanking you

Yours faithfully,

Date: 29.4.2019

Place: Chennai-08

S. Uthamani.  
29/4/19.  
PRINCIPAL  
ETHIRAJ COLLEGE FOR WOMEN  
CHENNAI - 600 008







# VELS



INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)

(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)

**NAAC ACCREDITED**

PALLAVARAM - CHENNAI - INDIA

Student ID No. .... Date 30/4/19  
 Name of the Student Dr. S. Jayakumari  
HOD, Pharmacology  
 Course Internship

Year	Term	
I/II/III/IV/V/VI	I Term	II Term
PARTICULARS		Rs.
Tuition Fees .....		
Transport Fees .....		
Admission Fees .....		
Regn. Fee .....		
Insurance .....		
Other (Specify) <u>Internship</u> <u>Consultancy</u>		<u>16,000</u>
TOTAL		<u>16,000</u>

Amount in words (Rupees) Six thousand  
 ..... only)

Mode of Payment  Cash  Demand Draft  
 NEFT / IMPS

DD No. .... Date : .....

Amount Rs. ....

Branch .....

9176692229

Tel. No.

Signature of the Student / Remitter

[Signature]

For Office Use

Office Seal with Date

Authorised Signatory

**CASH RECEIVED**  
**30 APR 2019**

P. L. S.  
P. L. S. BOSS

**CIL yearly Report-May 2018 - May 2019**

S. No	Name of the Instrument/ Analysis	Name of the Institute/ Industry	No of analysis	Amount generated (Rs.)	Total (Rs.)
1	<b>Atomic Force Microscope (AFM)</b>	BharathInstitute	2	4000	<b>4000</b>
2	<b>BET Surface area Analysis</b>	VISTAS	18	27000	<b>143000</b>
		Anna univ.	3	7000	
		Alagappachettiargov college of engg, karaikudi	1	2500	
		University of Madras	8	14000	
		Anna univ, regional campus, trinuelveli	1	2500	
		Avinashilingam Institute, Coimbatore	1	2500	
		AVIT College, Paiyanoor	1	2500	
		SRM Institute	3	7500	
		CARE, Kelambakam	5	7500	
		Cargo placement solution pvt ltd	2	10000	
		MKU	2	5000	
		Sathiyabama Institute	5	9500	
		MCC, Chennai	7	10500	
		AmirtaVishwa Vidyapeetham, Coimbatore	4	10000	
		Govt. Arts college, thiruvannamal	2	3000	
		Kamaraj college of engg and tech, madurai	2	5000	
		NIT, Trichy	1	2500	
		ChikkaiahNaichker college, erode	4	10000	
		Loyola college	1	2000	
		SSN college	1	2500	
3	<b>DYNAMIC LIGHT SCATTERING (DLS)</b>	VISTAS	30	26800	<b>45800</b>
		SRM Institute	5	5000	

	<b>ANALYSIS</b>	AC tech, annauniv	3	3000	
		Stella Marries College	2	2000	
		Chemistry, Sathiyabama Institute	2	3000	
		KMS Health Care Centre, Chrompet	1	2000	
		Gov arts college for men, Nandanam	4	4000	
		VISTAS	58	76900	<b>228100</b>
4	<b>FIELD EMISSION SCANNING ELECTRON MICROSCOPE (FESEM) WITH ENERGY DISPERSIVE X-RAY SPECTROMETER (EDS)</b>	AC tech, Anna univ	3	4500	
		AMET	2	3000	
		Anna University	7	10500	
		AVIT College, Paiyanoor	3	6000	
		CARE, Kelambakam	5	7500	
		CLRI	3	4500	
		DiferentHiarPvt Ltd	1	3000	
		Hindustan University	2	3000	
		Kalalingalm Academy of Research and Education	2	3500	
		Pachyappan College	1	2000	
		Sathyabhama University	2	3000	
		SaveethaUniv	1	2000	
		SPNB VaishnavClg	5	6000	
		SreeSastha institute	1	1500	
		SSN college	1	1500	
		Stella Marries College	2	4000	
		Univ. of Madras	62	84500	
		WCC	1	1200	
5	<b>ATTENUATED TOTAL REFLECTANCE FOURIER TRANSFORM INFRA-RED</b>	VISTAS	23	7150	<b>13450</b>
		TBML College, Porayar	4	1600	
		Cargo placement solution pvt ltd	1	800	

	<b>SPECTROMETER (ATR-FTIR)</b>	MCC, Chennai	13	3900	
6	<b>HIGH PERFORMANCE THIN LAYER CHROMOTOGRAPHY (HPTLC)</b>	VISTAS	1	2000	<b>2000</b>
7	<b>CONFOCAL RAMAN MICROSCOPE IMAGING/SPECTROMETER</b>	VISTAS	4	6000	<b>6000</b>
8	<b>SIMULTANEOUS THERMOGRAVIMETER/DIFFERENTIAL SCANNING CALORIMETER (TGA-DSC)</b>	VISTAS	3	3000	<b>6000</b>
		SRM Institute	1	1500	
		Anna University	1	1500	
9	<b>UV-VIS SPECTROPHOTOMETER</b>	VISTAS	3		<b>1200</b>
10	<b>POWDER X-RAY DIFFRACTOMETER (P-XRD)</b>	TBML College, Porayar	4	1200	<b>80900</b>
		VISTAS	66	26100	
		AC tech, annauniv	3	1500	
		Amirtha Univ. Coimbatore	2	1000	
		Anna University	2	1000	
		AVIT College, Paiyanoor	1	500	
		Bharath Univ.	3	1500	
		KMS Health Care Centre, Chrompet	1	1000	
		L.N. Govt. College, Ponnery	5	2500	
		MCC, Chennai	6	2400	
NIT, Trichy	6	3000			
Nuray Chemical Pvt Ltd, Tiruvallure	13	13000			
Pachiyappan College	1	500			

	Sathyabama Institute	5	2500	
	Sreevidyanikethan college of pharmacy	1	500	
	TBML College, Porayar	4	2000	
	University of Madras	50	23400	
	WCC	1	500	
	<b>Total</b>	<b>509</b>	<b>5,30,450</b>	<b>5,30,450</b>

<b><u>CIL yearly Report- June 2019 - March 2020</u></b>					
<b>S. No</b>	<b>Name of the Instrument/ Analysis</b>	<b>Name of the Institute/ Industry</b>	<b>No of analysis</b>	<b>Amount generated (Rs.)</b>	<b>Total (Rs.)</b>



## **School of Engineering**

### **Department of Biomedical Engineering**

#### **Real Time Consultancy Project Details**

1. Title of the Consultancy Proposal : Drone – An Assistant for the Elderly
2. Industry / Institute offering the Proposal: Barola Technologies, T nagar ,Chennai
3. Principal Investigator / Co Investigator: Dr.E.N.Ganesh,Dean, School of Engineering  
Ms.R.J.Hemalatha, HOD,Assistant Professor,
4. Budget (Rs) :6000
5. Duration : 2 Months  
Starting Date: 1/11/2018  
Expecting Date of Completion: 30/12/2018
6. Objectives:
  - 1.To design and calibrate the required sensor
  2. To design the medical drone
  3. To interface the sensor with the drone and the GSM module
  4. To Test the developed medical drone
7. Status: Completed

Signature of PI



## **School of Engineering**

### **Department of Biomedical Engineering**

#### **Real Time Consultancy Project Details**

1. Title of the Consultancy Proposal : Optical Sensor to Detect Blood Flow in IV set
2. Industry / Institute offering the Proposal: Biovision Medical Systems, Chennai
3. Principal Investigator / Co Investigator: Ms.R.J.Hemalatha, HOD, Assistant Professor,
4. Budget (Rs) :2000

5. Duration : 2 Months

Starting Date: 1/02/2019

Expecting Date of Completion: 30/03/2019

6. Objectives:
  - 1.To design and calibrate optical sensor.
  - 2.To design the motor unit and control unit
  - 3.To design the display unit
  - 4.To test the developed optical sensor for different subject
7. Status: completed

Signature of PI



**BUREAU OF PHARMA PUBLIC SECTOR UNDERTAKINGS OF INDIA**  
(Set up under the Department of Pharmaceuticals, Government of India)

NO-BPPI/06/IND15/TN581/2017 PMBJK

11 Jan 2018

To,

**Vels Institute of Sciences Technology and Advanced Studies (VISTAS)**  
**Mr. M. A shokkumak**  
School of Pharmaceutical Sciences Velan Nagar, DV Vaithiyalingam Road,  
Pallayaram Pallayaram Tamilnadu 600117.

**Subject: Final approval for Opening of "Pradhan Mantri Bhartiya Janaushadhi Kendra"**

**Reference: Application for opening of 'Pradhan Mantri Bhartiya Janaushadhi Kendra' at School of Pharmaceutical Sciences Velan Nagar, DV Vaithiyalingam Road, Pallayaram.**

This has reference to your application for opening of new "Pradhan Mantri Bhartiya Janaushadhi Kendra" at **School of Pharmaceutical Sciences Velan Nagar, DV Vaithiyalingam Road, Pallayaram.**

We thank you for your initiative & we are pleased to offer you final approval for opening of Pradhan Mantri Janaushadhi Kendra.

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| 4. Ms Santhosheema Ravi | PhNo: +91 8939654883 (TamilNadu & Puducherry) |

With warm regards,

**(Biplab Chatterjee)**  
CEO, BPPI



FILE NO. TAR/2018/001114  
**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**  
(A statutory body of the Department of Science & Technology, government of India)

5 & 5A, Lower Ground Floor  
Vasant Square Mall  
Plot No. A, Community Centre  
Sector-B, Pocket-5, Vasant Kunj  
New Delhi-110070

Dated: 20-May-2019

**ORDER**

Subject: Financial Sanction under Teachers Associateship for Research Excellence (TARE) to **Ms. KEERTHANA ARULDOSS, VELS Institute Of Science, Technology & Advanced Studies (VISTAS), Velan Nagar, Pallavaram, Meenambakkam, TAMIL NADU-600043**- under the mentorship of Dr.G.Saraswathy, at **Central Leather Research Institute Sardar Patel Road, Adyar, Chennai - 600020**- Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned grant at a total cost of **Rs. 18,30,000/-** (Rs. Eighteen Lakh Thirty Thousand **Only**) for a duration of 36 months.

The date of start of the project will be 28 March, 2019. The items of expenditure for which the total allocation of **Rs. 18,30,000/-** has been approved are given below:

The following budget is proposed for

**VELS Institute Of Science, Technology & Advanced Studies (VISTAS), Velan Nagar, Pallavaram, Meenambakkam, TAMIL NADU-600043 (Parent)**

Sl. No.	Budget Head	Amount
1.	Fellowship	Rs. 0 ( @0/- per month (consolidated))
2.	Research Grant	Rs. 2,50,000/- per annum
3.	Overheads	Rs. 25,000/- per annum

**Central Leather Research Institute Sardar Patel Road, Adyar, Chennai - 600020 (Host)**

Sl. No.	Budget Head	Amount
1.	Fellowship	Rs. 60,000 ( on completion of 90 days mandatory attendance in the host institute every year)
2.	Research Grant	Rs. 2,50,000/- per annum
3.	Overheads	Rs. 25,000/- per annum

2. Sanction of the **SERB** is also accorded to the payment of **Rs. 2,75,000/-** (Rupees Two Lakh Seventy Five Thousand only) to **VELS Institute Of Science, Technology & Advanced Studies (VISTAS), Velan Nagar, Pallavaram, Meenambakkam, Rs. 3,35,000/-** (Rupees Three Lakh Thirty Five Thousand only) to **Central Leather Research Institute Sardar Patel Road, Adyar, Chennai - 600020** being the first installment of the grant for the year 2019-2020 for implementation of the said research project.

3. The expenditure involved is debitable to

**Fund for Science & Engineering Research (FSER)**

**This release is being made under Teachers Associateship For Research Excellence (TARE). (Mechanical & Manufacturing Engineering & Robotics)**

4. The Sanction has been issued with the approval of the competent authority vide Diary No. **SERB/F/612/2019-2020** dated 17 May, 2019

5. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at website ([www.serb.gov.in](http://www.serb.gov.in)).

6. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.



7. As per rule 211 of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institute is called upon to do so.

8. The release amount of **Rs. 2,75,000/-** (Rupees Two Lakh Seventy Five Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES
Account Number	911010014364240
Bank Name & Branch	AXIS BANK MADIPAKAM, CHENNAI, NO-2, MEDAVAKKAM HIGH ROAD, MADIPAKKAM, CHENNAI-91
IFSC/RTGS Code	UTIB0000083
Email address of PI	keerthana0792@gmail.com
Email id of A/C Holder	registrar@velsuniv.ac.in
Email address of concerned officer	ms_tare@serbonline.in

The release amount of **Rs. 3,35,000/-** (Rupees Three Lakh Thirty Five Thousand only) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	CENTRAL LEATHER RESEARCH INSTITUTE
Account Number	30225127043
Bank Name & Branch	STATE BANK OF INDIA SME BRANCH, STATE BANK OF INDIA, NO.5 1ST CROSS ST, KASTURBA NAGAR, ADYAR, CHENNAI-600020
IFSC/RTGS Code	SBIN0013361
Email address of PI	keerthana0792@gmail.com
Email id of A/C Holder	director@clri.res.in
Email address of concerned officer	ms_tare@serbonline.in

9. Both the institutes will furnish Utilization certificate (UCs) financial year wise to the SERB and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

10. The institute will maintain separate audited accounts for the fellowship. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.

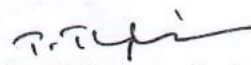
11. The File no. **TAR/2018/001114** may also be mentioned in all research communications arising from the above project with due acknowledgement of **SERB**.

12. As this is the first grant for the fellowship, no previous U/C is required.

13. The institute may refund any unspent balance to SERB by means of a Demand Draft favoring "**FUND FOR SCIENCE AND ENGINEERING RESEARCH**" payable at New Delhi.

14. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.


15. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.

  
(Dr. T Thangaradjou)  
Scientist E  
ms\_tare@serbonline.in

To,  
Under Secretary  
SERB, New Delhi

Copy forwarded for information and necessary action to: -

1.	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB , New Delhi.
3.	File Copy
4.	<p>(i) Ms. KEERTHANA ARULDOSS Biomedical Engineering VELS Institute of Science, Technology &amp; Advanced Studies (VISTAS) , Velan Nagar, Pallavaram, Meenambakkam, TAMIL NADU-600043 Email: keerthana0792@gmail.com Mobile: 919840194837</p> <p>(ii) Dr.G.Saraswathy Central Leather Research Institute Sardar Patel Road, Adyar, Chennai - 600020</p> <p>(Start date of the project may be intimated by name to the undersigned. For guidance, terms &amp; Conditions etc. Please visit <a href="http://www.serb.gov.in">www.serb.gov.in</a>.)</p>
5.	<p>(i) REGISTRAR, VELS Institute Of Science, Technology &amp; Advanced Studies (VISTAS), Velan Nagar, Pallavaram, Meenambakkam</p> <p>(ii) THE DIRECTOR Central Leather Research Institute Sardar Patel Road, Adyar, Chennai - 600020</p> <p>(Receipt of Grant may be intimated by name to the undersigned)</p>

  
(Dr. T Thangaradjou)  
Scientist E  
ms\_tare@serbonline.in





# VELS



INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)

(DEEMED TO BE UNIVERSITY Estd. u/s 3 OF THE UGC ACT, 1956)

**NAAC ACCREDITED**

PALLAVARAM - CHENNAI - INDIA

## **NON-INVASIVE DIAGNOSIS OF GASTROPARESIS IN DIABETIC PATIENTS USING HR-MEGG**

**VELS SEED GRANT MINI PROJECT REPORT SUBMISSION**

**BY**

**R.CHANDRASEKARAN**

**ASSISTANT PROFESSOR**

**DEPARTMENT OF BIOMEDICAL ENGINEERING**

**SCHOOL OF ENGINEERING**

**VELS INSTITUTE OF SCIENCE TECHNOLOGY AND ADVANCED STUDIES**

**DEPARTMENT OF BIOMEDICAL ENGINEERING**

**SCHOOL OF ENGINEERING**

**VISTAS 2018**

- |     |                             |  |
|-----|-----------------------------|--|
| 1.a | <b>Title of the project</b> | Non-Invasive Diagnosis of Gastroparesis in Diabetic Patients using HR-MEGG   |
| b   | <b>Name of the Faculty</b>  | R. Chandrasekaran  |
|     | <b>Designation</b>          | Assistant Professor  |
|     | <b>Department</b>           | Biomedical Engineering   |
|     | <b>School</b>               | School of Engineering  |
|     |                             |  |
| 2.a | <b>Budget Sanctioned</b>    | 1,00,000 Lakh Rupees   |
| b   | <b>Budget utilized</b>      | 1,00,000 Lakh Rupees   |
|     |                             |  |
| 3   | <b>Objectives</b>           | The main objective of the project is to design non-invasive high resolution Multichannel Electrogastrography for acquisition of gastric signal. Due to the failure of gastric pacemaker the food becomes stable in the stomach. This project aims at development of high resolution, low cost diagnosis of gastroparesis condition in diabetic patient using MEGG. |

#### 4. Description of project

The Gastroparesis condition occurs commonly to the diabetic subjects due to imbalanced ketogenic diet. The gastroparesis condition is investigated using Electrogastrography and gastric emptying test. The system for acquiring the Electrogastrography is costly and it is not installed in all hospitals. Only certain hospitals with research facilities have the Electrogastrography. The Subject is asked to undergo fasting for 2 hours. The Multichannel Electrogastrography is acquired for period of 480 seconds at fasting state and at after one hour of eating at postprandial state. Then the subject is given complex food. After half an hour of complex food intake the MEGG is acquired to detect the

gastroparesis condition in the subjects. The gastroparesis can be easily identified using the gastric slow wave cycles per minute.

#### **4.1 ELECTROGASTROGRAPHY**

Electrogastrography refers to the methods of recording electrogastrogram (EGGs). EGG rhythms reflect the gastric pacesetter potentials or slow waves of the stomach. Pacesetter potentials are crucial electrical depolarization and re polarization waves because they control the timing and propagation velocity of gastric peristaltic contractions. Gastric peristaltic contractions are responsible for mixing and emptying the foodstuffs that are ingested throughout the day. In humans, the gastric pacesetter potential is approximately 3 cycles per minute (cpm). Thus, the 3-cpm EGG signals are non-invasive recordings of the electrical activity of the stomach in health. Gastric dysrhythmias are abnormalities of gastric myoelectrical activity. Abnormally fast electrical rhythm are termed tachygastric, and abnormally slow rhythms are described as bradygastric. Gastric dysrhythmias are frequently present in patients with functional dyspepsia, unexplained nausea, and diabetic, idiopathic, and postsurgical Gastroparesis. Furthermore, correction of gastric dysrhythmias with drug therapies or electrical stimulation is associated with improvement in nausea and vomiting. In many respects, the recording of the EGG is analogous to the recording of electrocardiogram. Thus, there has been increasing interest in Electrogastrography and in the diagnostic value of EGG patterns.

#### **4.2 PROPERTIES OF ELECTRICAL RHYTHMICITY IN THE STOMACH**

Gastric peristaltic contractions are the basis for emptying of solids from the stomach. These events begin in the mid to high corpus region, develop into a ring around the stomach, and spread down the length of the stomach to the pylorus. The pressure wave resulting from gastric peristalsis pushes the contents of the stomach towards pyloric sphincter, but a nearly simultaneous contraction of the ring of muscle in the pyloric canal and the terminal antrum ultimately forces much of the food in the retrograde direction, toward the body of the

stomach. Repetitive peristaltic contractions (e.g., in the human these events occur about 3 times per minute), over a period of time, reduces ingested foods to small particles. The action of gastric peristalsis in the distal stomach facilitates emptying and the reduced particle diameter aids in chemical digestion of foods in the small intestine. Patho physiological conditions that disrupt or disorganize gastric peristalsis can impair or delay normal gastric emptying. Gastric peristaltic contractions result from depolarization of the plasma membranes of smooth muscle cells. For many years it has been known that gastric muscles display periodic (or rhythmic) electrical activity in which membrane potential oscillates between negative potentials and more depolarized levels.

The oscillations in membrane potential are known as electrical Slow waves are generated within the tunica muscularis of the proximal corpus along the greater curvature of the stomach, and these events spread around the circumference and down the stomach to the pylorus. Studies have shown that electrical slow waves are generated by specialized pacemaker cells, known as interstitial cells of Cajal (ICCs). The main pacemaker ICCs in the stomach form a dense network of electrically coupled cells between the circular and longitudinal muscle layers of the corpus and antrum. These cells generate and actively propagate slow waves throughout the musculature of the distal stomach. Both circular and longitudinal smooth muscle cells are electrically coupled to the network of ICCs, and electrical slow waves conduct to the smooth muscle cells via these connections. Smooth muscle cells do not possess the means to generate or actively propagate slow waves, but the depolarization caused by slow waves causes activation of a variety of voltage-dependent ion channels in the smooth muscle cell membrane.

### **4.3 JUVENILE DIABETES**

Diabetes mellitus type 1 (also known as type 1 diabetes) is a form of diabetes mellitus in which not enough insulin is produced. The lack of insulin results in high blood sugar levels. The classical symptoms are frequent urination, increased thirst, increased hunger, and weight loss. Additional symptoms may include blurry vision, feeling tired, and poor healing. Symptoms typically develop over a short period of time. The cause of type 1 diabetes is unknown. It however is believed to involve a combination of genetic and environmental factors. Risk factors include having a family member with the condition The underlying mechanism involves an autoimmune destruction of the insulin-producing beta cells in the pancreas. Diabetes is diagnosed by testing the level of sugar or A1C in the blood. Type-1 diabetes may be distinguished from type-2 by autoantibody testing. There is no way to

prevent type-1 diabetes. Treatment with insulin is typically required for survival. Insulin therapy is usually given by injection just under the skin but can also be delivered by an insulin pump. A diabetic diet and exercise are an important part of management. Untreated, diabetes can cause many complications. Complications of relatively rapid onset include diabetic ketoacidosis and non ketotic hyper osmolar coma. Long-term complications include heart disease, stroke, kidney failure, foot ulcers and damage to the eyes. Furthermore, complications may arise from low blood sugar caused by excessive insulin treatment. In this project type 1 diabetic subjects are tested because the type 1 diabetic subjects are often get influenced by the gastroparesis condition due to poor ketogenic diet.

#### **4.4 DIABETIC GASTROPARESIS**

Gastroparesis is a syndrome characterized by delayed gastric emptying in the absence of mechanical obstruction of the stomach. The cardinal symptoms include Postprandial fullness (early satiety), nausea, vomiting, and bloating. In one tertiary Referral series, diabetes accounted for almost one third of cases of Gastroparesis. Other causes include previous gastric surgery and neurologic and rheumatologic Disorders many cases are idiopathic (possibly occurring after a viral infection). Patients with diabetes in whom Gastroparesis develops often have had diabetes For at least 10 years and typically have retinopathy, neuropathy, and nephropathy. Diabetic Gastroparesis may cause severe symptoms and result in nutritional compromise, impaired glucose control, and a poor quality of life, independently of other factors such as age, tobacco use, alcohol use, or type of diabetes.

#### **4.5 NORMAL GASTRIC EMPTYING**

The proximal stomach serves as the reservoir of food, and the distal stomach as the grinder. The physical nature, particle size, and fat and caloric content of food determine its emptying rate. Non-nutrient liquids empty rapidly the rate is fastest when there is a large volume. If there are increased calories in the liquid phase of the meal, emptying is relatively constant over time with a maximum rate of 200 kcal per hour. Solids are initially retained in the stomach and undergo churning while antral contractions propel particles toward the closed pylorus. Food particles are emptied once they have been broken down to approximately 2 min diameter. Thus, solids empty during two phases over 3 to 4 hours an initial lag period (during which retention occurs), followed by a phase of relatively constant emptying. Glucose-regulating hormones are released when food arrives in different regions of the gut.



Glucagon and incretins (e.g., amylin and glucagon-like peptide 1) retard gastric emptying, allowing for the delivery of food at a rate that facilitates digestion and controls postprandial glycemia.

#### **4.6 IMPAIRED GASTRIC EMPTYING IN PATIENTS WITH DIABETES**

In patients with diabetic Gastroparesis, mechanisms are deranged, largely owing to neuropathy affecting the vagus, reductions in the numbers of intrinsic inhibitory neurons that are critical for motor coordination and numbers of pacemaker cells (the interstitial cells of Cajal), and hormonal changes (e.g., increased glucagon levels). Chronically elevated blood glucose levels increase the risk of diabetic neuropathy. Increased glycated hemoglobin levels are associated with increased rates of gastrointestinal symptoms. Acute hyperglycemia also may contribute to motor dysfunction in patients with diabetes in experiments, the time at which half of the consumed solids are emptied from the stomach (the half-time) is approximately 15 minutes longer in patients with hyperglycemia (blood glucose levels exceeding 180 mg per decilitre (10 mmol per liter) than in subjects with euglycemia. Neurohormonal dysfunction and hyperglycemia reduce the frequency of antral contractions (needed to churn food) in patients with diabetes. In contrast, the emptying of liquids is usually normal in patients with hyperglycemia. Delayed gastric emptying may be caused or exacerbated by medications for diabetes, including amylin analogues (e.g., pramlintide) and glucagon like peptide (e.g., exenatide). Delayed gastric emptying has direct effects on glucose metabolism, in addition to being one means of reducing the degree of postprandial hyperglycemia.<sup>19-22</sup> In a clinical trial of exenatide, nausea occurred in 57% of patients, and vomiting occurred in 17% of patients. Nausea or other gastrointestinal symptoms were identified as the reason for withdrawal from the study in 6% of patients. Co-existing psychiatric disorders may also contribute to symptoms of Gastroparesis. In a cross-sectional study, increased states of anxiety, depression and neuroticism were associated with an approximate doubling of the prevalence of gastrointestinal symptoms in patients with diabetes. However, it is unclear whether psychiatric symptoms cause the gastrointestinal complaints or result from them.

### **5. METHODOLOGY OF EXECUTION OF PROJECT**

#### **5.1 ELECTRODE PLACEMENT**

High-quality, fresh, disposable electrodes such as Ag/Agcl is used for recording of electrogastrogram (EGG). This disposable Ag/Agcl electrodes provides direct current offset voltage, combined offset instability and internal noise, alternating current impedance, defibrillation overload recovery, bias current tolerance. Our system consists of four channels for the electric signals along with one channel, to filter out artefacts such as muscle movements. The signal channels were positioned at the abdominal surface in projection above the larger curvature of the stomach.

- Channel 1 over the fundic region.
- Channel 2 over the cardia region.
- Channel 3 over the pylorus region.
- Channel 4 over the antral region.

EGG recording was always best in channel 2 (located above the upper antrum), data from this channel were used for further evaluation. To avoid motion artefacts, which necessitate cleaning of the EGG signal, volunteers were asked to lie without any movement on a diagnostic bed during the whole recording.

## 5.2 FILTERING AND SMOOTHENING

The Digital FIR Band pass filter is applied to filter of frequency 0.05Hz to 0.5 Hz. The Filtered Signal is then smoothened. After Filtering and Smoothening the features are extracted from the gastric signal.

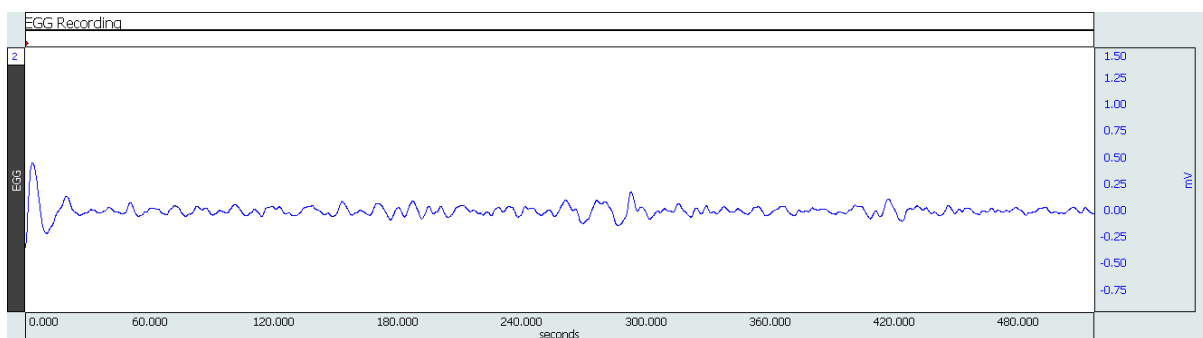


Fig1. Filtered EGG signal of Diabetic Subject at Fasting state

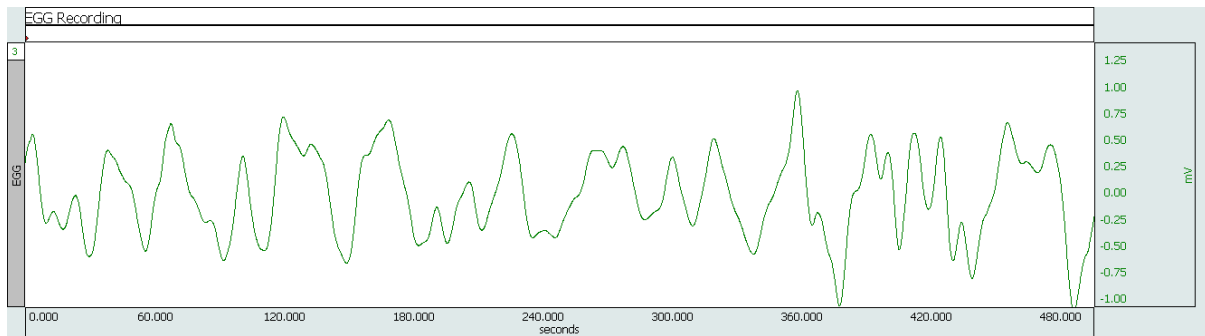


Fig2.Smoothened EGG signal of Healthy subject at postprandial state

### 5.3 FEATURE EXTRACTION

The time domain features are extracted from the signal. The features like Peak to peak amplitude, Max and Min Amplitude, Mean, Median, Standard Deviation, Skew are measured.

### 5.4 FILTER RESPONSE

The Filter response is plotted as waveform and its magnitude is observed.

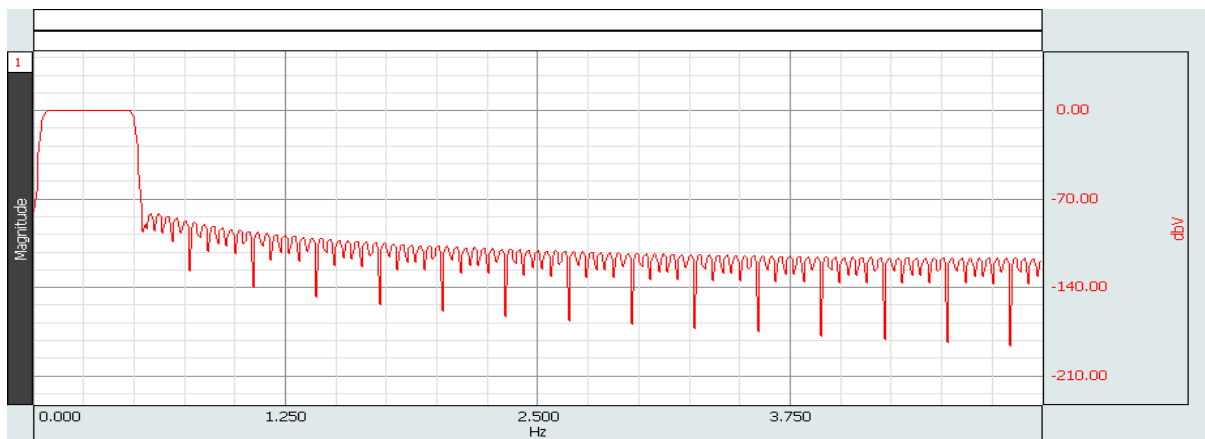
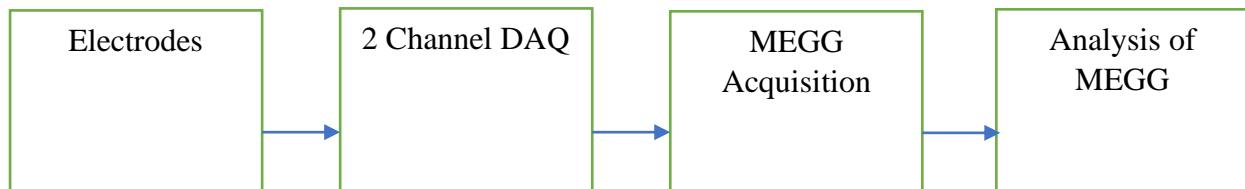


Fig3.FIR Band pass filter response

### 5.5 BLOCK DIAGRAM



The Patient Preparation plays important role in signal Acquisition. The subject is asked to undergo fasting for the period of 2 hrs. The healthy subjects and Diabetic subjects both are asked to undergo the fasting for 2 hrs. The Healthy subjects are at the age of average 19 to 21 years and Diabetic Subjects are at the age of 40-42 years. The Multi-Channel Electrogastragram for the Healthy and Diabetic Subjects were acquired using the 2 channel DAQ of the Biopac Signal Acquisition kit. The Electrodes ( Surface Electrodes) are placed at

exact location. Before the placement of the electrodes the region of electrode placement are marked with the marker. The Fasting State Gastric Signal is acquired.

The Postprandial state involves the acquisition of the gastric signal with complex food given to the subjects. The subjects were given complex food substances. The food menu includes liquid, solid and semi-solid foods. The subjects were given Milk (100ml) (42 calories), Bread (4 slices) (265 calories) and Milk shake(100ml) (112 calories). The food (+/- 400 calories) is in-taken by the subjects. After one hour of the food intake by the subjects the MEGG signal is acquired from the subjects. The time period of acquisition of the signal is 480seconds for both fasting as well as postprandial states.

The Gastric Signal acquired from the subjects after filtering exhibits the gastric slow wave. The gastric slow wave is measured as cycles per minute (CPM). The normal gastric slow wave of healthy subject is 3-4cpm. The gastric slow of diabetic subjects having gastroparesis condition have 4-8cpm.

## 6. RESULTS ACHIEVED

The MEGG signal for healthy subjects as well as diabetic subjects were acquired in both fasting as well as postprandial state. The acquired signal is digitally filtered using the FIR Band pass filter of frequency 0.05 – 0.50 Hz. The Filtered signal is then smoothed of 100 sampling frequency. The smoothed signal is observed for measuring the gastric slow wave. The gastric slow wave of the healthy subjects used in this project have 2-4cpm, but the Diabetic subjects consists of 2-3cpm and at some instant of time the slow wave is not generated which means the gastric pacemaker does not produces the pulsed signal to grind the stomach. The food was stable without grinding in postprandial state. The fasting state and postprandial state of the healthy subject gastric slow wave is found to be normal but the gastric slow wave of the diabetic subjects is found to be abnormal. The gastric signal of the diabetic subjects exhibits the gastroparesis condition at initial stages. The various time domain features of the signal are extracted and analysed. The filtering response of the filter is also plotted. The power spectral density and Fast Fourier Transform of the signal is also obtained and plotted to check the line length feature of signal for exact location of dominant frequency regions during stomach grinding.

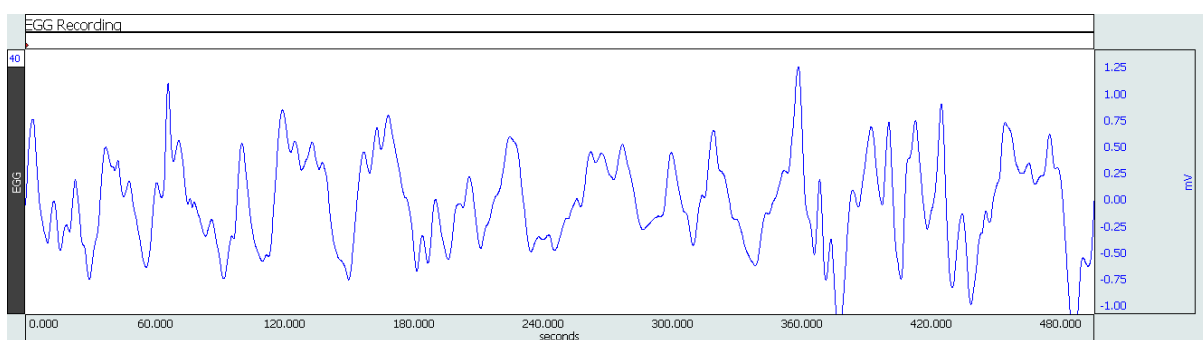


Fig4. EGG signal of Healthy Subject at Postprandial State

The Above Figure clearly shows the gastric signal of healthy subjects with 3-4 cycles gastric slow wave per minute.

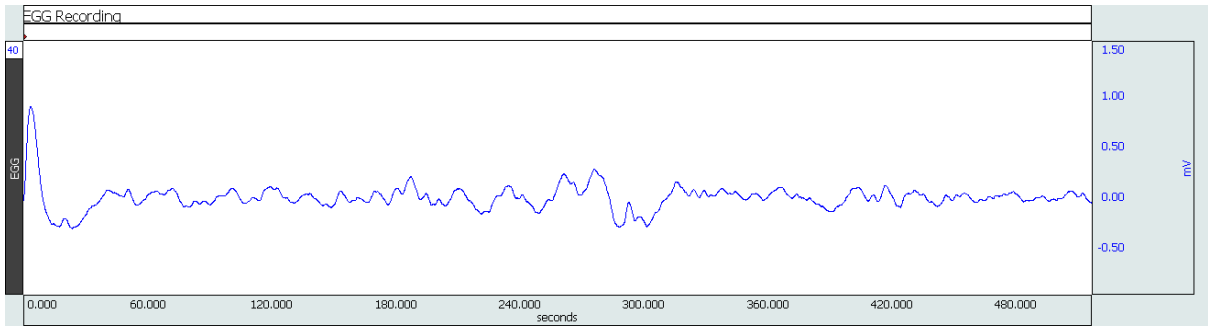


Fig5.Diabetic EGG signal Fasting state

The Above figure clearly shows that the diabetic subjects have low amplitude level of EGG signal and abnormal EGG gastric slow wave. The pacemaker signal is not properly received to the cajal cells at the period of 300-360 seconds on recording, hence low level signal is obtained at fasting state.

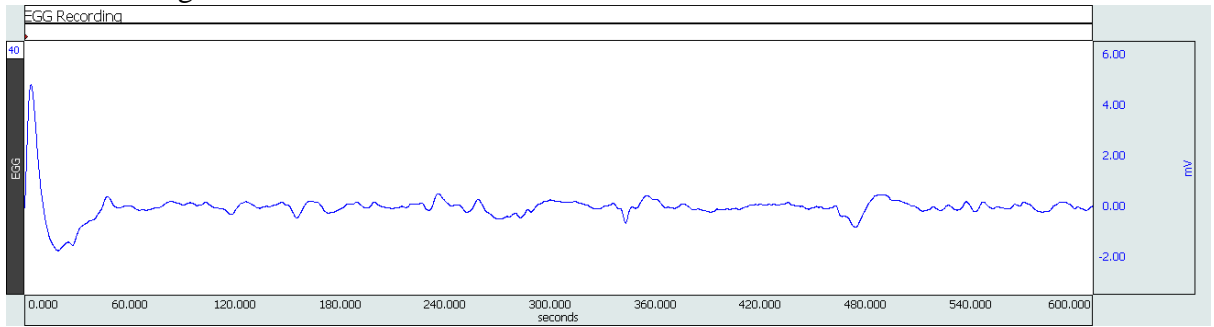


Fig6.Diabetic EGG at Postprandial state

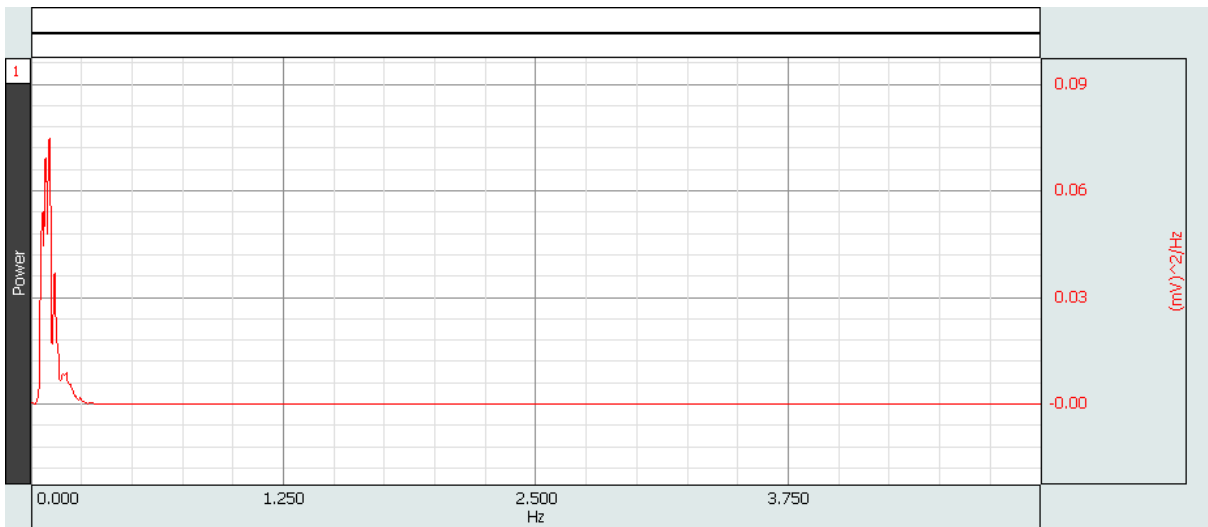


Fig7.Power spectral density for hamming window of Healthy EGG signal at postprandial state

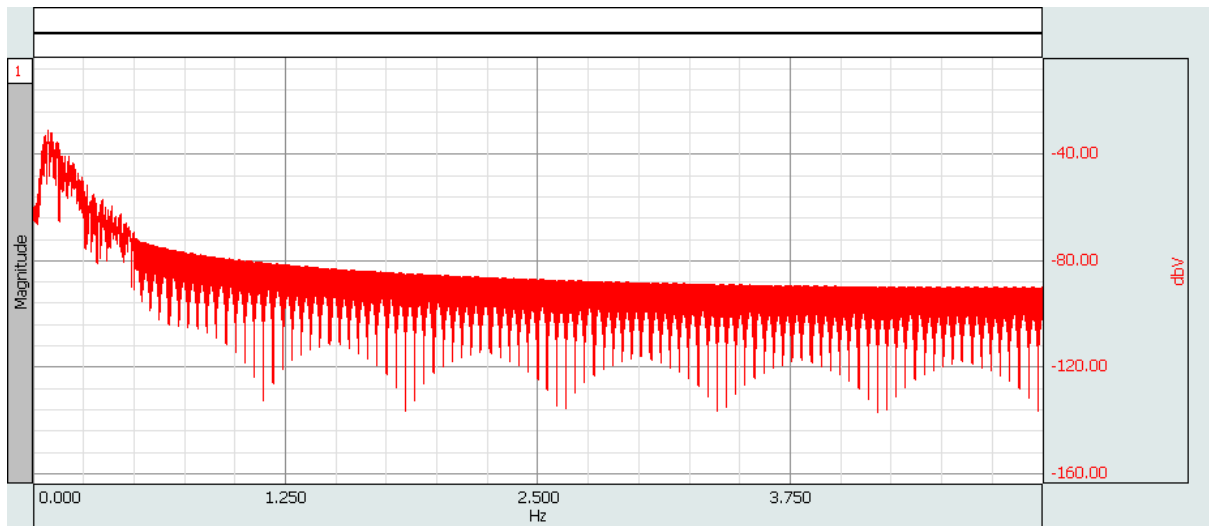


Fig8.Fast Fourier Transform of healthy EGG signal at postprandial state

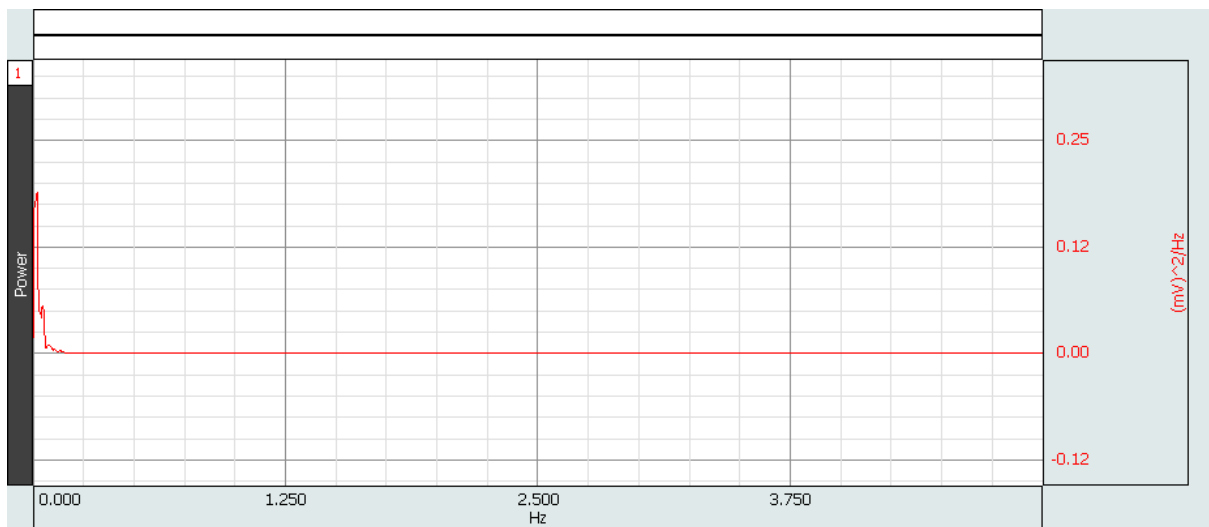


Fig9.Power Spectral Density of Diabetic subject at postprandial state

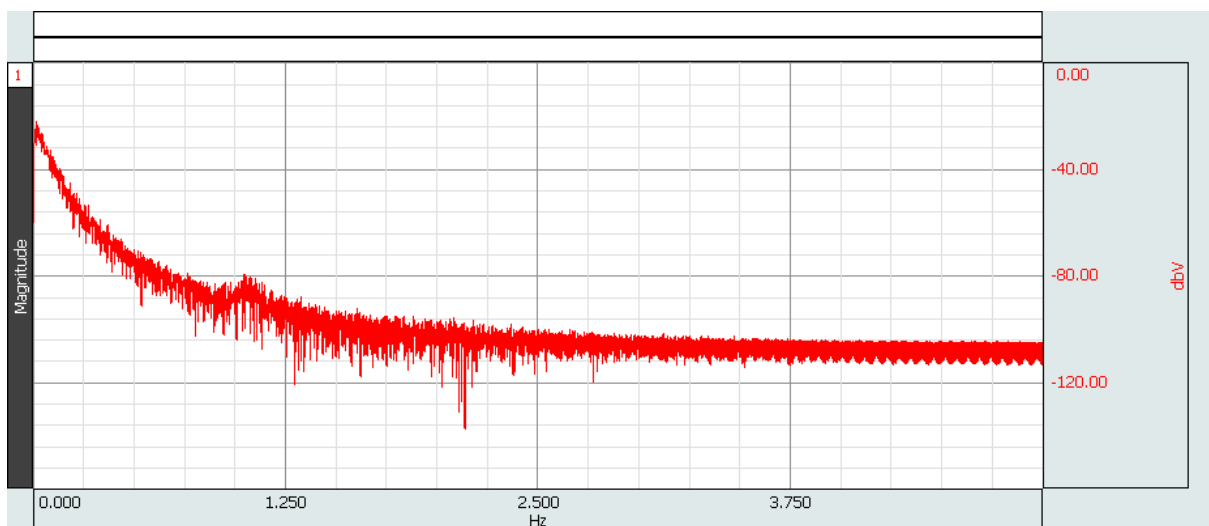


Fig10.Fast Fourier Transform of Diabetic Subject at Postprandial state

The Above figure clearly describes about the postprandial state of EGG signal. In this signal the gastric slow waves are not normal and more quivering of stomach pacemaker can be seen in this signal. The prolonged condition of this abnormal quivering leads to the gastroparesis.

The initial stage of the gastroparesis is abnormal gastric slow waves and random quivering of stomach pacemaker. The gastric slow wave cycles per minute is shown in the below table 1.

S/No	Subject	Gastric Slow wave (CPM) Fasting state	Gastric Slow wave (CPM) Postprandial state
1	Healthy	3-4	3-4
2	Healthy	3-4	3-4
3	Healthy	3-4	3-4
4	Healthy	3-4	3-4
5	Healthy	3-4	3-4
6	Healthy	3-4	3-4
7	Healthy	3-4	3-4
8	Healthy	3-4	3-4
9	Diabetic	2-3	irregular
10	Diabetic	2-3	Irregular

**Table 1. Gastric Slow wave of healthy and diabetic subjects**

S/No	Subject	Gender	P-P	Max	Min	Mean	Median	Standard Deviation	skew
1	Healthy	M	1.19mv	0.892mv	-0.303mv	0.008mv	0.004mv	0.276mv	1.769
2	Healthy	M	3.28mv	1.568mv	-1.630mv	0.007mv	0.018mv	0.428mv	1.328
3	Healthy	M	6.53mv	4.81mv	-1.428mv	0.103mv	0.085mv	0.57mv	3.745
4	Healthy	M	1.35mv	0.55mv	-0.72mv	0.002mv	0.04mv	0.126mv	1.156
5	Healthy	M	1.64mv	1.11mv	-0.532mv	0.006mv	0.02mv	0.26mv	1.445
6	Healthy	M	2.20mv	1.58mv	-0.303mv	0.004mv	0.002mv	0.250mv	1.335
7	Healthy	M	4.28mv	6.238mv	-1.630mv	0.007mv	0.018mv	0.428mv	1.328
8	Healthy	M	7.23mv	5.22mv	-1.002mv	1.103mv	0.505mv	0.317mv	3.548
9	Diabetic	M	0.35mv	0.55mv	-0.72mv	0.002mv	0.04mv	0.126mv	1.16
10	Diabetic	M	1.32mv	1.16mv	-0.42mv	0.006mv	0.02mv	0.26mv	1.245

**Table2. Time Domain Analysis of MEGG signal at Fasting State**

S/No	Subject	Gender	P-P	Max	Min	Mean	Median	Standard Deviation	skew
1	Healthy	M	2.49mv	1.262mv	-1.23mv	0.039mv	0.012mv	0.422mv	0.094
2	Healthy	M	3.19mv	1.56mv	-1.63mv	0.059mv	0.016mv	0.428mv	0.133
3	Healthy	M	3.08mv	1.52mv	-0.25mv	0.039mv	0.012mv	0.422mv	0.099
4	Healthy	M	3.16mv	1.56mv	-1.63mv	0.048mv	0.016mv	0.422mv	0.144
5	Healthy	M	3.11mv	1.562mv	-1.63mv	0.02mv	0.012mv	0.422mv	0.047
6	Healthy	M	3.19mv	1.56mv	-1.63mv	0.049mv	0.016mv	0.358mv	0.177
7	Healthy	M	3.18mv	1.862mv	-1.30mv	0.029mv	0.012mv	0.352mv	0.122
8	Healthy	M	3.19mv	1.76mv	-1.55mv	0.029mv	0.016mv	0.478mv	0.133
9	Diabetic	M	5.26mv	2.77mv	-2.52mv	0.024mv	0.052mv	0.437mv	0.620
10	Diabetic	M	3.167mv	2.44mv	-0.72mv	0.022mv	0.026mv	0.266mv	3.810

**Table3. Time Domain Analysis of MEGG signal at Postprandial State**

## **7. FUTURE SCOPE**

The Time domain features of the signal are acquired and analysed. In frequency domain the power spectral density and Fast Fourier Transform is obtained. In future various frequency and time domain features can be extracted from the signal and more unknown parameters of the signal can be identified. The classifiers can be included in future to classify the signal abnormalities. The project can also be extended by acquiring gastric signal with respect to various food substances and can estimate the digestion rate for each food substances and gastric emptying rate can be estimated.

**8.a Title of the Paper Prepared:** Acquisition and Analysis of Electrogastrogram for Complex foods.

**b.Name of the Journal:** Journal of Clinical and Diagnostic Research.

**c. Indexing of the Journal:** Scopus / Web of Science.



3 PP cell  
manuscript of Telecommunication project - security related  
1239

MEMORANDUM OF UNDERSTANDING (MOU)

FOR

LOW-COST HOME SECURITY SYSTEM

BETWEEN

VELS UNIVERSITY

AND

M/S K SECURITY'S



11 JAN 2014



தமிழ்நாடு தமில்நாடு TAMIL NADU

020161

11 NOV 2013

99AA 131834

S. KESAVARAJ

Stamp Vendor

19, G.S.T. Road, Pallavaram, Ch-43.  
LNo:14525/94 Ph:22641944

**MEMORANDUM OF UNDERSTANDING FOR LOW COST HOME SECURITY SYSTEM**

THIS DEED OF AGREEMENT IS FOR FULL RIGHTS OF LOW COST HOME SECURITY SYSTEM WHICH IS DEVELOPED IN COLLABORATION WITH VELS UNIVERSITY THIS AGREEMENT IS MADE AND EXECUTED ON THIS DATE 7<sup>th</sup> DAY OF JAN, 2014, AT CHENNAI BETWEEN:

**VELS UNIVERSITY**, Velan Nagar, P.V.Vaithiyalingam Road, Pallavaram, Chennai- 600117  
(Herein after called the First Party).

(Which expression shall mean and include not only the first party but also their legal heirs, representatives, successors, administrators and executors etc.)

**AND**

**M/S K SECURITY'S** having its registered office at P.No.53, HMT SATHAVAHANA NAGAR, OPP K P H B COLONY, KUKATPALLY, Hyderabad- 500072 and doing business of SECURITY SYSTEMS

(Herein after called the Second Party).

(which expression shall mean and include not only the second party but also his/their legal heirs, representatives, successors, administrators and executors etc.,)



11 JAN 2014

K. Jayakeish

K. Rama kothuware Rao



:: 2:

AS the Second Party approached First party for the Full Legal Rights to manufacture and sales of the said "LOW COST HOME SECURITY SYSTEM" in a Royalty & Profit sharing mechanism as investment is from second party.

Whereas the parties, after due deliberations and discussions, in order to avoid any further litigations have decided to reduce the terms and conditions into writing by way of this agreement.

NOW THEREFORE THIS AGREEMENT FOR FULL RIGHTS TO LOW COST SECURITY SYSTEM WITNESSES AS FOLLOWS:

1. The First Party shall give full rights to M/s K Security's for Manufacturing and Sales of the said product subject to the any obligations under Royalty and Profit sharing mechanism.
2. Whereas the Second party agree to pay a Royalty of 2.5% in Each every Unit Product of the sale and 2.5% of Profit Sharing from Second year of the sale in addition to royalty paid, so as to enable to get back the Initial Investment of Rs 7, 50,000/- (Seven Lakhs Fifty Thousand Rupees) which is invested by second party in the said case in the time frame.
3. In the said case the First party shall see that all the necessary requirement's of the product is full filled as per the below mentioned in a Time bound manner with a dead Line of 10th April 2014, as the product should be available in market by 28th April, 2104.
4. Description of product as per second party requirement
  - a) GSM 900 or higher board with 2.5G to 3G and Wi-Fi En-ability and calling facility for at least 5 numbers.
  - b) Applications for all the Latest smart phones that uses Android/IOS/Windows with full Integration.
  - c) A full working Website with product Integration for Customers.
  - d) Description of the product with know how's and FAQ's.
  - e) The First Party should get the product Patented in the name of First party for the said product and the TOT will be in the name of Second party.
5. Second party is planning to sell the product at a cost of Rs 9,000/- (Nine Thousand Rupees) per kit in open market in Territory of India.
6. Second party will be manufacturing (or) assembling the said product in Territory of India as the Branding will be MADE IN INDIA.
7. Second party expects to sell a minimum of 1000 kits in the first year and Increase of about 2% to 3% of Clients base in the Subsequent Years.

..... 3 ...



11 JAN 2014

8. First Party will see to that all the new products which may be in Research phase which come under this category (or) Segment (or) Replica, should be informed to the second party and only after second party gives a letter of Intent only further action should be taken.
9. That the Second party shall not be held responsible for any problems in relation to royalty and profit sharing payments which are above and beyond the second party control due to unforeseen circumstances, any such issues should be informed to the first party to the earliest.
10. That the first party will not be held responsible for complaints regarding Manufacturing defects of the product, but will be responsible in Informing any new changes to the technology related to the said product and updating the APPLICATIONS in the timely manner and inform the same to Second party.
11. That the Second party shall use First party branding for the purpose of advertisements announced for different parts of territory of India as Agreed by Both Parties.
12. That the Second party will be able to authorize any further dealers/distributors or to any other persons for Licenses and licenses of sales of "Low cost Home Security system" with the prescribed name which shall be announced on 15th March, 2014 for the product and the brand name of the product is the sole property of the second party.
13. That the second party shall update the communication address to first party at the first convenient time and frequent Intervals and the second party shall not be held responsible for any delays due to communication address mistakes from first party.
14. The second party shall give 5% to 10% discount for the Clients who are introduced by first party as a good will gesture.
15. All the payments will be made in the Form of cheque from M/s K Security's (HDFC Bank, Kukatpally).
16. The parties hereby mutually agreed and declare that they would co-operate each other in respect of furnishing necessary records and sharing of information, in smooth functioning of the agreement.
17. Any disputes or differences between the parties with regard to this agreement shall be discussed and settled amicably. In the event of any disputes or differences not settled amicably between the parties, such differences or disputes shall be referred to Arbitration and the Arbitration proceedings shall be conducted in accordance with the provisions of the Indian Arbitration and Conciliation Act 1996. The venue of the Arbitration should be at Chennai.

..... 4 ...

11 JAN 2014





IN WITNESS WHEREOF THE PARTIES HAVE SIGNED THIS AGREEMENT ON THE DATE, MONTH AND YEAR MENTIONED HEREIN ABOVE IN THE PRESENCE OF THE FOLLOWING WITNESSES:

WITNESSES:

1. *R. Ann*

2. *[Signature]*



FIRST PARTY:

1. *[Signature]*  
REGISTRAR  
YELS UNIVERSITY  
(VISTAS)  
Velam Nagar  
P.V. Vaithiyalingam Road  
Palavaram, Chennai-600112

SECOND PARTY

*K. Jayakrishna*  
1. K.JAYAKRISHNA  
(CEO-KSECURITY'S)  
K SECURITY'S  
HMT Sathavahana Nagar,  
KPHB Colony, Hyderabad-500 072.  
Ph: 810843333, 8106663981

*K. Rama Koteswara Rao*  
2. K.RAMA KOTESWARA RAO  
(MANAGING PARTNER)

ATTESTED

*[Signature]*  
C. SATYANARAYANA CHARYULU  
B.Com., B.L.  
ADVOCATE/NOTARY  
MIG-60/6, III-Phase, KPHB Colony,  
Kukatpally, R.R. Dist. Hyd-72. (India)  
Ph. No: 9246588112

11 JAN 2014

---

**EINNEL TECHNOLOGIES**

No. 4, Soundarya Nagar  
Gowrivakkam, Chennai – 600 073  
Phone: 044 – 22782028  
Email: [info@einnel.com](mailto:info@einnel.com) Web: [www.einnel.com](http://www.einnel.com)

Date: 26-Dec-2018

To:

**Dr. Jerritta S**

Associate Professor  
ECE Department  
Vels Institute of Science, Technology & Advanced Studies

Dear Madam,

Please find below the payment details.

S. No	Description	Amount
1.	Consulting charges for Matlab programming & Data Analytics	6,000.00
<b>Total:</b>		<b>6,000.00</b>

Cheque Details	
Cheque No	068548
Payee	Jerritta S
Cheque Date	31-Jan-2018
Amount	Rs. 6,000/-
Cheque clearance date	19-Mar-2018

Thanking you.

For EinNel Technologies

Authorized Signatory



**citibank**

(Incorporated with Limited Liability in the U.S.A.)

Citibank, N.A. CHENNAI  
IFSC : CITI0000003

जारी करने की तारीख से ३ महीने के लिए वैध / Valid for 3 months from the date of issue

दिनांक	2	4	0	8	2	0	1	8
Date	D	D	M	M	Y	Y	Y	Y

A/c. Payee Only

Pay **The Registrar, Vels Institute of Science Technology & Advanced Studies**

को या उनके आदेश पर Or Order

**Twenty Five Thousand Only**  
रुपये Rupees

अदा करें।

₹\*\*25,000.00

खाता सं.  
A/c No.

0341888018

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For And on Behalf of  
**RAUNAQ STEELS TRADING PVT LTD**

Authorised Signatory

Authorised Signatory

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D. S. SAVANT & SONS, MUMBAI / CTS - 2010



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बीस रुपये

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Rs.20

TWENTY  
RUPEES

INDIA NON JUDICIAL



தமிழ்நாடு தமில்நாடு TAMIL NADU

16938

VISTAS  
CHENNAI

22 OCT 2018

60AB 336066

*T.V. Ompakash*  
T.V. OMPRAKASH (S.V.)  
195, MUTHURANGAM ROAD,  
TAMBARAM, CHENNAI-46.  
NO.9593 / B1 / 2000 DT.7.9.2000  
98413 19588

### Memorandum of Understanding

This Memorandum of Understanding (hereinafter referred to as "MOU") is entered on this 24<sup>th</sup> day of October 2018 by

SS Ryders India Pvt. Ltd., 108, NPM Complex, Bangalore High Road, Irungattukottai, Sriperumbudur Taluk, Kanchipuram District

And

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS), located in Velan Nagar, P.V.Vaithiyalingam, Road, Pallavaram, Chennai - 600 117, Tamil Nadu, India. (hereinafter referred to as "VELS") which expressions shall include its successors and assigns through its duly constituted Attorney, Dr. A. R. Veeramani- Registrar on the Other Part.

*Dr. A. R. Veeramani*  
REGISTRAR  
VELS INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)  
Velan Nagar, P.V. Vaithiyalingam Road,  
Pallavaram, Chennai-600 117.

For SS RYDERS INDIA PVT LTD

*Surya*  
Director



**WHEREAS**

1. SS Ryders India Pvt. Ltd. was established on 2013 with the aim of servicing contract staffing, consulting services and logistics services to the logistics companies. They are providing Manpower Suppliers, Fleet Operations, Enroot Operations, Supply Chain Management
2. Vels Institute of Science, Technology and Advanced Studies (VISTAS) was established by VEL's Educational Trust in 2008 with the aim of transforming an individual into a complete man with character and ability committed to national service and development.
3. The Deemed to be University status was conferred to Vel's Group of Institutions, under section 3 of UGC Act 1956 and by the Ministry of Human Resource Development, Govt. of India. As a logical consequence of this, the founder Chairman Dr. Ishari K. Ganesh has become the President/Chancellor and now he leads the implementation of strategic plan that aims to shape the institute's future growth. He visualizes an University which will be globally more competitive and internationally recognized institution.
4. The Institution is governed by Governing Board or otherwise known as Board of Management and this is the highest statutory body of this University. The members of this Board is drawn from various agencies. The Board has members representing University Grants Commission, Govt. of India, Industry, Eminent persons outside Academia, Senior Academic persons and senior officials of the University. The Vice-Chancellor is the Chairman of the Board and the board meets periodically to frame policies and programmes for the growth and improvement of VISTAS.

Both SS Ryders and VISTAS (Hereinafter referred to as "Parties"), desire to cooperate with each other and the mutually agreed proposal, which underlines the broad understanding between the parties.

a) Both the parties will utilize the expertise in the following areas:

1. To provide name of the expertise company in the field of Logistics
2. To collect and offer database of logistics service providers.



REGISTRAR  
VELS INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)  
Velan Nagar, P.V. Vaithiyalingam Road,  
Pallavaram, Chennai-600 117.

..... 3 .....

**For SS RYDERS INDIA PVT LTD**



**Director**



ICICI Bank  
 Irungattukkottai Branch  
 No. 1/108, Bangalore, Main Road, Irungattukkottai, Kancheepuram, Tamilnadu - 602117  
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BUSINESS BANKING : CURRENT ACCOUNT

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Payable at par at all branches of ICICI Bank Limited in India



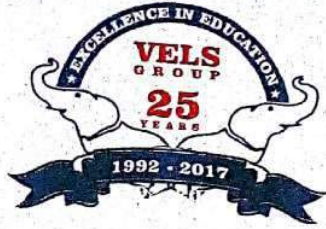
FOR SS RYDERS INDIA PRIVATE LIMITED

*Sumit*

Authorised Signatories  
 Please sign above

⑈000186⑈ 600229113⑈ 000022⑈ 29





# VELS

INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)

வேல்ஸ் அறிவியல் தொழில்நுட்ப உயர் ஆராய்ச்சி நிறுவனம்  
(DEEMED TO BE UNIVERSITY Estd.u/s 3 OF THE UGC ACT,1956)



**NAAC ACCREDITED**  
PALLAVARAM - CHENNAI - INDIA

5<sup>th</sup> October 2018

Dr. V. Rajendran  
Professor & HOD  
Dept. of Electronics & Communication Engg.  
School of Engineering

Dr. Kallol Roy  
Managing Director  
BHAVANI  
Kalpakkam: 603102.  
(Mobile: 9969049563)

Through

The Registrar  
VISTAS

Dear Sir,

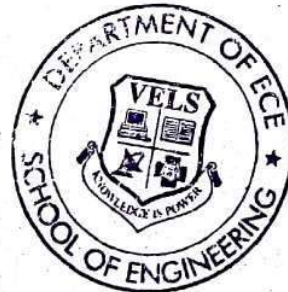
Sub: Submission of the Project proposal Entitled "*Feasibility study on regression/classification by mining the HF radar data using unsupervised learning process leading to identification of the intruders*" - reg.

I wish to inform you that with reference to the discussion at NIOT on 7<sup>th</sup> September, 2018 and as directed a mini project for the data analysis has been prepared with the title "*Feasibility study on regression/classification by mining the HF radar data using unsupervised learning process leading to identification of the intruders*", in line with the analytical techniques suggested by the scientist involved. The duration of the mini project is for six months.

Therefore, I would like to consider our proposal favorably with short timeline of 6 months with financial outlay of Rs.2.3 lakhs.

Sincerely yours

  
Dr. V. Rajendran



Forwarded

  
5-10-18

Dr.A.R. Veeramani  
Registrar

Vels Institute of Science, Technology  
& Advanced Studies (VISTAS)  
Pallavaram, Chennai - 600 117.

ENCLOSURE:

- Project Proposal

Velan Nagar, P.V. Vaithiyalingam Road, Pallavaram, Chennai - 600 117, INDIA

Phone: (91-44) 2266 2500, 2266 2501, 2266 2502, 2266 2503 Fax : (91-44) 2266 2513

E-mail: [vistas@velsuniv.ac.in](mailto:vistas@velsuniv.ac.in) Website: [www.velsuniv.ac.in](http://www.velsuniv.ac.in)

Admin. Office: 521/2, Anna Salai, Nandanam, Chennai - 600 035. Tele Fax : 2431 5541 / 2431 5542



# TAMILNADU STEEL TUBES LIMITED

MFRS. & EXPORTERS OF : MS & GI, SQUARE & RECTANGLE STEEL PIPES

REGD. OFF : MERCURY APARTMENTS, 1st FLOOR, 65, PANTHEON ROAD, EGMORE, CHENNAI - 600 008.  
PHONE : 28555653, 28555673, 28555733 FAX : 28555643 Web : [www.tamilnadusteeltubesltd.com](http://www.tamilnadusteeltubesltd.com)  
E-MAIL : [tnstl@vsnl.net](mailto:tnstl@vsnl.net) / [contact@tamilnadusteeltubesltd.com](mailto:contact@tamilnadusteeltubesltd.com) / [tnt.share@yahoo.in](mailto:tnt.share@yahoo.in) CIN : L27110TN1979PLC007887

TNT/2018-19/375

02.11.2018

Prof: Dr P.R. RAMAKRISHNAN  
The DEAN  
School of Management & Commerce  
VELS University of Science, Technology & Advance Studies (VISTAS)  
Pallavaram, CHENNAI - 600 117

Dear Sir,

Sub : PROJECT CONSULTATION ARRANGEMNTS - REG.

Ref : Our MOU dt. 05.02.2018

We would like to inform you that our Company has decided to avail the consultation for our new projects to explore the possibility to avail the expertise knowledge in the field of Stainless Steel Pipes manufacturing, Software Development for Trading Securities, etc.

We have placed our request before our Company's Board of Directors and the Board has given their consent to avail the consultation facility from M/s VELs University and an extract of the Resolution passed by the Directors at their Board Meeting is enclosed for your kind perusal.

WE now request you to kindly give your valuable advice for our business development, to improve our employees' knowledge and technical know how and the training, within the stipulated period in the filed of Stainless Steel Pipes Manufacturing, Software Technology for Trading National & International Scrips Training for our staffs.

Expecting your acceptance letter in this regard immediately.

Thanking you,  
Yours faithfully,  
for TAMILNADU STEEL TUBES LTD.

DIRECTOR  
Encl:





# TAMILNADU STEEL TUBES LIMITED

MFRS. & EXPORTERS OF : MS & GI, SQUARE & RECTANGLE STEEL PIPES

REGD. OFF : MERCURY APARTMENTS, 1st FLOOR, 65, PANTHEON ROAD, EGMORE, CHENNAI - 600 008.

PHONE : 28555653, 28555673, 28555733 FAX : 28555643 Web : www.tamilnadusteeltubesltd.com

E-MAIL : tnstl@vsnl.net / contact@tamilnadusteeltubesltd.com / tnt.share@yahoo.in CIN : L27110TN1979PLC007887

\*\*\*\*\*  
 Extract from the Minutes of the 2<sup>nd</sup> Board of Directors' Meeting 2018-19 of Tamilnadu Steel Tubes Ltd., held on Tuesday, the 14<sup>th</sup> August, 2018 at 4.00 P.M at the Regd. Office of the Company, Mercury Apts., 1<sup>st</sup> Floor, No.65, Pantheon Road, Egmore, Chennai-600 008.  
 \*\*\*\*\*

**ITEM No. 2.17: MoU signed between Tamilnadu Steel Tubes Ltd. & VELS University, Pallavaram, Chennai-117 – Consultation arrangement with VELS University for accreditation and ranking of Universities as per NAAC & AICTE :**

In continuation of the Resolution passed by the Board of Directors at their Meeting held on 14.02.2018 with regard to the MOU signed between the company and VELS University, there was a discussion among the directors for consultation arrangement with VELS University for our new projects. After detailed discussion, the following resolution was passed.

RESOLVED to extend the company's co-operation to the maximum extent to VELS University in availing the consultation facility from them so as to enable them to achieve the Goal.

RESOLVED FURTHER that Mr M.T. ELUMALAI, Director, be and is hereby authorised to sign and intimate the same to M/s VELS University on behalf of the Company expressing the company's consent to avail the consultation facility from them.

Sd/-  
 CHAIRMAN OF THE MEETING

“ True Copy ”

For TAMILNADU STEEL TUBES LTD.

Director



# TAMILNADU STEEL TUBES LIMITED

MFRS. & EXPORTERS OF : MS & GI, SQUARE & RECTANGLE STEEL PIPES

REGD. OFF : MERCURY APARTMENTS, 1st FLOOR, 65, PANTHEON ROAD, EGMORE, CHENNAI - 600 008.  
PHONE : 28555653, 28555673, 28555733 FAX : 28555643 Web : [www.tamilnadusteeltubesltd.com](http://www.tamilnadusteeltubesltd.com)  
E-MAIL : [tnstl@vsnl.net](mailto:tnstl@vsnl.net) / [contact@tamilnadusteeltubesltd.com](mailto:contact@tamilnadusteeltubesltd.com) / [tn.share@yahoo.in](mailto:tn.share@yahoo.in) CIN : L27110TN1979PLC007887

17.11.2018

Prof: Dr P.R. RAMAKRISHNAN  
The DEAN  
School of Management & Commerce  
VELS University of Science, Technology & Advance Studies (VISTAS)  
Pallavaram, CHENNAI – 600 117

Dear Sir,

Sub : Project consultation arrangements – Payment sanction- Intimation - reg.

Ref : 1) Our MOU dated 05.02.2018  
2) Our letter dated 02.11.2018

In continuation of our earlier letter dated 02.11.2018 cited above, we would like to state as follows.

Our Board of Directors have discussed in depth with the Project implementation for improving our business in consultation with your University and they also sanctioned a sum of Rs.10.00 Lakhs for this Project implementation.

Therefore, we request you to keep in touch with us as and when any query raised by you to enable us to complete the Project at the earliest.

Kindly acknowledge receipt of this letter and oblige.

Thanking you,

Yours faithfully,  
for TAMILNADU STEEL TUBES LTD.

  
AUTHORISED SIGNATORY

# KAREETAM TRADERS LTD.

No. 16, Sunkurama Street, 2<sup>nd</sup> Floor, Parrys, CHENNAI – 600 001

---

17.11.2018

Prof: Dr P.R. RAMAKRISHNAN  
The DEAN  
School of Management & Commerce  
VELS University of Science, Technology & Advance Studies (VISTAS)  
Pallavaram, CHENNAI – 600 117

Dear Sir,

Sub : Project consultation arrangements – Payment sanction- Intimation - reg.

Ref : 1) Our MOU dated 05.02.2018  
2) Our letter dated 02.11.2018

---

In continuation of our earlier letter dated 02.11.18 cited above, we would like to state as follows.

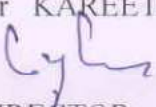
Our Board of Directors have discussed in depth with the Project implementation for improving our business in consultation with your University and they also sanctioned a sum of Rs.10.00 Lakhs for this Project implementation.

Therefore, we request you to keep in touch with us as and when any query raised by you to enable us to complete the Project at the earliest.

Kindly acknowledge receipt of this letter and oblige.

Thanking you,

Yours faithfully,  
for KAREETAM TRADERS LTD.

  
DIRECTOR



# KAREETAM TRADERS LTD.

No. 16, Sunkurama Street, 2<sup>nd</sup> Floor, Parrys, CHENNAI – 600 001

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02.11.2018

Prof: Dr P.R. RAMAKRISHNAN  
The DEAN  
School of Management & Commerce  
VELS University of Science, Technology & Advance Studies (VISTAS)  
Pallavaram, CHENNAI – 600 117

Dear Sir,

Sub : PRROJECT CONSULTATION ARRANGEMNTS – REG.

\*\*\*\*\*

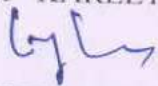
We would like to inform you that our Company has decided to avail the consultation for our new projects to explore the possibility to avail the expertise knowledge in the field of Software Development for Trading Securities – National & International, etc.

We have placed our request before our Company's Board of Directors and the Board has given their consent to avail the consultation facility from M/s VELs University and an extract of the Resolution passed by the Directors at their Board Meeting is enclosed for your kind perusal.

WE now request you to kindly give your valuable advice for our business development, to improve our employees' knowledge and technical know how and the training, within the stipulated period in the filed of Software Technology for Trading National & International Scrips Training for our staffs.

Expecting your acceptance letter in this regard immediately.

Thanking you,  
Yours faithfully,  
for KAREETAM TRADERS LTD.



DIRECTOR

Encl:



# KAREETAM TRADERS LTD.

No. 16, Sunkurama Street, Parrys, CHENNAI – 600

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\*\*\*\*\*  
Extract from the Minutes of the Meeting of Board of Directors of M/s Kareetam Traders Ltd., held on Thursday, the 30<sup>th</sup> August 2018, at 3.00 P.M. at the Registered Office of the Company, No. 16, Sunkurama Street, Parrys, Chennai-600 001.  
\*\*\*\*\*

**Item No. 10: Consultation arrangement with VELS University Pallavaram, Chennai-117, for accreditation and ranking of Universities as per NAAC & AICTE :**

There was a discussion among the directors for consultation arrangement with VELS University for our new projects. After detailed discussion, the following resolution was passed.


RESOLVED to extend the company's co-operation to the maximum extent to VELS University in availing the consultation facility from them so as to enable them to achieve the Goal.

RESOLVED FURTHER that Mr Vinaykumar Tibrewal, Director, be and is hereby authorised to sign and intimate the same to M/s VELS University on behalf of the Company expressing the company's consent to avail the consultation facility from them.

Sd/-  
CHAIRMAN OF THE MEETING

“ True Copy “

For KAREETAM TRADERS LTD.

  
Director.

**VELS INSTITUTE OF SCIENCE TECHNOLOGY AND ADVANCED STUDIES (VISTAS)**

**Receipt Voucher**

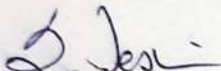
Voucher # : Rcpt/2018-19/MAR/0277

Dated : 26-MAR-2019


Particulars		Debit	Credit
To	Consultancy Receipts		17,000.00
	Cash	Dr 17,000.00	
Party Name: Consultancy Receipts		17,000.00	

**On Account of:**

Being cash received from Ms.Durgalakshmi towards the consultancy project fee for the project from Gujarat on mechanical properties of concare mix concrete on 23.11.17,dept of civil engg

  
Prepared by

Checked by

  
Authorised by

Received by



## CADDAM Technologies Pvt. Ltd.

Complete CAD / CAM / CAE / CFD Training and Solution Providers

Dear sir,

Date: 19-07-2017

Sub: CADDAM Technologies Pvt.Ltd-Offer consultancy projects on payment basis to Department of Mechanical Engineering, vels university- reg.

We express our sincere thanks to you for your interest to do consultancy and research work with us. We would like to offer some outsourcing part of our research work on account of technical constancy to you. The description of the work and quoted price are enclosed here with,

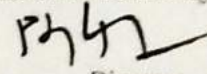
S.No	Title of the work	Quoted Price
1	Tie Rod Strength Analysis	9,000

It is requested that, if you are interest kindly send us your consent for the assignment. The following terms and conditions are applicable.

1. Maximum three weeks can be permissible to complete work.
2. In brief report of soft/hard copy to be submitted along with the solution.
3. There is no advance payment can be made and the final settlement will be made only after submission of the completed works successfully.
4. Based on your ongoing performance the company shall offer additional assignments or withdrawal of order
5. Our client or our faculty member may be often visited your premises to ensure the status of the work on any working day with prior intimation.
6. The information related consultancy is to be **kept confidential** and should not expose to any one at any instant of time.

We are anticipating favorable response from your end.

For CADDAM Technologies Pvt.Ltd

  
Director

CORPORATE OFFICE : # 12/27, 1ST FLR, MUTHU RANGA MUDHALI (M.R.M.) STREET, WEST TAMBARAM, CHENNAI - 600 045. TEL : 044-65879816

BRANCH OFFICE : # 29B, AVVAIYAR STREET, JAWAHARLAL NEHRU SALAI, AMBAL NAGAR, EKKATUTHANGAL, GUINDY, CHENNAI - 600 097. TEL : 044-6517175

Email : [info@caddamtechnologies.in](mailto:info@caddamtechnologies.in)

Visit us : [www.caddamtechnologies.in](http://www.caddamtechnologies.in)



**VELS INSTITUTE OF SCIENCE TECHNOLOGY AND ADVANCED STUDIES (VISTAS)**

**Receipt Voucher**

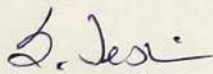
Voucher # : Rcpt/2018-19/MAR/0278

Dated : 26-MAR-2019

Particulars	Debit	Credit
To Consultancy Receipts		5,000.00
Cash Dr	5,000.00	
<i>Party Name: Consultancy Receipts</i>	<b>5,000.00</b>	

**On Account of:**

Being cash received from Ms.Durgalakshmi towards the consultancy project fee for the project from Mr.K.Venkatesan on Duplex House ,Dept of civil Engg

  
Prepared by

Checked by

  
Authorised by

Received by



## CADDAM Technologies Pvt. Ltd.

Complete CAD / CAM / CAE / CFD Training and Solution Providers

Dear sir,

Date: 06-01-2017

Sub: CADDAM Technologies Pvt.Ltd-Offer consultancy projects on payment basis to Department of Mechanical Engineering, vels university- reg.

We express our sincere thanks to you for your interest to do consultancy and research work with us. We would like to offer some out sourcing part of our research work on account of technical consultancy to you. The description of the work and quoted price are enclosed here with.

S.No	Title of the work	Quoted Price
1	Design and Modal analysis of wheel housing	14,000 /-

It is requested that, if you are interest kindly send us your consent for the assignment. The following terms and conditions are applicable.

1. Maximum three weeks can be permissible to complete work.
2. In brief report of soft/hard copy to be submitted along with the solution.
3. There is no advance payment can be made and the final settlement will be made only after submission of the completed works successfully.
4. Based on your ongoing performance the company shall offer additional assignments or withdrawal of order
5. Our client or our faculty member may be often visited your premises to ensure the status of the work on any working day with prior intimation.
6. The information related consultancy is to be kept confidential and should not expose to any one at any instant of time.

We are anticipating favorable response from your end.

For CADDAM Technologies Pvt.Ltd

  
Director

CORPORATE OFFICE : # 12/27, 1ST FLR, MUTHU RANGA MUDHALI (M.R.M.) STREET, WEST TAMBARAM, CHENNAI - 600 045. TEL : 044-65879816

BRANCH OFFICE : # 29B, AIVAIYAR STREET, JAWAHARLAL NEHRU DALAI, AMBAL NAGAR, EKKATUTHANGAL, GUINDY, CHENNAI - 600 067. TEL : 044-65171553

Email : [info@caddamtechnologies.in](mailto:info@caddamtechnologies.in)

Visit us : [www.caddamtechnologies.in](http://www.caddamtechnologies.in)





## CADDAM Technologies Pvt. Ltd.

Complete CAD / CAM / CAE / CFD Training and Solution Providers

Date: 05.08.2016

Dear Sir,

Sub: CADDAM technologies Pvt.Ltd-Consultancy with Vels University-supply technical data Reg.

Ref: your consent letter dated 01.08.2016 from the HOD/Mechanical, Vels University, Chennai.

I am very happy for your technical team extension with the reference of cited above your letter. In our technical team manager Mr. A. Subaraj will continue the technical support for further works. Your earliest completion of the work will be appreciated. I am very glad to inform you two more works were allotted to your technical team the details are as follows:

1. Design and Analysis for MMC piston
2. Root cause analysis of Trailing arm

For CADDAM Technologies Pvt.Ltd.

  
Director

CORPORATE OFFICE : # 12/27, 1ST FLR, MUTHU RANGA MUDHALI (M.R.M.) STREET, WEST TAMBARAM, CHENNAI - 600 045. TEL : 044-65879816

BRANCH OFFICE : # 29B, AVVAIYAR STREET, JAWAHARLAL NEHRU SALAI, AMBAL NAGAR, EKKATUTHANGAL, GUINDY, CHENNAI - 600 057. TEL : 044-65171553

Email : [info@caddamtechnologies.in](mailto:info@caddamtechnologies.in)

Visit us : [www.caddamtechnologies.in](http://www.caddamtechnologies.in)



**BUREAU OF PHARMA PUBLIC SECTOR UNDERTAKINGS OF INDIA**  
(Set up under the Department of Pharmaceuticals, Government of India)

NO-BPPI/06/IND15/TN581/2017 PMBJK

11 Jan 2018

To,

**Vels Institute of Sciences Technology and Advanced Studies (VISTAS)**  
**Mr. M. A shokkumak**  
School of Pharmaceutical Sciences Velan Nagar, DV Vaithiyalingam Road,  
Pallayaram Pallayaram Tamilnadu 600117.

**Subject: Final approval for Opening of "Pradhan Mantri Bhartiya Janaushadhi Kendra"**

**Reference: Application for opening of 'Pradhan Mantri Bhartiya Janaushadhi Kendra' at School of Pharmaceutical Sciences Velan Nagar, DV Vaithiyalingam Road, Pallayaram.**

This has reference to your application for opening of new "Pradhan Mantri Bhartiya Janaushadhi Kendra" at **School of Pharmaceutical Sciences Velan Nagar, DV Vaithiyalingam Road, Pallayaram.**

We thank you for your initiative & we are pleased to offer you final approval for opening of Pradhan Mantri Janaushadhi Kendra.

**"WARM WELCOME IN THE FAMILY OF PRADHAN MANTRI JANAUSHADHI KENDRA"**

Please place your valuable order to our **authorized distributor**

**Address:** PRAFFUL MEDICO C&F KARNATAKA, BUREAU OF PHARMA PSU's OF INDIA (BPPI) R.S. No: 351/1, VRL Complex, Varur, Hubli, Karnataka 581207.

**Contact Person:** Mr. Arun Kumar Shetty S

**Contact Number:** +91 9845288330, +91 9902496099

**Mail ID:** [praffulmedico@gmail.com](mailto:praffulmedico@gmail.com)

**Please approach our Marketing Officer and State in-charge in case of any clarification and guidance.**

- |                         |   |
|-------------------------|---|
| 1. Mr Arunkumar         | PhNo: +91 9489538779 (Coimbatore)             |
| 2. Mr B Rajasekar       | PhNo: +91 9486401773 ( Madurai)               |
| 3. Mr Saktishwer        | PhNo: +91 9095306167 (Chennai)                |
| 4. Ms Santhosheema Ravi | PhNo: +91 8939654883 (TamilNadu & Puducherry) |

With warm regards,

**(Biplab Chatterjee)**  
CEO, BPPI

**AGREEMENT DATED**

21 January 2019

Between

ECORYS India Pvt. Ltd.

And

**Mr. ARUN S****PREFACE TO THIS AGREEMENT****Contract**

This refers to the Agreement with the Highways Department (ICERS Cell), Govt. of Tamil Nadu (the "Client") and **Ecorys Nederland BV** (hereinafter "**Ecorys-NL**") dated 29<sup>th</sup> August 2018 ("**Principal Agreement**") for implementation of the project "**Training Need Assessment and Management for effective resource utilization in Tamil Nadu Highways Department**" under the **World Bank Loan Bo. 8499-IN**. The Principal Agreement specifies the scope of work and roles and responsibilities to be undertaken by Ecorys under the referred mandate from Client along with payment schedule.

**Ecorys Nederland** has signed a **Memorandum of Understanding (MOU)** with its group company **Ecorys India Private Limited** (hereinafter "**Ecorys-IN**" or "**Ecorys**") to support the implementation of the **Principal Agreement**.

**Content and purpose of the Project**

Details on the objectives, expected outcomes and inputs are provided in the Terms of Reference of the Principle Agreement and is provided as Appendix 1 to this Agreement.

**THIS AGREEMENT****Purpose of this Agreement between Ecorys-IN and Mr. ARUN S:**

Ecorys-IN wishes to secure the consultancy services of **Mr. ARUN S**, to act as the "**E-Learning Expert**".

This Agreement is made by and between:

**Ecorys-IN**, a company with limited liability existing under the laws of India, with offices located at Mira Corporate Suites, F-2-A, Ishwar Nagar, Mathura Road, New Delhi – 110 065, India

and

**Mr. ARUN S** (hereinafter referred to as "**Consultant**"), residing at W2, Block 4, Sanskruti Apts, 27 Santhanalakshmi Street, Rajeswari Nagar, Selaiyur, Chennai - 600073 and having a PAN number of AIJPA5999H and the Bank Account details as:

Account number	: 30022238185
Name and address of Bank	: SBI, Selaiyur
Account holder's name	: Arun S
IFSC Code	: SBIN0007948



## 1. TERM OF THIS AGREEMENT

- 1.1 The parties agree that this Agreement shall be effective as presently anticipated from ~~10th~~ **January 2019 and likely to be completed by 30<sup>th</sup> June 2019** unless terminated earlier by Ecorys pursuant to Article 2 of the General Conditions (attached herewith as Appendix 4) or extended by the parties hereto on mutually agreed terms and conditions.
- 1.2 The General Conditions referred to above provide inter alia that this Agreement may be terminated forthwith by Ecorys by notice in writing if the Client, for any reason, terminates or materially varies the Contract or if the Client, for any reason, requests the withdrawal of Ecorys services.

## 2. AGREEMENT

- 2.1 Ecorys hereby appoints the **Consultant** as E-Learning Expert for the Project and the **Consultant** hereby accepts such appointment.
- 2.2 During the term of this Agreement, Ecorys shall obtain the professional services from the **Consultant** for the entire duration of the Contract on an intermittent basis.
- 2.3 **Consultant** will be based at field office at Chennai in accordance with agreement with Ecorys. Also, he may be needed to visit Ecorys office as per the requirements of the project. The address in Chennai will be: Plot No. 74-75, Door 3A, Latha Street, Dr. Seethapathy Nagar, Velachery, Chennai - 42 (Phone: 044 2243 3347)
- 2.4 Ecorys will supply the **Consultant** with all information, data, documents etc. in the possession of Ecorys to the extent necessary for the proper fulfilment of **Consultant's** tasks under the Agreement. In return, the **Consultant** will render all the professional services necessary in order to provide the professional inputs and assistance necessary to perform the tasks of E-Learning Expert on the Project as needed by the Client and Ecorys and as further specified in this Agreement.
- 2.5 If due to force majeure, the named expert would be unavailable to continue, the **Consultant** must notify Ecorys immediately and the notice period shall be 30 days.
- 2.6 Expressions defined in the Principal Agreement shall have the same meaning when used in this Agreement.

## 3. TASKS AND OBLIGATIONS

- 3.1 **Consultant** will provide adequate professional services with respect to the execution of the specific tasks of **Key Expert**, as specified in:
- Appendix 1: Terms of Reference
  - Appendix 2: Timesheet
  - Appendix 3: Deleted
  - Appendix 4: General Conditions of Ecorys
  - Appendix 5: Ecorys Code of Business Ethics
  - Appendix 6: Payment Schedule

Any other strategic documents of the Project such as an Inception Report and Reports of any kind that may lead to revisions in Appendix 1, 2 and 3 that are approved by the Client will automatically become part of this Agreement. Failure to comply with the provisions in Appendix 5: Ecorys Code of Business Ethics may lead to immediate termination of this Agreement as per decision by the Ecorys Project Director.

Appendices 1, 2, 3, 4, 5 and 6 form an integral part of this Agreement.

- 3.2 The main tasks of the **Consultant** include the following:
- 3.2.1 Providing all inputs desired from the **Consultant's** position as per the terms of reference. Contributing to the best of his abilities that the Project is implemented successfully in terms of its policy relevance, anticipated outcomes and efficient use of the Project inputs.
  - 3.2.2 Management and coordination of the implementation of the part of the Project relevant to **Consultant's** position.
  - 3.2.3 Establishing and maintaining constructive working relations between the Project stakeholders, including the Client, other stakeholders, the Team Leader, the Project team and the Project management team.
  - 3.2.4 Monitoring and analyzing developments in the economic and political environment in which the Project is placed with the aim of assessing whether the program intervention logic of the Project remains relevant and feasible and reflecting this in the Project implementation.
  - 3.2.5 Advising and obtaining advice from the Ecorys Team and/or Project Manager on any changes that might be required in the Project execution.
  - 3.2.6 Informing immediately the Ecorys Team and suggesting suitable course of action of any matters that may seriously and durably affect the Project performance and the Contract with the Client.
  - 3.2.7 Ensuring delivery of reports required by the Client on time in close coordination with the Ecorys Team, as non-delivery on time may cause termination of the entire Project unilaterally by the Client. The Consultant will also be responsible for maintaining optimal quality on the project deliverables. The Consultant will also be responsible for managing timely delivery and supporting other experts and project support staffs assigned on the Project.
  - 3.2.8 Ensuring all comments received from the Client and other stakeholders are adequately incorporated in the reports and resubmitted to the Client.
  - 3.2.9 Reviewing, designing and implementing project work plans as and when required in close consultation with the Team Leader/ Ecorys Project Manager.
  - 3.2.10 Liaison on project planning, reporting and implementation with all project stakeholders.
  - 3.2.11 Making presentations to the Client including, but not limited to, the workshops and Trainings.
- 3.3 In carrying out these tasks, the **Consultant** will keep the Ecorys Team Leader and Project Manager informed as frequently as required on the Project. The Consultant will be required to update the Project Manager/Team Leader of Ecorys on progress of the work assigned. Any delay in the project deliverables has to be immediately notified along with proposed action plan to Ecorys Project Manager and Team Leader and has to be immediately rectified.
- 3.4 **Consultant** shall treat the information, which he/she shall obtain during the execution of his tasks for the Project, as confidential. As a rule, the **Consultant** will not divulge information on the



content of the Project to media, other competitors, and any other party with which Ecorys might have a potential conflict of interest, without prior written consent of Ecorys or the Client.

- 3.5 All the works delivered by the Consultant as a part of this Agreement will be treated as the property of Ecorys and Consultant cannot claim or use the work/ part of the work without consent of Ecorys. Any failure to comply with this clause will be treated as breach of this Agreement and shall lead to termination of this Agreement and may attract legal action against the Consultant.

#### 4. ORGANISATION

- 4.1 **Consultant** will report to the Ecorys Team Leader on all aspects of the Project. **Consultant** shall act in accordance with instructions received from the Ecorys Team Leader. The non-performance of such instructions may be considered as a breach of contract that entitles Ecorys to terminate this Agreement by written notice to such effect, if **Consultant** fails to remedy such breach within seven working days after having been so instructed in writing.
- 4.2 **Consultant** can only issue official statements of Ecorys management or Ecorys project management on this project after prior written consent from the Ecorys Project Manager.

#### 5. FINANCIAL CONDITIONS

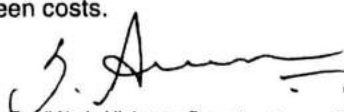
- 5.1 To compensate **Consultant** for providing the professional services as described in Article 3 of this Agreement, the financial conditions are the following:

- Professional Fee: **INR 150,000 (Indian Rupee One Lacs Fifty Thousand only) which is exclusive of GST and inclusive of all other taxes.**
- Per Diem: for any trip outside the home office, a per diem of INR 500 will be paid
- Accommodation & local transport: Accommodation and Local transport related to the project outside the home office location will be arranged by Ecorys.
- Travel: All travel expenses including to and fro taxi/conveyance to the airport will be reimbursed by Ecorys to the Consultant against the submission of actual bills and boarding passes. Any additional expenses on the travel for the project will be borne and arranged by the Consultant.
- All the payment to the Consultant as a part of this Agreement shall be made in Indian National Rupee.
- All the out of pocket expenses as mentioned above by the consultant shall be claimed within the same financial year from Ecorys in which they are incurred.

- 5.2 **Payment schedule:** The Consultant will raise the invoice for every stage after a formal approval of the deliverable by the Team Leader. Upon submission of the invoice by the Consultant against the approved milestones, the payments shall be made by Ecorys to Consultant within **3 Weeks** from date of its receipt. The payment shall be made as per the payment schedule in Annexure 6. In the event, the Consultant decides to leave the Assignment without giving notice or assigning any valid reasons acceptable to Project Manager, Ecorys will make payment for the approved milestones of the Consultant.

- 5.3 Ecorys will make the travel arrangements related to the Project. As soon as practicable after each journey, the **Consultant** shall present Boarding Passes and vouchers to Ecorys. In case of loss of boarding passes, the cost of travel for that particular trip will have to be approved by the Project Manager (upon written request) and in case of non-approval, shall be passed on to the **Consultant** and shall be deducted from the submitted invoice amount.
- 5.4 All payment which will be made by Ecorys to the Consultant under this Agreement will be subject to Tax Deduction at Source in accordance to the applicable provisions of the Income Tax Act 1961 of India or any other law for the time being in force.
- 5.5 The fee includes all such expenses as labor costs, all relocation and repatriation expenses, indirect taxes, sales taxes, custom duties, social security costs as well as all required medical insurances and insurances of personal belongings. However, the GST liability, if any, on the Professional Fee, shall be borne by Ecorys, as per the law applicable from time to time. The Consultant must submit to Ecorys a Tax Invoice which must include the PAN and GST Registration Number supported by an undertaking that the received GST will be deposited to the appropriate authority in accordance with the applicable provisions of GST Laws in India. **Consultant** accepts full responsibility for his proper health, accident and travel insurance and for all legal disputes that may arise related to his stay in field-office on this Project. For KYC purpose, the Consultant is required to submit the following documents to Ecorys:
- Self-Attested copy of the PAN card
  - Copy of GST Registration (if registered, otherwise a declaration)
  - Duly signed cancelled cheque of the bank account mentioned in this Agreement
- 5.6 **Consultant** is aware that no additional budget is available and guarantees that, excepting the event of circumstances beyond his control, all the services required under this Agreement will be adequately fulfilled.
- 5.7 If during the Project implementation it would appear that due to an important change in the focus of the Project, Ecorys would have to deviate from the number of Person-Months as stipulated in the deployment plan (Appendix 2), this Agreement will be changed accordingly with mutual consent.
- 5.8 **Consultant** will submit his invoice as per the payment schedule specified in Clause 5.2 above. Ecorys will pay by bank transfer to the **Consultant's** nominated bank account.
- 5.9 If the **Consultant** is able to execute only part of his duties, reasonable pro rata payments shall be made by Ecorys as per Clause 5.2, if the Project Manager approves the notice along with the valid reasons for failure to deliver the assigned duties.
- 5.10 All cost, not mentioned in this Agreement of whatever nature made by **Consultant** for the services rendered under this Agreement will be for his own account unless otherwise approved in writing by Ecorys.
- 5.11 It is hereby explicitly agreed that cost and damages suffered as a result of an accident at the place of the Project, a legal dispute with third parties (i.e. local authorities), unforeseen delays in the completion of the Project and any other unforeseen cost cannot be recovered from Ecorys unless the Client has accepted to pay for these unforeseen costs.

MSI





## 6. AMENDMENTS

- 6.1 Amendments to this Agreement can be initiated by either party at any time, if changes in the Project implementation are required that are agreed with the Client.
- 6.2 Amendments can concern also the appendices of this Agreement.

## 7. APPLICABLE LAW AND JURISDICTION

- 7.1 The provisions of this Agreement shall be governed in all respects and construed in accordance with the laws of the India.
- 7.2 All disputes arising out of or relating to this Agreement which cannot be settled amicably shall be referred to the exclusive jurisdiction of the competent court in New Delhi, India.
- 7.3 Headings in this Agreement are for convenience only and shall not affect the interpretation hereof.

## 8. COMMUNICATION

- 8.1 **Consultant** shall inform the Ecorys Project Manager or his representative as often as it is necessary to keep Ecorys fully informed at all times of Project progress.
- 8.2 Any notice, dispatch or submission of documents, instructions, orders and other communication required or necessary pursuant to this Agreement is deemed correctly done if addressed to:

**Attn. Mr Prashant Kumar, Assistant General Manager**

Ecorys India Pvt. Ltd., Mira Corporate Suites, F-2-A, Ishwar Nagar, Mathura Road,  
New Delhi – 110 065, India  
Email:Prashant.kumar@ecorys.com

- 8.3 Invoices should be sent to:

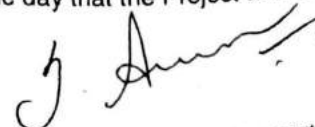
**Attn. Mr Prashant Kumar, Assistant General Manager**

Ecorys India Pvt. Ltd., Mira Corporate Suites, F-2-A, Ishwar Nagar, Mathura Road,  
New Delhi – 110 065, India  
Email:Prashant.kumar@ecorys.com

## 9. TERMINATION

- 9.1 Ecorys shall be entitled to terminate this Agreement with immediate effect in case of sub-standard performance by **Consultant**. Sub-standard performance is when both Client and Ecorys assess that the performance of the **Consultant** is not up to expected quality or mentioned in the Terms of Reference. In accordance with article 2.2 of the General Conditions where for instance sub-standard performance or non-performance is judged by the Client and Ecorys.
- 9.2 The Client may decide to amend, shorten or terminate the Project should the beneficiary fail to demonstrate commitment, leadership and coordination. This decision will terminate also the Contract between Ecorys and the **Consultant** on the day that the Project will be terminated.

MSI



9.3 Consultant shall give a notice of one month or above agreed fees in lieu thereof if notice period falls short of one month, to terminate if Consultant has to leave the Project for reasons that are beyond his control.

**10. GENERAL AND FINAL PROVISIONS**

10.1 This Agreement is composed of this Contract Form and its appendices:

- Appendix 1: Terms of Reference
- Appendix 2: Timesheets.
- Appendix 3: Deleted
- Appendix 4: General Conditions of Ecorys
- Appendix 5: Ecorys Code of Business Ethics
- Appendix 6: Payment Milestones

All these parts form an integral part of this Agreement.

Done in New Delhi in duplicate in English and initialled on each page by both parties.

Dated: 21 January 2019

Dated: 21 January 2019

Signed for ECORYS India Pvt. Ltd.

Signed by: Mr. ARUN S



M.S. Prakash  
Authorized signatory



As Consultant

**Appendix 1: Terms of Reference****Training need assessment and management for effective resource utilization in Tamil Nadu Highways  
Department**


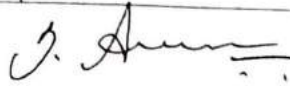
Terms of Reference for the Sub-Consultancy Services on E-Learning related aspects of the Project on Training Need Assessment and Management for Effective Resource Utilization in Tamil Nadu Highways Department (TNHD).

The major objectives the sub-consultancy services on E-Learning related aspects of the project are:

- Detailed plan for establishing an e-library at the upcoming Training Centre in consultation with the client
- Detailed TOR with necessary cost analysis for establishing e-library (by the department) which shall comprise, all relevant e-resources like, books, journals, IS, IRC, AASHTO, ASTM Codes, Specification and Standards, Manuals, Reference Books and all other relevant documents in consultation with the client.
- Development of a system to ensure secured and controlled accessibility to the e-resources by the employees of TNHD.
- Demonstration of the effective working of the system to the entire satisfaction of the client and submission of guidelines for the operation and maintenance of the e-library

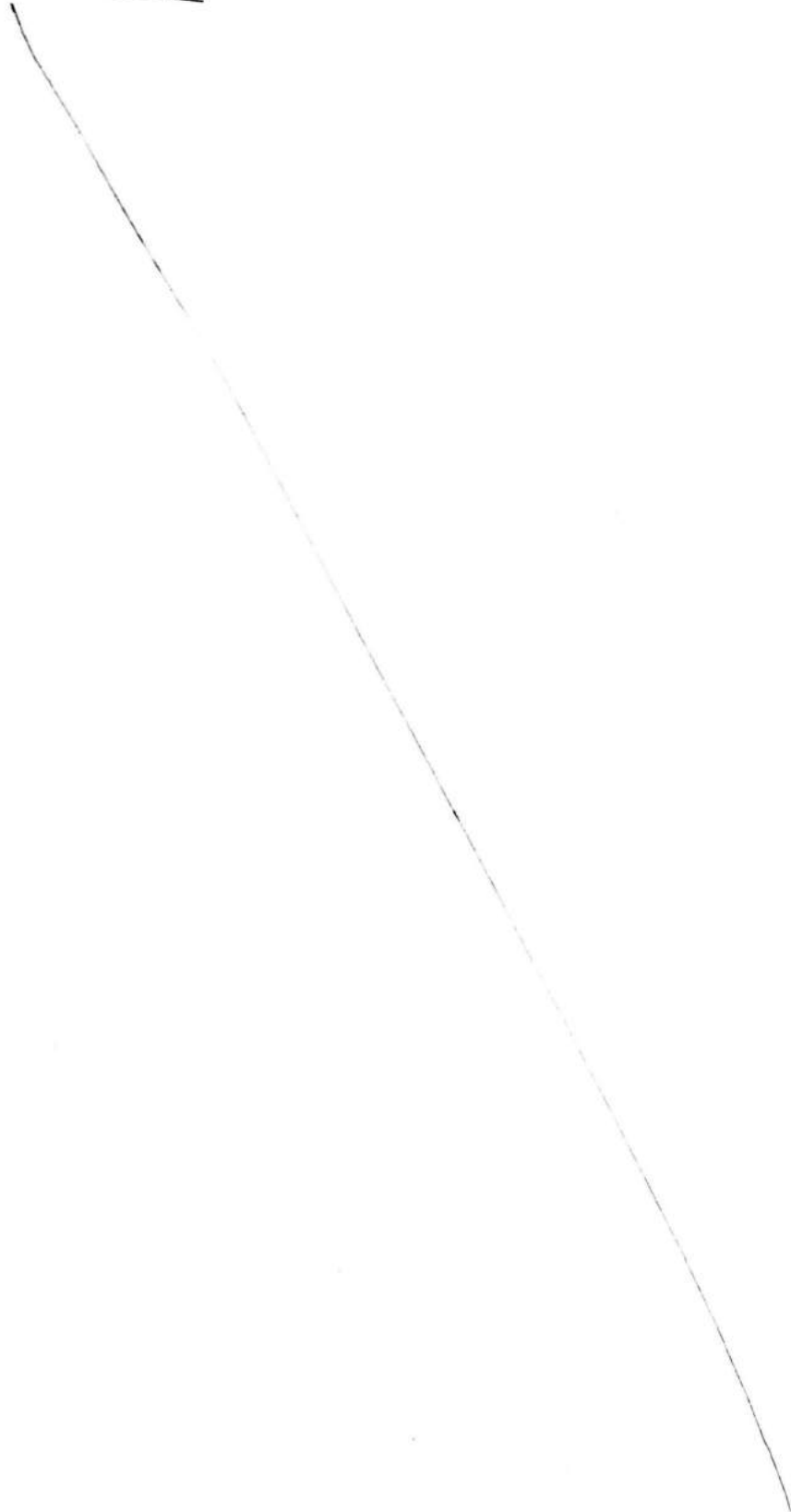


Appendix 2: Staffing and Timesheet

<b>ECORYS</b> ▲		<b>TIMESHEET</b>	
Project title:		Training Need Assessment and Management for effective resource utilization in Tamil Nadu Highways Department	
Expert's name:		E-Learning Expert	
Position:			
Month:			
<b>Date</b>	<b>Days</b>	<b>Short description of activities</b>	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
<b>Total</b>			
Signature Expert:		Approval Team Leader:	Approval Ecorys Project Manager:
			



Appendix 3: Deleted



*J. Anand*

## Appendix 4

### GENERAL CONDITIONS

In the text hereunder "Subcontractor" shall mean "Consultant"

#### Changes in work scope

##### Article 1

1. If during the term of this Agreement significant changes occur in the scope or character of the work to be performed, Subcontractor shall make the necessary changes to the tasks as listed under 3.1 of this Agreement here above after consultation with Ecorys and shall implement these changes only after receiving a written order from Ecorys Office in New Delhi
2. If there are grounds for doing so, Ecorys and the Client shall determine the adjustment to remuneration to the corresponding position of subcontractor as mentioned in the Contract and/or the period for providing its services that are attributable to a change in work scope. Ecorys may make necessary adjustments to remuneration payable to the Subcontractor.
3. The entitlement to any additional remuneration or extension of time by Subcontractor shall not exceed that which is granted to Ecorys by the Client in respect of the change in the scope or extension of time of work concerned.
4. For all the above changes to take effect written mutual consent of both Ecorys and Consultant is required.

#### Termination

##### Article 2

1. Client reserves the right at any time to withdraw the Contract or withdraw subcontractor position in the Contract. In such event this Agreement will be terminated at the same time. Ecorys shall not be obliged to indemnify Subcontractor in any way for the consequences of withdrawal of the appointment by the Client.
2. Ecorys may terminate this Agreement for the following reasons:
  - Non-performance or sub-standard performance by Subcontractor will be considered sufficient cause for the termination of this Agreement.
  - Breach of any contract provisions mentioned in this Agreement or any actions by Subcontractor that may damage the reputation of Ecorys may be considered as cause for immediate termination of the Agreement.
3. If Subcontractor shall be dissolved, liquidated or declared insolvent or bankrupt, Ecorys may forthwith terminate this Agreement by written notice to such effect.
4. Ecorys is not responsible and/or liable for any damages that may occur if the project is terminated or discontinued except for misconduct and/or gross negligence of Ecorys.
5. If this Agreement is terminated for any reason pursuant to article 2.1, 2.2 or 2.3 of these General Conditions both parties shall take immediate steps to bring their co-operation to an end in a prompt and orderly manner and shall make every effort to keep expenditures for that purpose to a minimum.
6. Subcontractor shall preserve and protect all documents generated or obtained by Subcontractor in fulfilling their obligation under this Agreement and shall deliver or relinquish such documents to or as directed by Ecorys.

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## Indemnity and insurance

### Article 3

1. Subcontractor shall indemnify and hold harmless Ecorys against any and all claims, demands and/or judgments of any nature brought against Ecorys arising out of the provision of services by Subcontractor under this Agreement. The obligation under this section shall survive the termination of this Agreement.
2. Subcontractor shall indemnify and keep indemnified Ecorys against all losses and claims for all injuries and damages to any person or property - including the property and employees of Ecorys - which may arise out of or in consequence of their services and against all claims, demands, proceedings, damages, cost, charges and expenses whatsoever in respect thereof or in relation hereto.
3. Subcontractor shall be responsible for effecting adequate insurance protection against the obligation and risks assumed by himself here under in the performance of his services. This includes:
  - health insurance
  - disability insurance
  - pension.
4. The cost of these insurances are for the account of Subcontractor. Under no circumstances will Ecorys be held responsible to make any payments by reason of partial or total, temporary or permanent disability, income foregone because of illness or temporary or permanent disability, nor for payments in case of decease, including widow and/or orphan pensions, nor for cost of repatriation in case of illness, accident or decease.
5. Subcontractor staff shall be physically fit for the assignment.
6. In no case, this Agreement will create any relationship between subcontractor and Ecorys or Client and shall not be binding on them.

## Reporting, information and storage

### Article 4

1. Subcontractor and Ecorys will inform each other on a regular basis on the progress of all activities, developments and other data, which are relevant for the performance of this Agreement.
2. Subcontractor shall present his report in conformity with the Client's guidelines.
3. Reports will be presented to the Ecorys representative.
4. All documents and reports, maps, diagrams, designs, models, statistics, tables, data and computer software produced by Subcontractor under the terms of this Agreement shall be properly arranged and indexed by Subcontractor and kept with the utmost care for 1 (one) year after the termination of the work which Subcontractor was appointed to perform, as referred in articles 1 and 2 of the Principal Agreement. Such data shall be freely available at all times to the Client and to Ecorys.
5. Subcontractor shall not invoke copyrights or other rights in respect of the Client and Ecorys, if and in so far as to make use of the material referred to under Article 4.4 of the General Conditions.
6. Subcontractor is obliged, without any reimbursement by Ecorys except for the cost, to transfer the property of the intellectual property rights to the material referred to under article 4.4 of the General Conditions to Ecorys if it is conceivable that Subcontractor is the owner of such a right.
7. If the industrial property right has still to be created by further acts Subcontractor is obliged without any reimbursement by Ecorys except for the cost to do whatever is necessary to create a right of ownership in the industrial property right in the name of Ecorys.



## Liability

### Article 5

1. Subcontractor shall remain liable beyond the completion of his services for any default or neglect in the performance of these services to the same extent and for such period as Ecorys remains liable under the Contract or governing law.

## Further subcontracting

### Article 6

1. Subcontractor may not - without the prior written consent of Ecorys - assign any right under this Agreement or further subcontract services, either partially or in its entirety.

## Exclusivity

### Article 7

1. Subcontractor shall not be engaged in any follow-up project or study, directly resulting from the activities within the scope of this Agreement, without first offering his services to Ecorys at reasonable remuneration and other conditions.

## Disputes

### Article 8

1. Any and all disputes arising out of, or in connection with, or in the implementation of this Agreement shall be, so far as possible, settled amicably.
2. Failing such amicable settlement, any such dispute shall be submitted to the jurisdiction of the competent court of law in New Delhi, India.
3. Pending the submission to this court of law and thereafter until the outcome of the dispute parties shall, except in the event of termination, continue to perform all their obligations set forth herein.

## Entire Agreement

### Article 9

1. Unless otherwise provided herein, this Agreement including all annexes is in the entire understanding and agreement between the parties with respect to the subject matter herein and supersedes and cancels any and all prior contemporaneous oral and written agreements or representations, if any, between the parties which are inconsistent with the provisions of this Agreement,
2. This agreement may not be amended or modified except in writing signed by both parties.

M.S.I

J. Arum



## Appendix 5: Ecorys Code of Business Ethics

Ecorys enjoys a reputation for conducting its business with integrity and with respect for the interests of those our activities can affect. This reputation is an asset, just as real as our people and brands.

Our first priority is to be a profitable business and that means investing for growth and balancing short term and long-term interests. It also means caring about our customers, employees, shareholders, suppliers, and the communities in which we conduct our operations. In the course of meeting our business objectives, we consider it essential that all employees understand and comply with our values and therefore share the Ecorys way of doing things.

It is very easy in the realm of business ethics to make high sounding statements of little practical value. The general principles contained in this Code are the bedrock; more detailed guidance tailored to the needs of different countries and companies already exists and will be further developed.

This Code of Business Principles is a core Ecorys statement and we commend it to all our stakeholders.

### 1. **Standard of conduct**

Ecorys conducts its business with honesty and integrity and with respect for the interests of those with whom it has relationships.

### 2. **Obeying the Law**

Ecorys companies are required to comply with the laws and regulations of the countries in which they operate.

### 3. **Employees**

Ecorys companies are required to recruit, employ and promote employees on the sole basis of the qualifications and abilities needed for the work to be performed. Ecorys is committed to providing safe and healthy working conditions for its employees worldwide. Ecorys believes it is essential to maintain good communications with employees, normally through company-based information and consultation procedures.

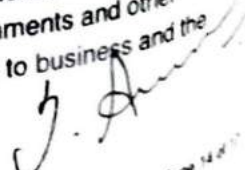
### 4. **Conflicts of Interest**

Ecorys expects its employees to avoid personal activities and financial interests which could conflict with their jobs. Steps are taken to ensure that employees receive appropriate guidance in areas where such conflicts can arise.

### 5. **Public Activities**

Ecorys neither supports political parties nor contributes to the funds of groups whose activities are calculated to promote party interests. Ecorys companies are encouraged to promote and defend their legitimate business interests. In so doing they may either directly, or through bodies such as trade associations, raise questions and discuss particular government actions or decisions. Where their experience can be useful, they are encouraged to cooperate with governments, individuals, agencies and other organizations in the development of proposed legislation and other regulations which may affect such legitimate interests. Ecorys companies are also encouraged to respond to requests from governments and other agencies for information, observations or opinion on issues relevant to business and the

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community in which we operate.

**6. Product Assurance**

Ecorys is committed to providing products which consistently offer value in terms of price and quality.

**7. Environmental Issues**

Ecorys is committed to running its business in an environmentally sound and sustainable manner. Accordingly, its aim is to ensure that its processes and products have the minimum adverse environmental impact commensurate with the legitimate needs of the business.

**8. Competition**

Ecorys believes in vigorous yet fair competition and supports the development of appropriate competition laws. Employees receive guidance to ensure that they understand such laws and do not transgress them.

**9. Reliability of Financial Reporting**

Ecorys accounting records and supporting documents must accurately describe and reflect the nature of the underlying transactions. No undisclosed or unrecorded account, fund or asset will be established or maintained.

**10. Bribery**

Ecorys does not give or receive bribes in order to retain or bestow business or financial advantages. Ecorys employees are directed that any demand for or offer of such bribe must be immediately rejected.

**11. Application**

This Code applies to Ecorys companies throughout the world. Where Ecorys companies participate in joint ventures the application of these principles will be actively upheld; this will significantly influence the decision to enter into or to continue in any joint venture.

**12. Compliance**

It is the responsibility of the Board of Ecorys to ensure that the principles embodied in this Code are communicated to, understood and observed by all employees. An independent Internal Audit function supports the Board in monitoring compliance with the Code. The Board of Ecorys will not criticize management for any loss of business resulting from adherence to these principles. Equally, the Board of Ecorys undertakes that no employee will suffer as a consequence of bringing to their attention, or that of senior management, a breach or suspected breach of these principles.

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**Appendix 6: Payment Milestones**

Sl. No.	Deliverable	Time Period	Payment (%)
1.	Submission of detailed plan for establishing an e-library at the upcoming Training Centre in consultation with the client.	End of 1 month	0 %
2.	Submission of a detailed TOR with necessary cost analysis for establishing e-library (by the department) which shall comprise, all relevant e-resources like, books, journals, IS, IRC, AASHTO, ASTM Codes, Specification and Standards, Manuals, Reference Books and all other relevant documents in consultation with the client.	End of 4 months	30 %
3.	Development of a system to ensure secured and controlled accessibility to the e-resources by the employees of TNHD.	End of 5 months	0 %
4.	Demonstration of the effective working of the system to the entire satisfaction of the client and submission of guidelines for the operation and maintenance of the e-library	End of 6 months	70 %
	<b>Total</b>	<b>6 months</b>	<b>100 %</b>

*M.S.I.*


*J. Arun*

**VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES**

**CONSULTANCY SERVICES**

**INVOICE**

**21/12/2019**

<b>Invoice From</b>	Vels Institute of Science, Technology and Advanced Studies (VISTAS), PV Vaithiyalingam Rd, Velan Nagar, Krishnapuram, Pallavaram, Chennai-600117. Tel: +91 44 22662500 / 2501 / 2502 / 2503	
<b>Invoice To</b>	Name of the Client	HE-MAN Engineers
	Full postal address	Vattekkad, Mookkannoor Po, Angamaly, Ernakulam-683577, Kerala, India
<b>Particulars</b>		<b>Amount (Rs.)</b>
Initial payment for Implementation of ISO 9001: 2015 QMS consultancy services (Ref: QMSC/2019/01)		14,000
<b>Total</b>		14,000
Amount Chargeable (in words): <b>Rupees Fourteen thousand</b> only. Mode of payment: Electronic Transfer Account details: SBI Bank IIT Madras, Chennai Account Name: MOHAMMED FAISAL A A/c No:10620945647 IFSC: SBIN0001055		
<b>For VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES</b>		
 <b>(Principal Consultant)</b>		
<b>Name:</b> Dr. A. Mohammed Faisal B.E., Ph.D., <b>Designation:</b> Assistant Professor <b>Department:</b> Department of MBA, School of Management Studies and Commerce		





Mohammed Faisal <a.mohd.faisal@gmail.com>

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## PSG

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neftinfo.psg@sbi.co.in <neftinfo.psg@sbi.co.in>  
To: a.mohd.faisal@gmail.com

Mon, Dec 30, 2019 at 3:44 PM



Dear Customer,

Thank you for banking with State Bank of India.

Your account has been credited for NEFT received as per the details given below

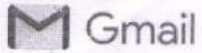
Credited to Your A/c: XX5647  
Amount: INR 14,000.00  
UTR No.: P19123091755325  
Date: 30/12/2019  
Sent by: HE MAN ENGINEERS  
Sender Bank IFSC: CNRB0009999

This is an auto generated mail. Please do not reply to this message or on this email address.  
For any query, please contact our toll-free number 1800-112-211.

Do not disclose any confidential information such as Username,Password,OTP etc. to anyone.

Sincerely,  
SBI NEFT Team





Office Assistant - SMS Vels University <officeassistant.sms@velsuniv.ac.in>

---

## Ecorys deposit receipt

1 message

---

**Dr.G.Rajini Vels University** <rajini.sms@velsuniv.ac.in>

Wed, Aug 5, 2020 at 3:57 PM

To: Office Assistant - SMS Vels University <officeassistant.sms@velsuniv.ac.in>

INR 64,750.00 deposited to A/c XXXXXXXX1268 towards NEFT Cr-ICIC0SF0002-ECORYS INDIA PRIVATE-Rajini G-22527490691DC Value 27-JUL-2020 . Clear Bal is INR 69,539.90, for any query call 1800-103-1222 . Cheque credits subject to clearing



VELS UNIVERSITY - PALLAVARAM, Vels University Compound, Velan  
Nagar, P.V. Vaithiyalingam Road, Pallavaram, Chennai - 600117,  
Chennai - 600117, Tamil Nadu  
IFSC : ESFB001159

तीन महीने तक वैध / VALID FOR 3 MONTHS ONLY  
दिनांक  
Date 03 08 20 20

Pay Vels Institute of Science, Technology and Advanced Studies  
रुपये Rupees Eight thousands Nine hundred and Ten rupees  
only. ₹ 8910/-

खा. सं.  
A/c No. 100003091268

Universal Salary Savings

G. Rajini  
RAJINI G

Payable at par at all branches of Equitas Small Finance Bank Ltd.

कृपया ऊपर हस्ताक्षर करें / Please sign above

⑈000008⑈ 600756034⑈ 001084⑈ 31



To,  
Capt. N. Kumar  
VELS UNIVERSITY,  
School of Maritime Studies  
Rajiv Gandhi Salai ,  
Off OMR (IT Highway)  
Near Navalur, Thalambur,  
Chennai – 603 103

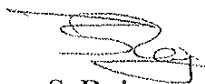
Dear Sir,

Please find enclosed cheque No.006917 dt.25.06.2018 for Rs. 36,160 drawn on HDFC Bank Ltd. in your favour towards payment for your bill as per details given below:

Date	Bill No.	Amount
22/02/2018	VELS/2018/046	1,180 ✓
14/02/2018	VELS/2018/039	1,180 ✓
09/03/2018	VELS/2018/062	7,000 ✓
09/03/2018	VELS/2018/063	29,500 ✓
	<b>Total</b>	<b>Rs. 38,860</b>
	Less : TDS	(2,700)
	<b>Net Amount Payable</b>	<b>Rs. 36,160</b> ✓

Kindly acknowledge receipt of the same

Thanking you,  
Yours faithfully,  
**For Maersk Training India Private Limited**



**S. Raj**  
Manager - Finance

Encl. : As above

**HDFC BANK**

759, ITC CENTRE ANNA SALAI,  
OPP. T.V.S CHENNAI - 600 002, TAMIL NADU  
RTGS / NEFT IFSC : HDFC00000004

A/c. PAYEE ONLY

25062018  
D D M M Y Y Y Y  
Valid for 3 months only

Pay Vels University

Or Bearer  
या धारक को

Rupees रुपये Thirty six thousand one hundred and  
sixty only

अदा करें ₹ 36,160/-

A/c No. 00040310004450

Brn: 0004 Pdt: 031  
C/A

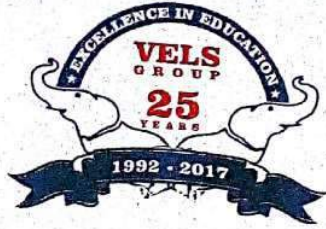
Payable at par through clearing/transfer at all branches of HDFC BANK LTD

For MAERSK TRAINING INDIA PRIVATE LIMITED

*[Signature]*  
*[Signature]*

Authorised Signatories  
Please sign above / कृपया यहाँ हस्ताक्षर करें

⑈006917⑈ 600240002⑈ 902267⑈ 30



# VELS

INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)

வேல்ஸ் அறிவியல் தொழில்நுட்ப உயர் ஆராய்ச்சி நிறுவனம்  
(DEEMED TO BE UNIVERSITY Estd.u/s 3 OF THE UGC ACT,1956)



**NAAC ACCREDITED**  
PALLAVARAM - CHENNAI - INDIA

5<sup>th</sup> October 2018

Dr. V. Rajendran  
Professor & HOD  
Dept. of Electronics & Communication Engg.  
School of Engineering

Dr. Kallol Roy  
Managing Director  
BHAVANI  
Kalpakkam: 603102.  
(Mobile: 9969049563)

Through

The Registrar  
VISTAS

Dear Sir,

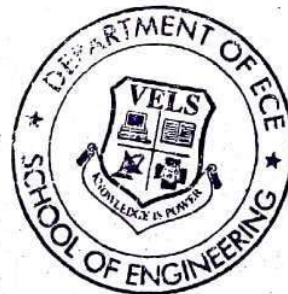
Sub: Submission of the Project proposal Entitled "*Feasibility study on regression/classification by mining the HF radar data using unsupervised learning process leading to identification of the intruders*" - reg.

I wish to inform you that with reference to the discussion at NIOT on 7<sup>th</sup> September, 2018 and as directed a mini project for the data analysis has been prepared with the title "*Feasibility study on regression/classification by mining the HF radar data using unsupervised learning process leading to identification of the intruders*", in line with the analytical techniques suggested by the scientist involved. The duration of the mini project is for six months.

Therefore, I would like to consider our proposal favorably with short timeline of 6 months with financial outlay of Rs.2.3 lakhs.

Sincerely yours

  
Dr. V. Rajendran



Forwarded

  
5-10-18

Dr.A.R. Veeramani  
Registrar

Vels Institute of Science, Technology  
& Advanced Studies (VISTAS)  
Pallavaram, Chennai - 600 117.

ENCLOSURE:

- Project Proposal

Velan Nagar, P.V. Vaithiyalingam Road, Pallavaram, Chennai - 600 117, INDIA

Phone: (91-44) 2266 2500, 2266 2501, 2266 2502, 2266 2503 Fax : (91-44) 2266 2513

E-mail: [vistas@velsuniv.ac.in](mailto:vistas@velsuniv.ac.in) Website: [www.velsuniv.ac.in](http://www.velsuniv.ac.in)

Admin. Office: 521/2, Anna Salai, Nandanam, Chennai - 600 035. Tele Fax : 2431 5541 / 2431 5542





# HITEC INDUSTRIAL FAN AND SYSTEMS

NO 1/393, 4<sup>th</sup> Street, Karthikeyapuram, Madipakkam, Chennai -600091 India

Phone +91 98408 75735, +91 9790700733

Email:- [hitecfan@gmail.com](mailto:hitecfan@gmail.com), [pthendraseelvam@gmail.com](mailto:pthendraseelvam@gmail.com)

Date: 3.04.2019

Dear Sir

Sub: HITEC INDUSTRIAL FAN AND SYSTEMS -Technical Evaluation report-Reg.

-----

We wish to convey that our technical team satisfied with the assigns work carried out by your technical team. We send the report to the client team for evaluation, after the reply from the client side we will communicate you; if any further requirement in works submitted by you. The consultation fee will be paid after the client team evaluation.

Thanking you

For HITEC INDUSTRIAL FAN AND SYSTEMS

Managing Director

HITEC INDUSTRIAL FAN AND SYSTEMS  
No.1/393, 4th Street, Karthikeyapuram,  
Madipakkam, Chennai - 600 091.

