



Kathir College of Engineering

Wisdom Tree, Avinashi Road, Neelambur, Coimbatore 641062

Criteria-3

Research, Innovations and Extension

Sub Criteria 3.1

Resource Mobilization for Research

**3.1.3: Percentage of departments having
Research projects funded by
government and non government
agencies during the last five years**



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3.1.3 Percentage of departments having Research projects funded by government and non-government agencies during the last five years

SUMMARY

ACADEMIC YEAR	2020-21	2019-20	2018-19	2017-18	2016-2017
Number of Departments	2	3	1	1	0
Amount in Lakhs	15.76	17.29	7.48	8.59	-



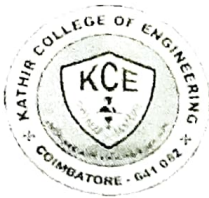
Kathir College of Engineering

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3.1.3 Percentage of departments having Research projects funded by government and non-government agencies during the last five years

Name of the Project/ Endowments, Chairs	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator	Year of Award	Amount Sanctioned	Page No.
Computerized Control Station for Pumping of Bitumen	Dr. Angulakshmi V S	S&H	2017-18	8.59	1-7
Energy efficient radio tower with power management	Dr. M. Kannan	ECE	2018-19	7.48	7-14
Post Landing Safety Analysis and Self Powered Runway System	Dr. G. R. Gnana King	ECE	2019-20	8.25	15-21
Maximum Demand Management Controller for Substation	Dr. P. Banumathi	CSE	2019-20	5.59	22-28
Design of online vehicular emission and analysis	Dr. D. Anantha Krishnan	MECHANICAL ENGG.	2019-20	3.45	29-35
RSSI based online tracking system for mob detection	Dr. S. J. K. Jagadeesh Kumar	CSE	2020-21	8.55	36-42
Relay/ Contactor/ Switchgear tester with feedback	Dr. B. Vaikundaselvan	EEE	2020-21	7.21	43-49



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 12.08.2017

The Managing Director
Orbit Edutech P Ltd
Chennai
Dear Sir/Madam,

Sub: INVITATION FOR JOINT VENTURE RESEARCH WORK

Kathir college of Engineering was established in the year of 2008 with an objective to promote the cause of higher education. The college is approved by A.I.C.T.E New Delhi and affiliated to Anna University Chennai. KCE offers the U.G courses B.E (CIVIL, CSE, EEE, ECE and MECHANICAL) and P.G courses such as MBA, M.E in Manufacturing Technology, Applied Electronics, Computer Science and Engineering and Power Electronics and Drives.

The institute has prime objectives of providing quality Engineering education for the students studying in all engineering, Technology streams and to provide an opportunity to utilize physical facilities, human resources and knowledge resources available in Educational institution to maximize the knowledge acquisition to the industry standards.

In order to prepare students in terms of their technical competence, soft skills and real time exposure, human Resource Development Centre (HRDC) invites industry professionals to share their thoughts and experiences with the students. The professional of Kathir College of Engineering are ready to work with the industry for mutual benefits to improve the Teaching methodology towards industry and Exporting latest technology to the industry for the welfare of our nation.

Now, this is right to put our Technical experts to work with industry to serve and gain knowledge. This may improve industry, institution and society. We request your esteemed organization to utilize our facilities for Research, Consultancy and Project development at an affordable cost and expecting joint venture projects from your esteemed organization.

Thanking you

For Kathir College of Engineering

[Principal]

Copy to: Chairman/Director/All HODs/Training and Placement



Dr. R. UDAIYAKUMAR, ME., Ph.D.
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Chemistry (S&H)

Minutes of Meeting Details

Project Name: Computerized Control Station for Pumping of Bitumen

Meeting No: 01

Date: 22.10.2017

The meeting was arranged in the Department of Chemistry (S&H) along with the faculty members and the client representatives. In the meeting the following points were discussed.

- o Complete Project designs were finalized
- o Work commencing date
- o Detailed discussion on the initial requirements
- o Software analysis of research data
- o Meetings for the further development of the project



Members


HOD


Client


Principal




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 17.11.2017

The Managing Director
Orbit Edutech P Ltd
Chennai
Dear Sir,

Sub: Research and Consultancy Work – Reg.,

Based on our discussions regarding project of "**Computerized Control Station for Pumping of Bitumen**", we would like to submit a feasibility report for your consideration. You are requested to go through the complete report and approve the same for early completion.

**Computerized Control Station for
Pumping of Bitumen:**

Rs. 8, 59, 000/-

**(Rupees Eight Lakh Fifty Nine
Thousand only)**

Terms and Conditions:

- The components related to the consultancy to be supplied by Orbit Edutech P Ltd
- If any field visit is required and must be arranged by Orbit Edutech P Ltd
- The payment must be released after results are achieved with the complete satisfaction of engineers of Orbit Edutech P Ltd
- The result demonstration will be held in our college premises
- For future modification and design rework will be permitted


The feasibility report contains technical, commercial and implementation concept at industry level. Kindly acknowledge the feasibility report and send to us. Feel free to contact us for further data if required.

Thanking you,

Yours faithfully,

For Kathir College of Engineering
(Principal)




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Department of Chemistry (S&H)

Minutes of Meeting Details

Project Name: Computerized Control Station for Pumping of Bitumen

Meeting No: 02

Date: 27.12.2017

The meeting was arranged in the Department of Chemistry (S&H) along with the faculty members and the client representatives. In the meeting the following points were discussed.

- Field visits for the project development will be arranged
- The material were supplied by the client
- Both the parties were concluded that the payment may be transferred during the project work.
- The representative is happy with the module
- We requested the client to arrange a field visit along with student team
- Insisted us to proceed further research



Members


HOD


Client


Principal




Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

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Valasaravakkam, Chennai - 600 087. INDIA.
Tel. : 2486 9452 / 53
E-mail : ID : orbitcontrols@gmail.com
Website : www.orbitcontrolz.com

29/01/2018

To
The Principal
Kathir College Of Engineering
Avinashi Road,
Coimbatore- 641 062.

Subject: Industrial Research for Control Station for Bitumen

Ref: Our MoU Dated 16/07/2017

Dear Sir,

As per the discussions had with our technical team we hereby accept your quotation regarding the work mentioned above. We here by accepting your Technical and Financial proposal and the work related materials will be delivered to your Institution for real time analysis and fast work completion.

**COMPUTERIZED CONTROL STATION FOR PUMPING OF BITUMEN
SEPERATOR FOR REFINERIES**

- Rs.8,59,000/-

Please read the annexure attached with this work order carefully for Technical and Commercial Terms and Condition related to the work mentioned, for more information you are requested to contact our Director
Thanking you,

for Orbit Edutech (P) Ltd.,

S. Selva Moona
S. Selva Moona
(Managing Director)



[Signature]
Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

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Valasaravakkam, Chennai - 600 087. INDIA.
Tel. : 2486 9452 / 53
E-mail : ID : orbitcontrols@gmail.com
Website : www.orbitcontrolz.com

20/04/2018

To
The Principal
Kathir College Of Engineering
Avinashi Road,
Coimbatore- 641 062.

Ref: Work Order dated 29/01/2018

Sub: Sanctioning Order and Financial Approval

Dear Professor,

Its a great privilege from Team Orbit Edutech to issue this stage wise financial sanctioning of the work mentioned below. The Technical Information furnished by your Professors headed by the Principal Investigator mentioned below is approved for further proceeding and financial support on stage wise will be released as per the need, all the hardware ,materials will be supported by our company based on the requirement.

Stage wise completion report is essential and must be approved for financial sanctioning, all the technical information will be discussed during the Minutes of Meeting held in your College.

DETAILS OF THE WORK

PROPOSED WORK TITLE : Computerized Control Station For
Pumping Of Bitumen
PROPOSAL DATED : 14/09/2017
WORK ORDER DATE : 29/01/2018
PRINCIPAL INVESTIGATOR : Dr. ANGULAKSHMI VS



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal

Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Coimbatore - 641 062.

Engineers, Designers, Manufacturers of Industrial Automation and Software

DESIGNATION : Associate Professor
 DEPARTMENT : Department of Chemistry(S&H)
 ESTIMATED COST : Rs.8,59,000/-
 EXPECTED DURATION : 3 Years

STAGEWISE FINANCIAL SANCTION

STAGEWISE SCHEDULE	FINANCIAL SANCTION
(STAGE1) 2018 - 2019	Rs.2,50,000/-
(STAGE2) 2019 – 2020	Rs.2,50,000/-
(STAGE3) 2020 - 2021	Rs.3,59,000/-
Total Sanction	Rs.8,59,000/-

The Stage wise Financial Sanctioning is subject to each stage approval in all aspects like Design, Fabrication, Documentation, other requirements discussed during Minutes of meeting and mutually agreed by the both teams. The Proposed Work Schedule has to be followed as prescribed in the Minutes.

TERMS AND CONDITIONS

1. The Inputs given by the Orbit Team must be kept confidential and must not be revealed except to the members.
2. Sub-Contracting the work will be permitted to the certain extent, but not the full work.
3. The similar fashioned company or work should be avoided at any circumstances.
4. The PI, Members and Team of Orbit Engineers have to meet at least once in 3 Months.
5. A fair and honesty in Research work is essential by understanding own values, limitations.
6. All the Documentation from the beginning must be handed over at each stage of work completion and none of them is permitted for Digital and Print Media.
7. Orbit Group of Companies has always open minded to share information to the students and teaching faculty for promoting Industry Institution activities. In this context, Orbit permits students and faculty to use the Information to upgrade their knowledge.

FOR ORBIT EDUTECH Pvt.Ltd.,

S. Selva Meena
 S. SELVA MEENAA (DIRECTOR)



Dr. R. Udayakumar
 Dr. R. UDAIYAKUMAR, ME., Ph.D.,
 Principal
 Kathir College of Engineering
 "Wisdom Tree" Avinashi Road,
 Neelambur, Coimbatore - 641 062.





Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 18.06.2018

The Managing Director
Orbit Controls and Services
Chennai

Dear Sir/Madam,

Sub: INVITATION FOR JOINT VENTURE RESEARCH WORK

Kathir college of Engineering was established in the year of 2008 with an objective to promote the cause of higher education. The college is approved by A.I.C.T.E New Delhi and affiliated to Anna University Chennai. KCE offers the U.G courses B.E (CIVIL, CSE, EEE, ECE and MECHANICAL) and P.G courses such as MBA, M.E in Manufacturing Technology, Applied Electronics, Computer Science and Engineering and Power Electronics and Drives.

The institute has prime objectives of providing quality Engineering education for the students studying in all engineering, Technology streams and to provide an opportunity to utilize physical facilities, human resources and knowledge resources available in Educational institution to maximize the knowledge acquisition to the industry standards.

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Now, this is right to put our Technical experts to work with industry to serve and gain knowledge. This may improve industry, institution and society. We request your esteemed organization to utilize our facilities for Research, Consultancy and Project development at an affordable cost and expecting joint venture projects from your esteemed organization.


Thanking you

For Kathir College of Engineering

[Principal]

Copy to: Chairman/Director/All HODs/Training and Placement




Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Electronics and Communication Engineering

Minutes of Meeting Details

Project Name: Energy efficient radio tower with power management

Meeting No: 01

Date: 24.08.2018

The meeting was arranged in the Department of Electronics and Communication Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

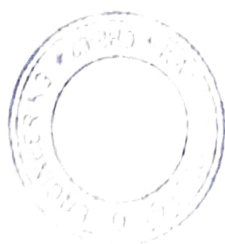
- o Project designs were finalized
- o Work commencing date
- o Detailed discussion on the initial requirements
- o Module analysis
- o Meetings for the further development of the project

M. K. K.
Members

M. K. K.
HOD

[Signature]
Client

[Signature]
Principal



[Signature]
Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 09.09.2018

The Managing Director
Orbit Controls and Services
Chennai
Dear Sir,

Sub: Research and Consultancy Work – Reg.,

Based on our discussions regarding project of **"Energy efficient radio tower with power management"**, we would like to submit a feasibility report for your consideration. You are requested to go through the complete report and approve the same for early completion.

Energy efficient radio tower with power management:

Rs. 7, 48, 000/-

(Rupees Seven Lakh Forty Eight Thousand only)


Terms and Conditions:

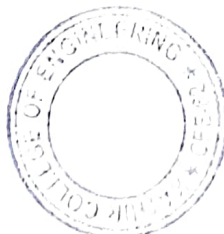
- The components related to the consultancy to be supplied by Orbit Controls and Services Chennai
- If any field visit is required and must be arranged by Orbit Controls and Services Chennai
- The payment must be released after results are achieved with the complete satisfaction of engineers of Orbit Controls and Services Chennai
- The result demonstration will be held in our college premises
- For future modification and design rework will be permitted

The feasibility report contains technical, commercial and implementation concept at industry level. Kindly acknowledge the feasibility report and send to us. Feel free to contact us for further data if required.

Thanking you,

Yours faithfully


For Kathir College of Engineering
(Principal)



Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Electronics and Communication Engineering

Minutes of Meeting Details

Project Name: Energy efficient radio tower with power management

Meeting No: 02

Date: 14.11.2018

The meeting was arranged in the Department of Electronics and Communication Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- Electronic components were finalized
- The representative is happy with the project design
- The material were supplied by the client
- Both the parties were concluded that the payment may be transferred during the project work.
- We requested the client to arrange a field visit along with student team.
- Insisted us to proceed further research

M. Keen
Members

M. Keen
HOD

[Signature]
Client

[Signature]
Principal



[Signature]
Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

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Valasaravakkam, Chennai - 600 087. INDIA.

Tel. : 2488 9452 / 53

E-mail : ID : orbitcontrols@gmail.com

Website : www.orbitcontrolz.com

10.09.2018

To
The Principal
Kathir College Of Engineering
Avinashi Road, Neelambur,
Coimbatore- 641 062.

Subject : Power Management System for Radio Towers
Reference: MoU Dated 25TH JULY 2018

Dear Professor,

Warm Greetings from Orbit Controls and Services. On receipt of your quotation for the work mentioned below, we would like to offer the design and Prototype development work on joint venture basis. Field visit to understand the requirement will be arranged by our company during work progress. You are requested to initiate the work for early completion.

WORK TITLE	COST
Energy Efficient Radio Tower With Power Management	Rs.7.48,000/-
Rupees Seven Lakh Forty Eight Thousand only	

Further information can be discussed with Mr.S.Aravindh Kumar., Design Engineer- Instrumentation.

Thanking you,

for Orbit Controls and Services

K.Senthil Kumar
(Chief Executive)

Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

Encl : Technical Specifications, Field Installation Details, Sensor Details

Engineers, Designers, Manufacturers of Industrial Automation and Software

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ORBIT CONTROLS & SERVICES34, Madurai Meenakshi Nagar,
Valasaravakkam, Chennai - 600 087. INDIA.

Tel. : 2486 9452 / 53

E-mail : ID : orbitcontrols@gmail.com

Website : www.orbitcontrolz.com

22/03/2019

To
The Principal
Kathir College Of Engineering
Avinashi Road, Neelambur,
Coimbatore- 641 062.

Ref: Work Order dated 10/09/2018

Sub: Sanctioning Order for Research Work -Financial

Dear Professor,

Its a great privilege from Team Orbit Controls And Services to issue this stage wise financial sanctioning of the work mentioned below. The Technical Information furnished by your Professors headed by the Principal Investigator mentioned below is approved for further proceeding and financial support on stage wise will be released as per the need, all the hardware ,materials will be supported by our company based on the requirement.

Stage wise completion report is essential and must be approved for financial sanctioning, all the technical information will be discussed during the Minutes of Meeting held in the College.

DETAILS OF THE WORK

PROPOSED WORK TITLE : Energy Efficient Radio Tower With
Power Management

PROPOSAL DATED : 11/06/2018

WORK ORDER DATE : 10/09/2018

PRINCIPAL INVESTIGATOR : Dr. KANNAN. M

DESIGNATION : Professor & Head



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal

Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

Engineers, Designers, Manufacturers of Industrial Automation and Software

DEPARTMENT : Electronics And Communication Engineering
ESTIMATED COST : Rs.7,48,000/-
EXPECTED DURATION : 3 Years

STAGEWISE FINANCIAL SANCTION

STAGEWISE SCHEDULE	FINANCIAL SANCTION
(STAGE1) 2019 – 2020	Rs.1,00,000/-
(STAGE2) 2020 – 2021	Rs.2,48,000/-
(STAGE3) 2021 – 2022	Rs.4,00,000/-
Total Sanction	Rs.7,48,000/-

The Stage wise Financial Sanctioning is subject to each stage approval in all aspects like Design, Fabrication, Documentation, other requirements discussed during Minutes of meeting and mutually agreed by the both teams. The Proposed Work Schedule has to be followed as prescribed in the Minutes.

TERMS AND CONDITIONS

1. The Inputs given by the Orbit Team must be kept confidential and must not be revealed except to the members
2. Sub-Contracting the work will be permitted to the certain extent, but not the full work.
3. The similar fashioned company or work should be avoided at any circumstances.
4. The PI, Members and Team of Orbit Engineers have to meet at least once in 3 Months.
5. A fair and honesty in Research work is essential by understanding own values, limitations.
6. All the Documentation from the beginning must be handed over at each stage of work completion and none of them is permitted for Digital and Print Media.
7. Orbit Group of Companies has always open minded to share information to the students and teaching faculty for promoting Industry Institution activities. In this context, Orbit permits students and faculty to use the information to upgrade their knowledge.

FOR ORBIT CONTROLS AND SERVICES

K.SENTHIL KUMAR
(CHIEF EXECUTIVE)



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 04.03.2019

The Managing Director
Orbit Controls and Services
Chennai
Dear Sir/Madam,

Sub: **INVITATION FOR JOINT VENTURE RESEARCH WORK**

Kathir college of Engineering was established in the year of 2008 with an objective to promote the cause of higher education. The college is approved by A.I.C.T.E New Delhi and affiliated to Anna University Chennai. KCE offers the U.G courses B.E (CIVIL, CSE, EEE, ECE and MECHANICAL) and P.G courses such as MBA, M.E in Manufacturing Technology, Applied Electronics, Computer Science and Engineering and Power Electronics and Drives.

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Now, this is right to put our Technical experts to work with industry to serve and gain knowledge. This may improve industry, institution and society. We request your esteemed organization to utilize our facilities for Research, Consultancy and Project development at an affordable cost and expecting joint venture projects from your esteemed organization.

Thanking you

For Kathir College of Engineering

[Principal]

Copy to: Chairman/Director/All HODs/Training and Placement



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Electronics and Communication Engineering

Minutes of Meeting Details

Project Name: Post Landing Safety Analysis and Self Powered
Runway System


Meeting No: 01

Date: 16.05.2019

The meeting was arranged in the Department of Electronics and Communication Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- o Electronic requirements discussed
- o Project designs were finalized
- o Work commencing date
- o Detailed discussion on the initial requirements
- o Meetings for the further development of the project



Members


HOD


Client


Principal




Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Date: 18.07.2019

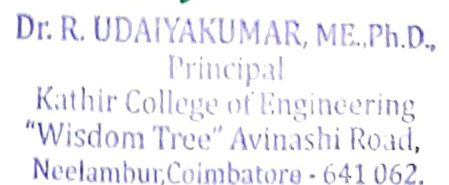
Sub: Research and Consultancy Work – Reg.,

Post Landing Safety Analysis And Self Powered Runway System :	Rs. 8, 25, 000/- (Rupees Eight Lakh Twenty Five Thousand only)
---	---

- a. The components related to the consultancy to be supplied by Orbit Controls and Services
- b. If any field visit is required and must be arranged by Orbit Controls and Services
- c. The payment must be released after results are achieved with the complete satisfaction of engineers of Orbit Controls and Services
- d. The result demonstration will be held in our college premises
- e. For future modification and design rework will be permitted

Thanking you,

For Kathir College of Engineering
(Principal)





Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]

Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Electronics and Communication Engineering

Minutes of Meeting Details

Project Name: Post Landing Safety Analysis and Self Powered Runway System


Meeting No: 02

Date: 03.09.2019

The meeting was arranged in the Department of Electronics and Communication Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- The hardware components were listed and finalized
- The material were supplied by the client
- Both the parties were concluded that the payment may be transferred during the project work.
- Insisted us to proceed further work
- We requested the client to arrange a field visit along with student team
- The representative is happy with the project design



Members


HOD


Client


Principal




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

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Valasaravakkam, Chennai - 600 087. INDIA.
Tel. : 2486 9452 / 53
E-mail : ID : orbitcontrols@gmail.com
Website : www.orbitcontrolz.com

23.08.2019

To
The Principal
Kathir College Of Engineering
Avinashi Road, Neelambur,
Coimbatore- 641 062.

Subject : Post Landing Safety Analysis
Reference: MoU Dated 25TH JULY 2018

Dear Professor,

Warm Greetings from Orbit Controls and Services. On receipt of your quotation for the work mentioned below, we would like to offer the design and Prototype development work on joint venture basis. Field visit to understand the requirement will be arranged by our company during work progress, You are requested to initiate the work for early completion.

WORK TITLE	COST
Post Landing Safety Analysis And Self Powered Runway System	Rs.8,25,000/-
Rupees Eight Lakh Twenty Five Thousand Only	

Further information can be discussed with Mr.S.Aravindh Kumar., Design Engineer-Instrumentation.

Thanking you,

for Orbit Controls and Services

K.Senil Kumar
(Chief Executive)

Encl : Technical Specifications, Field Installation Details, Sensor Details

Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062

ORBIT

"The technology solutions company"

Since 1987

ORBIT CONTROLS & SERVICES

34, Madurai Meenakshi Nagar,
Valasaravakkam, Chennai - 600 087. INDIA.

Tel. : 2486 9452 / 53

E-mail : ID : orbitcontrols@gmail.com

Website : www.orbitcontrolz.com

21/12/2019

To
The Principal
Kathir College Of Engineering
Avinashi Road, Neelambur,
Coimbatore- 641 062.

Ref: Work Order dated 23/08/2019

Sub: Sanctioning Order for Research Work -Financial

Dear Professor,

Its a great privilege from Team Orbit Controls And Services to issue this stage wise financial sanctioning of the work mentioned below. The Technical Information furnished by your Professors headed by the Principal Investigator mentioned below is approved for further proceeding and financial support on stage wise will be released as per the need, all the hardware ,materials will be supported by our company based on the requirement.

Stage wise completion report is essential and must be approved for financial sanctioning, all the technical information will be discussed during the Minutes of Meeting held in the College.

DETAILS OF THE WORK

PROPOSED WORK TITLE	: Post Landing Safety Analysis And Self Powered Runway System
PROPOSAL DATED	: 18/03/2019
WORK ORDER DATE	: 23/08/2019
PRINCIPAL INVESTIGATOR	: Dr. GNANA KING G R
DESIGNATION	: Professor



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal

Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Coimbatore - 641 062

Engineers, Designers, Manufacturers of Industrial Automation and Software

DEPARTMENT : Electronics And Communication Engineering
ESTIMATED COST : Rs.8,25,000/-
EXPECTED DURATION : 3 Years

STAGewise FINANCIAL SANCTION

STAGewise SCHEDULE	FINANCIAL SANCTION
(STAGE1) 2020 – 2021	Rs.1,00,000/-
(STAGE2) 2021 – 2022	Rs.3,00,000/-
(STAGE3) 2022 – 2023	Rs.4,25,000/-
Total Sanction	Rs.8,25,000/-

The Stage wise Financial Sanctioning is subject to each stage approval in all aspects like Design, Fabrication, Documentation, other requirements discussed during Minutes of meeting and mutually agreed by the both teams. The Proposed Work Schedule has to be followed as prescribed in the Minutes.

TERMS AND CONDITIONS

1. The Inputs given by the Orbit Team must be kept confidential and must not be revealed except to the members.
2. Sub-Contracting the work will be permitted to the certain extent, but not the full work.
3. The similar fashioned company or work should be avoided at any circumstances.
4. The PI, Members and Team of Orbit Engineers have to meet at least once in 3 Months.
5. A fair and honesty in Research work is essential by understanding own values, limitations.
6. All the Documentation from the beginning must be handed over at each stage of work completion and none of them is permitted for Digital and Print Media.
7. Orbit Group of Companies has always open minded to share information to the students and teaching faculty for promoting Industry Institution activities. In this context, Orbit permits students and faculty to use the information to upgrade their knowledge.

FOR ORBIT CONTROLS AND SERVICES

K.SENTHIL KUMAR
(CHIEF EXECUTIVE)



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]

Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 05.03.2019

The Managing Director
Orbit Controls and Services,
Chennai

Dear Sir/Madam,

Sub: INVITATION FOR JOINT VENTURE RESEARCH WORK

Kathir college of Engineering was established in the year of 2008 with an objective to promote the cause of higher education. The college is approved by A.I.C.T.E New Delhi and affiliated to Anna University Chennai. KCE offers the U.G courses B.E (CIVIL, CSE, EEE, ECE and MECHANICAL) and P.G courses such as MBA, M.E in Manufacturing Technology, Applied Electronics, Computer Science and Engineering and Power Electronics and Drives.

The institute has prime objectives of providing quality Engineering education for the students studying in all engineering, Technology streams and to provide an opportunity to utilize physical facilities, human resources and knowledge resources available in Educational institution to maximize the knowledge acquisition to the industry standards.

In order to prepare students in terms of their technical competence, soft skills and real time exposure, human Resource Development Centre (HRDC) invites industry professionals to share their thoughts and experiences with the students. The professional of Kathir College of Engineering are ready to work with the industry for mutual benefits to improve the Teaching methodology towards industry and Exporting latest technology to the industry for the welfare of our nation.

Now, this is right to put our Technical experts to work with industry to serve and gain knowledge. This may improve industry, institution and society. We request your esteemed organization to utilize our facilities for Research, Consultancy and Project development at an affordable cost and expecting joint venture projects from your esteemed organization.

Thanking you

For Kathir College of Engineering

[Principal]

Copy to: Chairman/Director/All HODs/Training and Placement



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Computer Science and Engineering

Minutes of Meeting Details

Project Name: Maximum Demand Management Controller For
Substation


Meeting No: 01


Date: 22.04.2019

The meeting was arranged in the Department of Computer Science and Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- Module analysis for the project
- Project designs were finalized
- Detailed discussion on the initial requirements
- Work commencing date
- Meetings for the further development of the project



Members


HOD


Client


Principal




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 16.05.2019

The Managing Director
Orbit Controls and Services,
Chennai

Dear Sir,

Sub: Research and Consultancy Work – Reg.,

Based on our discussions regarding project of "**Maximum Demand Management Controller for Substation**", we would like to submit a feasibility report for your consideration. You are requested to go through the complete report and approve the same for early completion.

Maximum Demand Management Controller For Substation: Rs. 5, 59, 000/-
(Rupees Five Lakh Fifty Nine Thousand only)

Terms and Conditions:

- The components related to the consultancy to be supplied by Orbit Controls and Services,
- If any field visit is required and must be arranged by Orbit Controls and Services,
- The payment must be released after results are achieved with the complete satisfaction of engineers of Orbit Controls and Services,
- The result demonstration will be held in our college premises
- For future modification and design rework will be permitted


The feasibility report contains technical, commercial and implementation concept at industry level. Kindly acknowledge the feasibility report and send to us. Feel free to contact us for further data if required.

Thanking you,

Yours faithfully

For Kathir College of Engineering
(Principal)




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE - Affiliated to Anna University - Accredited by NAAC]
Wisdom Tree Neelambur, Avinashi Road, Coimbatore-62

Department of Computer Science and Engineering

Minutes of Meeting Details

Project Name: Maximum Demand Management Controller for
Substation

Meeting No: 02

Date: 11.07.2019

The meeting was arranged in the Department of Computer Science and Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- Languages for coding were discussed
- System Configurations were requested with the client
- Both the parties were concluded that the payment may be transferred during the project work.
- The representative is happy with the module
- The material were supplied by the client
- We requested the client to arrange a field visit along with student team.
- Insisted us to proceed further work



Members


HOD


Client


Principal




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

ORBIT**"The technology solutions company"****Since 1987****ORBIT CONTROLS & SERVICES**34, Madurai Meenakshi Nagar,
Valasaravakkam, Chennai - 600 087. INDIA.

Tel. : 2486 9452 / 53

E-mail : ID : orbitcontrols@gmail.com

Website : www.orbitcontrolz.com

24.06.2019

To
The Principal
Kathir College Of Engineering
Avinashi Road, Neelambur,
Coimbatore- 641 062.

Subject : Demand Management Controller
Reference: MoU Dated 25TH JULY 2018

Dear Professor,

Warm Greetings from Orbit Controls and Services. On receipt of your quotation for the work mentioned below, we would like to offer the design and Prototype development work on joint venture basis. Field visit to understand the requirement will be arranged by our company during work progress. You are requested to initiate the work for early completion.

WORK TITLE	COST
Maximum Demand Management Controller For Substation	Rs.5,59,000/-
Rupees Five Lakh Fifty Nine Thousand Only	

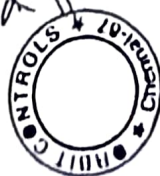
Further information can be discussed with Mr.S.Aravindh Kumar., Design Engineer-Instrumentation.

Thanking you

for Orbit Controls and Services

K.Senthil Kumar
(Chief Executive)

Encl : Technical Specifications, Field Installation Details, Coimbatore



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal

Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore-641 062.

ORBIT

"The technology solutions company"

Since 1987

ORBIT CONTROLS & SERVICES

34, Madurai Meenakshi Nagar,
Valasaravakkam, Chennai - 600 087. INDIA.

Tel. : 2486 9452 / 53

E-mail : ID : orbitcontrols@gmail.com

Website : www.orbitcontrolz.com

21/12/2019

To
The Principal
Kathir College Of Engineering
Avinashi Road, Neelambur,
Coimbatore- 641 062.

Ref: Work Order dated 24/06/2019

Sub: Sanctioning Order for Research Work -Financial

Dear Professor,

Its a great privilege from Team Orbit Controls And Services to issue this stage wise financial sanctioning of the work mentioned below. The Technical Information furnished by your Professors headed by the Principal Investigator mentioned below is approved for further proceeding and financial support on stage wise will be released as per the need, all the hardware ,materials will be supported by our company based on the requirement.

Stage wise completion report is essential and must be approved for financial sanctioning, all the technical information will be discussed during the Minutes of Meeting held in the College.

DETAILS OF THE WORK

PROPOSED WORK TITLE	: Maximum Demand Management Controller For Substation
PROPOSAL DATED	: 18/03/2019
WORK ORDER DATE	: 24/06/2019
PRINCIPAL INVESTIGATOR	: Dr. BANUMATHI P
DESIGNATION	: Professor & Head

Engineers, Designers, Manufacturers of Industrial Automation and Software



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

DEPARTMENT : Computer Science And Engineering
ESTIMATED COST : Rs.5,59,000/-
EXPECTED DURATION : 3 Years

STAGEWISE FINANCIAL SANCTION

STAGEWISE SCHEDULE	FINANCIAL SANCTION
(STAGE1) 2020 – 2021	Rs.1,00,000/-
(STAGE2) 2021 – 2022	Rs.2,00,000/-
(STAGE3) 2022 – 2023	Rs.2,59,000/-
Total Sanction	Rs.5,59,000/-

The Stage wise Financial Sanctioning is subject to each stage approval in all aspects like Design, Fabrication, Documentation, other requirements discussed during Minutes of meeting and mutually agreed by the both teams. The Proposed Work Schedule has to be followed as prescribed in the Minutes.

TERMS AND CONDITIONS

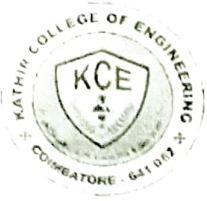
1. The Inputs given by the Orbit Team must be kept confidential and must not be revealed except to the members.
2. Sub-Contracting the work will be permitted to the certain extent, but not the full work.
3. The similar fashioned company or work should be avoided at any circumstances.
4. The PI, Members and Team of Orbit Engineers have to meet at least once in 3 Months.
5. A fair and honesty in Research work is essential by understanding own values, limitations.
6. All the Documentation from the beginning must be handed over at each stage of work completion and none of them is permitted for Digital and Print Media.
7. Orbit Group of Companies has always open minded to share information to the students and teaching faculty for promoting Industry Institution activities. In this context, Orbit permits students and faculty to use the information to upgrade their knowledge.

FOR ORBIT CONTROLS AND SERVICES

K.SENTHIL KUMAR
(CHIEF EXECUTIVE)



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To
The Managing Director
Electro Solar Solutions
6/80, Balakumaran Nagar, Part A
Kolathur, Chennai – 600 099
Dear Sir/Madam,

Date: 22.09.2019

Sub: **INVITATION FOR JOINT VENTURE RESEARCH WORK**

Kathir college of Engineering was established in the year of 2008 with an objective to promote the cause of higher education. The college is approved by A.I.C.T.E New Delhi and affiliated to Anna University Chennai. KCE offers the U.G courses B.E (CIVIL, CSE, EEE, ECE and MECHANICAL) and P.G courses such as MBA, M.E in Manufacturing Technology, Applied Electronics, Computer Science and Engineering and Power Electronics and Drives.

The institute has prime objectives of providing quality Engineering education for the students studying in all engineering, Technology streams and to provide an opportunity to utilize physical facilities, human resources and knowledge resources available in Educational institution to maximize the knowledge acquisition to the industry standards.

In order to prepare students in terms of their technical competence, soft skills and real time exposure, human Resource Development Centre (HRDC) invites industry professionals to share their thoughts and experiences with the students. The professional of Kathir College of Engineering are ready to work with the industry for mutual benefits to improve the Teaching methodology towards industry and Exporting latest technology to the industry for the welfare of our nation.

Now, this is right to put our Technical experts to work with industry to serve and gain knowledge. This may improve industry, institution and society. We request your esteemed organization to utilize our facilities for Research, Consultancy and Project development at an affordable cost and expecting joint venture projects from your esteemed organization.

Thanking you

For Kathir College of Engineering

[Principal]

Copy to: Chairman/Director/All HODs/Training and Placement



Dr. R. UDAIYAKUMAR, M.E., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]

Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Mechanical Engineering

Minutes of Meeting Details

Project Name: Design of online Vehicular Emission and Analysis

Meeting No: 01

Date: 10.10.2019

The meeting was arranged in the Department of Mechanical Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- o Detailed discussion on the initial requirements
- o Work commencing date
- o Analysis on Emissions
- o Project designs were finalized
- o Meetings for the further development of the project


Members

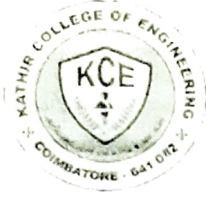
HOD

Client

Principal




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To
The Managing Director
Electro Solar Solutions,
6/80, Balakumaran Nagar, Part A,
Kolathur, Chennai – 600 099

Date: 20.12.2019

Dear Sir,

Sub: **Research and Consultancy Work – Reg.,**

Based on our discussions regarding Design of online Vehicular Emission and Analysis, we would like to submit a feasibility report for your consideration. You are requested to go through the complete report and approve the same for early completion.

**Design of online Vehicular
Emission and Analysis :**

**Rs. 3, 45, 000/-
(Rupees Three Lakhs Forty
Five Thousand Only)**

Terms and Conditions:

- The components related to the consultancy to be supplied by Electro Solar Solutions
- If any field visit is required and must be arranged by Electro Solar Solutions
- The payment must be released after results are achieved with the complete satisfaction of engineers of Electro Solar Solutions
- The result demonstration will be held in our college premises
- For future modification and design rework will be permitted


The feasibility report contains technical, commercial and implementation concept at industry level. Kindly acknowledge the feasibility report and send to us. Feel free to contact us for further data if required.

Thanking you,

Yours faithfully


For Kathir College of Engineering
(Principal)




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062,



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Mechanical Engineering

Minutes of Meeting Details

Project: Design of online Vehicular Emission and Analysis

Meeting No: 02

Date: 29.12.2019

The meeting was arranged in the Department of Mechanical Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- Engine specifications for analysis
- The material were supplied by the client
- Both the parties were concluded that the payment may be transferred during the project work.
- The representative is happy with the module
- Insisted us to proceed further work
- We requested the client to arrange a field visit along with student team.



Members


HOD


Client


Principal




Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Electro Solar Solutions

Solar Power Plant & Water Heaters

30th January 2020

TO
THE PRINCIPAL
KATHIR COLLEGE OF ENGINEERING
AVINASHI ROAD, NEELAMBUR,
COIMBATORE- 641 062.

Subject : Industry Research Work
Ref : MoU Dated 23/01/2020

Work Order Number: ESS/R&D/CBE/2020/002

Dear Sir,

With reference to your quote, We hereby accept your proposal regarding Online Vehicular Emission Analysis. The Technical and Software information furnished by your Professor are up to the mark and please proceed with the work and deliver the work as scheduled in the annexure attached with this work order.

DESIGN OF ONLINE VEHICULAR EMISSION AND ANALYSIS

-Rs.3,45,000/-

We hereby confirm your proposal report for further proceeding and authorize the work can to be carried out in your lab. Faculties of KCE can contact us in case of any Technical Assistance, Manpower Resources. Materials required for this work can be collected from our Industry with prior intimation. Please refer terms and conditions and send us the confirmation letter. Thanking You.

for ELECTROSOLAR SOLUTIONS

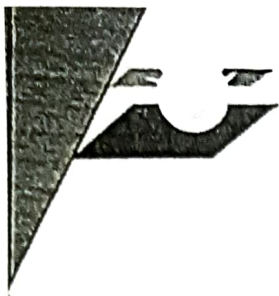
M.KAMALAKANNAN
(Director)

Enclosed- Technical Annexure



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.





Electro Solar Solutions

Solar Power Plant & Water Heaters

16/03/2020

To
THE PRINCIPAL
KATHIR COLLEGE OF ENGINEERING
AVINASHI ROAD, NEELAMBUR,
COIMBATORE- 641 062.

Subject : Financial Sanction for Research work
Ref : Work Order Number: ESS/R&D/CBE/2020/002

With Reference to the Research work Proposal submitted by the Institute on 29TH December 2019 is approved and official work order released on 30th January 2020 to analyze the technical and manufacturing feasibilities. Engineering team of Electro Solar Solutions analyzed Technical, Manufacturing And Financial feasibility reports submitted on behalf of Institution KCE by the Principal Investigator.

We here with release the financial sanction for the above mentioned work as per the schedule given below and subject to the terms and conditions mutually agreed.

SCHEDULED WORK TITLE : DESIGN OF ONLINE VEHICULAR EMISSION AND ANALYSIS

SANCTIONED AMOUNT : Rs.3,45,000/-

TIME SPAN : 3 Years from the date of Work Order

PRINCIPAL INVESTIGATOR : Dr. ANANTHA KRISHNAN D

DESIGNATION : PROFESSOR/ HEAD

DEPARTMENT : Mechanical Engineering

FINANCIAL SANCTION SCHEDULE

SANCTION SCHEDULE	FINANCIAL SANCTION	TOTAL SANCTION
2020 - 2021	Rs.50,000/-	
2021 - 2022	Rs.1,50,000/-	
2022- 2023	Rs.1,45,000/-	
		RS.3,45,000/-



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering

6/30, Balaraman Nagar, V/1 A, Kothamangalam, Coimbatore - 641 062.
Neelambur, Coimbatore - 641 062.

TERMS AND CONDITIONS

- The Institution is allowed to use sub contracting few part of the work in connection with the project, experimental or otherwise, to be carried out by a third party as per Institute norms and procedures, provided this does not result in the danger of information of a confidential nature coming into the hands of unauthorized persons.
- The results of all work done at the Institute by the PI in connection with the project, incorporated in written reports shall remain the property of the Client.
- Unless otherwise agreed, all reports are to be sent to the Client. The PI Institute has the right to retain a copy for Institutional purpose.
- The Institution or PI or Associated members or any faculty of the Institution do have no rights to publish the Research work in any Digital or Print media or patents, Intellectual property matters without prior discussions and written approval from Electro Solar Solutions, the results can be used only for Educational purpose of the faculty and students.

For ELECTRO SOLAR SOLUTIONS

M.KAMALAKANNAN
DIRECTOR



Dr. R. UDAIYAKUMAR, ME.,Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur,Coimbatore - 641 062.

A handwritten signature in green ink, appearing to be "Dr. R. UDAIYAKUMAR".





Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]

Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 06.09.2020

The Managing Director
Electro Solar Solutions
6/80, Balakumaran Nagar, Part A
Kolathur, Chennai – 600 099
Dear Sir/Madam,

Sub: INVITATION FOR JOINT VENTURE RESEARCH WORK

Kathir college of Engineering was established in the year of 2008 with an objective to promote the cause of higher education. The college is approved by A.I.C.T.E New Delhi and affiliated to Anna University Chennai. KCE offers the U.G courses B.E (CIVIL, CSE, EEE, ECE and MECHANICAL) and P.G courses such as MBA, M.E in Manufacturing Technology, Applied Electronics, Computer Science and Engineering and Power Electronics and Drives.

The institute has prime objectives of providing quality Engineering education for the students studying in all engineering, Technology streams and to provide an opportunity to utilize physical facilities, human resources and knowledge resources available in Educational institution to maximize the knowledge acquisition to the industry standards.

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Now, this is right to put our Technical experts to work with industry to serve and gain knowledge. This may improve industry, institution and society. We request your esteemed organization to utilize our facilities for Research, Consultancy and Project development at an affordable cost and expecting joint venture projects from your esteemed organization.


Thanking you

For Kathir College of Engineering

[Principal]

Copy to: Chairman/Director/All HODs/Training and Placement



 Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Computer Science and Engineering

Minutes of Meeting Details

Project Name: RSSI based online tracking system for MOB detection

Meeting No: 01

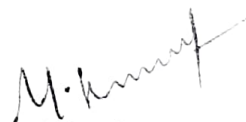
Date: 15.09.2020

The meeting was arranged in the Department of Computer Science and Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- Work commencing date
- Detailed discussion on the initial requirements
- Module analysis
- Project designs were finalized
- Meetings for the further development of the project


Members


HOD


Client


Principal




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 21.10.2020

The Managing Director
Electro Solar Solutions
6/80, Balakumaran Nagar, Part A
Kolathur, Chennai – 600 099

Dear Sir,

Sub: Research and Consultancy Work – Reg.,

Based on our discussions regarding project of "**RSSI based online tracking system for MOB detection**", we would like to submit a feasibility report for your consideration. You are requested to go through the complete report and approve the same for early completion.

RSSI based online tracking system for MOB detection: Rs. 8, 55, 000/-
(Rupees Eight Lakh Fifty Five Thousand only)

Terms and Conditions:

- The components related to the consultancy to be supplied by Electro Solar Solutions
- If any field visit is required and must be arranged by Electro Solar Solutions
- The payment must be released after results are achieved with the complete satisfaction of engineers of Electro Solar Solutions
- The result demonstration will be held in our college premises
- For future modification and design rework will be permitted

The feasibility report contains technical, commercial and implementation concept at industry level. Kindly acknowledge the feasibility report and send to us. Feel free to contact us for further data if required.

Thanking you,

Yours faithfully

For Kathir College of Engineering
(Principal)



Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Computer Science and Engineering

Minutes of Meeting Details

Project Name: RSSI based online tracking system for MOB detection

Meeting No: 02

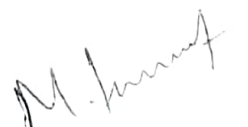
Date: 28.10.2020

The meeting was arranged in the Department of Computer Science and Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- The material were supplied by the client
- Both the parties were concluded that the payment may be transferred during the project work.
- The representative is happy with the module
- Insisted us to proceed further work
- We requested the client to arrange a field visit along with student team.



Members


HOD


Client


Principal




Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Electro Solar Solutions

Solar Power Plant & Water Heaters

25th February 2021

TO
THE PRINCIPAL
KATHIR COLLEGE OF ENGINEERING
AVINASHI ROAD, NEELAMBUR,
COIMBATORE- 641 062.

Subject : Industry Research Work
Ref : MoU Dated 23/01/2020

Work Order Number: ESS/R&D/CBE/2021/013

Dear Sir,

It gives us pleasure to congratulate your team members and their efforts on Man Overboard Detection For Deep Sea Application design and development. The feasibility report Supported by your Institutions meets our requirement both Financial and Technical aspects.

RSSI BASED ONLINE TRACKING SYSTEM FOR MOB DETECTION

-Rs.8,55,000/-

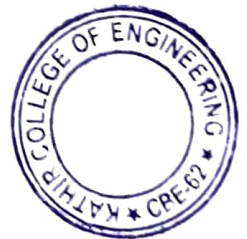
We hereby confirm your proposal report for further proceeding and authorize the work can to be carried out in your lab. Faculties of KCE can contact us in case of any Technical Assistance, Manpower Resources. Materials required for this work can be collected from our Industry with prior intimation. Please refer terms and conditions and send us the confirmation letter. Thanking You.

for ELECTROSOLAR SOLUTIONS

M.KAMALAKANNAN
(Director)



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.





Electro Solar Solutions

Solar Power Plant & Water Heaters

04/06/2021

To
THE PRINCIPAL
KATHIR COLLEGE OF ENGINEERING
AVINASHI ROAD, NEELAMBUR,
COIMBATORE- 641 062.

Subject : Financial Sanction for Research work
Ref : Work Order Number: ESS/R&D/CBE/2021/013

With Reference to the Research work Proposal submitted by the Institute on 5TH January 2021 is approved and official work order released on 25th February 2021 to analyze the technical and manufacturing feasibilities. Engineering team of Electro Solar Solutions analyzed Technical, Manufacturing And Financial feasibility reports submitted on behalf of Institution KCE by the Principal Investigator.

We here with release the financial sanction for the above mentioned work as per the schedule given below and subject to the terms and conditions mutually agreed.

SCHEDULED WORK TITLE : RSSI BASED ONLINE TRACKING SYSTEM FOR MOB DETECTION AND ANALYSIS

SANCTIONED AMOUNT : Rs.8,55,000/-

TIME SPAN : 3 Years from the date of Work Order

PRINCIPAL INVESTIGATOR : DR. S.J.K. JAGADEESH KUMAR

DESIGNATION : Professor & Head

DEPARTMENT : Computer Science and Engineering

FINANCIAL SANCTION SCHEDULE

SANCTION SCHEDULE	FINANCIAL SANCTION	TOTAL SANCTION
2021- 2022	Rs.1,50,000/-	
2022- 2023	Rs.3,00,000/-	
2023- 2024	Rs.4,05,000/-	
		RS.8,55,000/-



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal

Kathir College of Engineering
"Wisdom Tree" Avinashi Road,

Dr. R. Udaiyakumar, Regd. Prof. A Kolathur, Chennai - 600 099.

99414 04885 | electro.solar@gmail.com

TERMS AND CONDITIONS

- The Institution is allowed to use sub contracting few part of the work in connection with the project, experimental or otherwise, to be carried out by a third party as per Institute norms and procedures, provided this does not result in the danger of information of a confidential nature coming into the hands of unauthorized persons.
- The results of all work done at the Institute by the PI in connection with the project, incorporated in written reports shall remain the property of the Client.
- Unless otherwise agreed, all reports are to be sent to the Client. The PI Institute has the right to retain a copy for Institutional purpose.
- The Institution or PI or Associated members or any faculty of the Institution do have no rights to publish the Research work in any Digital or Print media or patents, Intellectual property matters without prior discussions and written approval from Electro Solar Solutions, the results can be used only for Educational purpose of the faculty and students.

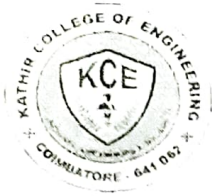
For ELECTRO SOLAR SOLUTIONS

M.KAMALAKANNAN
DIRECTOR



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.





Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 13.11.2020

The Managing Director
Electro Solar Solutions
Chennai

Dear Sir/Madam,

Sub: INVITATION FOR JOINT VENTURE RESEARCH WORK

Kathir college of Engineering was established in the year of 2008 with an objective to promote the cause of higher education. The college is approved by A.I.C.T.E New Delhi and affiliated to Anna University Chennai. KCE offers the U.G courses B.E (CIVIL, CSE, EEE, ECE and MECHANICAL) and P.G courses such as MBA, M.E in Manufacturing Technology, Applied Electronics, Computer Science and Engineering and Power Electronics and Drives.

The institute has prime objectives of providing quality Engineering education for the students studying in all engineering, Technology streams and to provide an opportunity to utilize physical facilities, human resources and knowledge resources available in Educational institution to maximize the knowledge acquisition to the industry standards.

In order to prepare students in terms of their technical competence, soft skills and real time exposure, human Resource Development Centre (HRDC) invites industry professionals to share their thoughts and experiences with the students. The professional of Kathir College of Engineering are ready to work with the industry for mutual benefits to improve the Teaching methodology towards industry and Exporting latest technology to the industry for the welfare of our nation.


Now, this is right to put our Technical experts to work with industry to serve and gain knowledge. This may improve industry, institution and society. We request your esteemed organization to utilize our facilities for Research, Consultancy and Project development at an affordable cost and expecting joint venture projects from your esteemed organization.

Thanking you

For Kathir College of Engineering
[Principal]

Copy to: Chairman/Director/All HODs/Training and Placement




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Electrical and Electronics Engineering

Minutes of Meeting Details

Project Name: Relay/ Contactor/ Switchgear tester with Feedback


Meeting No: 01


Date: 20.11.2020

The meeting was arranged in the Department of Electrical and Electronics Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

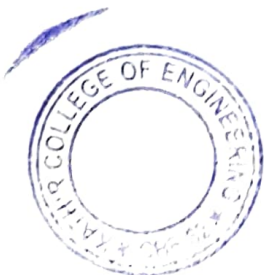
- o Work commencing date
- o Detailed discussion on the initial requirements
- o Module analysis
- o Project designs were finalized
- o Meetings for the further development of the project


Members


HOD


Client


Principal




Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

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Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

To

Date: 14.12.2020

The Managing Director
Electro Solar Solutions

Chennai

Dear Sir,

Sub: Research and Consultancy Work – Reg.,

Based on our discussions regarding project of "**Relay/ Contactor/ Switchgear tester with Feedback**", we would like to submit a feasibility report for your consideration. You are requested to go through the complete report and approve the same for early completion.

**Relay/ Contactor/ Switchgear
tester with Feedback:**

**Rs. 7, 21, 000/-
(Rupees Seven Lakh Twenty one
Thousand only)**

Terms and Conditions:

- The components related to the consultancy to be supplied by Electro Solar Solutions
- If any field visit is required and must be arranged by Electro Solar Solutions
- The payment must be released after results are achieved with the complete satisfaction of engineers of Electro Solar Solutions
- The result demonstration will be held in our college premises
- For future modification and design rework will be permitted

The feasibility report contains technical, commercial and implementation concept at industry level. Kindly acknowledge the feasibility report and send to us. Feel free to contact us for further data if required.

Thanking you,

Yours faithfully

For Kathir College of Engineering
(Principal)



Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Kathir College of Engineering

[Approved by AICTE | Affiliated to Anna University | Accredited by NAAC]
Wisdom Tree, Neelambur, Avinashi Road, Coimbatore-62

Department of Electrical and Electronics Engineering

Minutes of Meeting Details

Project Name: Relay/ Contactor/ Switchgear tester with Feedback

Meeting No: 02

Date: 21.12.2020

The meeting was arranged in the Department of Electrical and Electronics Engineering along with the faculty members and the client representatives. In the meeting the following points were discussed.

- Hardware list is finalized for the project
- The material were supplied by the client
- Both the parties were concluded that the payment may be transferred during the project work.
- The representative is happy with the module
- Insisted us to proceed further work
- We requested the client to arrange a field visit along with student team.


Members


HOD


Client


Principal




Dr. R. UDAYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



Electro Solar Solutions

Solar Power Plant & Water Heaters

25th February 2021

TO
THE PRINCIPAL
KATHIR COLLEGE OF ENGINEERING
AVINASHI ROAD, NEELAMBUR,
COIMBATORE- 641 062.

Subject : Industry Research Work
Ref : MoU Dated 23/01/2020

Work Order Number: ESS/R&D/CBE/2021/014

Dear Sir,

Regarding the quote of Design, Fabrication of prototype and analysis report for the application of Software and Hardware based Relay Testing System. The feasibility report Supported by your Institutions meets our requirement both Financial and Technical aspects.

RELAY / CONTACTOR / SWITCH GEAR TESTER WITH FEEDBACK -Rs.7,21,000/-
(Please Refer Payment Terms Based On Work Proceeding)

We hereby confirm your proposal report for further proceeding and authorize the work can to be carried out in your lab. Faculties of KCE can contact us in case of any Technical Assistance, Manpower Resources. Materials required for this work can be collected from our Industry with prior intimation. Please refer terms and conditions and send us the confirmation letter. Thanking You.

for ELECTRO SOLAR SOLUTIONS

M.KAMALAKANNAN
(Director)



Dr. R. UDAIYAKUMAR, ME., Ph.D.,
Principal
Kathir College of Engineering
"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.



6/80, Balakumaran Nagar, Part A Kolathur, Chennai - 600 099.

994414 04625 ✉ electro.solar@gmail.com



Electro Solar Solutions

Solar Power Plant & Water Heaters

25th February 2021

TO
THE PRINCIPAL
KATHIR COLLEGE OF ENGINEERING
AVINASHI ROAD, NEELAMBUR,
COIMBATORE- 641 062.

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for ELECTRO SOLAR SOLUTIONS

M.KAMALAKANNAN
(Director)



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"Wisdom Tree" Avinashi Road,
Neelambur, Coimbatore - 641 062.

Office, Balakumaran Nagar, Part A Kolathur, Chennai - 600 099.

98414 04626 | electrosolar1@gmail.com

TERMS AND CONDITIONS

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For ELECTRO SOLAR SOLUTIONS

M.KAMALAKANNAN
DIRECTOR



Dr.

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