



KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY
Indian Institute of Science campus, Bengaluru

Telephone: 080 -23600978, 23341652 || Email: spp@kscst.org.in
 Website: www.kscst.iisc.ernet.in/spp.html or www.kscst.org.in/spp.html

**FORMAT FOR STUDENT PROJECT PROPOSAL FOR THE
 46th SERIES OF STUDENT PROJECT PROGRAMME**

(Handwritten proposals will not be accepted, please fill all the details in this MS word file, insert images / diagrams wherever necessary. Convert to pdf file, get it approved from the project guide / head of the department and principal of your institution. Keep ready the scanned pdf file of 1) Declaration and Endorsement 2) details of processing fees made and fill-up the Google Form. Send the softcopy of the project proposal including the three scanned pages and send the proposal (All information in one pdf file) by email to spp@kscst.org.in

<https://forms.gle/pMfzw4iKL7LNAojd8>

1.	Name of the College: GSSS Institute of Engineering and Technology for Women, Mysuru
2.	Project Title: Detection and monitoring of current leakage in power transmission line insulator using IoT.
3.	Branch: Electrical and Electronics Engineering
4.	Theme (as per KSCST poster): Stream No. 1) Non Conventional and Composite building materials/structures
5.	Name(s) of project guide(s): 1. Name: Prof. Smitha S K Email id: smithak@gsss.edu.in Contact No: 9449307538

6. Name of Team Members (Strictly not more than four students in a batch):

Name: GANAVI

USN No: 4GW19EE013

Email id: ganavigsg@gmail.com

Mobile No:8105466243



Name: HIMASHREE H S

USN No: 4GW19EE015

Email id: himashreehs01@gmail.com

Mobile No: 7349415389



Name: RENUKA S MANNERI

USN No: 4GW19EE033

Email id: renukamanneri7@gmail.com

Mobile No:8088263237




Name: TEJASHREE S

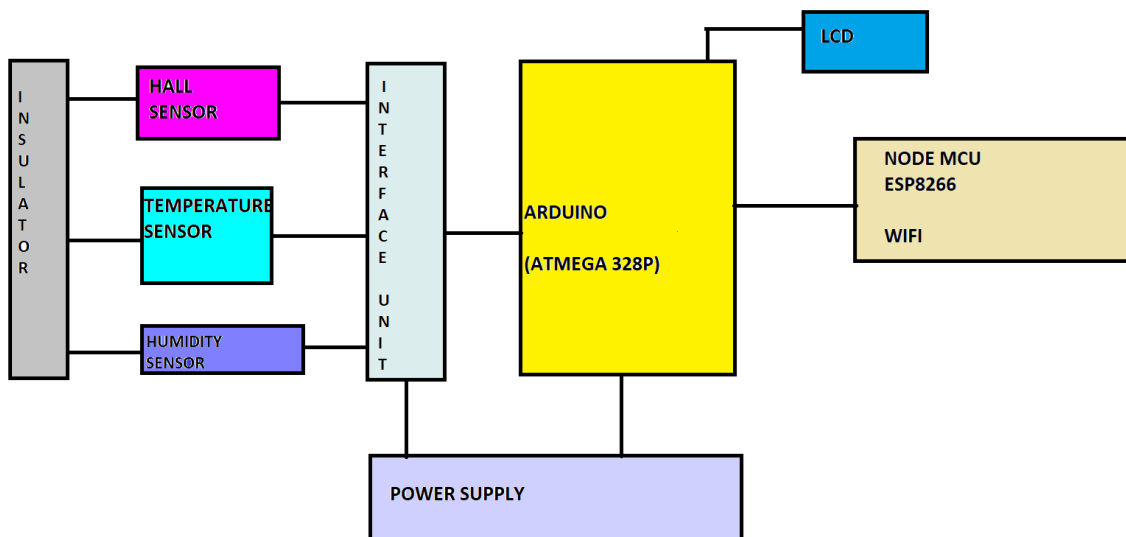
USN:4GW19EE038

Email id: shreeteja929@gmail.com

Mobile No: 9353273537



7.	<p>Team Leader of the Project:</p> <p>Name: RENUKA S MANNERI USN No: 4GW19EE033 Email id: renukamanneri7@gmail.com Mobile No:8088263237</p> 
8.	<p>Processing Fee Details (Through Online Payment only): (processing fee of Rs. 1000/-) Please furnish the payment made details provided in the last page of this proposal.</p> <p>UPI No: 000394063218 Date: 31/01/2023 Bank Name: CANARA BANK</p>
9.	<p>Date of commencement of the Project: 02/11/2022</p>
10.	<p>Probable date of completion of the project: 20/2/2023</p>
11.	<p>Scope / Objectives of the project:</p> <ul style="list-style-type: none"> ➤ Measuring, monitoring and Analysis of leakage current in transmission line insulators. ➤ Monitoring of humidity, leakage current and temperature. ➤ Interface to obtain the output using IOT technology.
12.	<p>Methodology:</p>



- Insulators are placed in the overhead transmission lines.
- As leakage current is one of the factors that affect insulators. Its monitoring is required.
- There is a need to monitor the condition of such equipment and possibly extend service life in the absence of major system disruptions.
- Leakage current is monitored by Hall Effect Sensor.
- The other parameters such as the temperature and humidity of the insulator are monitored by sensors and the values are displayed in the LCD unit.
- Arduino and Node-MCU are used to analyze data and transmit information very quickly.
- The location of the fault is transferred to the concerned people and the amount of leakage current can be identified through IoT technology.

13. **Expected Outcome of the project:**

In this project, a new technology is proposed for data transmission about the leakage current through IOT to mobile phones and substation. Required analysis of leakage current in transmission line insulators is measured by monitoring humidity, leakage current, temperature and speed. The output is obtained by interfacing. It is efficient, easy installation, robust and reliable to electrical system and it is necessary to transform the data into information.

14. **Is the project proposed relevant to the Industry / Society or Institution?**

Yes / No: No

15.	<p>Can the product or process developed in the project be taken up for filing a Patent?</p> <p>Yes / No:</p> <p>No</p> <p>Prior Art search done?</p> <p>Yes/No:</p> <p>No</p>												
16.	<p>Budget details (break-up details should be given):</p> <p>Note: KSCST will provide nominal grant support for carrying out the project by students if selected by the project selection committee.</p> <table border="1"> <thead> <tr> <th>Budget</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>a) Materials / Consumables (Please specify)</td> <td>2500.00</td> </tr> <tr> <td>b) Labor (Describe)</td> <td>1500.00</td> </tr> <tr> <td>c) Travel (Describe)</td> <td>500.00</td> </tr> <tr> <td>e) Miscellaneous (Please specify)</td> <td>500.00</td> </tr> <tr> <td>Total</td> <td>5000.00</td> </tr> </tbody> </table>	Budget	Amount	a) Materials / Consumables (Please specify)	2500.00	b) Labor (Describe)	1500.00	c) Travel (Describe)	500.00	e) Miscellaneous (Please specify)	500.00	Total	5000.00
Budget	Amount												
a) Materials / Consumables (Please specify)	2500.00												
b) Labor (Describe)	1500.00												
c) Travel (Describe)	500.00												
e) Miscellaneous (Please specify)	500.00												
Total	5000.00												
17.	<p>Any other technical details (Please specify):</p> <p>Hardware Components:</p> <ul style="list-style-type: none"> ➤ Hall effect Sensor ➤ PIC Microcontroller ➤ Temperature Sensor ➤ Liquid Crystal display(LCD) <p>Software used:</p> <ul style="list-style-type: none"> ➤ IoT 												
18.	<p>SPP Coordinator (Identified by the college):</p> <p>Note: To be identified by the principal of the institution. The project proposals must be submitted to KSCST through SPP coordinator designated by the principal.</p> <p>Name: Mr.RAJASHEKAR M B</p> <p>Email id: rajashekar@gsss.edu.in</p> <p>Contact No.: 9620268281</p>												

Name of the Project Guide: Smt. Smitha S K
Email ID: smithak@gsss.edu.in
Contact No: 9449307538

Name of the HOD: Dr.G.Sreeramulu Mahesh
Email ID:hodeeee@gsss.edu.in
Contact No: 9980147498



GSSS

GEETHA SHISHU
SHIKSHANA SANGHA (R)

INSTITUTE OF ENGINEERING AND TECHNOLOGY FOR WOMEN

(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE New Delhi & Govt. of Karnataka)

KRS ROAD, METAGALLI | MYSURU - 570 016 | KARNATAKA | INDIA



Phone : 0821 - 2581304, 4257304 / 2977306 **Fax :** 0821 - 2581305 **Email :** gssseengg@yahoo.co.in, principal@gsss.edu.in **Web :** www.geethashishu.in

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

DECLARATION

(From Project Students)

We, the project team hereby declare that the details enclosed in the project proposal (Title of the Project: Detection and monitoring of current leakage in Transmission lines using IOT Technology, Branch: Electrical & Electronics Engineering, College: GSSS Institute of Engineering & Technology for Women, Mysuru, are true and correct to the best of our knowledge and belief and we undertake to inform KSCST of any changes therein in the project title, students name will be intimated immediately through project guide. In case any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it. We hereby authorize sharing of the project information with this project proposal with the Karnataka State Council for Science and Technology, Bengaluru.

We are aware that the project team must exhibit / demonstrate the project in the nodal centre and interact regarding project with the experts and to exhibit the project in the State Level Seminar and Exhibition (if selected). If the student team fails to attend the evaluation in nodal centre or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned to KSCST.

We also hereby, enclose the endorsement form to KSCST, Bengaluru.

Name of the students with USN No.

Signature with date

1. Ganavi G (4GW19EE013)
2. Himashree H S (4GW19EE015)
3. Renuka S Manneri (4GW19EE033)
4. Tejashree S (4GW19EE038)

Smt.Smitha.S.K
(Name & Signature of Project Guide with Seal)
Email id: smithak@gsss.edu.in
Contact No: 9449307538

Dr.G.Sreeramulu Mahesh
(Name & Signature of HOD with Seal)
Email id: hodeee@gsss.edu.in
Contact No: 9980147498



GSSS

GEETHA SHISHU
SHIKSHANA SANGHA (R)

INSTITUTE OF ENGINEERING AND TECHNOLOGY FOR WOMEN

(Affiliated to Visvesvaraya Technological University, Belagavi. Approved by AICTE New Delhi & Govt. of Karnataka)

KRS ROAD, METAGALLI | MYSURU - 570 016 | KARNATAKA | INDIA



Phone : 0821 - 2581304, 4257304 / 2977306 Fax : 0821 - 2581305 Email : gsssegg@gmail.com, principal@gsss.edu.in Web : www.geethashishu.in

1918

GSSSIETW/pr. office/KSCST/2022-2023/1918

Date: 02/02/2023

ENDORSEMENT

This is to certify that below mentioned are bonafide student(s) of Department of Electrical & Electronics Engineering in the UG degree program of our institution. If the project proposal submitted by these students under the 46th series of Student Project Programme is selected by KSCST, we will provide the requisite laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps to see that the project team will exhibit / demonstrate their project in the nodal centre and in the State Level Seminar and Exhibition (if selected). If the student team fails to send the completed project report or fails to attend the evaluation in nodal centre or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned to KSCST.

Sl. No	Student 1	Student 2	Student 3	Student 4
1.	Ganavi G	Himashree HS	Renuka S Manneri	Tejashree S
2.	Nisarga B	Nisarga M	Harshitha L	Sahana R K
3.	Chandana H R	Mouna M D	Sonika U P	Supritha A
4.	Aishwarya M	Dakshayini N	Dhanushree N	Divya E R
5.	Aishwarya R	Kavya Vishwanath	Nimrah Zain R	Sameera Maheen Taj
6.	Bindushree	Archana R	Pooja Sharma	Priyadarshini R
7.	Rakshitha G	Prakruthi K N	Vidyashree K	Bhoomika C P

[Signature]
(Signature of HOD with Seal)
Professor & Head
Dept. of Electrical & Electronics Engg.
GSSSIETW, Mysuru, India - 570016

Email id: hodeee@gsss.edu.in

Contact No.: 9980147498

[Signature] 02/02/2023
(Signature of the Principal with Seal)
Principal
GSSSIETW, Mysore-570016

Email id: principal@gsss.edu.in

Contact No.: 9844406214

DETAILS OF PROCESSING FEES MADE THROUGH NEFT / UPI PAYMENT

(**Note:** Include this page in the softcopy of the student project proposal. The student team shall furnish the details in the Google Form. It is informed to the students to 1) keep ready the softcopy of the project proposal and other documents and 2) Furnish the payment made details as processing fees and 3) update the details in the Google Form on the same day of payment made to KSCST by NEFT / UPI payment).

1. TITLE OF THE PROJECT	:	Detection and monitoring of current leakage in power transmission line insulator using IoT
2. NAME OF THE TEAM LEADER	:	Renuka S Manneri
3. EMAIL ID	:	renukamanneri7@gmail.com
4. CONTACT MOBILE NO.	:	8088263237

PAYMENT MADE DETAILS

5. BANK REF. NO. / UTR NO. / UPI No. (12 digits)	:	000394063218
6. TRANSACTION ID	:	000394063218
7. NAME OF THE SENDER / ACCOUNT HOLDER and CONTACT NUMBER	:	Principal, GSSSIETW
8. NAME OF THE BANK	:	CANARA BANK
9. PROCESSING FEES	:	Rs. 1000/-(36,000 for 36 project proposals)
10. DATE OF PAYMENT MADE	:	31-01-2023
11. TIME	:	12:02:44
12. MODE OF PAYMENT MADE (NEFT / UPI, PLEASE SPECIFY)	:	Funds Transfer Debit-KARNATAKA STATE COUNCIL FOR SCIENCE: Cheque

Renuka S Manneri

(Name & Signature of
the team leader)

Dr.G.Sreeramulu Mahesh

(Name & Signature of
Project Guide or HOD with Seal)

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science campus, Bengaluru

46th SERIES OF STUDENT PROJECT PROGRAMME (SPP)

(Note: This page is for information about bank details of KSCST to the student team and college / institution and not to include this page in the project proposal softcopy)

BANK ACCOUNT DETAILS OF KSCST

Name and address of the Institution	Karnataka State Council for Science and Technology, IISc Campus, Bangalore -560012
Account holder's name / Designation	Secretary, Karnataka State Council for Science and Technology
Bank Account No. & Name of the bank	Current A/C No. 0683201000024 Canara Bank, IISc Campus Branch, Bangalore-560012
IFSC Code	CNRB0000683
MICR Code	560015023
Bank Branch Address	Canara Bank, Indian Institute of Science, Bangalore-560012

BANK DETAILS

Name of the Agency	Karnataka State Council for Science and Technology IISc Campus, Bangalore - 560012
Account holder's name / Designation	Secretary , Karnataka State Council for Science and Technology
Bank Account No. & Name of the bank	Current A/C No. 0683201000024 Canara Bank IISc Campus Branch Bangalore-560012
IFSC Code	CNRB0000683
MICR Code	560015023
Bank Branch Address	Canara Bank Indian Institute of Science Bangalore-560012