

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“Jnana Sangama” Belagavi – 590 010



PROJECT REPORT ON

**“DEVELOPMENT OF HUMIDITY SENSOR USING
PVA/PULLULAN AND POLYANILINE BLEND”**

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

**BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING**

Submitted By

Name	USN
AKSHATHA S PATIL	4AL16EC001
BHAVYA M NAYAK	4AL16EC014
DEEPAK R	4AL16EC020
DHANALAKSHMI	4AL16EC021

**Under the Guidance of
Mr. YUVARAJ T**

Asst. Professor

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 "DEVELOPMENT OF HUMIDITY SENSOR USING PVA/PULLULAN AND POLYANILINE BLEND" is a bona fide work carried out by

AKSHATHA S PATL

4AL16EC001

BHAVYA M NAYAK

4AL16EC014

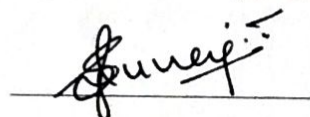
DEEPAK R

4AL16EC020

DHANALAKSHMI

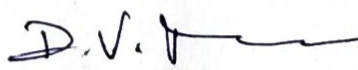
4AL16EC021

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

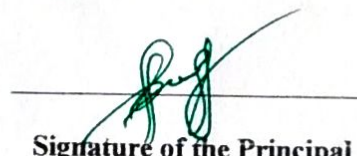
Mr. Yuvaraj T



Signature of the H.O.D

Dr. D V Manjunatha
H. O. D.

Dept. Of Electronics & Communication
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225



Signature of the Principal

Dr. Peter Fernandes
PRINCIPAL

EXTERNAL VIVA

Name of the Examiners

1.....

2.....

Signature with date

.....

.....

ABSTARCT

Humidity plays a significant role in every part of the earth in biology and automated industrial processes. To have desirable surrounding atmosphere, it is essential to monitor, detect and control the ambient humidity under different conditions ranging from low temperature to high or in mixtures with other gases by precise and provident sensors. Utilization of intelligent systems and networks as monitoring sensors to determine the soil moisture during irrigation in agriculture, for diagnosis of corrosion and erosion in infrastructures and civil engineering are among the applications of humidity sensors. In fact, the need for protection of environmental conditions has been leading to extensions in various humidity sensor developments based on the use of physical and chemical methods in presence of organic, inorganic or hybrid materials. Advancement of humidity sensory systems includes enhanced efforts in betterment of transducer performance such as sensing elements, structure design, principle of mechanism, and fabrication technologies.

On daily bases usually humidity Sensor is manufactured using inorganic materials like conducting metals like silver, gold, copper, aluminium, zinc and but we are going to use the organic materials like conducting polymers. According to our requirement while choosing the conducting polymers we use calibration process, instead of using conducting metal in humidity sensor. We use chemical deposition so that we can reduce the cost of the humidity sensor which must meet all the requirement in market. According to the survey there is more water vapour than any other greenhouse gas in the atmosphere. Humidity is an important aspect of the atmosphere because it affects weather and climate as well as global climate change.