



T.J.S ENGINEERING COLLEGE

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

Accredited by NAAC / ISO 9001:2015 Certified Institution

TJS Nagar, Peruvoyal, Near Kavaraipettai, Gummidipoondi Taluk,

Thiruvallur District -601 206.

Ph: 044 27967600, E-mail: tjsivanandam@gmail.com, Web: www.tjsec.in



ACADEMIC YEAR	NO OF NEW EXTERNALLY FUNDED RESESARCH PROJECTS
2023-2024	01
2022-2023	02
2021-2022	02
2020-2021	NIL
2019-2020	02
2018-2019	01

PRINCIPAL

T.J.S. ENGINEERING COLLEGE

Peruvoyal, Kavaraipettai,

Gummidipoondi Taluk.

Thiruvallur Dist - 601 206.



NO OF EXTERNALLY FUNDED RESEARCH PROJECTS: Academic Year -2023- 2024

Sl. No	Name of the research project/ endowment	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator / Co-investigator	Name of the Funding Agency	Type (Government /Non-Government	Amount Sanctioned In INR in (Lakhs)
1	Real Time Monitoring of workers to enforce safety standards in Industries using Artificial intelligence and Machine Learning	Ms.J.Agnes / Principal Investigator. Mr. A. Vijayan / Co-investigator	CSE	Pantech Solutions (India) Pvt. Ltd.,	Non-Government	4.800


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T.J.S. ENGINEERING COLLEGE
 Peruvoyal, Kavaraipettai,
 Gummidipoondi Taluk,
 Thiruvallur Dist - 601 206.

3.1.1 GRANTS RECEIVED FROM GOVERNMENT AND NON-GOVERNMENTAL AGENCIES FOR RESEARCH PROJECTS/ENDOWMENTS IN THE INSTITUTION DURING THE LAST FIVE YEARS.

Academic Year	2023-2024
Name of the Project	Real-time Monitoring of Workers to enforce safety standards in Industries using Artificial Intelligence and Machine Learning
Name of the Principal Investigator	Ms. J Agnes, Head Of the Department, Computer Science and Engineering, T.J.S Engineering College, Peruvoyal , Near Kavaraipettai, Tamil Nadu - 601206
Name of the Co-Principal Investigator	Mr. A. Vijayan, Assistant Professor, Computer Science and Engineering, T.J.S Engineering College, Peruvoyal, Near Kavaraipettai. Tamil Nadu - 601206
Name of the Funding Agency	Pantech Solutions India Pvt Ltd
Amount Sanctioned	Rs. 4,80,000 /-
Duration of the project	8 months



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T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 200.

03.07.2023

To

The Principal,
T.J.S. Engineering College,
GNT Road, Peruvoyal,
Tamil Nadu - 601206.

Dear Sir,

Sub: Collaborative Research Project with your R&D Team -Reg.

Pursuant to the discussions between our technical team and your R&D team, we are happy to proceed further on partnering with your Institution in Research & Development of products.

With the vast experience of your Institute faculty, we are sure we could mutually benefit from employing latest technologies in developing solutions for industrial needs. We request you to identify a core team from your Institution in collaborating for research and development of Real-time Monitoring of Workers to enforce safety standards in Industries using Artificial Intelligence and Machine Learning. We are confident that our working together will provide fruitful outcomes for both of us.

With regards

PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



M R Senthilkumar

Director

#8, Natarajan St, Kamaraj Nagar, Sholinganallur, Chennai, Tamil Nadu 600119

Contact: +91 8925533488 / 89

Email: learn@warriorsway.in



Dr. J. Prakash, M.E, Ph.D.,
PRINCIPAL

10.07.2023

To
The Director,
Pantech Solutions India Pvt Ltd,
Sholinganallur, Chennai - 600119

Dear Sir,

Sub: Collaborative Research Project with Pantech Solutions India Pvt Ltd - Reg.

With reference your letter dated 03/07/2023 we are happy that Pantech Solutions India Pvt Ltd and T.J.S. Engineering College would be partnering in research and development.

We have potential faculty members with expertise in the area of Artificial Intelligence and Machine Learning, who would be able to collaborate with you developing a system for Real - time monitoring of workers to enforce safety standards in industries using Artificial Intelligence and Machine Learning.

The purpose of this research collaboration is to combine our respective strengths, knowledge and resources to tackle specific challenges and capitalize on emerging opportunities.

Thank you for the opportunity. We look forward to hearing from you soon

With Regards



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T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

17.07.2023

To

The Principal,
T.J.S. Engineering College,
Peruvoyal, Near Kavaraipettai,
Tamil Nadu - 601206

Dear Sir,

Sub: Submission of Research Project proposal - Reg.

With reference to your letter dated 10/07/2023 we are pleased to collaborate with TJS Engineering college for the research and development of a system for Real - time monitoring of workers to enforce safety standards in industries using Artificial Intelligence and Machine Learning.

We request you send us the research proposal stating the outline, scope, methodology, timelines and budget. Also inform us of the core team members for the research work, Principal Investigator and Co-Investigator.

The duration of the project work may be limited to 8 months from the project start. We would request you submit the project proposal and all the other related documents within a month of receipt of this communication.



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T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



With regards



M R Senthilkumar

Director

#8, Natarajan St, Kamaraj Nagar, Sholinganallur, Chennai, Tamil Nadu 600119

Contact: +91 8925533488 / 89

Email: learn@warriorsway.in



Dr. J. Prakash, M.E, Ph.D.,
PRINCIPAL

21/07/2023

To
The Director,
Pantech Solutions India Pvt Ltd,
Sholinganallur, Chennai – 600119

Dear Sir,

Sub: Submission of proposal and assigning of faculty members to do Collaborative research work with Pantech Solutions India Pvt Ltd – Reg.

Greetings from the T.J.S. Engineering College (TJSEC)

With reference to the letter dated (17.07.2023), the following faculty members have been deputed to do collaborative research with Pantech Solutions India Pvt Ltd and a proposal on the mentioned title is submitted along with this letter. **List of Faculty members**

S. No	Faculty Name	Designation	Contact information
<u>1.</u>	Ms J Agnes, Principal Investigator	Head of Department, Department of Computer Science and Engineering	7904496805 , agnes.pravin@gmail.com
<u>2.</u>	M. A Vijayan, Co-Investigator	Assistant Professor, Department of Computer Science and Engineering	9840525650. Vijayan.selva@gmail.com

With regards



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 200.

SUBMISSION OF RESEARCH PROPOSAL

On

**REALTIME MONITORING OF WORKERS TO ENFORCE
SAFETY STANDARDS IN INDUSTRIES USING ARTIFICIAL
INTELLIGENCE AND MACHINE LEARNING**

Submitted to

Pantech Solutions India Pvt Ltd

#8, Natarajan St, Kamaraj Nagar, Sholinganallur,

Chennai, Tamil Nadu 600119



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



Academic Year -2022- 2023

Sl.no	Name of the research project/ endowment	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator / Co-investigator	Name of the Funding Agency	Type (Government /Non-Government)	Amount Sanctioned In INR in (Lakhs)
1	Transferable Mechanized Concrete Blending Machine	Dr.K.KamalBabu & Mr.M.Vioth Kumar	MECH	APVK Infra Private Ltd	Non-Government	4.800
2	ANFO Mixing Machine for Safety and Proper Homogenization	Mr.Sivachandran & Mr.K.Kaviarasn	Civil	My Way Enterprises	Non-Government	5.360


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T.J.S. ENGINEERING COLLEGE
 Peruvoyal, Kavaraipettai,
 Gummidipoondi Taluk
 Thiruvallur Dist - 601 200.



APVK INFRA PRIVATE LIMITED

CIN : U45203TN2022PTC152509

Date: 02-06-2022

To
The Principal,
T.J.S. Engineering College,
Puduvoyal, Tamil Nadu-601 206

Dear Sir,

Sub: Requisition for involvement in collaborative research project with your R&D Team -Reg.

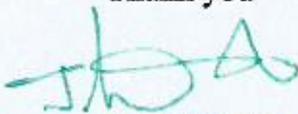
Greeting from APVK Infra Private limited, Chennai.

I am writing to you for the research grant and collaborative research project with your R&D Team for Manufacturing a Transferable Mechanized Concrete Blending Machine. After carefully reviewing your organization we are excited to express our willingness to engage in a research project with you. We recognize the expertise and reputation of your institution in the field of engineering and technology, and we believe that collaboration between our organizations will yield significant results.

In order to move forward with this project, we kindly request you to send us a research proposal outlining the scope, methodology, timelines, and team members involved. We are eager to work closely with T.J.S. Engineering College
We look forward to hear from you soon.

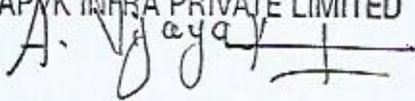
Thank you




PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Tiruvallur Dist - 601 206.

Regards

For APVK INFRA PRIVATE LIMITED


Director
APVK Infra Private limited,
Chennai.

D.No.1160, West End Colony, Anna Nagar West Extension, Chennai - 600 101.

PAN NO: AAXCA0523C, GST NO: 33AAXCA0523C1Z2

Phone No: 044-27925544 / 27925245

Email : apvkinfra@gmail.com



T.J.S. ENGINEERING COLLEGE

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An ISO 9001:2015 Certified Institution



08-06-2022

Dr. J. Prakash, M.E., PhD,
PRINCIPAL
To
The Director
APVK INFRA PRIVATE LIMITED
No.1160, West End Colony,
Anna Nagar, West Extension
Chennai – 600101

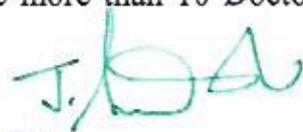
Dear Sir,

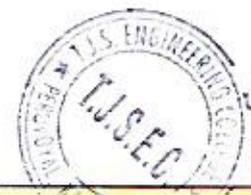
Sub: Collaborative Research Opportunity with APVK Infra Private Limited -Reg.

Thank you for offering R&D work to our institution, we are interested to establish a research collaboration with your esteemed organization as per your requirement.

T.J.S. Engineering College, founded by Shri T.J. Govindarajan in 2009, has been continually striving for excellence in technical education. We take pride in being approved by AICTE, New Delhi and affiliated with Anna University, Chennai. Our college offers a range of undergraduate programs including Mechanical Engineering, Electrical and Electronics Engineering (EEE), Electronics and Communication Engineering (ECE), and Computer Science Engineering (CSE).

At T.J.S., we strongly believe in fostering research and consulting work to enhance technical competence among our students and faculty members. In addition to regular academic laboratory facilities, our institution has research facilities that allow for interdisciplinary research our college more than 10 Doctorates are available in various domains in our college.


T.J.S. E. ...
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur District, Tamil Nadu - 601 206.



T.J.S.Nagar, Peruvoyal, Kavaraipettai, Near Red Hills, Gummidipoondi Taluk, Thiruvallur Dist - 601 206.
Phone : 044 27967602, 27967604, 27967605, Cell : 7373730006 / 9788877774

E-mail : tjsivanandam@ymail.com, tjsivanandam@gmail.com Website : www.tjsec.in



T.J.S. ENGINEERING COLLEGE

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TJSEC is looking for innovative research project to help UG & PG Students by involving them in applied research projects. After-carefully reviewing your request, we are excited to express our willingness to engage in a research project with you. We believe that collaboration between our organizations will yield significant results Thank you for providing this opportunity.

Thank you

Yours Sincerely,

PRINCIPAL

PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.





APVK INFRA PRIVATE LIMITED

CIN : U45203TN2022PTC152509

Date: 13-06-2022

To
The Principal,
T.J.S. Engineering College,
Puduvoyal, Tamil Nadu-601 206

Dear Sir,

Sub: Submission of Proposal for Research Project -Reg.

With reference to the letter dated 08-06-2022, we are pleased to collaborate with T.J.S Engineering college for extending technical support We appreciate your interest in the Industrial Relevant research work for our organization We are glad to receive the proposal from your side for the Transferable Mechanized Concrete Blending Machine. The duration of the project work may be limited to 08 Months from the starting date of the project.

Thank you

Regards

For APVK INFRA PRIVATE LIMITED

Director

APVK Infra Private limited,
Chennai



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T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

D.No.1160, West End Colony, Anna Nagar West Extension, Chennai - 600 101.

PAN NO: AAXCA0523C, GST NO: 33AAXCA0523C1Z2

Phone No: 044-27925544 / 27925245

Email : apvkinfra@gmail.com



T.J.S. ENGINEERING COLLEGE

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6-07-2022

Dr. J. Prakash, M.E., PhD,
PRINCIPAL

To
The Director
APVK INFRA PRIVATE LIMITED
No.1160, West End Colony,
Anna Nagar, West Extension
Chennai – 600101

Sub: Submission of Proposal and assigning faculty members to do Collaborative research work with APVK Infra Private Limited, Chennai -Reg

Greeting from TJSEC, with the reference to the letter dated 13-06-2022, we are permitting the following faculty members to do collaborative research with APVK Infra Private Limited, Chennai and submitting the proposal on the mentioned title Transferable Mechanized Concrete Blending Machine along with this letter, the following Faculty members were assigned to do research work with APVK Infra Private Limited.

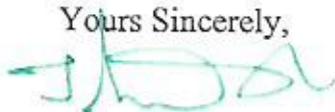
1. Dr.Kamal Babu Associate Professor, Department of Mechanical Engineering.
2. Mr.Vinoth Kumar Assistant Professor, Department of Mechanical Engineering.

Kindly permit the above faculty members to execute the above research work. We are expecting a positive reply from your side.

Thank you


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T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



Yours Sincerely,

PRINCIPAL

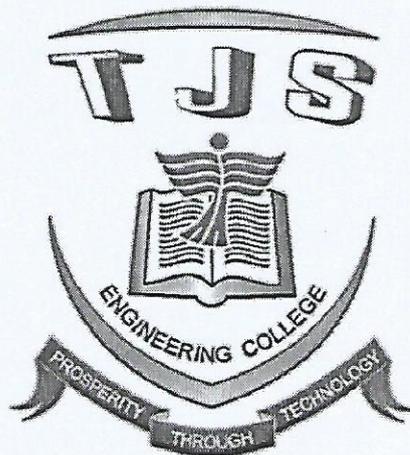
Submission of Research proposal

on

**TRANSFERABLE MECHANIZED CONCRETE
BLENDING MACHINE**

Submitted to

**APVK INFRA PRIVATE LIMITED
No.1160, West End Colony,
Anna Nagar, West Extension
Chennai - 600101**



A handwritten signature in blue ink is located to the right of the college logo. The signature is cursive and appears to be the name of the principal.

**PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.**



Academic Year - 2021- 2022

Sl. No	Name of the research project/ endowment	Name of the Principal Investigator/Co-investigator	Department of Principal Investigator / Co-investigator	Name of the Funding Agency	Type (Government /Non-Government)	Amount Sanctioned In INR in (Lakhs)
1	5 KW Roof Top Solar PV Implementation	Dr.J.Prakash & Dr. I. Arul doss Adaikalam	EEE	Subam Industried (p) Ltd	Non Government	4.760
2	AI Based Automatic Irrigation System with Android Application	Mr.T.Kamal Kumar	EEE	TNSCST	Government	0.075


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T.J.S. ENGINEERING COLLEGE
 Peruvoyal, Kavaraipettai,
 Gummidipoondi Taluk,
 Thiruvallur Dist - 601 206.

02.06.2021

**Chief Executive Officer,
For Subam Industries**

To
The Principal,
T.J.S. Engineering College,
Peruvoyal, Near Kavaraipettai,
Tamil Nadu 601206.

Dear Sir,

Sub: Request for involvement in collaborative research project with your
R&D Team -Reg.

Greeting from Subam Industries, Chennai

I hope this letter finds you in good health and high spirits. I am writing to propose collaboration between T.J.S Engineering College and Subam Industries for a project work initiative. This letter is regarding the 5 KW Roof Top Solar PV Implementation research grant with your R&D team in the college. Having thoroughly examined your college, we are eager to say that we would be interested in working with you on a study project. We are aware of your institution's standing and competence in the engineering and technology fields, and we think working together will provide important outcomes for both of our businesses.

We respectfully ask that you provide us an acceptance of project proposal details inorder to proceed with it. We are excited to contribute significantly to the field of Electrical and Electronics Engineering and collaborate closely with T.J.S. Engineering College.

I appreciate your consideration.

Yours Sincerely,
G. Karandhi
Chief Executive Officer,



[Signature]
PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206



GST NO: 33AFZPK9630C1Z7

☎ 9444034474 / 9940143213 | ☎ 044-48534593

✉ subamkitchens@gmail.com / subameqep@gmail.com 🌐 www.subamkitchens.in / www.subamkitchens.com

No:14, Subam Campus, Sanjay Gandhi Nagar, Perumal Agaram, Thiruverkadu, Chennai – 600077, Tamilnadu, India.



T.J.S. ENGINEERING COLLEGE

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An ISO 9001:2015 Certified Institution



Dr. J. Prakash, M.E., Ph.D., MISTE,
Principal,
E-mail: principal@tjsec.in,
Ph: 044-27967602, 7373730006.

Date: 16.06.2021

To

The Chief Executive Officer,
Subam Industries (P) Ltd,
No.14, Perumalagaram Salai,
Sanjay Gandhi Nagar,
Chennai, Tamil Nadu-600077

Dear Sir,

Sub: Collaborative Research Opportunity with Subam Industries - Reg.

Thank you for offering R&D work to our institution, we are interest to establishing a research collaboration with your esteemed institution as per your requirement.

T.J.S. Engineering College, Peruvoyal, was established by Shri T.J.GOVINDARAJAN (FOUNDER & CHAIRMAN) in the year 2009. Our college is approved by AICTE, New Delhi and affiliated with Anna University, Chennai. We are offering five UG programs in Mechanical, Electrical and Electronics Engineering (EEE), Electronics and Communication Engineering (ECE), Computer Science Engineering (CSE) and Artificial Intelligent and Data Science (AI&DS) and Three PG programs in Master of Business Administration (MBA), Master of Very Large Scale Integration (VLSI), and Master of Computer Science Engineering. Our college is also involved in fostering research and consulting work in technical competence. Therefore, I am writing this letter to express our interest in establishing research collaboration with Subam Industries.

As stated above, we have potential faculty members from the core of Electrical and Electronics Engineering and they have expertise in the area of solar PV implementation and are also ready to submit a research proposal on 5 KW Roof Top Solar PV Implementation.

The purpose of this research collaboration is to combine our respective strengths, knowledge and resources to tackle specific challenges and capitalize on emerging opportunities.

Thank you for considering this opportunity. We look forward to hearing from you soon



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai.

Yours Sincerely,

T.J.S.Nagar, Peruvoyal, Kavaraipeetai, Gummidipoondi Taluk, Thiruvallur Dist - 601 206.
Phone : 044 27967602, 27967604, 27967605, Cell : 7373730006 / 9788877774

E-mail : tjsivanandam@gmail.com, tjsivanandam@tjsec.in Website : www.tjsec.in

02.07.2021

**Chief Executive Officer,
for Subam Industries.**

To
The Principal,
T.J.S. Engineering College,
Peruvoyal, Near Kavaraipettai,
Tamil Nadu - 601206

Dear Sir,

Sub: Submission of Research Project proposal - Reg.

We are pleased to collaborate with TJS Engineering college for extending your technical support, with reference to the letter dated 16.06.2021, I am writing in response to your letter regarding the research grant offered in topic of solar PV implementation. We are excited to express our willingness to engage in a research project work with T.J.S. Engineering College.

We recognize the expertise and reputation of your institution in the field of Engineering and Technology, and we believe that collaboration between our organizations will yield significant results. So you are requested to send us a research proposal stating about the outlining, scope, methodology, timelines and also allocate the team members for the same.

We look forward to working closely with T.J.S. Engineering College and creating a lasting impact in the field of electrical and electronics engineering. The duration of the project work may be limited to 09 months from the project started. We would request you to submit the project proposal and all the other relative documents.



[Handwritten Signature]
PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206

Yours Sincerely,
[Handwritten Signature]
Chief Executive Officer



GST NO: 33AFZPK9630C1Z7

☎ 9444034474 / 9940143213 | ☎ 044-48534593

✉ subamkitchens@gmail.com / subameqep@gmail.com 🌐 www.subamkitchens.in / www.subamkitchens.com

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T.J.S. ENGINEERING COLLEGE

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Dr. J. Prakash, M.E., Ph.D., MISTE,
Principal,
E-mail: principal@tjsec.in,
Ph: 044-27967602, 7373730006.

Date: 12.07.2021

To

The Chief Executive Officer,
Subam Industries (P) Ltd,
No.14, Perumalagaram Salai,
Sanjay Gandhi Nagar,
Chennai, Tamil Nadu-600077

Dear Sir,

Sub: Submission of proposal and assigning of faculty members to do Collaborative research work with Subam Industries – Reg.

Greetings from the T.J.S. Engineering College (TJSEC)

With reference to the letter dated (02.07.2021), TJSEC is permitted the following faculty members to do collaborative research with Subam Industries and a proposal on the mentioned title "5KW ROOF TOP SOLAR PV IMPLEMENTATION" is submitted along with this letter. The following faculty members are assigned to do research work with Subam Industries.

List of Faculty members

S. No	Name of PI & Co-PI	Designation and Specialization	Contact information
1.	Dr. J. Prakash	Principal/ Principle investigator	9443275330 principal@tjsec.in
2.	Dr. I. Arul Doss Adaikalam	Associate Professor, Co-Investigator	9865773737 iadaikalam@gmail.com




PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206

Yours Sincerely,


PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206

T.J.S. Nagar, Peruvoyal, Kavaraipeetai, Near Red Hills, Gummidipoondi Taluk, Thiruvallur Dist - 601 206,
Phone : 044 27967602, 27967604, 27967605, Cell : 7373730006 / 9788877774

E-mail : tjsivanandam@gmail.com, tjsivanandam@gmail.com Website : www.tjsec.in

02.06.2021

**Chief Executive Officer,
For Subam Industries**

To
The Principal,
T.J.S. Engineering College,
Peruvoyal, Near Kavaraipettai,
Tamil Nadu 601206.

Dear Sir,

Sub: Request for involvement in collaborative research project with your
R&D Team -Reg.

Greeting from Subam Industries, Chennai

I hope this letter finds you in good health and high spirits. I am writing to propose collaboration between T.J.S Engineering College and Subam Industries for a project work initiative. This letter is regarding the 5 KW Roof Top Solar PV Implementation research grant with your R&D team in the college. Having thoroughly examined your college, we are eager to say that we would be interested in working with you on a study project. We are aware of your institution's standing and competence in the engineering and technology fields, and we think working together will provide important outcomes for both of our businesses.

We respectfully ask that you provide us an acceptance of project proposal details inorder to proceed with it. We are excited to contribute significantly to the field of Electrical and Electronics Engineering and collaborate closely with T.J.S. Engineering College.

I appreciate your consideration.

Yours Sincerely,
G. Karandhi
Chief Executive Officer,



[Signature]
PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206



GST NO: 33AFZPK9630C1Z7

☎ 9444034474 / 9940143213 | ☎ 044-48534593

✉ subamkitchens@gmail.com / subameqep@gmail.com 🌐 www.subamkitchens.in / www.subamkitchens.com

No:14, Subam Campus, Sanjay Gandhi Nagar, Perumal Agaram, Thiruverkadu, Chennai – 600077, Tamilnadu, India.



T.J.S. ENGINEERING COLLEGE

(Approved by AICTE, Affiliated to Anna University, Chennai & Accredited by NAAC)
An ISO 9001:2015 Certified Institution



Dr. J. Prakash, M.E., Ph.D., MISTE,
Principal,
E-mail: principal@tjsec.in,
Ph: 044-27967602, 7373730006.

Date: 16.06.2021

To

The Chief Executive Officer,
Subam Industries (P) Ltd,
No.14, Perumalagaram Salai,
Sanjay Gandhi Nagar,
Chennai, Tamil Nadu-600077

Dear Sir,

Sub: Collaborative Research Opportunity with Subam Industries - Reg.

Thank you for offering R&D work to our institution, we are interest to establishing a research collaboration with your esteemed institution as per your requirement.

T.J.S. Engineering College, Peruvoyal, was established by Shri T.J.GOVINDARAJAN (FOUNDER & CHAIRMAN) in the year 2009. Our college is approved by AICTE, New Delhi and affiliated with Anna University, Chennai. We are offering five UG programs in Mechanical, Electrical and Electronics Engineering (EEE), Electronics and Communication Engineering (ECE), Computer Science Engineering (CSE) and Artificial Intelligent and Data Science (AI&DS) and Three PG programs in Master of Business Administration (MBA), Master of Very Large Scale Integration (VLSI), and Master of Computer Science Engineering. Our college is also involved in fostering research and consulting work in technical competence. Therefore, I am writing this letter to express our interest in establishing research collaboration with Subam Industries.

As stated above, we have potential faculty members from the core of Electrical and Electronics Engineering and they have expertise in the area of solar PV implementation and are also ready to submit a research proposal on 5 KW Roof Top Solar PV Implementation.

The purpose of this research collaboration is to combine our respective strengths, knowledge and resources to tackle specific challenges and capitalize on emerging opportunities.

Thank you for considering this opportunity. We look forward to hearing from you soon



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai.

Yours Sincerely,

T.J.S.Nagar, Peruvoyal, Kavaraipeetai, Gummidipoondi Taluk, Thiruvallur Dist - 601 206.
Phone : 044 27967602, 27967604, 27967605, Cell : 7373730006 / 9788877774

E-mail : tjsivanandam@gmail.com, tjsivanandam@tjsec.in Website : www.tjsec.in

02.07.2021

**Chief Executive Officer,
for Subam Industries.**

To
The Principal,
T.J.S. Engineering College,
Peruvoyal, Near Kavaraipettai,
Tamil Nadu - 601206

Dear Sir,

Sub: Submission of Research Project proposal - Reg.

We are pleased to collaborate with TJS Engineering college for extending your technical support, with reference to the letter dated 16.06.2021, I am writing in response to your letter regarding the research grant offered in topic of solar PV implementation. We are excited to express our willingness to engage in a research project work with T.J.S. Engineering College.

We recognize the expertise and reputation of your institution in the field of Engineering and Technology, and we believe that collaboration between our organizations will yield significant results. So you are requested to send us a research proposal stating about the outlining, scope, methodology, timelines and also allocate the team members for the same.

We look forward to working closely with T.J.S. Engineering College and creating a lasting impact in the field of electrical and electronics engineering. The duration of the project work may be limited to 09 months from the project started. We would request you to submit the project proposal and all the other relative documents.

Yours Sincerely,

G. K. K. K.
Chief Executive Officer



J. S. A.
PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206



GST NO: 33AFZPK9630C1Z7

☎ 9444034474 / 9940143213 | ☎ 044-48534593

✉ subamkitchens@gmail.com / subameqep@gmail.com 🌐 www.subamkitchens.in / www.subamkitchens.com

No:14, Subam Campus, Sanjay Gandhi Nagar, Perumal Agaram, Thiruverkadu, Chennai – 600077, Tamilnadu, India.



T.J.S. ENGINEERING COLLEGE

(Approved by AICTE, Affiliated to Anna University, Chennai & Accredited by NAAC)
An ISO 9001:2015 Certified Institution



Dr. J. Prakash, M.E., Ph.D., MISTE,
Principal,
E-mail: principal@tjsec.in,
Ph: 044-27967602, 7373730006.

Date: 12.07.2021

To

The Chief Executive Officer,
Subam Industries (P) Ltd,
No.14, Perumalagaram Salai,
Sanjay Gandhi Nagar,
Chennai, Tamil Nadu-600077

Dear Sir,

Sub: Submission of proposal and assigning of faculty members to do Collaborative research work with Subam Industries – Reg.

Greetings from the T.J.S. Engineering College (TJSEC)

With reference to the letter dated (02.07.2021), TJSEC is permitted the following faculty members to do collaborative research with Subam Industries and a proposal on the mentioned title “5KW ROOF TOP SOLAR PV IMPLEMENTATION” is submitted along with this letter. The following faculty members are assigned to do research work with Subam Industries.

List of Faculty members

S. No	Name of PI & Co-PI	Designation and Specialization	Contact information
1.	Dr. J. Prakash	Principal/ Principle investigator	9443275330 principal@tjsec.in
2.	Dr. I. Arul Doss Adaikalam	Associate Professor, Co-Investigator	9865773737 iadaikalam@gmail.com



PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206

Yours Sincerely,

PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206

T.J.S.Nagar, Peruvoyal, Kavaraipeetai, Near Red Hills, Gummidipoondi Taluk, Thiruvallur Dist - 601 206,
Phone : 044 27967602, 27967604, 27967605, Cell : 7373730006 / 9788877774

E-mail : tjsivanandam@gmail.com, tjsivanandam@gmail.com Website : www.tjsec.in



Academic Year - 2019 – 2020

Sl.no	Name of the research project/ endowment	Name of the Principal Investigator/Coinvestigator	Department of Principal Investigator / Coinvestigator	Name of the Funding Agency	Type (Government /NonGovernment)	Amount Sanctioned In INR in (Lakhs)
1	Industrial Dip & Spray Painting Using PLC	Dr.S.Velmurugan & Dr.M.Sathya Priya	ECE	Pioneer Coatings	Non Government	4.230
2	Automatic fault Detection and Location of Transmission Lines using IOT	Mr.T.Kamal Kumar	EEE	TNSCST	Government	0.075


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T.J.S. ENGINEERING COLLEGE
 Peruvoyal, Kavaraipettai,
 Gummidipoondi Taluk,
 Thiruvallur Dist - 601 206.



PIONEER COATINGS

Address: PlotNo.:126,Kalaimagal Nagar,
Pazhandhandalam,
Thirumudivakkam,Chennai-600 044
GSTIN:33AAXFP6991Q1ZW



Date: 03-06-2019

To

The Principal,
T.J.S. Engineering College,
Puduvoyal, TamilNadu-601206



Dear Sir,

Sub: Request to join your R&D team in a cooperative Research Project – Reg.,

Greeting from Pioneer Coatings, Chennai!

For the purpose of working with your R&D team on a study project titled "Industrial Dip & Spray-Painting Using PLC" I'm writing to express my interest. I'm thrilled to offer my willingness to collaborate with you after carefully examining your institution's stellar reputation and vast technical and technological knowledge.

With the knowledge and resources your team has to offer, I am sure that working together will provide noteworthy outcomes for both of our companies. I appreciate you taking a look at this proposal, and I hope to hear from you soon.

Yours Sincerely,

Chief Executive Officer

PIONEER COATINGS

126, Kalaimagal Nagar, Pazhandhandalam,
Thirumudivakkam, Chennai - 44



PRINCIPAL

T.J.S. ENGINEERING COLLEGE

Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



T.J.S. ENGINEERING COLLEGE

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Date: 10-06-2019

Dr. T. Palani, M.E., Ph.D.,
PRINCIPAL

To

The Chief Executive Officer,
Pioneer Coatings,
Plot No:126,Kalaimagal Nagar,
Pazhandhandalam,Thirumudivakkam,
Chennai – 600 044.

Dear Sir,

Sub: Possibility of Joint Research with Pioneer Coatings -Reg.,

We appreciate your interest in working with us on the "Industrial Dip & Spray-Painting Using PLC" funded project. We are thrilled about the prospect of collaborating with your prestigious organization.

At T.J.S. Engineering College, we are dedicated to supporting academic and student research and consulting projects that advance technical proficiency. Our goal is to help our students become well-rounded professionals by giving them chances for interdisciplinary research.

We are happy to learn that your organization prioritizes research and has cutting-edge space for multidisciplinary study. We are confident that working together will provide noteworthy outcomes, and we are eager to collaborate with your group.

Yours Sincerely,

PRINCIPAL
PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

T.J.S.Nagar, Peruvoyal, Near Kavaraipeetai, Gummidipoondi Taluk, Thiruvallur Dist - 601 206.
Phone : 044 27967600, 27967602, 27967604, 27967605, Fax : 044 2796 7606.

E-mail : tjsivanandam@ymail.com, tjsivanandam@gmail.com Website : www.tjsec.in



PIONEER COATINGS

Address: PlotNo.:126,Kalaimagal Nagar,
Pazhandhandalam,
Thirumudivakkam,Chennai-600 044
GSTIN:33AAXFP6991Q12W



Date: 14-06-2019

To

The Principal,
T.J.S. Engineering College,
Puduvoyal, TamilNadu-601 206



Dear Sir,

Sub: Request of approval before submitting a proposal for a Research project. -Reg.

We are pleased to announce that we have joined forces with T.J.S. Engineering College to provide technical support. Referring to the letter of 10.06.19, we are delighted that your organization is interested in our industrial-related research work. We look forward to receiving the proposal from your party for the "Industrial Dip & Spray-Painting Using PLC". The duration of the project work may be restricted to a period of 7 months from the start date.

Yours Sincerely,

Chief Executive Officer

PIONEER COATINGS

126, Kalaimagal Nagar, Pazhandhandalam,
Thirumudivakkam, Chennai - 44



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



T.J.S. ENGINEERING COLLEGE

(Approved by AICTE, Affiliated to Anna University, Chennai & Accredited by NAAC)
An ISO 9001:2015 Certified Institution



Dr. T. Palani, M.E., Ph.D,
PRINCIPAL

Date: 17-07-2019

To

The Chief Executive Officer,
Pioneer Coatings,
Plot No:126,Kalaimagal Nagar,
Pazhandhandalam,Thirumudivakkam,
Chennai – 600 044.

Dear Sir,

Sub: Designated academic staff to conduct joint research with Pioneer Coatings, Chennai in order to submit a proposal –Reg

Thank you for your letter regarding the joint research project of TJSEC with Pioneer Coatings, Chennai. I have received your letter on 14.06.19 and the proposal of "Industrial Dip & Spray-Painting Using PLC" that you submitted. I am aware that TJSEC gave authorization to the faculty members to carry out this research. I wish you the best in your efforts.

Designated Faculty members to do research work with Pioneer Coatings,

- Dr.S.Velmurugan, Professor & Head, Department of Electronics and Communication Engineering.
- Dr.M.Sathya Priya, Professor, Department of Electronics and Communication Engineering.

Please allow the faculty members to carry out the above-mentioned research work. We look forward to a positive response from you.

Yours Sincerely,



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

DOTE Campus, Chennai-600025

STUDENT PROJECTS SCHEME

Proposals invited for 2019-2020

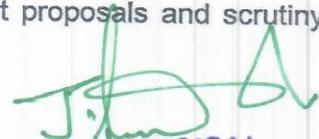
Tamilnadu State Council for Science and Technology has been implementing Student Projects Scheme in order to harness the talent and potential available with students for the benefit of our State. Under this scheme final year UG students (Engineering) / PG Science Students / PG professional Students who have dissertation work in their curriculum may apply. Financial support up to a maximum of Rs.10, 000/- will be provided to each project. Those who want to apply under this scheme are requested to read the instructions carefully and apply only in the prescribed format. The format and instructions in which the proposals are to be submitted is available in the Council's website. (www.tanscst.nic.in).

Two copies of proposals complete in all aspects are to be submitted through proper channel to **The Member Secretary, Tamilnadu State Council for Science and Technology, DOTE Campus, Chennai - 600 025** on or before **24 SEPTEMBER 2019, 5 pm.**

Instructions

1. The scheme is instituted for the purpose of providing assistance in the form of grant to final year students of **UG/PG (Engineering-Civil: Mechanical: :EEE/ECE/EIE/ICE:CSE/IT/Computer Application / Software : Chemical), PG (Professional Courses) and PG (all Sciences)** for scientific research work, with particular relevance to the State of Tamilnadu, for economic and industrial development.
2. Student projects will be eligible for a **maximum grant of Rs.10, 000/-**.
3. **Any One** sector in format (at SI.NO.4) must be chosen and filled carefully. Incorrect filling or filling more than one sector will lead to rejection of your application.
4. The project team (batch) can have up to a maximum of four students. The project team should send only one proposal.
5. It may be noted that the project proposal should be of original, innovative and novel. They should have utility and applicability for implementation. Kindly note that the evaluation of the project is also based on these factors.
6. The Project Guides / HODs needs to evaluate the project proposals and scrutiny them before sending the project proposals to TNSCST.




PRINCIPAL

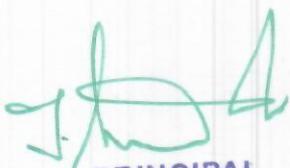
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipeetai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

7. The project team **should not** change the topic and should not deviate from the objectives of the sanctioned project proposal. In the event of any such changes, grant will be treated as cancelled and the institution should return the sanctioned amount to TNSCST.
8. Project proposals received will be reviewed and evaluated by a team of experts and those selected will be announced in TNSCST website www.tanscst.nic.in. The project sanction letter and the money will be sent to the Principal/Registrar of the institution with a copy to the Project guide.
9. The sanctioned projects should be completed and the report should be submitted before end of **April 2020**.
10. The Utilization Certificate (UC) and Statement of Expenditure (SE) should be signed by the guide, HOD and Principal/Registrar with official seal as the case may be. The guides are responsible for timely submission of seminar paper, UC and SE.
11. If the guide wishes to leave the institution where the project is based, the Institute/Guide will inform the same to the Council and in consultation with Council, evolve steps to ensure successful completion of the project, before relieving the GUIDE.
12. Project proposals not in the prescribed format and incomplete will not be considered. **Advance copy and soft copy** of the proposals will not be considered.
13. Two copies of the proposal should be signed and forwarded by the Guide through HOD and Principal / Registrar as the case may be to reach the council office on or before **31 AUGUST 2019, 5.00 PM**.
14. Proposals received after the deadline will not be considered and no communication will be entertained in this regard. Postal delays will not be accepted on any ground.

-sd-

MEMBER SECRETARY




PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

FORMAT FOR STUDENT PROJECT PROPOSAL

1. Name of the Student (s) : S. Rahul, L. Sathish kumar, M. Santhosh kumar
one valid e-mail id : rahulnavesh007@gmail.com.
2. Name of the Guide : T. KAMALKOMAR.
Department / Designation : E.E.E/A.P.
Institutional Address : T.J.S Engineering College, T.J.S Nagar, Peruvoyal.
Phone No. & Mobile No. : 044-27967624 / 9843652119.
3. Project Title : AUTOMATIC FAULT DETECTION AND LOCATION OF TRANSI
- ON LINE USING
4. Sector in which your Project proposal is to be Considered : Agriculture/Biology/Physical/ Environment/ Medicine/
Veterinary/Social Sciences/Engineering & Tech.(Chemical
/Computer Science/ Civil/ Mechanical/ Electrical,
Electronics, Instrumentation, Communication) (Specify
only one sector)
5. Project Details : (write up (max. 5 pages only) is to be
given for each item including justification for
acquiring / fabricating equipments / apparatus in
the budget)
 1. Introduction
 2. Objectives
 3. Methodology
 4. Work Plan
 5. Budget
 6. Any other details
7. Has a similar project been carried out in your college / elsewhere? If so furnish details of the previous project and highlight the improvements suggested in the present one : No.

CERTIFICATE

This is to certify that Mr./Miss. S. Rahul, L. Sathish kumar, M. Santhosh is a bonafide final year student of P.G. Science / U.G. Engineering / P.G. professional courses of our college and it is also certified that two copies of utilization certificate and final report along with seminar paper will be sent to the Council after completion of the project by the end of April 2020.

Signature of the Guide

Signature of the HOD

Signature of the Principal/
Head of the Institution
T.J.S. ENGINEERING COLLEGE
PERUVOYAL, GUMMIDIPOONDI T.K.
(NEAR KAVARAIPETTAI)
THIRUVALLUR DIST. - 601 206.

N.B.: 2 copies of the proposals are to be submitted through proper channel to The Member Secretary, TNSCST, DOTE Campus, Chennai - 600 025 on or before 31 AUGUST 2019, 5 pm.



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.

Automatic Fault Detection and Location of Transmission Lines using IoT

INTRODUCTION

Currently the electric power infrastructure is highly vulnerable against many forms of natural and malicious physical events which can adversely affect the overall performance and stability of the grid. Additionally, there is an impending need to equip the age-old transmission line infrastructure with a high-performance data communication network, that supports future operational requirements like real time monitoring and control necessary for smart grid integration

Wireless sensor-based monitoring of transmission lines provides a solution for several of these concerns like real time structural awareness, faster fault localization, accurate fault diagnosis by identification and differentiation of electrical faults from the mechanical faults, cost reduction due to condition based maintenance rather than periodic maintenance, etc.

These sensors can take fine grained measurements of a variety of physical or electrical parameters and generate a lot of information. Network design is a critical aspect of sensor-based transmission line monitoring due to the large scale, vast terrain, uncommon topology, and critical timing requirements. Mechanical faults, cost reduction due to condition-based maintenance rather than periodic maintenance, etc.

In Small-scale real-world deployments of wireless sensors include tension monitoring using load cells and power conductor surface temperature monitoring, sago meter, etc. This paper deals with the application of artificial neural networks (ANNs) to fault detection and location in extra high voltage (EHV) transmission lines for high speed protection using terminal line data by use of IOT

There are many courses of fault in power transmission power output, if not properly managed notable among them includes.

-fault at power generation station

-Damage to power transmission line



A handwritten signature in green ink, appearing to be "S. S. S.", written over the printed name of the principal.

PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



Academic Year - 2018 – 2019

Sl.no	Name of the research project/ endowment	Name of the Principal Investigator/Co investigator	Department of Principal Investigator / Co investigator	Name of the Funding Agency	Type (Government /Non-Government)	Amount Sanctioned In INR in (Lakhs)
1	Design and Construction of BLDC Motor Based Sewing Machine	Mrs.M.Shunmuga Sankari	EEE	TNSCST	Government	0.075

PRINCIPAL

T.J.S. ENGINEERING COLLEGE

Peruvoyal, Kavaraipettai,

Gummidipoondi Taluk,

Thiruvallur Dist - 601 206.

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY
DOTE Campus, Chennai-600025

STUDENT PROJECTS SCHEME

Proposals invited for 2018-2019

Tamilnadu State Council for Science and Technology has been implementing Student Projects Scheme in order to harness the talent and potential available with students for the benefit of our State. Under this scheme final year UG students (Engineering) / PG Science Students / PG professional Students who have dissertation work in their curriculum may apply. Financial support up to a maximum of Rs.10, 000/- will be provided to each project. Those who want to apply under this scheme are requested to read the instructions carefully and apply only in the prescribed format. The format and instructions in which the proposals are to be submitted is available in the Council's website. (www.tanscst.nic.in).

Two copies of proposals complete in all aspects are to be submitted through proper channel to **The Member Secretary, Tamilnadu State Council for Science and Technology, DOTE Campus, Chennai - 600 025** on or before **24 SEPTEMBER 2018, 5 pm.**

Instructions

1. The scheme is instituted for the purpose of providing assistance in the form of grant to **final year** students of **UG/PG (Engineering-Civil: Mechanical: :EEE/ECE/EIE/ICE:CSE/IT/Computer Application / Software : Chemical)**, **PG (Professional Courses)** and **PG (all Sciences)** for scientific research work, with particular relevance to the State of Tamilnadu, for economic and industrial development.
2. Student projects will be eligible for a **maximum grant of Rs.10, 000/-**.
3. **Any One** sector in format (at SI.NO.4) must be chosen and filled carefully. Incorrect filling or filling more than one sector will lead to rejection of your application.
4. The project team (batch) can have up to a maximum of **four** students. The project team should send **only one** proposal.
5. It may be noted that the project proposal should be of original, innovative and novel. They should have utility and applicability for implementation. Kindly note that the evaluation of the project is also based on these factors.
6. The Project Guides / HODs needs to evaluate the project proposals and scrutiny them before sending the project proposals to TNSCST.




PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipundi Taluk,
Tamil Nadu - 600 025.

7. The project team **should not** change the topic and should not deviate from the objectives of the sanctioned project proposal. In the event of any such changes, grant will be treated as cancelled and the institution should return the sanctioned amount to TNSCST.
8. Project proposals received will be reviewed and evaluated by a team of experts and those selected will be announced in TNSCST website www.tanscst.nic.in. The project sanction letter and the money will be sent to the Principal/Registrar of the institution with a copy to the Project guide.
9. The sanctioned projects should be completed and the report should be submitted before end of **April 2019**.
10. The Utilization Certificate (UC) and Statement of Expenditure (SE) should be signed by the guide, HOD and Principal/Registrar with official seal as the case may be. The guides are responsible for timely submission of seminar paper, UC and SE.
11. If the guide wishes to leave the institution where the project is based, the Institute/Guide will inform the same to the Council and in consultation with Council, evolve steps to ensure successful completion of the project, before relieving the GUIDE.
12. Project proposals not in the prescribed format and incomplete will not be considered. **Advance copy and soft copy** of the proposals will not be considered.
13. Two copies of the proposal should be signed and forwarded by the Guide through HOD and Principal / Registrar as the case may be to reach the council office on or before **31 AUGUST 2018, 5.00 PM**.
14. Proposals received after the deadline will not be considered and no communication will be entertained in this regard. Postal delays will not be accepted on any ground.

-sd-

MEMBER SECRETARY



PRINCIPAL
T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist - 601 206.



FORMAT FOR STUDENT PROJECT PROPOSAL

1. Name of the Student (s) : EKNATH. N, NIRMAL RAGAVAN. R, BANU PRAKASH
 one valid e-mail id : @Knathnarayanan744@gmail.com.
2. Name of the Guide : SHUNMUGA SANKARI . M,
 Department / Designation : EEE / ASSISTANT PROFESSOR,
 Institutional Address : TJS ENGINEERING COLLEGE, PERUVOYAL,
 Phone No. & Mobile No. : 044 - 228 01428.
3. Project Title : DESIGN AND CONSTRUCTION OF BLDC MOTDR TO
 REPLACE THE SEWING MACHINE CLUTCH MOTOR FOR
 HANDICAPPED PERSON
4. Sector in which your Project proposal is to be Considered : Agriculture/Biology/Physical/ Environment/ Medicine/ Veterinary/Social Sciences/Engineering & Tech.(Chemical /Computer Science/ Civil/ Mechanical/ Electrical, Electronics, Instrumentation, Communication) (Specify only one sector)
5. Project Details : (write up (max. 5 pages only) is to be given for each item including justification for acquiring / fabricating equipments / apparatus in the budget)

- | | |
|-----------------|----------------------|
| 1. Introduction | 4. Work Plan |
| 2. Objectives | 5. Budget |
| 3. Methodology | 6. Any other details |

7. Has a similar project been carried out in your college / elsewhere? If so furnish details of the previous project and highlight the improvements suggested in the present one : NO

CERTIFICATE

This is to certify that Mr./Miss. R. Banu Prakash, N. Eknath, R. Nirmal Ragavan is a bonafide final year student of P.G. Science / U.G. Engineering / P.G. professional courses of our college and it is also certified that two copies of utilization certificate and final report along with seminar paper will be sent to the Council after completion of the project by the end of April 2019.

[Signature]
Signature of the Guide

[Signature]
Signature of the HOD
Head

[Signature]
Signature of the Principal/
Head of the Institution
PRINCIPAL

Department of EEE
T.J.S. Engineering College

T.J.S. ENGINEERING COLLEGE
PERUVOYAL, GUMMIDIPOONDI T.K.
(NEAR KAVARAIPETTAI)

Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist.



Two copies of the proposals are to be submitted through proper channels to the Member, TNSCST, DOTE Campus, Chennai - 600 025 on or before SEPTEMBER 2018, 5 pm.

[Signature]
PRINCIPAL

T.J.S. ENGINEERING COLLEGE
Peruvoyal, Kavaraipettai,
Gummidipoondi Taluk,
Thiruvallur Dist. - 601 206.



TJS ENGINEERING COLLEGE
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
Design and Fabrication of BLDC Motor Based Sewing Machine
PROJECT PROPOSAL

GENERAL INTRODUCTION

Before there were brushless DC motors there were brushed DC motors, which were brought on in part to replace the less efficient AC induction motors that came before. The brush DC motor was invented all the way back in 1856 by famed German inventor and industrialist Ernst Werner von Siemens. Near the end of the 1980s, Robert E. Lordo of the POWERTEC Industrial Corporation unveiled the first large brushless DC motors, which had at least ten times the power of the earlier brushless DC motors.

The high-speed industrial sewing machine clutch motor is normally 1/2 horse power 2850 rpm and is used on machines that require high speed production such as clothing straight sewers and over lockers. The low speed industrial sewing machine clutch motor is normally 1/2 horse power 1425 rpm and is used on machines that require a lower speed or are trying to sew heavier work like walking foot and compound feed machines.

EXISTING SYSTEM

In existing system clutch motor is used to run the sewing machine. In this system the clutch plates are used to control the speed of a sewing machine. By applying pressure on the clutch plate it isolates the motor and sewing machine so, that the won't run.

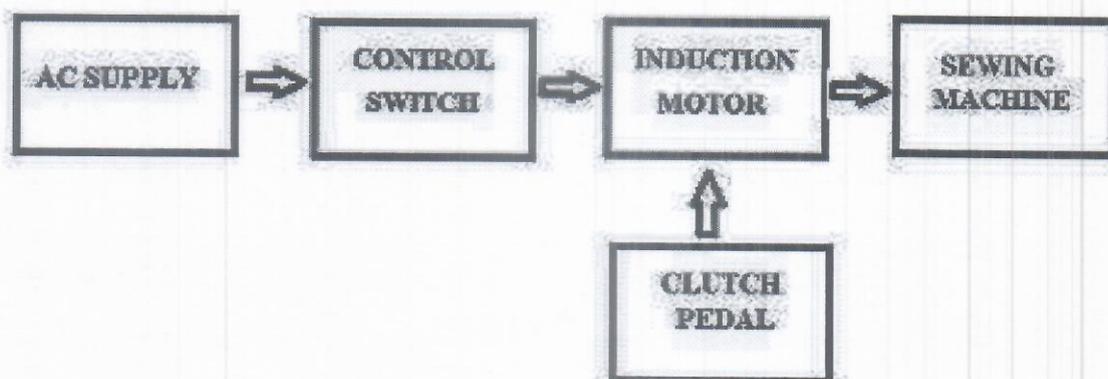


Fig 3.1 Block Diagram of Existing System




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