



NAAC 3.1. SUMMARY

3.1.1 Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years (3)

3.1.3 Number of research projects per teacher funded by government and non-government agencies during the last five years (For UG Colleges weightage of this metric will be 7) (4)

S.No	Title	Page.No
1	Energy Audit	1
2	PMSG based seashore windmill with automatic output voltage control	8
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13	Seminar on Advances in green technology for pollution free energy sources	50


Principal

PRINCIPAL
JCT College of Engineering & Technology
PICHANUR, Coimbatore - 641 105.



JCT College of Engineering and Technology

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)

Accredited by NAAC & Accredited by NBA for Petrochemical, Mechanical, EEE & CSE.)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



Vanitha Engineering

20/128, Kumaran Nagar
Eachanari, Coimbatore 641024
Ph. : 984258825

Ref. No. VE/098/2018

To

Date: 14.06.2018

The Head of the Department,
Department of Electrical and Electronics Engineering,
JCT College of Engineering and Technology,
Coimbatore -641105

Dear Sir,

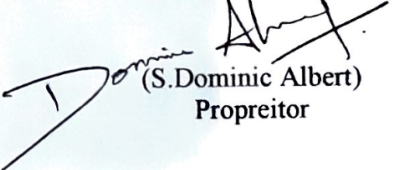
Sub: Requisition for Consultancy Work – Reg.

We are operating CNC Machines for past few years. For past few months Power Consumption charges increased drastically. Many of friends recommended me about Energy Auditing. So I kindly request you to help me identify the problem by conducting an Energy Audit in my Company.

Please kindly arrange your best men and also quote the amount for the Consultancy Work.

Thanking you

Yours faithfully


(S.Dominic Albert)
Propreitor



Ref: JCTCET/EEE/R&D/02

25.06.2018

To

The Proprietor,
Vanitha Engineering,
20/128, Kumaran Nagar,
Eachanari,
Coimbatore – 641024.

Dear Sir,

Sub: Acceptance for Consultancy Work – Reg.

Ref: VE/098/2018 dated 14.06.2018

Warm greetings from JCT College of Engineering and Technology

We are happy to inform that accepting your consultancy work to conduct an Energy Audit in your company. We will audit the entire Electrical component which you have installed on your company and we will provide complete detail on the Energy Consumptions. We also give suggestion on how to improve the Energy efficiency. For the above work mentioned we quote the amount sum of Rs.15, 000 and our professionals will visit your company on your appointed date.

Thanking you

Yours faithfully,

[Handwritten signature]
HOD/EEE

Dr. K. GEETHA, M.E., Ph.D.
Professor and Head,
Dept. of Electrical and Electronics Engg.,
JCT College of Engineering and Technology,
Coimbatore - 641 105.

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



Ref: JCTCET/EEE/R&D/02

23.07.2018

To

The Proprietor,
Vanitha Engineering,
20/128, Kumaran Nagar,
Eachanari,
Coimbatore – 641024.

Dear Sir,

Sub: Results of Pre-Audit – Reg.

Ref: VE/098/2018 dated 14.06.2018

Warm greetings from JCT College of Engineering and Technology

The Pre-Audit on your company Completed successfully. Herewith this report I also attached the Pre-Audit Report. Please go through the Report and we divided the Components according to their functions. Once you send the Confirmation letter, we will proceed for the Detailed Auditing.

Thanking you

Yours faithfully,


Dr. K. GEETHA, M.E., Ph.D.,
Professor and Head,
Dept. of Electrical and Electronics Engg.,
JCT College of Engineering and Technology,
Coimbatore - 641 105.

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



Vanitha Engineering

20/128, Kumaran Nagar,
Eachanari, Coimbatore 641024.
Ph. : 9842588255

Ref. No. VE/106/2018

To

Date: 26.07.2018

The Head of the Department,
Department of Electrical and Electronics Engineering,
JCT College of Engineering and Technology,
Coimbatore -641105

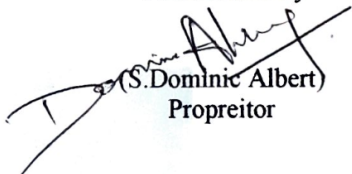
Dear Sir,

Sub: Confirmation for Detailed Energy Audit – Reg.

Greetings from Vanitha Engineering. We are satisfied about the Pre-Audit Report. We confirm you to conduct detailed Energy Audit. So contact through phone to confirm the convenient date.

Thanking you

Yours faithfully


(S. Dominic Albert)
Proprietor



Ref: JCTCET/EEE/R&D/02

10.08.2018

To

The Proprietor,
Vanitha Engineering,
20/128, Kumaran Nagar,
Eachanari,
Coimbatore – 641024.

Dear Sir,

Sub: Completion of Consultancy Work – Reg.

Ref: VE/106/2018 dated 26.07.2018

Warm greetings from JCT College of Engineering and Technology

We are happy to inform that the Energy auditing on your Campus has been done successfully. I hereby submit the Detailed Energy Auditing Report.

We have considered all the Electrical utilization and the report includes the problem for Energy loss and also about the actions to be taken for the improvement of Energy efficiency.

We thank you for all your support and the opportunity you have given us.

Thanking you

Yours faithfully,

B. K. Geetha
19/8/18

Dr. K. GEETHA, HOD/EEE
Professor and Head,
Dept. of Electrical and Electronics Engg.
JCT College of Engineering and Technology,
Coimbatore - 641 105.

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

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Vanitha Engineering

20/128, Kumaran Nagar

Eachanari, Coimbatore - 641024.

CASH BILL

Bill.No. VE/B/023

Date: 14/8/2018

To.

ISC College of Eng & Tech,
Coimbatore

S.No	PARTICULARS	RATE	AMOUNT
1	Energy Audit Consultancy work	/	15,000
TOTAL			15,000


Proprietor

ENERGY AUDIT REPORT

VANITHA ENGINEERING

(Audited by Dr.M.Jayaprakash and Dr.T.Anbalagan, JCTCET.)

Introduction

This Project is the vision to make the company energy efficient. It is a fact that CNC Machines uses a huge amount of energy and it is also very obvious that we waste quite a sizable chunk of it. Vanitha Engineering energy bill keeps up around INR 17-24 Lakhs per year. This amount is huge and thus naturally attracts attention when we understand that quite a lot of energy is being wasted, which in turn would mean that huge amount of financial resources are being wasted. Making the Company area energy efficient will not only help the company reduce its expenses but also helps to fulfil the moral responsibility of not wasting this precious resource, which is scarcely available to rest of the people of the country.

Energy Audit Objective

This Energy Audit was conducted in two phases

- Phase 1 – Pre-Audit
- Phase 2 – Detailed Audit

Pre-Audit:

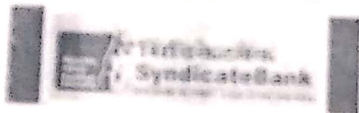
- To acquire and analyse data and finding the energy consumption pattern of these facilities.

Detailed Audit:

- To calculate the wastage pattern based on the results of the first objective.
- To find and implement solutions that are acceptable and feasible

JCT College of Engineering and Technology

Dr S Kavitha Associate Professor Dept. of Petrochemical JCT College of Engineering and Technology Coimbatore-641105	Cfd Analysis of catalytic converter to reduce particulate matter and achieve limited back pressure in diesel engine	Harihara Pramesh M	CHE-014	The Principal JCT College of Engineering and Technology Coimbatore-641105	7500/-
✓ Ms.J Priyadarshini Assistant Professor Dept. of EEE JCT College of Engineering and Technology Pichanur Coimbatore - 641 105	PMSG Based seashore windmill with automatic output voltage control	P.Anas Ibn Yousuf K.P.Sainul Nisam K.Muhammed Shakir	EEE-129	The Principal JCT College of Engineering and Technology Pichanur Coimbatore - 641 105	7500/-



सिन्डिकेट बैंक कोम्बटोर - 641018
KUNACHI ROAD, COIMBATORE - 641018
PSC SYNDICATE (CBS)

18032019
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Pay J. Priyadharshini

रुपये Rupees Seven Thousand Five Hundred only

रुपये की ₹ 7500/-

A/c No 61212010007372

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Ph: 044- 22301428 Fax: 044- 22301552

www.tanscst.nic.in E-mail: enquiry.tanscst@nic.in : ms.tanscst@nic.in

Dr.R.SRINIVASAN, M.Sc., Ph.D., F.I.C.S., M.A.C.S.(USA),
Member Secretary

Ref: TNSCST/SPS/AR/2018-2019/

24.06.2019

To: Ms.J.Priyadharshini
Assistant Professor
Dept. of EEE
JCT College of Engineering and Technology
Pichanur
Coimbatore - 641 105

Sir/Madam,

Sub: TNSCST Programme 'Student Project Scheme' – Conduct of Seminar–Cum–Exhibition –
Invitation extended – reg.

With reference to the above, the Seminar-cum-Exhibition has been arranged on **19th and 20th JULY 2019** at **Kalasalingam Academy of Education and Research (Kalasalingam University), Krishnankoil, Srivilliputhur-626126**. I request you to kindly ensure that one of the student who did the project must come to Krishnankoil and present the findings of the project in the seminar. Models pertaining to the project can be exhibited and share your innovative ideas with others.

The following points may please be noted:

- The student must report to coordinator Dr.R.Ramalakshmi (9486488642 & rama@klu.ac.in) & Dr. N. Nallamuthu (8220471458 & nnallamuthu@gmail.com) Kalasalingam Academy of Education and Research, Krishnankoil, Srivilliputhur-626126.
- Accommodation and food will be provided from the evening of 18th July 2019 till the evening 20th July 2019 in the college hostel.
- Only one student will be provided boarding and lodging in the College hostel. No charges need to be paid. **Second sleeper class train fare / Actual Bus (Govt. bus) fare** (Up & Down) from the Place of study to Kalasalingam Academy of Education and Research, Srivilliputhur will be provided for one student of each project.
- The student must be present on both the days (i.e) **19th and 20th JULY 2019**.
- The student should make the oral presentation within the allotted time of 10 minutes and LCD Projectors will be provided.
- Request for specific requirement for display of project must be made in advance to the Co-ordinator.
- Certificate will be given to those who have done the project.
- Prizes will be given to the best presentation and best exhibit in each discipline.

Those who have not submitted the Utilization Certificate so far, kindly arrange to send the same immediately without any further delay.

I request you to co-operate in making this seminar-cum-exhibition a successful academic event.

Thanking you,

Yours faithfully,

Member Secretary



TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

CHE-014

(Govt. of Tamilnadu)

DOTe Campus, Chennai - 600 02

Ph: 044- 22301428 Fax: 044- 22301552

www.tanscst.nic.in E-mail: enquiry.tanscst@nic.in ; ms.tanscst@nic.in

Dr.R.SRINIVASAN, M.Sc., Ph.D., F.I.C.S., M.A.C.S.(USA),
Member Secretary

Ref: TNSCST/SPS/AR/2018-2019/

24.06.2019

To: Dr S Kavitha
Associate Professor
Dept. of Petrochemical
JCT College of Engineering and Technology
Coimbatore-641105

Sir/Madam,

Sub: TNSCST Programme 'Student Project Scheme' – Conduct of Seminar–Cum–Exhibition –
Invitation extended – reg.

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I request you to co-operate in making this seminar-cum-exhibition a successful academic event.

Thanking you,

Yours faithfully,

Member Secretary



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Dr S Kavitha Associate Professor Dept. of Petrochemical JCT College of Engineering and Technology	Cfd Analysis of catalytic converter to reduce particulate matter and achieve limited back pressure in diesel engine	Harihara Pramesh M	CHE-014	The Principal JCT College of Engineering and Technology Coimbatore-641105	7500/-
---	--	--------------------	---------	--	--------

1/6/18

Submitted to the principal

Respected sir,

Herewith I am submitting
an amount Rs 1500/- (One thousand
five hundred only) towards charge
for testing of project work specimen
from ME student of RV's faculty of
Engineering Sular.

Thanking You
N. Sellakumar
Test conducted by.
Mr. N. Sellakumar.
ASST. PROF./CIVIL.

Yours

A. K. Kumar
A. K. Kumar
HOD/CIVIL



on
for
1/6/18

From

Pichanur
26/5/18

Jijin-s (3011)
RVS Faculty of Engineering
Sulur

To

The Head of department
Civil department
JCT CET

Respected sir,

Subject : (Regarding Permission For testing of
Our Concrete specimens)

This is to inform you that we are
From RVS Faculty of Engineering, Sulur. & we need to
test our Concrete Specimen for our m.e project.

Hereby, we request you to kindly provide
with bonafied certificate at earliest

cs
Thy
HOD(civil)

List of specimens,
cube,
cylinder
column.

as
permitted
26/5

Thanking you

Jijin-s

Jijin-s
(Jijin-s)

Pachankur
26/05/18

from
Sajith V.R (712916413019)
RVS Faculty of Engineering
Sulur.

To

The Head of Department
Civil department
JCT CET

Respected Sir,

Subject = (Seeking permission for testing of our concrete specimens)

This is to inform you that, we are from
RVS Faculty of Engineering, Sulur, we need to test
our 8 concrete specimens for our ME-project.

Hereby, we request you to, kindly provide
with bonafide certificate, at the earliest.

Thanking you


HOD/Civil

List of specimens:-

cube,
cylinder,
beam



(Sajith V.R)
(Sajith V.R)



From

Manash PK (3014)

Rvs Faculty of engineering
Sulur

Pichanur

26/05/18

To

The Head of department

Civil department

JCT C&T

Respected Sir

Subject - (Seeking Permission for testing of our
concrete specimens).

This is to inform you that, we are from Rvs
Faculty of engineering, Sulur, we need to test our
and concrete specimens for of our MC-Project

Here by, we request you to. Kindly provide
us with bonafide certificate at the earliest

Attn
1700/111

List of specimen's

cube,
cylinder
beam

26/5

Thanking you

Manash.

(Manash PK)
(Manash P.K.)



19/4/18

Submitted to the principal.

Respected Sir,

Here with I am submitting an amount Rs. 10,400/= (Ten thousand Four hundred only) towards fund generated through consultancy material testing.

1. P.M.G.SY 2016-17 Kundadam Block - upgradation of Road from sangarankuppalayam to pudupalayam.

(a) Test on sand - 900.00	} 5,500/=
(2)	
(b) Test on aggregate - 900.00	
(2)	
(c) Test on cement (2) - 900.00	
(d) Test on steel (1) - 1200.00	
(e) Test on water (1) - 1000.00	
(f) Test on concrete cube 600.00	
(3)	

2. P.M.G.SY 2016-17 Kundadam Block - upgradation of Road from Surigavallur - Velappam palayam

(a) Test on sand - 900.00	} 4,900/=
(2)	
(b) Test on Aggregate (2) - 900.00	
(c) Test on cement (2) - 900.00	
(d) Test on steel (1) - 1200.00	
(e) Test on water (1) - 1000.00	

Received Amt - 10,400/= Total. - 10,400/=

TEST INCHARGE

19/4/18

A. Kumar

- 12/2/18

From,
Assitant Engineer,
Kundladam Block,
Panchayat Union,
Tirupur.

To
The Principal,
JCTCET, Coimbatore.

Sub: Test report for samples - reg.

Sir,
Kindly send the following test reports:
Name of work: Upgradation of ^{road} work from km 3/6
of Sangaramdampalayam - Puthupalayam to
Sellappillai gounden pudur road km 0/0 - 3/2.
Scheme: P.M.G.S.Y (2016-2017)

I request to conduct the following test
and send the test report.


Assitant Engineer.

12/2/18

From,
Assitant Engineer,
Kundadam Block,
Panchayat Union,
Tirupur,

To
The Principal,
JCTCET, Coimbatore.

Sub: Test report for samples - reg.

Sir,
Kindly send the following test reports.

Name of work: Upgradation of the road from
Suriyanallur - Velappampalayam road
to S. Alampalayam km 0/0 - 4/6.

Scheme : P.M.G.S.Y (2016 - 2017)

I request to conduct the following test
and send the test report.



Assitant Engineer

Prop: *M. Elango*

IS: 8034

IS: 9283

COIMBATORE PUMP ENGINEERING



POST BOX No. 2019, 80 Post Box no. 2019, 30-C Kamadhenu Nagar,

CM/L-6434063

CM/L-6434164

Krishnarayapuram, Avarampalayam, Coimbatore 641006. Ph. : 0422-2562426

frs. of: Single phase & Three phase Submersible Pumpsets, Monoblocks, Openwell Monoblocks, Motors & Spares

To

Date: 16.03.2018

The Principal,

JCT College of Engineering and Technology,

Coimbatore -641105

Dear Sir,

Sub: Design of motor for low power consumption Submersible pump – Reg

We are very happy to introduce ourselves a leading pump manufacturing company in Tamilnadu. At present we are focusing on low power consumption submersible pumps. We have got some enquiries for open-well; dry type, monoblock and low power consumption submersible type pumps of range 12.5HP and 15 HP.

We request you to develop a design for motors for above mentioned submersible pump with better efficiency and performance characteristics.

Thanking you

Yours faithfully

(M.Elango)

Proprietor



23.03.2018

To

The Manager,
M/S Coimbatore Pump Engineering,
Post Box no. 2019, 30-C kamadhenu Nagar,
Krishnarayapuram,
Avarampalayam,
Coimbatore 641006

Dear Sir,

Sub: Consultancy from EEE department - Regarding

Ref: JCTCET/EEE/R&D/01 dated 16.03.2018

Warm greetings from JCT College of Engineering and Technology

With reference to your letter cited above, we wish to bring to your kind information that we are one of the reputed institutions in the state. As a part of research activities from the department of Electrical and Electronics Engineering, We would like to share our expertise and ideas for developing new projects with the needs of your industry which you have stated in reference, and let the students to be sentient towards industrial needs. EEE department in our college is fervently working on design of electrical pumps. As mentioned in your letter we are able to provide implausible guidance to your industry. In this regard you are requested to discuss unreservedly with Mr. V.Jethose, HoD/EEE for any further consultation.

Thanking you

Yours faithfully,

23/3/18
PRINCIPAL
JCT College of Engineering & Technology
Pichanur, Coimbatore - 641105



JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in

Prop: *M. Elango*

IS: 8034

IS: 9283

COIMBATORE PUMP ENGINEERING



POST BOX No. 2019, 80 Post Box no. 2019, 30-C Kamadhenu Nagar,
Krishnarayapuram, Avarampalayam, Coimbatore 641006. Ph. : 0422-2562426

CM/L-6434063
CM/L-6434164

Supplies of: Single phase & Three phase Submersible Pumpsets, Monoblocks, Openwell Monoblocks, Motors & Spares

To

Date: 03.04.2018

The Principal,

JCT College of Engineering and Technology,

Coimbatore- 641105

Dear Sir,

Sub: Design of suitable motor for low power consumption Submersible pump – Reg

Ref: your letter dated 29.03.2018

We are very happy with your acceptance towards our requisition. We hope the team you have assigned will work to satisfy our expectation. In this regard we request you to send the estimation for the entire process.

Thanking you

Yours faithfully

(M.Elango)

Proprietor



Ref: JCTCET/EEE/R&D/01

09.04.2018

To

The Manager,
M/S Coimbatore Pump Engineering,
Post Box no. 2019, 30-C kamadhenu Nagar,
Krishnarayapuram, Avarampalayam,
Coimbatore 641006

Dear Sir,

Sub: Intimation of consultation charges – Regarding

Ref: Your letter dated 03.04.2018

Warm Greetings from JCT College of Engineering and Technology!

With reference to your letter dated 03.04.2018, we would like to quote our consultation charges for design of 12.5 HP and 15 HP motors for low power consumption submersible pump set as below:

1. Consultation charges	Rs.2,000/ per sitting
2. Design Data	Rs.45,000/- up to 15HP
3. Testing charges at your site	Rs.5,000/- up to 15HP
4. Miscellaneous	as applicable

We request you to send your approval for further proceedings



[Signature]
Principal

Dr. G. Ramesh, M.E., Ph.D.,
PRINCIPAL

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jctac.in www.jctac.in

Prop: *M. Elango*

IS: 8034

IS: 9283

COIMBATORE PUMP ENGINEERING



POST BOX No. 2019, 80 Post Box no. 2019, 30-C Kamadhenu Nagar,
Krishnarayapuram, Avarampalayam, Coimbatore 641006. Ph. : 0422-2562426

CM/L-6434063

CM/L-6434164

Mfrs. of: Single phase & Three phase Submersible Pumpsets, Monoblocks, Openwell Monoblocks, Motors & Spares

To

Date: 18.04.18

The Principal,

JCT College of Engineering and Technology,

Coimbatore 641105

Dear Sir,

Sub: Development of low power consumption Submersible pump – Reg

Ref: The acceptance letter dated 09.04.18

Thank you very much for accepting our project of designing 12.5 HP and 15 HP motor for submersible pump. Our engineer's crew has accepted the quotation. We request you to start the consultation work without any vacillation. Our chief engineer Mr.S.Karthikeyan would visit your institution for further discussion about the project.

Thanking you

Yours faithfully

(M.ELANGO)

Proprietor

Prop: *M. Elango*

IS: 8034

IS: 9283

COIMBATORE PUMP ENGINEERING



CM/L-6434063

CM/L-6434164

POST BOX No. 2019, 80 Post Box no. 2019, 30-C Kamadhenu Nagar,

Krishnarayapuram, Avarampalayam, Coimbatore 641006. Ph. : 0422-2562426

Mfrs. of: Single phase & Three phase Submersible Pumpsets, Monoblocks, Openwell Monoblocks, Motors & Spares

Date: 20.04.18

To:

The Principal,

JCT College of Engineering and Technology,

Coimbatore – 641105.

Dear Sir,

Sub: Development of low power consumption submersible pump set - Reg

Ref: Report of our Chief Engineer Mr.S.Karthikeyan.

From the report we received from our engineer, we are very much impressed by your work towards the project. When your team visits our campus, we will pay the amount of Rs.10, 000 towards your development charges in advance. Please receive the same and acknowledge the receipt.

Thanking you

Yours faithfully

(M.ELANGO)

Propreitor



21.05.2018

Ref: JCTCET/EEE/R&D/01

To

The Manager,

M/S Colmbatore Pump Engineering,

Post Box no. 2019, 30-C kamadhenu Nagar,

Krishnarayapuram, Avarampalayam,

Colmbatore 641006

Dear Sir,

Sub: Designing of 12.5 HP and 15 HP Low Power Consumption Submersible Pump set –
Regarding

Ref: Your Letter dated 20.04.2018.

Warm Greetings from JCT College of Engineering and Technology!

We are happy to notify that we have received the Advance amount of the consultation charge that our faculty received from you. In continuation to the discussion we had with your Engineer, we wish to inform you that design process is in progress, we shall give the design data within six months.

Thanking you


HoD/EEE




Principal

Dr. C. Ramesh, M.E., Ph.D.,
PRINCIPAL

JCT College of Engineering and Technology
Pichanur, Colmbatore - 641 105

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

Pichanur, Colmbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in

Payment Voucher

Date: 18.05.2018

VI. No.: CBE/2018/026

Pay To: JCT College of Engineering
and Technology

[illegible]

Authorised By 

Authorised By





தமிழ்நாடு அறிவியல் தொழில்நுட்ப மாநில மன்றம்
TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY
(Established by Government of Tamilnadu)
Directorate of Technical Education Campus, Chennai – 600 025.
Ph : 044-22301428, Telefax : 044-22301552 www.tanscst.nic.in

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S.(USA).,
Member Secretary

Lr.No.TNSCST/SPS/AR/2017-2018

27.01.2018

To

The Principal
JCT College of Engineering and Technology
Pichanur
Coimbatore - 641 105

Sir/Madam,

Sub: TNSCST – Student Project Scheme – 2017-2018 – approval
intimation–grant release- reg.

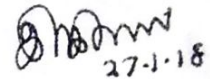
With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. Kindly read and ensure adherence to the terms and conditions such as submission of UC and seminar paper in time.

Kindly find enclosed here with the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest.

Kindly send the utilisation certificate (format enclosed) and seminar paper (ref.T&C-no.5&6) on completion of the project.

Thanking you,

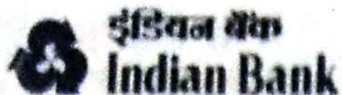
Yours faithfully,


27.1.18

Member Secretary.

- Encl: a) Terms & Conditions (T&C)
b) Format of Utilisation Certificate (UC) 59
c) Cheque for Rs.10000/- No: 322460 dt: 27.1.2018

Copy to: The individual guides.



Branch: DOTE CAMPUS
DOTE OFFICE BUILDINGS
GUINDY, CHENNAI
IFS Code: IDIB000DD060

A/c. Payee Only

VALID FOR THREE MONTHS ONLY

27 01 2018
D D M M Y Y Y Y

PAY The Principal, JCT College of Engineering and Tech. या धारक को OR BEARER
Coimbatore
RUPEES रुपये Ten thousand only

अदा करें ₹ 10,000/-

खा. नं.
A/c No. SB 479135159

FOR MEMBER SECRETARY TN STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

CBS Code: 01636

AUTHORISED SIGNATORY

992000060

PAYABLE AT PAR AT ALL OUR BRANCHES

Please sign above

⑈322459⑈ 600019119⑈ 135159⑈ 31



TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

GOVERNMENT OF TAMILNADU



INSCST

CERTIFICATE

This is to certify that the project entitled ENHANCEMENT OF CO-SOLVENT

USING REACTIVE DISTILLATION sponsored by the Council under the sector

CHEMICAL ENGINEERING carried out and presented

by HARIPRASAD V.P., DEPT. OF PETROCHEMICAL ENG., JCT. COLLEGE OF ENG. & TECH.,

COIMBATORE at the Seminar cum Exhibition of the STUDENT PROJECT SCHEME held at

National College, Tiruchirappalli has won the Second Prize for the Project Oral Presentation.

Chennai-600025

21.07.2018

DR. R. SRINIVASAN

Member Secretary



CHENNAI SCIENCE FESTIVAL - 2018



Theme: "Health for All"
Science City, Chennai
Government of Tamilnadu

PARTICIPATION CERTIFICATE

This is to Certify that Mr. / Ms. V.P. Hari Prasad

representing J.C.T. College of Engineering & Technology Coimbatore

participated in the Science Model competition conducted by the Science City during the

"Chennai Science Festival 2018" from 21st to 24th February, 2018.

U. SAGAYAM, I. A. S.,

Vice Chairman

Science City, Chennai - 25.



TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

(GOVT. of Tamilnadu)

DOTe Campus, Chennai - 600 02

Ph: 044- 22301428 Fax: 044- 22301552

www.tanscst.nic.in E-mail: enquiry.tanscst@nic.in : ms.tanscst@nic.in

Dr.R.SRINIVASAN, M.Sc., Ph.D., F.I.C.S., M.A.C.S.(USA),
Member Secretary

CHE-014

Ref: TNSCST/SPS/AR/2017-2018/

05.07.2018

To : Dr.R.Paramasivam
Professor
Dept. of Petrochemical engineering
JCT College of Engineering and Technology
Pichanur
Coimbatore - 641 105

Sir/Madam,

Sub: TNSCST Programme 'Student Project Scheme' - Conduct of Seminar-Cum-Exhibition - Invitation extended - reg.

With reference to the above, the Seminar-cum-Exhibition has been arranged on 20th and 21st JULY 2018 at National College, Tiruchirappalli-620001. I request you to kindly ensure that one of the student who did the project come to Tiruchirappalli and present the findings of the project in the Seminar. Models pertaining to the project can be exhibited and share your innovative ideas with others.

The following points may please be noted:

- The Student must report to Dr.Mohammed Jabbar, Associate Professor, Department of Biotechnology, National College, Tiruchirappalli-620001.(Contact details: 9786425226 Email: mohamedjaabir@nct.ac.in)
- Accommodation and food will be provided from the evening of 19th July 2018 till the evening 21st July 2018 in the college hostel.
- The students are requested to bring the required medicines (if any) and other personal needs for their stay at hostel.
- Only one student will be provided boarding and lodging in the College hostel. No charges need to be paid. **Second sleeper class train fare / Actual Bus (Govt. Bus) fare** (Up & Down) from the Place of study to National College, Tiruchirappalli will be provided for one Student of each project.
- The student must be present on both the days (i.e) 20th and 21st JULY 2018.
- The student should make the oral presentation within the allotted time of 10 minutes and LCD Projectors will be provided.
- Request for specific requirement for display of project must be made in advance to the Co-ordinator.
- Certificate will be given to those who have done the project and are present at the venue.
- Prizes will be given to the best presentation and best exhibit.

Those who have not submitted the Utilization Certificate so far, kindly arrange to send the same immediately without any further delay.

I request you to co-operate in making this seminar-cum-exhibition a successful academic event.

Thanking you,

Yours faithfully

Member Secretary

72.JCT College of Engineering and Technology 10,000/-

1	Dr.R.Paramasivam Professor Dept. of Petrochemical engineering JCT College of Engineering and Technology Pichanur Coimbatore - 641 105	Enhancement of traces reactive distillation process using co-solvent	Hariprasad.V.P Fakkrudeen Ali Ahamed.A	The Principal JCT College of Engineering and Technology Pichanur Coimbatore - 641 105	CHE-014	10000/-
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INVOICE

dt.25.04.2017.

To
The KPC India Pvt Ltd.,
D.No.6/23, Ragavaiah Road, T.Nagar - 600017,
Chennai.

Lr.No. F.Civil Consultancy / JCTCET / 2017 /

Sir,

Sir(s),

Sub.: Civil Consultancy Works

Ref.: Your letter

Planning, designing and Estimation of a Library building. For this job the charge is about 2,30,000 INR. Please make the arrangement for the payment as earlier possible.

We thank for your keen interest in building a relationship with you.

Regards,

PRINCIPAL,

JCT CET, COIMBATORE.

Payment voucher

THE KPC INDIA PVT LTD.,
D.No.6/23, Ragavaiah Road,
T.Nagar,
Chennai 600017

Date: 06-05-2017

Vr.No: 207/44/88

Payment To: JET college of Engineering & Technology.
Coimbatore.

NO	PARTICULARS	AMOUNT
1	Civil consultancy works	2,30,000/-



INVOICE

dt.10.07.2016.

To
The KPC India Pvt Ltd.,
D.No.6/23, Ragavaiah Road, T.Nagar - 600017,
Chennai.

Lr.No. F.Civil Consultancy / JCTCET / 2016 /

Sir(s),

Sub.: Civil Consultancy Works

Ref.: Your letter

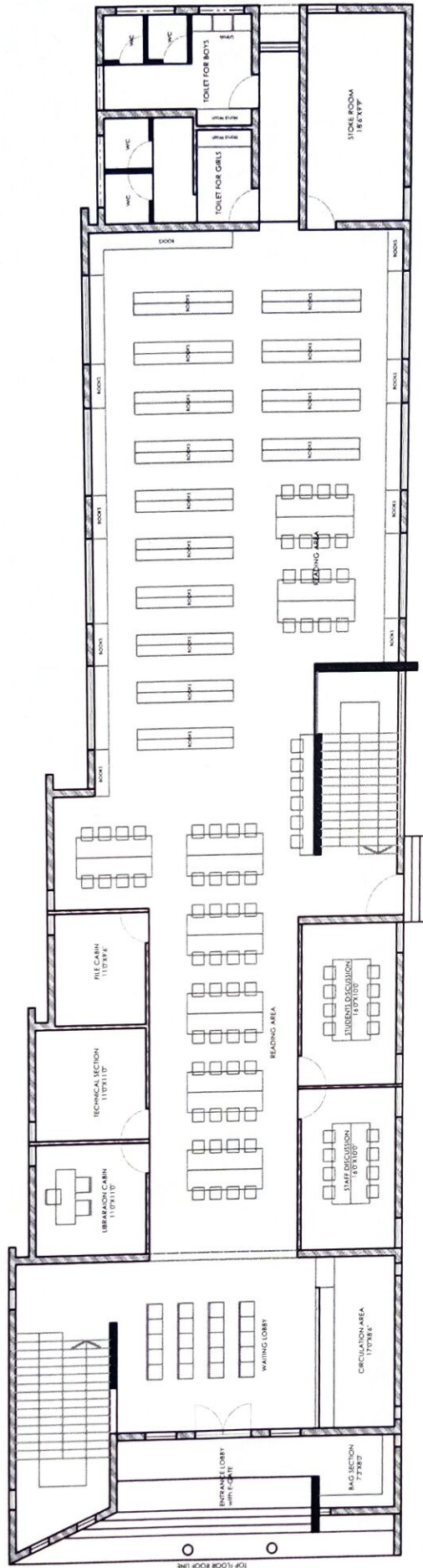
Planning, designing and Estimation of a Girls Hostel building. For this job the charge is about 1,50,000 INR. Please make the arrangement for the payment as earlier possible.

We thank for your keen interest in building a relationship with you.

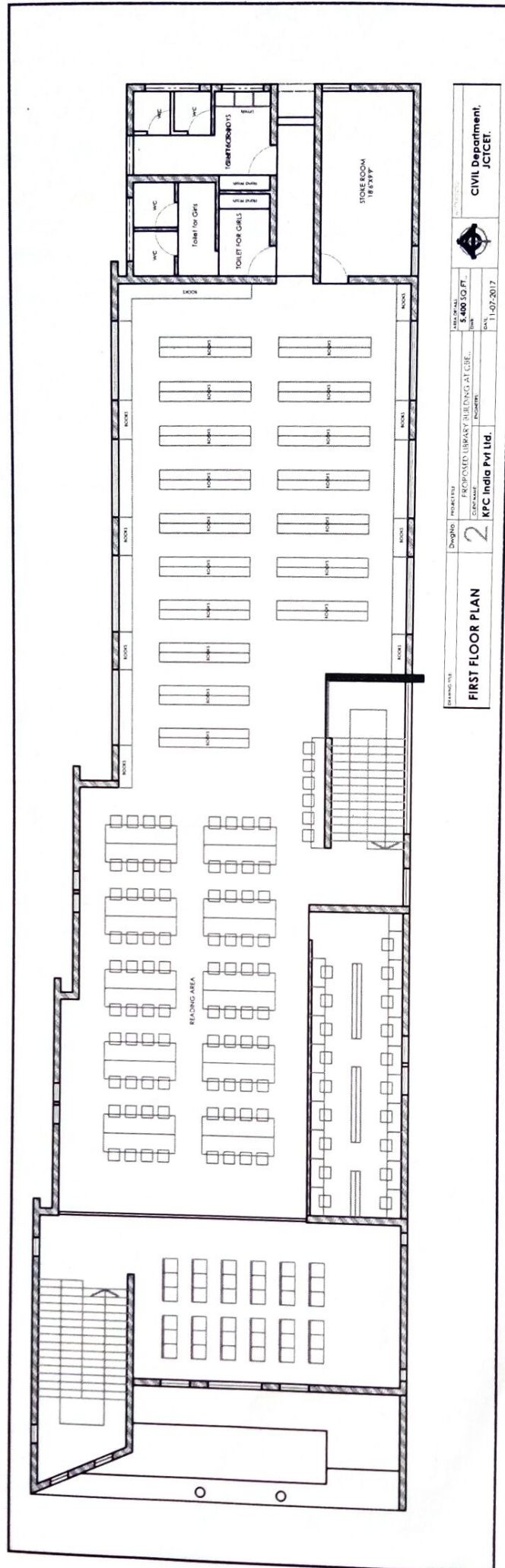
Regards,

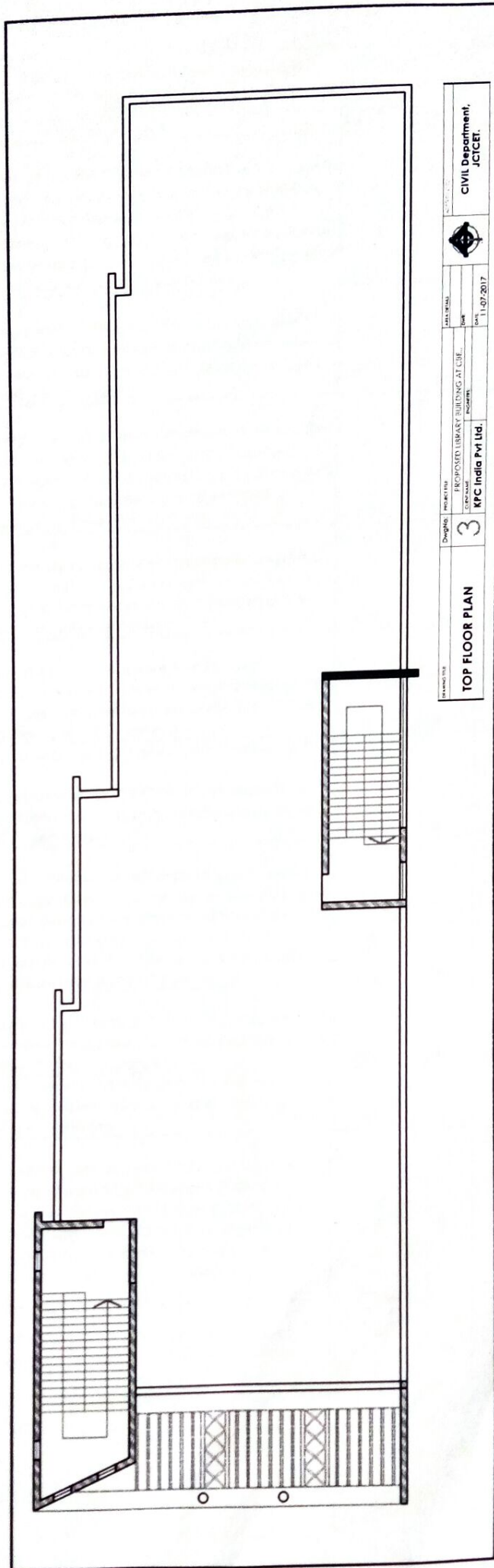
PRINCIPAL,

JCT CET, COIMBATORE.



Drawing Title		PROJECT NAME		CIVIL Department, JCTCET.	
GROUND FLOOR PLAN		PROPOSED LIBRARY BUILDING AT C.E.			
Drawing No.		Scale		Date	
1		KFC India Pvt Ltd.			
Area		Total Area		Total Area	
3,400 SQ. FT.		3,400 SQ. FT.		3,400 SQ. FT.	





Drawn by	3	Project No.	PROPOSED LIBRARY BUILDING AT CBE	Scale	1:100	DATE	11-07-2017
Checked by		Client	KPC India Pvt. Ltd.	Project			
Approved by		Project Manager					
TOP FLOOR PLAN				CIVIL Department, JCTCET.			

.....

Chennai 600017

Vr.No: 2016/20/04.

Coimbatore.

[illegible]

From

K. A.E. Rajeswari
Assistant engineer(RD)
Palladam Block
Tirupur Disttict.

To

The Principal
JCT college of Engineering
Kadakkasavadi
Coimbatore.

Sir,

Sub : Requisition for testing the cube (Retaining Wall) 1:21/2:5 for PMGSY
Road work.

Name of the road : Upgradation of the road to Muthandipalayam Km

0/00-1/0&2/2-3/840

Name of the scheme : PMGSY Phase VIII

I kindly request you to perform following tests for the 40mm metal (cube test).

S.NO	GRADE 40MM METAL	40MM METAL
1	Cube test <i>Retaining wall.</i>	Cube test
2	Impact test	Impact test
3	Abrasion test	Abrasion test
4	Water absorption	Water absorption
5	Flakiness index	Flakiness index

Thanking you

Yours truly

K. Rajeswari
15/6/15

Encl: Samples

5/8/15

Submitted to the principal,

Respected Sir,

Herewith I am submitting ~~the~~
an amount Rs 10,500/- (Tenthousand five
hundred only) towards material testing
charges.

1. Testing of aggregate WBM-II, premix carpet }
Bitumen Binder } - 3500.00.
for Road from Tiruppur - palladam
2. - do - Road from segampalayam to Thottiapplachi - 3500.00
rail.
3. - do - perundurai - Kangayam road - 3500.00

10,500.00

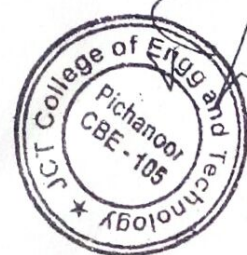
(Rupees Ten thousand five hundred only)

5/8/15

HOD/Civil.

Cash Received

Rs. 10,500/-





ST JUDE ELECTRICALS

Vettoor Arcade
M C Road, Ettumanoor, Kottayam
Ettumanoor - 686631
Kerala, India

Ltr. No: CSW/022/2015

30.11.2015

To,

The Head of the Department,
Electrical and Electronics Engineering,
JCT College of Engineering and Technology,
Pichanur,
Coimbatore - 641 105.

Dear Sir,

Sub: Requisition for consultancy work – Reg

We are Manufacturer, Distributor and Servicing of Electro Mechanical Converter, Transformers, Electrical Lamps, Solar Photovoltaic, Solar Thermal and Solar Equipment.

Now we are focusing to manufacture the Control Circuit for Electrical Drives. So I kindly request you to provide the possible methods to design the control circuit.

So we are requested provide the faculty members for do the consultancy work in your esteemed Institution. So please go through the specified area and quote the amount for the consultancy work.

Thanking you,

Yours Truly,

For St. Jude Electricals Pvt Ltd,

(Sajo Thomas)

Managing Director



JCT

College of Engineering and Technology

JCT/EEE/CON/003

02-12-2015

To,

The Managing Director,
St. Jude Electrical Pvt Ltd,
Vettoor Arcade
M C Road, Ettumanoor, Kottayam
Ettumanoor - 686631
Kerala, India

Sir,

Sub: Acceptance for consultancy work – Reg

We are received your letter on 01nd December 2015 (Letter No: CSW/022/2015). We are happy to inform that accepting your consultancy work in the area of Controlling of Electrical Drives.

We are provide the details of Literature survey, Detailed Report, Design procedure and simulation output. For the above work we quoted the amount sum of Rs. 11000/- and we plan to complete the work within six months.

The following Faculties are allotted for your consultancy work, without affecting their academic schedule.

1. Mr. Manikandan S, Assistant Professor/EEE (In charge)
2. Mr. Abner Leo N, Assistant Professor/EEE (Assisting)

Thanking You,

Yours Truly,

For JCT College of Engg & Tech

Prof. Jethose V

HOD/EEE



JCT College of Engineering and Technology

Pichanur, Colmbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in



JCT

College of Engineering and Technology

JCT/EEE/CON/CS/003

20-05-2015

To,

The Managing Director,
St. Jude Electrical Pvt Ltd,
Vettoor Arcade
M C Road, Ettumanoor, Kottayam
Ettumanoor - 686631
Kerala, India

Sir,

Sub: Completion of consultancy work – Reg

I hereby submit the Consultancy project titled "Closed Loop Control of Three Phase Induction Motor Using Model Predictive Control" as per the letter Ref. No. CSW/022/2015.

I have taken care of all your specifications mentioned during the process of project execution. Kindly check at your end and thank you for the opportunity given to us.

We seek your continued support in future as like now.

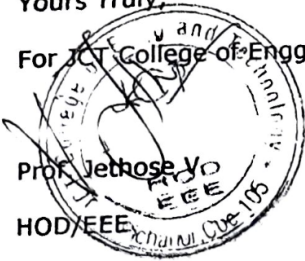
Thanking You,

Yours Truly,

For JCT College of Engg & Tech

Prof. Jethose V

HOD/EEE



JCT College of Engineering and Technology

Pichanur, Colmbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901 Email: info@jct.ac.in www.jct.ac.in

CASH BILL

From. S.P. Jude Electricals 20/5/16
MC Road, Ettumanoor,

To. JCT college of Engineering
PICHANUR

S.No	Products	Rate	Amount
01	Consultancy work 3φ closed loop control of 2m		Rs 11,000/-

Total Rs 11,000

[Signature]
Proprietor

CHAPTER 1

INTRODUCTION

1.1 GENERAL

Induction motors are the most widely used motors for industrial control and automation; hence, they are also called the workhorse of the motion industry. They are robust and reliable. When power is supplied to an induction motor at the recommended specifications, it runs at its rated speed. But many applications need variable speed operations. For example, a washing machine may use different speeds for each wash cycle. Induction motor Speed control is complex due to its nonlinear characteristics.

There are two types of controlling speed of induction motor these are scalar control and vector control. Several studies have been carried out in the field of speed control system, but scalar speed control system shows simple structure by low steady state error. The constant V/f scalar control system is considered for study. Variable Voltage Variable Frequency (VVVF) or V/f is the most common method of speed control in open loop approach. This method is most suitable for applications without position control requirements or the need for high accuracy of speed control.

In the last few years, Model Predictive Control (MPC) has a growing interest in many motor control applications due to its nonlinear ties handling features and independence of the plant modeling. The MPC operates in a knowledge-based way, Numerical -based control method has the ability to deal with system nonlinearity and its control performance is less affected by system parameter variations. An MPC technique uses a linguistic if then rule base which is designed by taking advantage of system qualitative aspects and expert knowledge.

The main advantage of MPC is the fact that it allows the current timeslot to be optimized, while keeping future timeslots in account. This is achieved by optimizing a finite time-horizon, but only implementing the current timeslot. MPC

Zimbra

paramasivam.r@sjct.co.in

Fund recd from PAO Secretariat New Delhi for Ministry of Earth Science 9/28/2014, 9:39:49 PM

From: arumugam.e@sjct.co.in

To: principal@sjct.co.in

Cc: secretary@sjct.co.in; paramasivam.r@sjct.co.in

Dear Sir,

We wish to confirm that we have recd payment from PAO secretariat, New Delhi a sum of Rs.60,000/- through neft.

13-Sep-14

NEFT SBIN714256214061 PAO Secretariat New Delhi

60,000.00

This is for your kind information pl.

Thanks

E Arumugam

Submitted to Principal.

[Signature]
29/09/2014
HOD/PCE

[Signature]
29/9/14

[Signature]
29/9/14



Certified that we have satisfied our self that the condition on which the grants in aid was sanctioned have been duly fulfilled and exercised the following checks to see that money was actually utilized for the purpose for which it was sanctioned:

- I. Committees formed for printing, preconference expenditure and event management.
- II. TADA to participants checked
- III. Souvenir printing and preparation – Technical Committee
- IV. Stationeries and Registration Committee.

11. The following documents have been enclosed along with this Utilization certificate:

2- COPIES OF THE PROCEEDINGS ✓

Total Income details for this event and audited Statement of expenditure ✓

Recommendations and follow-up actions ✓

Other achievements from this event ✓

Other enclosures: Nil

Date:

For JCT College of Engineering & Technology

Signature of Finance Officer

Signature of Project Investigator

(Michael Rahul Soosai)

(Prof. N. V. Maswamy)

Signature of Head of the Institute

(Dr. G. Ramesh, Principal)

PRINCIPAL
JCT College of Engineering & Technology
Pichanur, Coimbatore - 641 105

(To be counter signed by MoES officer-in charge)

mbra: paramasivam.r@sjct.co.in

<http://webmail.sjct.co.in/zimbra/#2>

paramasivam.r@sjct.co.in

Zimbra

Fund recd from PAO Secretariat New Delhi for Ministry of Earth Science 9/28/2014, 9:39:49 PM

From: arumugam.e@sjct.co.in

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13-Sep-14

NEFT SBIN714256214061 PAO Secretariat New Delhi

60,000.00

This is for your kind information pl.

Thanks

E Arumugam

UTILISATION CERTIFICATE

(To be submitted in Quadruplicate within Two months from the date of the event)

1. Title of the Conference/Seminar/Workshop/Symposia (Amount in Rs. in Lakhs)
: "Advances in Green Technology for pollution free energy Sources."
2. Name of the Organization : J.C.T. College of Engineering and Technology, Coimbatore.
3. Principal Organizer's name : Dr. G. Ramesh, Principal
4. Ministry's sanction letter no. and date : Mail dated 7th May, 2014 from Dr. Ashok Saha MoES.
: Proposal No.: MoES/05/PC-V/2014
5. Amount received from MoES : Rs. 60,000/-
(Transfer of Grant through ECS/RTGS) awaited
6. Interest earned, if any on the MoES grants : Nil
7. Total amount that was available for expenditure (S. Nos. 5 + 6) : Rs. 60,000/-
8. Actual expenditure (excluding Commitments) : Rs. 60,000/-
(Statement of total audited Expenditure is to be enclosed) : Statement enclosed
9. Unspent balance refunded, if any : No unspent balance
(Please give details of Demand draft No. etc.)
10. Certified that the amount of Rs. 60,000/- against col. 8 has been utilized on the Conference/Seminar/Workshop/Symposia for the purpose for which it was sanctioned and that the balance of Rs. NIL remaining unutilized has been surrendered to Govt.
(vide No. —).

ABOUT THE INSTITUTION

Shri Jagannath Educational Health and Charitable Trust was established by renowned and philanthropic people with an objective of providing education to all especially the downtrodden and rural population. Considering the growing demands for technical education in the country, the Trust has started an engineering college namely **JCT College of Engineering and Technology** in Pichanur, Coimbatore from the academic year 2009-2010.

Students will be encouraged to get equipped and sensitized to understand full implications of their decisions, actions and their innovations. The college promotes Technical Education to meet the requirements of Industrial arena, which takes into account the demands of industry and R&D institutions in the context of global concern at the threshold of the twenty-first century.

COURSES OFFERED

BE - COURSES

- Civil Engineering
- Mechanical Engineering
- Petrochemical Engineering
- Computer Science Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering
- Automobile Engineering
- Petroleum Engineering
- Food Technology

ME - COURSES

- Engineering Design
- Power Electronics and Drives
- Structural Engineering
- VLSI Design

National Seminar on
**Advances in Green Technology for
Pollution Free Energy Sources**

Sponsored by
Ministry of Earth Sciences
(Government of India)

25th August, 2014

Convener
Dr. G. Ramesh

Co Convener
**Dr. R. Paramasivam
N. Aravindh**

Coordinator
Prof. N. Krishnaswamy

Co-ordinators
**S. Pandurajan
Michael Rahul Soosal**



JCT College of Engineering and Technology
Jointly with



PEACE
(PETROCHEMICAL ENGINEERS ASSOCIATION
FOR THE COUNTRY EMPOWERMENT, JCT)

Organized by
**Faculties of Petrochemical & Petroleum Engineering
JCT College of Engineering and Technology**

(Approved by AICTE, New Delhi &
Affiliated to Anna University, Chennai)
Pichanur, Coimbatore 641 105, Tamil Nadu
Ph: 0422 2636900, 0422 2636902 Fax: 0422 2636901
Website: www.jct.ac.in

National Seminar on
**Advances in Green Technology for
Pollution Free Energy Sources**

Sponsored by
Ministry of Earth Sciences
(Government of India)

25th August, 2014

REGISTRATION FORM

Name (CAPITAL):

Designation:

Organization:

Mailing Address:

Mobile:

Email:

Signature of Candidate

Signature of HOD with Seal

Please return this form to:

Prof. N. Krishnaswamy
Dean Chemical Sciences
JCT College of Engineering and Technology
Pichanur, Coimbatore 641 105, Tamil Nadu
Ph: 0159469832, 9894298769.
Fax: 0422 2636901