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### **3.1.3 Details of Percentage of departments having Research projects funded by government and non-government agencies**

#### **DVV CLARIFICATION**

Provide grant award letter of teachers along with the department affiliation, title of the funded project, the amount and the funding agency during the year 2015-16, 2016-17, 2017-18, 2018-19 and 2019-2020.

#### **INDEX SHEET**

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| 4    | ACADEMIC YEAR 2018-19                  | 34      |
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# **CERTIFICATE OF HEAD OF INSTITUTION**

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that the Number of departments having Research projects funded by government and non-government agencies during the last five years are listed below.

| Academic Year | 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------------|---------|---------|---------|---------|---------|
| Number        | 5       | 4       | 2       | 2       | 0       |



  
**PRINCIPAL**

**Dr. A.V. MAYAKKANNAN, M.E., Ph.D.,**  
PRINCIPAL  
**J.N.N INSTITUTE OF ENGINEERING**  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.



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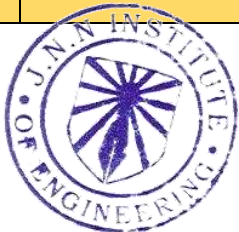
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# **CONSOLIDATED LIST OF RESEARCH PROJECTS – DVV CLARIFICATIONS**

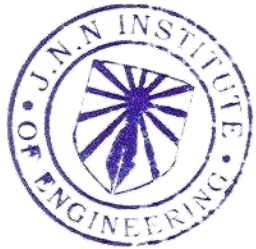
### 3.1.3 Percentage of departments having Research projects funded by government and non-government agencies – DVV Clarifications

| S.No | Name of the Project/<br>Endowments, Chairs  | Name of the Principal<br>Investigator/<br>Co-Investigator | Department of<br>Principal<br>Investigator | Year of<br>Award | Amount<br>Sanctioned | Name of the Funding Agency          |
|------|---|---|--|------------------|----------------------|-------------------------------------|
| 1    | Analysis of Structural Steel  | Dr V R ArunPrakash  | Mechanical<br>Engineering                  | 2019-20          | 0.419                | Premier Steel Complex Pvt Ltd       |
| 2    | Production of Sustainable<br>Toothbrush Using Macauba<br>Fibre Reinforced UP<br>Composite               | Dr V R ArunPrakash  | Mechanical<br>Engineering                  | 2019-20          | 0.05                 | Metro Composites R&D                |
| 3    | Design and Development of<br>Creep Testing Machine for<br>plastics                                      | Dr V K Shanmuganathan                                     | Mechanical<br>Engineering                  | 2019-20          | 0.1525               | Metro Composites R&D                |
| 4    | Digital marketing   | Dr P.Rajalakshmi  | Management<br>Studies                      | 2019-20          | 0.2                  | Ripe Consulting Services Pvt<br>Ltd |
| 5    | NLP Based AI ChatBot  | Dr G.Gunasekaran  | Computer Science<br>and Engineering        | 2019-20          | 0.41                 | CheersBye Innovations               |
| 6    | Design and Analysis of<br>Commercial Retail Building  | Dr G.Gunasekaran  | Computer Science<br>and Engineering        | 2018-19          | 0.5                  | Everspace Realty LLP                |
| 7    | Synthesis of Co-Tio2<br>Compound Particle for the<br>Preparation of EMI Shielding<br>Composite Material | Dr G.Gunasekaran  | Computer Science<br>and Engineering        | 2018-19          | 0.05                 | Metro Composites R&D                |
| 8    | A Study on Employee<br>Retention Techniques   | Dr G.Gunasekaran  | Management<br>Studies                      | 2018-19          | 0.23                 | Ripe Consulting Services Pvt<br>Ltd |



  
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|    |  |                  |                                  |         |       |                               |
|----|--|------------------|----------------------------------|---------|-------|-------------------------------|
| 9  | Study on Statistical Characteristic Strength of Steel Used in Two Wheeler Disc Break | Dr G.Gunasekaran | Mechanical Engineering           | 2018-19 | 0.3   | Premier Steel Complex Pvt Ltd |
| 10 | Online Course Examination Management System  | Dr P.Karthik     | Computer Science and Engineering | 2017-18 | 0.125 | Chennai Technology            |
| 11 | Development of Sustainable Building Materials  | Dr P.Karthik     | Civil Engineering                | 2017-18 | 0.275 | Everspace Realty LLP          |
| 12 | Transport Management   | Dr P.Karthik     | Computer Science and Engineering | 2016-17 | 0.6   | Chennai Technology            |
| 13 | Reducing In-house and Customer Rejection and Improving Cost of Poor Quality          | Dr P.Karthik     | Mechanical Engineering           | 2016-17 | 0.5   | Annai Enterprises Pvt Ltd     |



  
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**ACADEMIC YEAR 2019-20**

From

02.12.2019

Dr. VR Arun Prakash ME; Ph.D  
Principal Investigator,  
Department of Mechanical Engineering,  
J.N.N Institute of Engineering  
Chennai-Periyapalyam Highway  
TamilNadu- 601102

To

Premier Steel Complex Pvt.Ltd  
1-A/3, SIDCO Industrial Estate,  
Ambattur, Chennai-600098

Sub:- Project Grant Reg;.

Respected sir

Greetings from J.N.N Institute of Engineering

I hereby attached the details of project proposal titled "Analysis of Structural Steel", which we have disused last week at your firm. Please find the detailed analysis and kindly release the project fund to expedite to complete the project work.

Thanking You



(Dr. VR. Arunprakash)

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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## Project Grant Proposal

**Premier Steel Complex Pvt. Ltd, No. A/3, SIDCO Industrial Estate, Ambattur, Chennai- 600098**

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**Title of the Project** : Analysis of Structural Steel

**Materials used** : Iron, Silicon, Zinc, Mo

**Making process** : Melt casting      **Duration** : 6 Months

### Detailed description

The novel silicon steel based materials are gaining enough importance because of their supreme properties such as low conductivity, less hysteresis and high resistance. However the addition of marginal volume of Zinc and Mo may modifies the base properties and makes this material to be deployed in many engineering applications. The development of this new structural steel could be evaluated for its mechanical properties and micro structural behavior. Before and after heat treatment the properties could be checked before implementing these materials for end level applications.

The detailed properties need to be followed are as follows

- Tensile strength and modulus
- Hardness
- Elongation at break
- Proof stress
- Microstructure (Bainite, austenite, pearlite formation)
- Execution and validation



*Dr. A.V. Mayakkannan*  
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**A) Funding Details**

| Description              | Cost (INR)      |
|--------------------------|-----------------|
| Raw material             | 12000           |
| Processing of steel      | 8000            |
| Characterization         | 10000           |
| Validation and trial run | 20000           |
| <b>Total</b>             | <b>50,000/-</b> |

Signatures of

Principal Investigator



(Dr. VR. Arun Prakash)



Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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# PREMIER STEEL COMPLEX PVT. LTD.

Office & Factory : 1-A/3, SIDCO INDUSTRIAL ESTATE,  
AMBATTUR, CHENNAI - 600 098.  
Phone : 95000 02031  
e-mail : admin@premiersteels.in  
Web : www.premiersteels.in



ANISO9001:2015

11/02/2020

To,  
The Principal,  
J.N.N Institute of Engineering,  
Chennai - Periyapalayam Highway,  
Tiruvallur 601102

Dear Sir,

We have received your request for a grant towards the project titled "Analysis of Structural Steel".

After careful consideration, it is our pleasure to inform you that the request has been granted. A grant of Rs 41,900 will be transferred to the institution's account on 14/02/2020.

Kindly acknowledge receipt of payment and send a copy for our records. We wish J.N.N Institute of Engineering best of luck and success.

Thank you.

For Premier Steel Complex Pvt. Ltd.

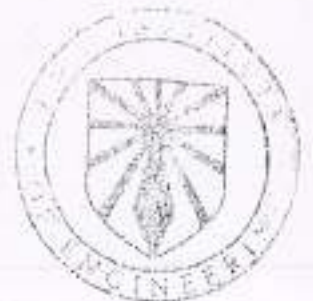
*V. Srinivasan*

Signatory



*A. V. Mayakkannan*

**D.R.A.V. MAYAKKANNAN, MIE., Ph.D.,**  
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|            |            |                          |  |          |          |            |
|------------|------------|--------------------------|--|----------|----------|------------|
| 13/02/2020 | 13/02/2020 |                          | CASH ON HAND   |          | 25.00    | 1543630.28 |
| 14/02/2020 | 14/02/2020 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPOSIT STATE BANK OF INDIA 0339 015 CLC/38715/581      | 00514453 | 41000.00 | 1585530.28 |
| 14/02/2020 | 14/02/2020 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPOSIT STATE BANK OF INDIA 0339 015 CLC/38715/581      | 00560715 | 20000.00 | 1605530.28 |
| 14/02/2020 | 14/02/2020 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPOSIT SYNDICATE BANK 0339 015 CLC/78901 CLC/78901/578 | 00749754 | 82000.00 | 1687530.28 |
| 14/02/2020 | 14/02/2020 | SALARY                   | CASH DEPOSIT Deposit by D. Srikanya                            |          | 20100.00 | 1687630.28 |



STATEMENT OF ACCOUNT from 01/02/2020 to 29/02/2020 for Account Number 0004/46000

Page No. 11

### Bank Statement for the month of February 2020

*Arav*

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL,  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
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Tiruvallur, Dist. - 601102.



From

Dr. VR. Arunprakash ME; Ph.D  
Principal Investigator  
J.N.N Institute of Engineering

To

The Head  
Research and Development  
Metro Composites Research and Development Centre  
Chennai- 66

Sub: Project Proposal for grant

Respected sir

With reference to the discussion herewith I have presenting the details of project proposal for the suitable grant from your research organization. Kindly do the needful and revert back us if any clarifications required.

Thanking You

13.07.2019

Chennai



*Dr. A.V. Mayakkannan*

(Dr. VR. Arunprakash)

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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# Project Proposal

## Metro Composites R&D

TECHNICAL DETAILS

13.07.19

**Project Title:** Production of sustainable toothbrush (changeable head and/or body) using macaúba (*Acrocomia aculeata*) fiber-reinforced UP composite

Applicants:

Dr. V R Arun Prakash – Associate Professor, J.N.N Institute of Engineering

Duration : 3 months

### A) Description of Problem

The utilization of non-degradable plastic products is extensively used in modern world by human beings. Starting from basic household needs up to industrial requirements the plastic products are predominantly used. The extensive use of non-degradable plastics is increasing the solid waste, which lead pollution of mother earth simultaneously. In this, toothbrush is a basic commodity, which is being used by human beings all around the world. In the USA, 1 million toothbrushes are disposed in land fields every year, which indicates around 50-70 million used toothbrushes are being disposed every year around the world. The disposed solid waste (used toothbrush) affects the fertility of soil and other living beings.

### B) Rationale for taking up the project

- There are many health related issues by long-term disposal of non-degradable plastic products;



*Arun*  
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- Using bio derivatives (plant fibers and fillers) into polymer is an economical process and the way to minimize the plastic waste and maximize the unutilized plant fibers;
- The upsetting of eco-system in land and water;
- If adopted, the reusable bio fiber-plastic composite may improve the environment safety for human and other living beings.

### C) Description of Proposal

#### Objectives

- To prepare toothbrush changeable head and/or body using up to 60% of its volume with macaúba (*Acrocomia aculeata*) natural fiber and low cost unsaturated polyester resin;
- To prepare light weight and/or low cost toothbrush when compared with the options available on the marketing;
- To produce high strength and toughness toothbrush for long product life.

### D) Detailed description

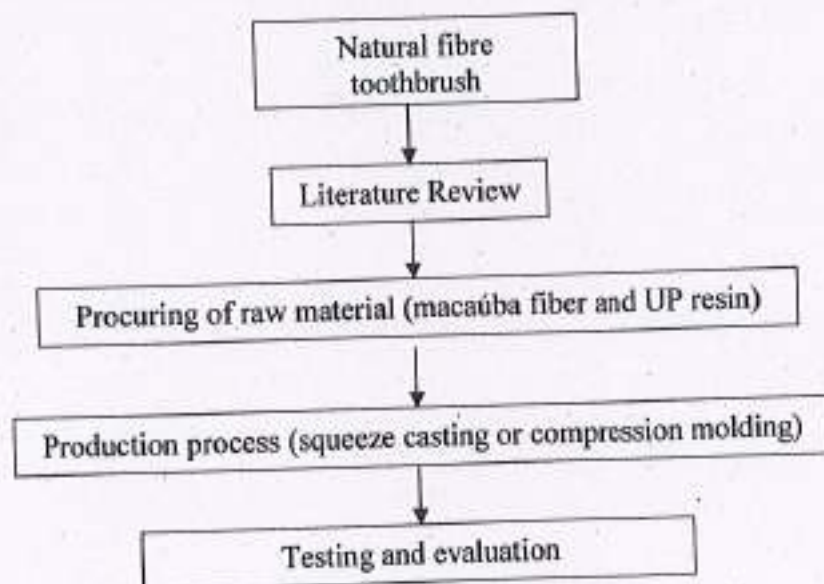
The proposed toothbrush changeable head and/or body could be prepared using abundant macaúba (*Acrocomia aculeata*) natural fiber and low cost unsaturated polyester resin. Since the fiber addition is proposed with slow cure thermosetting polymer, the final product could be used as toothbrush building material. Thermosetting polymers are non-reusable, thus the toothbrush changeable head and/or body (finger grip and handle) is proposed for reducing the waste index. In this, the fiber is procured from macaúba forms and processed with acid treatment. Dirt and soft cellulosic content will be removed during the treatment, freeing the fiber surface from defects. After that, the fiber may be surface treated using silanes for better adhesion with matrix medium. It is expected to test formulations with up to 60% volume using chopped macaúba fiber mixed with high viscous unsaturated polyester



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resin. The mix will be mechanically stirred for 20 minutes to obtain homogenous mixtures. The resulted fiber-resin mixture will be further mixed with curing agents and sonicated (or stirred) for additional 15 minutes. The resulted colloidal substance will be poured into molds (casting) and the toothbrush parts will be produced using squeeze casting or compression molding process. After sufficiently curing, the toothbrush parts will be ejected of the molds and inspected for surface defects. The bristles could be further inserted into the head part using suitable method. The head and handle may have different motives (e.g. male or female) mating market demands. Due to its easy removal, the head alone can be replaced frequently, thus the toothbrush product life cycle of could be higher with minimal of solid waste.

**E) Methodology detailing stepwise activities and sub-activities**



**F) Budget Estimates: Summary (INR) Cost for making prototype including trials**

| S.No | Items                     | Cost (INR) |
|------|---------------------------|------------|
| 1    | Raw material (consumable) | 3000.00    |



3 *Avesha*  
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|   |   |         |
|---|---|---------|
| 2 | Mechanical stirrer (One time purchase)  | 1500.00 |
| 4 | Other processing materials (consumable) | 1000.00 |
| 5 | Other Costs (consumable)                | 1000.00 |
| 6 | Personnel expenses                      | 1000.00 |
|   | Total                                   | 7500.00 |

Signature



(DR. VR Arun Prakash)



*Arun*  
 Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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 99, Ushra Garden, Mannigaipair,  
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24/07/2019

To,

Chennai

The Principal,  
J.N.N Institute of Engineering,  
Tiruvallur 601102

Greetings from Metro Composites R&D!

We are pleased to inform you that your project proposal titled "Production of sustainable toothbrush (changeable head and/or body) using macaúba (*Acrocomia aculeata*) fiber-reinforced UP composite" submitted by Dr. VR Arun prakash, Associate Professor, Department of Mechanical Engineering has been approved for the grant of Rupees 5000/-. It is for your kind notice that the sanctioned amount will be electronically transferred to the Institution's account, on or before 28.07.2019. You are requested to show the progress of the project every 15 days once via in-person or online. Based on the progress, further grants may be provided for the completion of the project.

The project duration is 3 months

Thank you.



Metro Composites Research and  
Development Centre  
Chennai-600 066

  
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|                |                |                                |   | IBIBS/1907/20<br>18782346 |        |          |             |
|----------------|----------------|--------------------------------|---|---------------------------|--------|----------|-------------|
| 25/07/<br>2019 | 25/07/<br>2019 | ATM SERVICE<br>BRANCH          | BY TRANSFER<br>UPI<br>TRANSFER/0208<br>15638510/UPI<br>TRANSFER<br>FROM<br>97216003393      |                           |        | 30000.00 | 130778.28CR |
| 25/07/<br>2019 | 25/07/<br>2019 |                                | CASH DEP<br>CHRGs OTHER   |                           | 25.00  |          | 130753.28CR |
| 26/07/<br>2019 | 26/07/<br>2019 | SERVICE<br>BRANCH<br>(CHENNAI) | CHEQUE DEPO<br>485 0330 CTS<br>CLG-000398<br>CLG-000398/KM<br>B                             | 000003<br>86              |        | 5000.00  | 135753.28CR |
| 26/07/<br>2019 | 26/07/<br>2019 | VINAYAGAPURA<br>M              | CASH DEPOSIT<br>Deposit by<br>madhyatals p  |                           |        | 50000.00 | 185753.28CR |
| 26/07/<br>2019 | 26/07/<br>2019 | CDPC CHENNAI                   | ISSUE OF MICR<br>CA   |                           | 400.00 |          | 185353.28CR |
| 27/07/<br>2019 | 27/07/<br>2019 | ATM SERVICE<br>BRANCH          | BY TRANSFER<br>UPI<br>TRANSFER/0208<br>13212384/Fees<br>due TRANSFER<br>FROM<br>97216003393 |                           |        | 8000.00  | 193353.28CR |
| 27/07/<br>2019 | 27/07/<br>2019 | ATM SERVICE<br>BRANCH          | BY TRANSFER<br>UPI<br>TRANSFER/0208   |                           |        | 100.00   | 193453.28CR |

**Bank Statement for the month of July 2019**

*Arsp*

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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90, Ushaa Garden, Kannigaipair,  
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From

Dr. VR. Arunprakash ME; Ph.D  
Principal Investigator  
J.N.N Institute of Engineering

To

The Head  
Research and Development  
Metro Composites Research and Development Centre  
Chennai- 66

Sub: Project Proposal for grant Reg:-

Respected sir

With reference to the discussion herewith I have presenting the details of project proposal for the suitable grant from your research organization. Kindly do the needful and revert back us if any clarifications required.



Thanking You

13.05.2019

Chennai

*Arqa*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D., (Dr. VR. Arunprakash)  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyar, Main Highway,  
Tiruvallur Dist. - 601102.

20/05/2019

To,

The Principal,  
J.N.N Institute of Engineering,  
Kannigaipair Village,  
Tiruvallur 601102

Greetings from Metro Composites R&D!

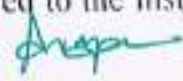
We are pleased to inform you that your design grant request sum of Rs. 15250.00/- (Rupees Fifteen thousand two fifty) for the purpose of prototyping the "Creep testing machine" for your polymer composite lab is approved. Further grant may be provided after the successful completion of prototype and for creating the actual model. The principal investigator of this project is requested to update the progress of the project completion regularly.

Note:

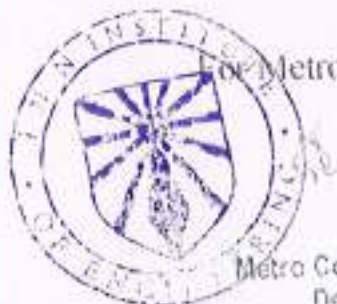
The approved grant amount will be electronically transferred to the Institution's account before 25.05.2019.

**The project duration is 3 months**

Thank you.

  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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For Metro Composites Research and Development Centre



Metro Composites Research and  
Development Centre  
Chennai-600 056

# Project Proposal

## Metro Composites R&D

### TECHNICAL DETAILS

**Project Title:** Design and development of creep testing machine for plastics

Applicants:

Dr. V K Shanmuganathan –Professor, J.N.N Institute of Engineering

Duration : 180 Days

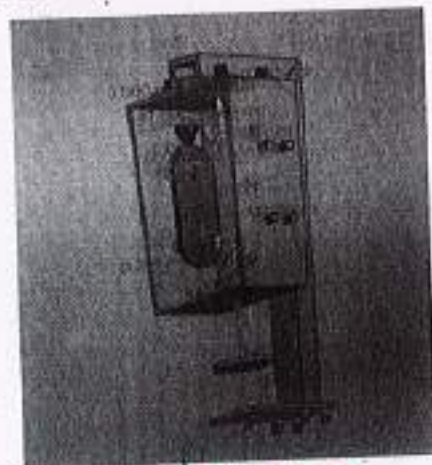
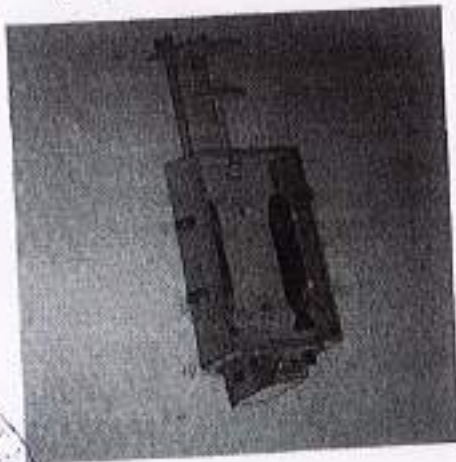
#### A) Description of Proposal

##### Objectives

- To Design a customized Creep testing machine for the purpose of studying the polymer creep behavior.
- To prepare light weight and/or low cost creep testing machine when compared with the options available on the marketing;
- To produce creep tester with long product life.

#### B) Detailed description

The proposed model of design is enclosed herewith



*Dr. V K*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Usha Garden, Kannigaipair,  
Chennai - Palaru Road Highway,  
Tamil Nadu - 600 022.

**C) Budget Estimates: Summary (INR) Cost for making prototype including trials**

| S.No | Items                     | Cost (INR) |
|------|---------------------------|------------|
| 1    | Raw material (consumable) | 10000.00   |
| 2    | Machining (fabrication)   | 5000.00    |
| 4    | Heater                    | 1250.00    |
| 5    | Other                     | 2000.00    |
| 6    | Personnel                 | 2000.00    |
|      | Total                     | 20,250.00  |



Signature



**Dr. A.V. MAYAKKANNAN, M.E., Ph.D.,**  
PRINCIPAL  
**J.N.N INSTITUTE OF ENGINEERING**  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.



**J·N·N**  
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ENGINEERING

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Approved by AICTE New Delhi | Affiliated to Anna University, Chennai

90, Ushaa Garden, Kannigaipair, Chennai - Periyapalayam Highway, Tiruvallur, TN 601102.

Tel: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)

|            |            |                          |  |           |           |           |             |
|------------|------------|--------------------------|--|-----------|-----------|-----------|-------------|
| 18/05/2019 | 18/05/2019 | ATM SERVICE BRANCH       | BY TRANSFER UPI TRANSFER/9138 13052283/NO REMARKS TRANSFER FROM 97216003393            |           |           | 1000.00   | 87604.00CR  |
| 20/05/2019 | 20/05/2019 | KANNIGAPER               | CREDIT   |           |           | 350000.00 | 437604.00CR |
| 20/05/2019 | 20/05/2019 | KANNIGAPER               | CHQ TRANSFE  | 000141 84 | 333830.00 |           | 103774.00CR |
| 22/05/2019 | 22/05/2019 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPO INDIAN OVERSEAS BANK 0339 CTS CLG:974502 CLG:974502/IOB                    | 009745 02 |           | 15250.00  | 119024.00CR |
| 25/05/2019 | 25/05/2019 | KANNIGAPER               | CSH DEP SEQ NO: 1163 ATM ID: S1T003391 TRAN DATE (MMDD) 0525 TRAN TIME (HHMMSS) 163056 |           |           | 47500.00  | 166524.00CR |
| 25/05/2019 | 25/05/2019 | KANNIGAPER               | CSH DEP SEQ NO: 1165 ATM ID: S1T003391 TRAN DATE (MMDD) 0525 TRAN TIME                 |           |           | 22000.00  | 188524.00CR |

**Bank Statement for the month of May 2019**

*Ar. V. Mayakkannan*

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.





3<sup>rd</sup> Sep 2019

From

Dr. G. Gunasekaran  
Principal Investigator,  
J.N.N Institute of Engineering.

To

The Chief executive officer,  
RIPE Consulting services Pvt. Ltd,  
48, Natwest Vijay Apartments, Block 4,  
Pallikarani, Chennai-600100.

Sub: Request based on popularization Scheme grant Reg:-

Respected sir

As we are going to conduct a 2 day workshop in the title "Digital Marketing on 14<sup>th</sup> & 15<sup>th</sup> October 2019 by the Department of Management studies I am requesting you to promote us by giving an event grant of Rupees 20,000. This grant will be used for the benefit of audience and attendees of the workshop. Kindly consider the request and release the fund to perform the event well.

Thanking You



*Arupa*  
*G. Gunasekaran*  
(Dr. G. Gunasekaran)  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.



# RIPE CONSULTING SERVICES PVT LTD

26-09-2019

To,  
The HOD,  
Department of Management Studies,  
JNN Institute of Engineering,  
Chennai – Periyapalayam Hwy, Tiruvallur,  
TN 601102

Madam,

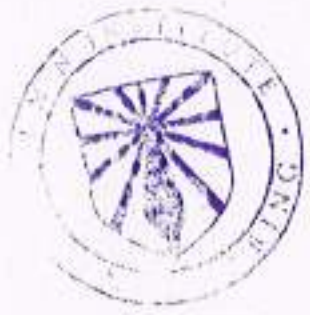
**Sub: Grant for 2 Day Workshop – Department of Management Studies – J.N.N**

I'm delighted to know that the Department of Management Studies at J.N.N Institute of Engineering will be conducting a two day workshop on Digital Marketing on 14<sup>th</sup> & 15<sup>th</sup> October 2019. In order to promote such initiatives and encourage the student organizers, RIPE is pleased to provide a grant of Rs 20,000 for this event. We would appreciate an event summary to be sent to our office after the completion of the event.

We wish the Department of Management Studies and the organizers the very best.

Regards,

Dr. V. Vijay Anand Sriram  
Chief Executive Officer



*Aravindhan*  
Dr. A. V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
80, Ushaa Ganga, Kennigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist - 601102.



**RIPE CONSULTING SERVICES PVT LTD**

No:48, Natwest Vijay Apartments, Block 4, Velachery Tambaram Main Rd. Pallikaranai, Chennai – 600 100  
Ph : 044 - 22462498, Mob : 9962514134 E-Mail : info@goripe.com

www.goripe.com

16.10.2019

To

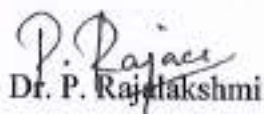
The Chief executive officer  
RIPE Consulting services Pvt. Ltd  
48, Natwest Vijay Apartments, Block 4,  
Pallikarani, Chennai-600100

### Certificate of Completion

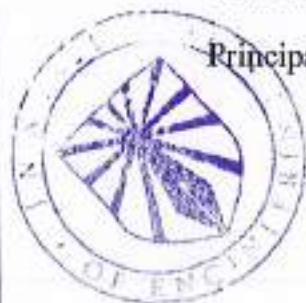
This is to certify that the 2 day workshop in the title "Digital Marketing on 14<sup>th</sup> and 15<sup>th</sup> October 2019 is successfully conducted. We thank for your great support and financial assistance.

Add-ons

Copy of Event schedule

  
Dr. P. Rajalakshmi

Principal Investigator



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

  
(Dr. G. Gunasekaran)

Principal

PRINCIPAL  
J.N.N. INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Tiruvallur Dist, Tamil Nadu-601-102.



# J·N·N | INSTITUTE OF ENGINEERING

JNN Institute of Engineering

Department of Management Studies

Event Schedule

14.10.2019 & 15.10.2019

| Date & Time       | Event  |
|-------------------|--|
| 14.10.2019/9.00am | Inaugural  |
| 9.10am            | Welcome address by HoD   |
| 9.15 am           | Presidential address by Chairman   |
| 9.30am            | Session 1- Dr. Suresh kumar (Introduction to digital marketing)  |
| 10.30am           | Tea break  |
| 11.00am           | Session 1-continuation   |
| 12.30pm           | Lunch break  |
| 1.30pm            | Session 2- Dr. P Rajalakshmi (Marketing strategies)  |
| 3.30pm            | Tea Break and Session ends   |
| 9.00am            | Session 3- Mr. Sivan, Head Marketing, Madras Engineering, (Digital tools)                                |
| 11.00am           | Tea break  |
| 11.30am           | Live demo  |
| 12.30pm           | Lunch break  |
| 1.30pm            | Session 4- Dr. P Gaytheri, Professor, Veltech Engineering College (International Marketing an over view) |
| 3.30pm            | Tea Break and Session ends   |
| 4.00pm            | Valedictory  |



*P. Rajack*  
HoD/MBA  
*Ar...*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Petiyapalayam Highway,  
Tiruvallur Dist. - 601102.

4<sup>th</sup> Nov 2019

From

Dr. G. Gunasekaran  
Principal Investigator  
J.N.N Institute of Engineering

To

The Head  
CheersBye Innovations  
22/2, Rathnapuri Nager 5<sup>th</sup> street  
Koyambedu, Chennai-600107

Sub: Project Grant Request Reg:-

Respected sir

As per the discussion with your Research and Development cell I am hereby submitting a project based grant proposal titled "NLP based AI Chatbot" for possible funding. The details of project description is attached herewith. Kindly revert us is any clarification needed.

Thanking You

  
(Dr. G. Gunasekaran)



  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.

## NLP based AI Chatbot

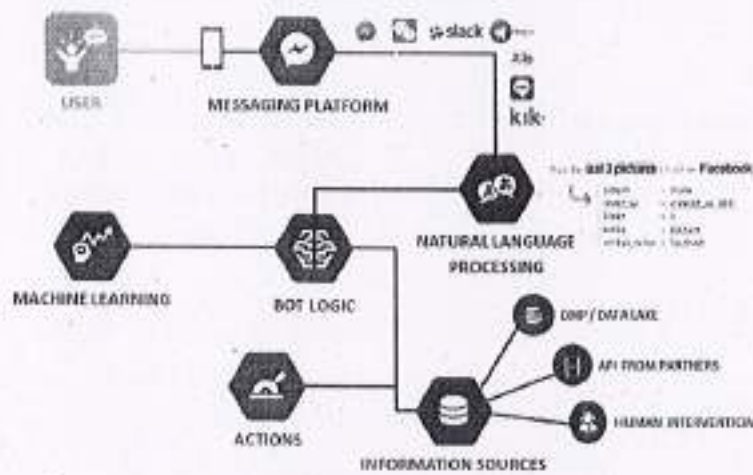
|                        |  |
|------------------------|--|
| Principal investigator | :Dr. G. Gunasekaran, Professor, Department of Computer Science |
| Co-investigator        | :Mr. Philip Vinod K  |
| Date of Submission     | :4/11/2019   |
| Project Duration       | :4 months (120days)  |
| Reporting Frequency    | :30 days once  |

### Description of Project

A chatbot is a programme that can interact by using natural language with a person. Modeling the interaction is one of the important tasks in the development of artificial understanding and natural language. It is the most difficult challenge to build a successful chat since the beginning of artificial intelligence. While chatbots can do several things, they must primarily understand and react appropriately to the statements of people. In the past, for constructions of chatbot architectures simple statistical methods or handwritten models and rules have been used. With the increasing ability to learn, These models were replaced around 2015 by end-to-end neural networks. In the modelling of conversations, particularly now the recurring model of the encoder-decoder dominates. This architecture is taken from the translation domain of Neural Machines and there is very good performance. To date, there have been several features and variations that have greatly improved chatbots' conversation skills. A systematic analysis of recent literature was carried out in this paper. In the last five years we have reviewed several publications concerning chatbots. We then presented various related works and the AI concepts required to create an intelligent conversational agent, based on profound learning models. Finally, we have presented a working architecture to create an intelligent medical aid chatbot.



*Dr. A.V. Mayakkannan*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.M.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalam Highway,  
Tiruvallur Dist. - 601102.



Configuration

### Funding Requirement

| Particulars              | Amount (INR)   |
|--------------------------|----------------|
| Hardware set up purchase | 24000/-        |
| Hardware assembly        | 2900/-         |
| Programming              | 10000/-        |
| Trial run and validation | 5000/-         |
| <b>Total</b>             | <b>41900/-</b> |

(Dr. G. Gunasekaran)

Principal investigator

Mr. Philip Vinod K

Co-investigator



Dr. A. V. MAYAKKANNAN, M.E., Ph.D.,  
 PRINCIPAL  
 J.N.N INSTITUTE OF ENGINEERING  
 90, Usha Garden, Kannigaipair,  
 Chennai-Perivayalayan Highway,  
 Tiruvallur Dist. - 601102.

19/11/2019

To,  
Dr. G. Gunasekaran,  
Principal,  
J.N.N Institute of Engineering,  
90, Ushaa Garden, Kannigaipair,  
Chennai Periyapalayam Highway,  
Tiruvallur 601102

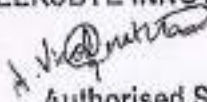
Dear Sir,

Sub: Acceptance of Proposal – Release of Payment for Grant - Reg

At the outset, we are glad to be working with the Faculty and students of J.N.N Institute of Engineering on this project proposal. After due consideration, we hereby release a sum of Rs 41,900 towards the grant for project titled "NLP based AI Chatbot".

We wish the team all the very best for the successful completion of the project within 4 months. Kindly acknowledge the receipt of this letter and payment.

For CHEERSBYE INNOVATIONS

  
Authorised Signatory

Vimalanathan Ayyanar  
Proprietor



  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.





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Tel: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)

|            |            |                          |  |           |           |          |             |
|------------|------------|--------------------------|--|-----------|-----------|----------|-------------|
| 19/11/2019 | 19/11/2019 | ATM SERVICE BRANCH       | BY TRANSFER IPI TRANSFER/0023 0912005411PI TRANSFER FROM 3723803303        |           |           | 30000.00 | 868804.28CR |
| 19/11/2019 | 19/11/2019 | GUMMADIPOONDI            | CASH DEPOSIT Deposit by S KAMALI 7828103107                                |           |           | 40000.00 | 908804.28CR |
| 20/11/2019 | 20/11/2019 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPOSIT STATE BANK OF INDIA 0030 CTS 00000497 00000497/581          | 005644 97 |           | 41900.00 | 949804.28CR |
| 20/11/2019 | 20/11/2019 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPOSIT ICICI BANKING CORPORATION 0339 CTS 000008148 000008148/ICIC | 005605 96 |           | 15000.00 | 963804.28CR |
| 21/11/2019 | 21/11/2019 | KANNIGAPER               | CASH CHEQUE Paid to M VINOD  | 000000 91 | 100000.00 |          | 863804.28CR |
| 22/11/2019 | 22/11/2019 | KANNIGAPER               | CASH CHEQUE Paid to VINOD M  | 000000 90 | 95000.00  |          | 768804.28CR |
| 22/11/2019 | 22/11/2019 | KANNIGAPER               | CASH CHEQUE  | 000000 95 | 116488.00 |          | 862338.28CR |

**Bank Statement for the month of November 2019**

*Dr. A.V. Mayakkannan*

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.





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90, Ushaa Garden, Kannigaipair, Chennai - Periyapalayam Highway, Tiruvallur, TN 601102.  
Tel: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)

---

**ACADEMIC YEAR 2018-19**

From

Dr. G. Gunasekaran ME; Ph.D  
Principal,  
J.N.N Institute of Engineering

To

The Head  
Research and Development  
Everspace Realty LLP  
SHOBHANS, 22, Rajaram Metha Nager,  
Chennai- 29

Sub: Project Grant Request

Respected sir

I am writing this grant request with reference to your campus visit held on 02.04.2018 and face to face discussion with the department of **civil engineering** to seek possible funding to execute the proposed project titled "**Design and Analysis of Commercial Retail Building**" the preliminary study related to this subject has been done by our team and ready to initiate the project. In this regard I request you to please grant the funding as early as possible.

Thanking You


02.05.2018

Chennai



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair, Chennai - Periyapalayam Highway, Tiruvallur Dist - 601 102.

  
(Dr. G. Gunasekaran)

PRINCIPAL

J.N.N. INSTITUTE OF ENGINEERING

90, Ushaa Garden, Kannigaipair,  
Tiruvallur Dist, Tamil Nadu-601 102

# EVERSPACE

5<sup>th</sup> July 2018

To,  
The Principal,  
J.N.N Institute of Engineering,  
Chennai – Periyapalayam Highway,  
Tiruvallur 601102

Respected Sir,

**Sub:** Grant for Project – Release of Initial Payment - Reg

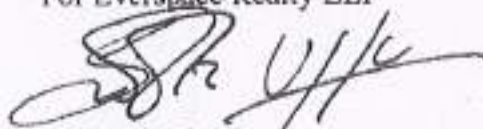
With reference to our discussion and our visit to your campus on 2<sup>nd</sup> April 2018, we are pleased to release a sum of Rs. 50,000 towards the initial funding for the project titled "Design and Analysis of Commercial Retail Building"

The progress of the project will be reviewed after six months. After the satisfactory performance of the first phase, the remaining funds will be disbursed.

Thank you.

Yours Sincerely,

For Everspace Realty LLP



Managing Partner



*Ariga*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.

EVERSPACE REALTY LLP

SHOBHANS 22, Rajaram Mehta Nagar, Chennai-600 029.  
Phone: 044-23742745 / 43550023 Email: mail@everspace.in  
WWW.EVERSPACE.IN



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Tel: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)

|             |  |   |     |  |           |            |
|-------------|--|---|-----|--|-----------|------------|
| 06-JUL-2018 |  | NEFT-CITI-CITIN18885682556-<br>ONE97 COMM-005000520-0 | TRF |  | 25000.00  | 490148.30  |
| 06-JUL-2018 |  | GOKUL AS CIVIL III YR                                 | TRF |  | 60000.00  | 550148.30  |
| 06-JUL-2018 |  | NEFT-CIC-1487214194-T SELVAM-<br>BILL PAYMENT         | TRF |  | 38200.00  | 588348.30  |
| 07-JUL-2018 |  | BY CLG:809834.ETC:0270                                | CLR |  | 238000.00 | 823348.30  |
| 07-JUL-2018 |  | BY CLG:899324.ETC:0270                                | CLR |  | 510000.00 | 1333348.30 |
| 07-JUL-2018 |  | BY CLG:888190:0270                                    | CLR |  | 50000.00  | 1383348.30 |
| 07-JUL-2018 |  | R N RAMYA CASH  | CSH |  | 15000.00  | 1398348.30 |
| 07-JUL-2018 |  | BY R VEGAQLAKSHMI                                     | CSH |  | 8000.00   | 1406348.30 |
| 07-JUL-2018 |  | BY V.RAMYA- EEE- 2ND YR                               | CSH |  | 8000.00   | 1414348.30 |
| 07-JUL-2018 |  | BY CASH S REBIYASH 2ND YEAR                           | CSH |  | 45000.00  | 1460348.30 |
| 07-JUL-2018 |  | NEFT-HDFC-N188180580879604-<br>POONDLA VI-            | TRF |  | 100000.00 | 1560348.30 |
| 07-JUL-2018 |  | BY SANGEETHA A  | CSH |  | 10000.00  | 1570348.30 |
| 07-JUL-2018 |  | NEFT-APGB-APGBN18188446378-Y<br>KONDAPAN-             | TRF |  | 49000.00  | 1619348.30 |
| 07-JUL-2018 |  | NEFT-SBIN-SBIN618188802321-<br>RARDTHI GO-JATTMIIIR-I | TRF |  | 69200.00  | 1688548.30 |

### Bank Statement for the month of July 2018

*Ariga*

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING

90, Ushaa Garden, Kannigalpal, Chennai - Periyapalayam Highway, Tiruvallur, TN 601102.

Contact: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)



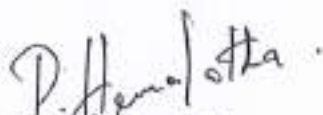
15.03.2019

To

The Head  
Research and Development  
EVERSPACE REALTY LLP  
Chennai- 29

### Certificate of Completion

This is to certify that the first phase of project titled "**Design and Analysis of Commercial Retail Building**" funding amount of rupees 50,000 under the grant from your firm is successfully completed. We thank for the financial support and great guidance during the project.

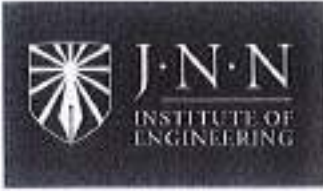
  
Dr. P. Hemalatha

  
(Dr. G. Gunasekaran)



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

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Tiruvallur Dist, Tamil Nadu-601 102.



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From

Dr. G. Gunasekaran  
Principal,  
J.N.N Institute of Engineering

To

The Head  
Research and Development  
Metro Composites Research and Development Centre  
Chennai- 66

Sub: Project Proposal for grant

Respected sir

Greetings! Herewith I have presenting the synopsis of project proposal for the suitable grant from your research organization. Kindly do the needful and revert back us if any clarifications required. The details of principal investigator and co-investigator details are appended herewith.

Thanking You

03.09.2018

Chennai



*Arjun*  
Dr. A.V. MAYAKKANNAM, M.E. M.S.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

*Dr. G. Gunasekaran*  
(Dr. G. Gunasekaran)

# Project Proposal

## Metro Composites R&D

TECHNICAL DETAILS

03.09.18

**Project Title:** Synthesis of Co-TiO<sub>2</sub> compound particle for the preparation of EMI shielding Composite Material

Applicants:

Dr. VK Shanmuganathan – Principal Investigator, Department of Mechanical Engg, J.N.N Institute of Engineering, Chennai

Mr. R Manivannan - Assistant Professor, Department of Chemistry, J.N.N Institute of Engineering, Chennai

Project Duration - 3 Months

### A) Description of Problem

The development of shielding composite helmet for human being who predominantly works in high electromagnetic wave prone zones is highly demand and required for current technology era. Chronic exposure to the EM wave the human brains may suffer with lot of brain related issues and thus it need to be avoided. Developing composites with both magnetically and electrically may fetch refined results in EMI shielding, which could be helpful to achieve high EMI shielding index.

### B) Rationale for taking up the project

- There are many health related issues by long-term exposure of high frequency electromagnetic waves
- Using Compound particle (say! Co and TiO<sub>2</sub>) into polymer is an economical process to produce high EMI effect.



• Simple making process for compound particle is required.

*Aruga*  
Dr. A.V. MAYAKKANNAN, M.E., P.H.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaip-ar,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.



### C) Description of Proposal

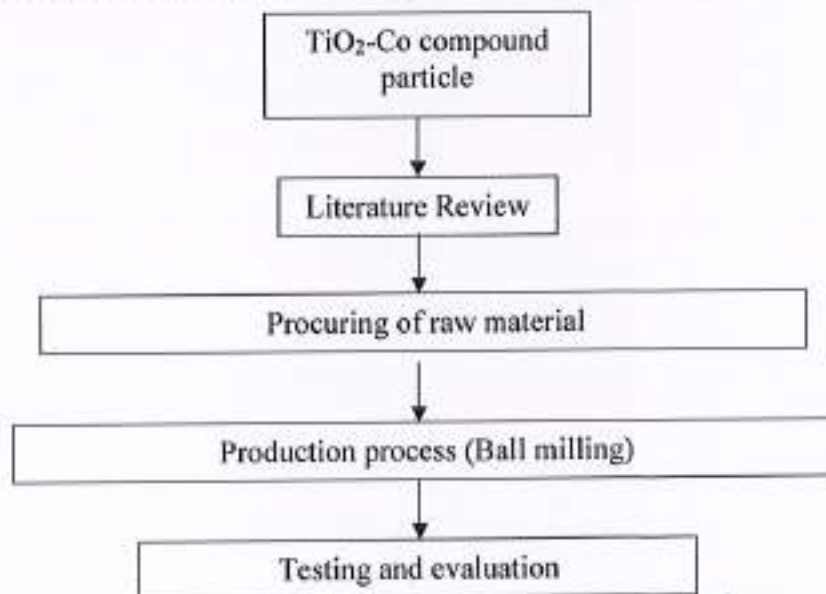
#### Objectives

- To prepare Co-TiO<sub>2</sub> functional compound particle via simple ball milling process.
- To confirm the hybridizing effect of Cobalt and Titanium dioxide.
- To study the crystalline nature of material after compounding

### D) Detailed description

The TiO<sub>2</sub> and Co particles of 25 g were mixed and ball milled in planetary ball mill for 4 h. The ball material used was WC with a ball diameter of 10 mm. The mill was set with a rotating rpm of 250 throughout the process. The powder weight to ball weight ratio was maintained at 1:15. The ball mill jar was made up of stainless steel and coated with rubber material to avoid abrasion of the parent material. A small quantity of powder sample at the end of milling was collected for further characterization.

### E) Methodology detailing stepwise activities and sub-activities



**F) Budget Estimates: Summary (INR) Cost for making prototype including trials**

| S.No | Items                            | Cost (INR)     |
|------|----------------------------------|----------------|
| 1    | Raw material (consumable)        | 4000.00        |
| 2    | Ball milling process             | 1000.00        |
| 3    | Characterization part (XRD, TEM) | 3000,00        |
| 4    | Other Costs (consumable)         | 1,000.00       |
|      | <b>Total</b>                     | <b>9000.00</b> |

Signature of Investigators.

1. Dr. VK. Shanmuganathan



2. Mr. R. Manivannan



Dr. A.V. MAYAKKANNAN, M.E. Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipatti,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

20/09/2018

To,

The Principal,  
J.N.N Institute of Engineering,  
Tiruvallur 601102

Greetings from Metro Composites R&D!

We are pleased to inform you that your project proposal titled "Synthesis of Co-TiO<sub>2</sub> compound particle for the Preparation of EMI Shielding Composite Material" has been approved for the grant of rupees 5000INR. You are requested to show the progress frequently. The sanctioned amount will be electronically transferred to the institutional account, which is stated in the proposal on or before 30.09.2018.

All the best.

Thank you.

For Metro Composites Research and Development Centre



Metro Composites Research and  
Development Centre  
Chennai-600 056



  
Dr. A.V. MAYAKKANNAN, M.E., PND  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.



# J.N.N

## INSTITUTE OF ENGINEERING

An ISO 9001:2015 Certified Institution

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Ushaa Garden, Kannigaipair, Chennai - Periyapalayam Highway, Tiruvallur, TN 601102.

Tel: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)

| 2018       | 2018       | (CHENNAI)                | BANK 0339 CTS<br>CLG:682787<br>CLG:682787/SYB                     |          |  |          | R                |
|------------|------------|--------------------------|---|----------|--|----------|------------------|
| 28/09/2018 | 28/09/2018 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPO BANK OF INDIA 0339 CTS CLG:455819 CLG:455819/BOI      | 00455819 |  | 71000.00 | 1243239.00C<br>R |
| 28/09/2018 | 28/09/2018 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPO CORPORATION BANK 0339 CTS CLG:190920 CLG:190920/CO RB | 00190920 |  | 5000.00  | 1248239.00C<br>R |



STATEMENT OF ACCOUNT from 01/09/2018 to 30/09/2018 for Account Number 6664746668.

Page No. 7

| Value Date | Post Date  | Remitter Branch          | Description                              | Cheque No | DR | CR       | Balance          |
|------------|------------|--------------------------|--|-----------|----|----------|------------------|
| 28/09/2018 | 28/09/2018 | SERVICE BRANCH (CHENNAI) | CHEQUE DEPO STATE BANK OF INDIA 0339 CTS | 00896822  |    | 60000.00 | 1308239.00C<br>R |

### Bank Statement for the month of September 2018

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.



18.04.2019

To

The Head  
Research and Development  
Metro Composites Research and Development Centre  
Chennai- 66

### Certificate of Completion

This is to certify that the project titled **“Synthesis of Co-TiO<sub>2</sub> Compound particle for the preparation of EMI shielding Composite Material”** under the grant from **Metro Composites Research and Development Centre** is successfully completed. We thank for the financial support and great guidance during the project.



Dr. VK Shanmuganathan

Principal Investigator



Dr. G. Gunasekaran

Principal

PRINCIPAL

J.N.N. INSTITUTE OF ENGINEERING

90, Ushaa Garden, Kannigaipair,

Tiruvallur Dist, Tamil Nadu-601 102.

Dr. A.V. MAYAKKANNAM, M.E., Ph.D Tiruvallur Dist, Tamil Nadu-601 102.

PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING

90, Ushaa Garden, Kannigaipair,

Chennai - Periyapalayam Highway,

Tiruvallur Dist - 601 102.



4<sup>th</sup> Dec 2019

From

Dr. G. Gunasekaran ME, PhD  
Principal,  
J.N.N Institute of Engineering.

To

The Chief executive officer  
RIPE Consulting services Pvt. Ltd  
48, Natwest Vijay Apartments, Block 4,  
Pallikarani, Chennai-600100

Sub: Project Grant Request Reg:-

Respected sir

As per the discussion with your research and development team I am requesting you to please sanction the project based grant for the sum of Rupees 23,000 for the title "A study on Employee Retention Techniques". The project team has a co-investigator from the department of Management studies. Kindly consider the request and release the fund to expedite the completion of project in time.

Thanking You



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

  
(Dr. G. Gunasekaran)  
PRINCIPAL  
J.N.N. INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Tiruvallur Dist, Tamil Nadu-601 102.



## RIPE CONSULTING SERVICES PVT LTD

19<sup>th</sup> Dec 2018

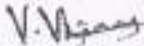
To,  
The Principal,  
J.N.N Institute of Engineering,  
Chennai - Periyapalayam Highway,  
Tiruvallur 601102

Madam,


With reference to our recent telephonic conversation, we are glad to release a grant of Rs 23,000 via Demand Draft for the project "A study on Employee Retention Techniques" by the Department of Management Studies (MBA) at your college.

As discussed earlier, the project shall be completed within 2 months from the date of receipt of payment and a completion report should be sent to our office. Kindly acknowledge receipt of this letter for our records. All the very best.

Regards,

  
Dr. V. Vijay Anand Srilam  
Chief Executive Officer



  
Dr. A. V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Usha Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist - 601102.

RIPE CONSULTING SERVICES PVT LTD

No:48, Natwest Vijay Apartments, Block 4, Velachery Tambaram Main Rd, Pallikaranai, Chennai - 600100  
Ph : 044 - 22462498, Mob : 9962514134 E-Mail : info@goripe.com

www.goripe.com

25.02.2019

To

The Chief executive officer  
RIPE Consulting services Pvt. Ltd  
48, Natwest Vijay Apartments, Block 4,  
Pallikarani, Chennai-600100

Certificate of Completion

This is to certify that the project titled "A study on Employee Retention Techniques" under the grant rupees 23000 is successfully completed. We thank for the financial support and great guidance during the project.

  
Dr. P. Rajalakshmi

Principal Investigator

  
(Dr. G. Gunasekaran)

Principal



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

PRINCIPAL  
J.N.N. INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Tiruvallur Dist, Tamil Nadu-601 102.



**Office & Factory : 1-A/3, SIDCO INDUSTRIAL ESTATE,  
AMBATTUR, CHENNAI - 600 098.**

**Phone : 95000 02031**

**e-mail : admin@premiersteels.in**

**Web : www.premiersteels.in**

**ANISO9**

04/07/2012

HOD,  
Department of Mechanical Engineering,  
J.N.N Institute of Engineering,  
Kannigaipair, Tiruvallur 601102

Sir,  
Sub: Grant Approval Letter - Release of funds - Reg

writing to acknowledge our receipt of your proposal "Study on Statistical Characteristic  
strength of Steel used in 2-wheeler Disc Brakes" dated 29/05/2012. We are pleased to  
inform you that your proposal has been accepted.

Amount of Rs. 20,000 will be transferred to your account for purchase of necessary  
material and execution of the project. Please acknowledge receipt of payment and this  
letter.



Premier Steel Complex Pvt. Ltd.

*Roshini*

Chief Executive Officer



*Dr. A.V. Mayakkannan*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Usba Garden, Kannigaipair,  
Chennai-Pervayalayar Highway,  
Tiruvallur Dist. - 601102.



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90, Ushaa Garden, Kannigalpair, Chennai - Periyapalayam Highway, Tiruvallur, TN 601102.  
Tel: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)

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**ACADEMIC YEAR 2017-18**

10.08.2017

To

The head

Chennai Technology

Chennai-600007

Respected Sir

Sub: Request for funding

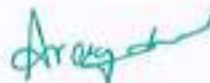
As per the telephonic conversation herewith I am attaching the request for grant based project proposal titled "Online Course and Examination Management System" behalf of principal investigator Mrs. T Sangeetha of Computer Science department. The details of the proposed model are attached in the annexure. Please find the same and do the needful. Kindly contact us if any clarifications required.

Thanking you

Attachments:

Annexure

Budget details



Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.



Dr. P. Karthik

Principal

PRINCIPAL  
J.N.N. INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Tiruvallur Dist, Tamil Nadu-601 102.

## Online Course and Examination Management System

Proposal Submitted by

**Mrs. T Sangeetha**

to

**Chennai Technology, Purasaiwalkam, Chennai 600007**

on

**10.08.2017**



Dr. A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigair -  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 302.

## Investigator details

Principal investigator: Mrs. T. Sangeetha, Department of Computer Science,

**Proposed topic :** Online Course and Examination Management System

**Duration :** 3 Months

## Technical Details:

### Rationale behind the topic

The online class and exam management system reduces lot of time for the person who mainly works with arrangement of classes and free hours to the faculties, altering the working hour, attendance, lab hour monitoring. Thus implementing this system to any organization will reduce lot of time and man power.

### Proposed model

This proposed model consists of multiple domains to enter the input values from class hours, time table, faculty, student and examination seating arrangement. A kind of optimization and shortest path algorithm could use to perform the conversions and arrangements. The detailed explanation of the software app model can be explained in detail by in-person.

### Financial needs

This proposed model requires a financial need of rupees 15,000 (split up attached in the annexure). This money will be spent for developing the web page platform, app designing, mobile phone compatibility etc...

### Duration spilt up

The proposed project is aimed to complete within 90 working days. The web page model will be launched by the end of 45days and the remaining software test will be done before 90 working days.



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Koyyalogudi,  
Chennai - Periyapalayam,  
Tiruvallur Dist - 601 102.

## Reporting Progress

The project work progress will be regularly monitored and updated every 2 weeks once.



*Dr. A.V. Mayakkannan*  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigapatt, Chennai - Periyapalayam Highway, Tiruvallur Dist - 601 102.

Signatory,

*Sangeetha T*  
Mrs. Sangeetha T



Date:  
2<sup>nd</sup> September 2017

To,  
Principal,  
J.N.N Institute of Engineering,  
Ushaa Garden, No 90, Kannigaiper,  
Tiruvallur 601102


Sir,

Greetings from Chennai Technology. With reference to the proposal and the telephonic conversation with Mrs. Sangeetha, Assistant Professor, Department of Computer Science Engineering, I am glad to release a grant of Rs 12,500 for the project "Online Course and Examination Management System".

Chennai Technology is committed to the support you are providing and therefore wish your institution the best of luck. Kindly acknowledge the receipt of payment. Thank you.

  
Proprietor



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaiper,  
Chennai - 601102  
www.chennaitechnology.in



29.12.2017

To

The Chennai Technology,  
No.21/10, Gramma Street, Purasawalkam,  
Chennai- 07

### Certificate of Completion

With immense pleasure I certify that the project titled "**Online course and Examination Management System**" under the financial grant from "**Chennai Technology**" has been successfully completed. The outcome of this funding will be sent via mail link for further verification and validation. We thank you for the financial support and great assistance.



T. Sangeetha

Principal Investigator



Dr. A.V. MAYAKKANAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.



Dr. P. Karthik

Principal

PRINCIPAL  
J.N.N. INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Tiruvallur Dist, Tamil Nadu-601 102,



From

Dr. P. Karthik ME; Ph.D  
Principal,  
J.N.N Institute of Engineering

To

The Head  
Research and Development  
Everspace Realty LLP  
SHOBHANS, 22, Rajaram Metha Nager,  
Chennai- 29

Sub: Project Grant Request

Respected sir

As a principal investigator of this project I am requesting you to please sanction a project based grant for completing of the proposed project titled "Development of Sustainable Material" for green building and eco-friendly design concept. Kindly consider the request and release the fund to expedite the completion of project.

Thanking You

30.12.2017

Chennai



  
(Dr. P. Karthik)

  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

# EVERSPACE

11<sup>th</sup> January 2018

To,  
The Principal,  
J.N.N Institute of Engineering,  
Chennai – Periyapalayam Highway,  
Tiruvallur 601102

Respected Sir,

**Sub: Confirmation Letter – Release of Initial Payment - Reg**

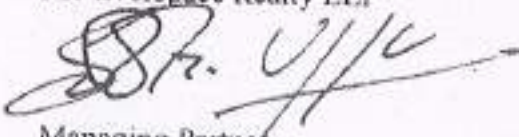
With reference to our telephonic conversation, we are pleased to release a sum of Rs. 27,500 towards the initial funding for the project 'Development of Sustainable Building Materials'

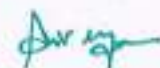
The progress of the project will be reviewed after eight months. Remaining funds will be disbursed after satisfactory completion of the deliverables.

Thank you.

Yours Sincerely,

For Everspace Realty LLP

  
Managing Partner

  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kanaigaiapur,  
Chennai - Periyapalayam Highway,  
Tiruvallur - 601102.



EVERSPACE REALTY LLP

SHOBHANS 22,Rajaram Mehta Nagar, Chennai-600 029.  
Phone: 044-23742745 / 43550023 Email: mail@everspace.in  
WWW.EVERSPACE.IN

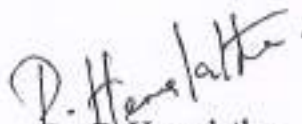
03.01.2019

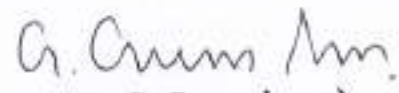
To

The Head  
Research and Development  
EVERSPACE REALTY LLP  
Chennai- 29

### Certificate of Completion

This is to certify that the first phase of project titled "**Development of Sustainable Building Materials**" under the grant from your firm (Rs. 27500) is successfully completed. We thank for the financial support and great guidance during the project.

  
Dr. P. Hemalatha

  
(Dr. G. Gunasekaran)



  
Dr. A.V. MAYAKKANNAN, M.E., P.H.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.



**J·N·N**  
INSTITUTE OF  
ENGINEERING

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Tel: 044-27629613 / 9600057121, E-mail: [info@jnn.edu.in](mailto:info@jnn.edu.in), [www.jnn.edu.in](http://www.jnn.edu.in)

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**ACADEMIC YEAR 2016-17**



90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur, Tamil Nadu 601102  
P. 044 - 27629613 / 96000 57121  
www.jnn.edu.in  
E : info@jnn.edu.in

From

19.12.2016

Dr. P. Karthik ME; Ph.D  
Principal,  
J.N.N Institute of Engineering  
Chennai-Periyapalyam Highway  
TamilNadu- 601102

To

The Chennai Technology  
No. 21/10, Gramma Street, Purasawalkam,  
Chennai- 600007

Sub:- Requesting grant for the completion of project work.

Respected sir

Greetings from J.N.N Institute of Engineering

I'm attaching the specifics of a project plan titled "Transport Management System" for an appropriate grant from your company, in relation to the discussion. Please complete the necessary steps and contact us if any clarifications are needed.

Thanking You



  
Dr. A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601102.

  
(Dr. P. Karthik)  
PRINCIPAL  
J.N.N. INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Tiruvallur Dist, Tamil Nadu-601102

# Project Grant Proposal

Chennai Technology, No. 21/10, Gramma Street, Purasawalkam, Chennai- 600007

**Project Title** : Transport Management System  
**Date** : 19/12/16  
**Investigator** : Mr. K. Philip Vinod  
**Duration** : 3 Months from the grant date

## A) Description of Problem

Monitoring and managing the transports in any organization is a crucial part where lot of man power getting involved. However the effective utilization of transport with high economic run is not attained in many organizations due to manual entry of kilometers run, periodical maintenance, fuel entries and salary. Thus this system needs to be optimized to get overall best outcome from the system exist.

## B) Detailed description

The proposed software management system consists of many domains where the input put from various factors can be enrolled. The factors such as fuel volume, mileage, vehicle tracking, tyre life, depreciation of vehicle were effectively involved. The system can produced periodical reports, graphs and messages to the developer and owner of the system for effective managing. Moreover, the software is designed such a way that the space occupied is very limited. Thus it can be fitted in any gadgets like browsers and mobile phones. The detailed requirements for competition of this project are as follows

- High configuration desktop



  
A.V. MAYAKKANNAN, M.E., PH.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigar - ii,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

- Domain purchase
- Graphics and designing
- Rendering
- Trial
- Execution and validation

### C) Funding Details

| Description       | Cost (INR) |
|-------------------|------------|
| Domain purchase   | 5000       |
| Designing and app | 35000      |
| Coding            | 15000      |
| Hosting           | 5000       |
| Total             | 50,000/-   |

*PS.*

Signatures of

Principal Investigator

*M. Priya*  
Co-investigator

(Mr. K. Philip Vinod)

(Mrs. M. Priya)



*Ariga*  
Dr. A. V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J. N. INSTITUTE OF ENGINEERING  
Ushaa Garden, Kannigaraar,  
Guennai - Periyapalayam Hightway,  
Tiruvattur Dist - 601 102.



Date :

Date : 28/12/2016

To,  
Principal,  
J.N.N Institute of Engineering,  
Kannigaipair, Tiruvallur 601102

Dear Sir,

**Sub:** Release of funds for project – Transport Management System – reg  
**Ref:** Phone conversation on 26/12/2016

I'm writing to acknowledge our receipt of your project proposal titled "Transport Management System". After careful consideration, we have decided to accept your proposal and issue a grant of Rs. 60,000 to execute the project. We wish the project is completed successfully and within the mutually agree time frame of 3 months. Please find the enclosed demand draft.

I wish the faculty and students involved in the project all the very best.

Thanking you

*(Signature)*  
Proprietor



*Arjan*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai, Periyapalayam Highway,  
Tiruvallur Dist - 601102.





20.04.2017

To

**The Chennai Technology**  
No.21/10, Gramma Street, Purasawalkam,  
Chennai- 600007

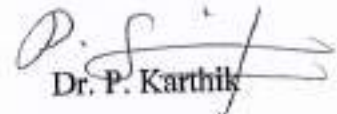
### Certificate of Completion

This is to certify that the project "Transport Management system," funded by "Chennai Technology, Chennai-600007," has been completed successfully. We appreciate your financial assistance and excellent guidance during the process. The detailed functioning information are available in the attached Annexure.

Thank you very much



Mr. K. Philip Vinod  
Principal Investigator



Dr. P. Karthik  
Principal



Dr. A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai - Periyapalayam Highway,  
Tiruvallur Dist - 601 102.

From

Dr. P. Karthik  
Principal Investigator  
J.N.N Institute of Engineering  
Kannigaipair, TN-601102.

To

The Division Manager  
Annai Enterprises Private Limited  
Chennai- 600058

Sub: Request for project grant Reg:-

Respected sir

With reference to the discussion herewith I have presenting the details of project proposal titled "Reducing in-house and Customer Rejection and improving Cost of poor Quality" for suitable grant from your organization. The details of proposal are attached herewith. Kindly do the needful.

Thanking You

06.02.2017

Chennai



*Dr. P. Karthick*

(Dr. P. Karthick)

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,

PRINCIPAL

J.N.N INSTITUTE OF ENGINEERING

90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.

# **Reducing in-house and Customer Rejection and improving Cost of Poor Quality**

Submitted to

**ANNAI ENTERPRISES PRIVATE LIMITED**  
Chennai-600058

Submitted by

**Dr. P. Karthik, M.E., Ph. D**

Professor & Principal Investigator

Dept. of Mechanical Engineering

J.N.N Institute of Engineering

90, Ushaa Garden, Kannigaipair,

Chennai-Periyapalayam Highway, Thiruvallur-601102



*Argha*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
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90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Thiruvallur Dist. - 601102.

## COVER SHEET

### A. Identification

1. **Project Title:** Reducing in-house and Customer Rejection and improving Cost of Poor Quality.
2. **Key words:** Neem oil, nano-particle, cutting fluid, Human and environmental safety
3. **Duration:** 12 Months
4. **Total Cost:** Rs. 50000 INR (Rupees fifty thousand only)

### 6. Principal Investigator:

6.1 Name : Dr. P Karthik

6.2 Designation: Professor

6.3 Department : Mechanical Engineering

6.4 Address:

Address (Including Telephone (official & residence), E-mail, Fax) Pin :

|  |
|--|
| OFFICIAL   |
| 90, Usha garden, Kannigaipair,<br>Thiruvallur Dist, Chennai-601102,<br>9884182155, karthikp@jnn.edu.in |

### 7. Co-Investigator: I

7.1 Name: Mr.T Dinesh ME

7.2 Department: Mechanical Engineering

7.3 Designation: Assistant professor

7.5 Address (Including Telephone (official & residence), E-mail, Fax) Pin :

|  |
|--|
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| 90, Usha garden, Kanigaipair, Thiruvallur<br>Dist, Chennai-601102, 9941345544,<br>dinesht@jnn.edu.in |



*A.V. Mayakkannan*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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Channel-Periyapalayam Highway,  
Thiruvallur Dist. - 601102.

## 8 Capability of the Organization:

The organization is built with separate R&D division dedicated for promoting R&D activities with college and intra-colleges.

### B. Technical Details

**Project Title :** Reducing in-house and Customer Rejection and improving Cost of Poor Quality

#### 1. Background

##### 1.1 Description of problem

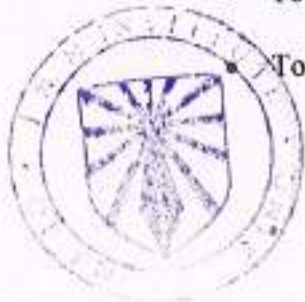
The Industrial revolution in India especially in Tamilnadu is one of the positive boon for employability, economy and per capita income. But still the quality of produced product and cost of per product remains uncertain due to machining, operator, quality of tools and environmental factors. Controlling this factor in significant level may improve the overall economy of the process and industry. Educating the operator, studying the process capability and capability index, implementing 6 Sigma, TQM and TPM are the sources of improving the product quality. In-house and customer based rejections reducing the goodwill and the marginal profits of any industry.

#### 2. Description of Proposal

##### 2.1 Objectives of the project

- To reduce the in-house rejections from various machining process.
- To reduce customer end rejection due to poor packing and faulty final inspection method
- To find the root cause for the abrupt rejections in the machining process

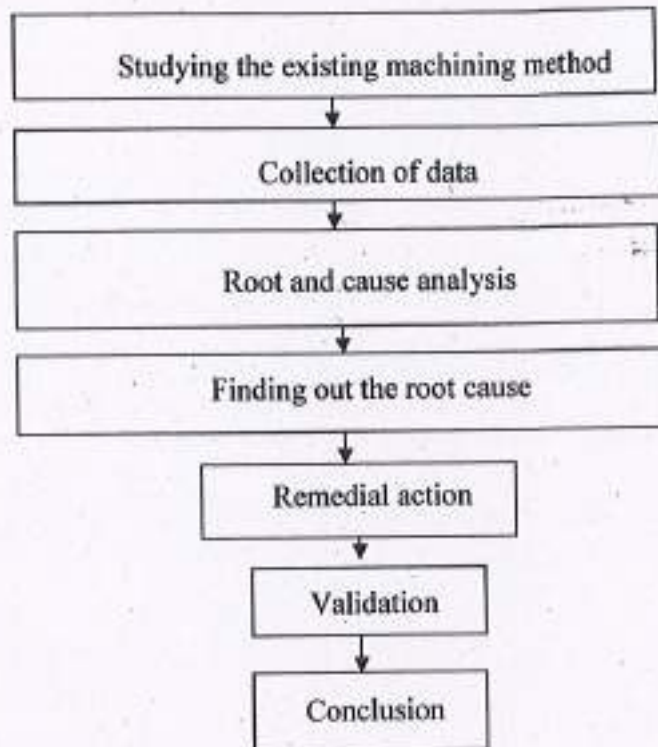
To reveal the suitable solution



*Arayokan*  
Dr.A.V. MAYAIKANNAN, M.E., Ph.D.,  
PRINCIPAL

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90, Usha Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.

## 2.2 Methodology detailing stepwise activities and sub-activities



### C: Funding

#### 3. Requirement Summary (Rupees)

| Items                         | Budget   |
|-------------------------------|----------|
| Expenses for quality tools    | 20,000   |
| Expenses for training         | 25,000   |
| Expenses for travel           | 20,000   |
| Salary expenses for assistant | 1,20,000 |
| Others                        | 15,000   |
| Total                         | 2,00,000 |




*Anupam*  
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Chennai-Pariyapalayam Highway,  
Tiruvallur Dist. - 601102.


**D: Declaration**

I acknowledge hereby the information provided by me is true to the best of knowledge and belief.

06/02/2017  
Chennai

  
(Dr. P Karthik)



  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
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Tiruvallur Dist - 601 102.



# Anna Enterprises Private Limited



No: SP - 146, 1<sup>st</sup> Main Road, 4<sup>th</sup> Lane, Ambattur Industrial Estate, Chennai - 600 058.  
Ph: 044 - 2652 2605, 044 - 2652 2426      E Mail: admin@annaenterprises.net  
www.annaenterprises.net      CIN: U34300TN2003PTC050630

24<sup>th</sup> April 2017

To,  
The Principal,  
J.N.N Institute of Engineering,  
Kannigaipair, TN 601102

Dear Sir,

Sub: Release of initial grant for project - Reg

With reference to your proposal and the discussion we had with you, we are pleased to release a sum of **Rs. 50,000** as initial funding for the project on "Reducing In-house and Customer Rejection and Improving Cost of Poor Quality".

The progress of the project will be reviewed after six months and upon satisfactory completion of the first phase, the remaining funds will be released.

Thank you.

Yours Sincerely,

For Anna Enterprises Private Limited

*Kanna V. S.*  
Management Board



*Arup*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
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**J·N·N**  
INSTITUTE OF  
ENGINEERING

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| 2017 18:03:41 |        |   |     |           |          |
|---------------|--------|---|-----|-----------|----------|
| 25-APR-2017   |        | IMPS CHARGES/711518912468                             | TRF | 5.76      | 31071.7  |
| 26-APR-2017   | 972685 | UNITED INDIA INSURANCE                                | CLR | 17801.00  | 13270.7  |
| 27-APR-2017   |        | CR. FOR NEFT 8985062741711623<br>SCB MRL POOLING ACCO | TRF | 14333.25  | 27603.9  |
| 27-APR-2017   |        | FUNDS TRF-NET@193380                                  | TRF | 10000.00  | 37603.9  |
| 27-APR-2017   |        | FUNDS TRF-NET@193388                                  | TRF | 40000.00  | 77603.9  |
| 27-APR-2017   |        | FUNDS TRF-NET@193448                                  | TRF | 50000.00  | 127603.9 |
| 27-APR-2017   |        | CHARGES FOR PORD CUSTOMER<br>PAYMENT :000057769223    | TRF | 8.04      | 127597.9 |
| 27-APR-2017   |        | NEFT PMT IOBAN17117401471 016<br>TOP FRESHERS TECHNO  | TRF | 100000.00 | 27597.9  |
| 28-APR-2017   |        | G. ASWINI/CSE/1ST YEAR                                | CSH | 16000.00  | 43597.9  |
| 28-APR-2017   | 972628 | TULSYAN REFINERY                                      | CLR | 16661.00  | 27036.9  |
| 28-APR-2017   |        | CR. FOR NEFT 8985062841709621<br>SCB MRL POOLING ACCO | TRF | 13860.49  | 40897.4  |
| 29-APR-2017   |        | BY CLG/ZN CMAINCHE/SET 10                             | CLR | 17000.00  | 57897.4  |

### Bank Statement for the month of April 2017

*Ariga*

Dr.A.V. MAYAKKANNAN, M.E., Ph.D.,  
PRINCIPAL  
J.N.N INSTITUTE OF ENGINEERING  
90, Ushaa Garden, Kannigaipair,  
Chennai-Periyapalayam Highway,  
Tiruvallur Dist. - 601102.



10.05.2018

To

The Division Manager  
Annai Enterprises Private Limited  
Chennai- 600058

### Certificate of Completion

This is to certify that the project titled "Reducing in-house and Customer Rejection and improving Cost of poor Quality" under the grant from Annai Enterprises Private Limited is successfully completed. The project findings and corrective action reports were presented in the Annexure report. We thank for the financial support and great guidance during the project.



*Ariga*  
Dr.A.V. MAYAKKANNAN, M.E., Ph.D.  
PRINCIPAL

*(Dr. P. Karthik)*

J.N.N INSTITUTE OF ENGINEERING

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# **ADDITIONAL INFORMATION**



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| 2    | DATA TEMPLATE                        | <a href="https://assessmentonline.naac.gov.in/storage/app/hei/SSR/109981/3.1.3_1619593409_6268.xlsx">https://assessmentonline.naac.gov.in/storage/app/hei/SSR/109981/3.1.3_1619593409_6268.xlsx</a> |