KSCST

Karnataka State Council for Science and Technology
(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)
Indian Institute of Science Campus, Bengaluru - 560 012
Telephone: 080-23341652, 23348848, 23348849, 23348840
Email: office.kscst@iisc.ac.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

16th March 2020

Ref: 7.1.01/SPP/953

The Principal,
Alva's Institute of Engineering and Technology,
Shobavana Campus,
Mijar, Moodbidri - 574 225.

Dear Sir/Madam,

Sub : Sanction of Student Project – 43rd Series: Year 2019-2020
Your Project Proposal Reference No. : ***43S_BE_0147***
Ref : Your Project Proposal entitled " ***DESIGN AND FABRICATION OF AMMONIA GAS SENSOR USING ELECTROSPINNING METHOD FOR THE INDUSTRIAL AND MEDICAL APPLICATION***

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme – 43rd Series" with a budgetary break-up as detailed below:

Student / s	Ms. Rohini Halloli	**Budget**	
	Ms. Rasika B Patil	**Particulars**	**Amount (Rs.)**
	Ms. Sahana M G	Materials/Consumables	2,500.00
	Ms. Sheela Golasangi	Labour	-
Guide/s	Dr. Praveen J	Travel	500.00
		Miscellaneous	500.00
Department	Electronics And Communication Engineering	Report	500.00
		Total	**4,000.00**
	SIX THOUSAND FIVE HUNDRED RUPEES ONLY		

The following are the guidelines to carry out the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and softcopy of the full report in a CD (single file .pdf format only) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project reference number printed above** in all your future correspondences.

e) **Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

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Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225. D.K

6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
6) Objectives (about 10 lines)
7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

The sanctioned amount will be sent to the Principal / Head of the Institute by NEFT details provided by the college/institution.

The sponsored projects evaluation will be held in the Nodal Centre /online platform and the details of the same will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,

(H. Hemanth Kumar)

Copy to (by email):

1) Head of the Department
Alva'S Institute Of Engineering And Technology,
Shobavana Campus,
Mijar, Moodbidri - 574 225.

2) Dr. Praveen J
Department of Electronics And Communication Engineering
Alva'S Institute Of Engineering And Technology,
Shobavana Campus,
Mijar, Moodbidri - 574 225.

3) The Finance Officer, KSCST, Bangalore

Encl: As Above

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VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010

PROJECT REPORT ON

"DESIGN AND FABRICATION OF AMMONIA GAS SENSOR USING ELECTROSPINNING METHOD FOR INDUSTRIAL AND MEDICAL APPLICATIONS"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

Name	USN
RASIKA B PATIL	4AL16EC057
ROHINI HALLOLI	4AL16EC060
SAHANA M G	4AL16EC062
SHEELA GOLASANGI	4AL16EC068

Under the Guidance of
Dr. PRAVEEN J

Dean Academics

Department of E&C Engineering

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225.

2019-2020

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225

(Affiliated to VTU, **BELAGAVI**)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

*Certified that the project work entitled "***DESIGN AND FABRICATION OF AMMONIA GAS SENSOR USING ELECTROSPINNING METHOD FOR INDUSTRIAL AND MEDICAL APPLICATIONS***" is a bona fide work carried out by*

RASIKA B PATIL	**4AL16EC057**
ROHINI HALLOLI	**4AL16EC060**
SAHANA M G	**4AL16EC062**
SHEELA GOLASANGI	**4AL16EC068**

in partial fulfillment for the award of BACHELOR OF ENGINEERING in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2019–2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Signature of the Guide	**Signature of the H.O.D**	**Signature of the Principal**
Dr.Praveen J	**Dr. D V Manjunatha**	**Dr. Peter Fernandes**
	H. O. D. Dept. Of Electronics & Communication Alva's Institute of Engg. & Technology Mijar, MOODBIDRI - 574 225	PRINCIPAL Alva's Institute of Engg. & Technology Mijar, MOODBIDRI - 574 225, D.K

EXTERNAL VIVA

Name of the Examiners	Signature with date
1.....	.....
2.....	.....

ABSTRACT

For the environment, there is a need to design and fabricate appropriate product and fabrication in VLSI is one of the most important process related to produce an appropriate sensor. Measuring the concentration of ammonia is very important for acute illness and long term conditions. In industries, due to use of vast amount of chemicals like ammonia. More concentration of ammonia might damage the environment and also can introduce the physical and mental illness due to the gases produced by harmful chemicals and may cause severe injury and burns. Contact with concentrated ammonia solutions such as industrial cleaners may cause corrosive injury, including skin burns, permanent eye damage or blindness. In such scenario, ammonia sensor is required for avoiding before it seriously affects health. Sudden high concentration is one of the problem, so there are several sensors designed for solving problem, such as electronic ammonia gas sensors, smart phone reminder applications and many more. However, it is not possible for all existing ammonia gas sensors to find the concentration at Room Temperature (RT) and for small concentration.

This work a sensor that will help not only in the laboratory and to the industries in the environment, but also a person who is suffering from Renal disease. Fabricated sensor will help user to find the high concentration of ammonia regions. People need not to worry about the present environment like place where they live or work as they can set an alarm on the concentration of ammonia. A sensor is usually placed in ventilation region, which blinks at particular time when the areas in a dangerous situation due to high concentration of ammonia the chemical gas so that people can evacuate the place. The alarm can be set for more than a certain concentration which can harm the environment.