



## 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

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**Mr. H. Hemanth Kumar**

Executive Secretary

19th April 2021

Ref: 7.1.01/SPP/10

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

Dear Sir/Madam,

Sub : Sanction of Student Project - 44th Series: Year 2020-2021

**Your Project Proposal Reference No. : 44S\_BE\_1153**

Ref : Your Project Proposal entitled " **AIR POLLUTION TRACKING IN MANGALORE USING GIS AND RS**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 44th Series" with a budgetary break-up as detailed below:

Student / s	Ms. Nidhi S	Budget	
	Ms. Jose Sharon	Particulars	Amount (Rs.)
	Ms. Vidyashree S H	Materials/Consumables	3,000.00
	Ms. Thejaswini G	Labour	500.00
Guide/s	Dr. H G Umeshchandra	Travel	500.00
		Miscellaneous	500.00
Department	Civil Engineering	Report	500.00
		Total	5,000.00
	FIVE THOUSAND RUPEES ONLY		

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- 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.
- 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.
- Please quote your **project reference number printed above** in all your future correspondences.
- 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 :
  - Title of the project
  - Name of the College & Department
  - Name of the students & Guide(s)
  - Keywords

PRINCIPAL

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) Dr. Kiran B Malagi  
SPP Coordinator  
Alva'S Institute Of Engineering And Technology,  
Shobavana Campus,  
Mijar, Moodbidri - 574 225.

2) Dr. H G Umeshchandra  
Department of Civil 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 CAMPUS, BELGAVI-590010



## **PROJECT REPORT ON “AIR POLLUTION TRACKING IN MANGALORE USING GIS AND RS ”**

**Submitted by**

<b>NIDHI S</b>	<b>4AL17CV044</b>
<b>P JOSE SHARON</b>	<b>4AL17CV048</b>
<b>VIDYASHREE S</b>	<b>4AL17CV080</b>
<b>THEJASWINI</b>	<b>4AL18CV411</b>

**In partial fulfillment of the requirements for the degree of**

**BACHELOR OF ENGINEERING**

**In**

**CIVIL ENGINEERING**

**Under the Guidance of**

**DR. H. G. UMESHCHANDRA**

**Associate Professor**

**DEPARTMENT OF CIVIL ENGINEERING**



**ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**MIJAR, MOODBIDRI D.K. -574225**

**KARNATAKA**



# ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI D.K. -574225

KARNATAKA



## DEPARTMENT OF CIVIL ENGINEERING

### CERTIFICATE

Certified that the project entitled "AIR POLLUTION TRACKING IN MANGALORE USING GIS AND RS" has been successfully completed by the bonified student of Department of Civil Engineering, Alva's Institute of Engineering and Technology in partial fulfillment for the award of BACHELOR OF ENGINEERING in DEPARTMENT OF CIVIL ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY BELAGAVI during the year 2020-2021. 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.

**Dr. H. G. UMESHCHANDRA**

**Project Guide**

  
**Dr. H. AJITH HEBBAR**

**H.O.D.**  
**Dept. of Civil Engineering**  
**Alva's Institute of Engg. & Technology**  
**Mijar, Moodbidri - 574 225**

  
**DR. PETER FERNANDES**

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

## ABSTRACT

Environmental pollution of urban areas is one of key factors that state authorities and local agencies have to consider in the decision making process. Understanding temporal and spatial distribution of air quality at the landscape scale is essential in assessing the potential ecological conditions for ecological restoration and in making decisions for regional management. To find a compromise among many criteria, spatial analysis extended by geostatistical methods and dynamic models has to be carried out. In this case, spatial analysis includes processing of a wide range of air, water and soil pollution data and possibly noise assessment and waste management data.

The accuracy of the map was then assessed by comparing predicted pollution levels with monitored levels at a range of independent reference sites. A lot of research has already been done to investigate the functional relationship between air quality and air pollution from transport. This study is an effort to develop a more flexible framework of model to find the exposure of the air pollution in the atmosphere. This review article describes the development of framework of different GIS inputs that help to find the exposure of vehicular pollution in megacity.