



Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849 ♦ Telefax: 080-23348840

Email: office@kscst.iisc.ernet.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

27th March 2019

Ref: 7.1.01/SPP/1333

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

Dear Sir/Madam,

Sub : Sanction of Student Project - 42nd Series: Year 2018-2019
Your Project Proposal Reference No. : 42S_BE_0690

Ref : Your Project Proposal entitled " **DELINEATION OF GROUND WATER POTENTIAL ZONES AT MOODBIDRI BY ELECTRICAL RESISTIVITY AND REMOTE SENSING TECHNIQUE**

I am happy to inform that your student project proposal referred above, has been approved by the Council for "Student Project Programme - 42nd Series" and has been sanctioned with a budgetary break-up as detailed below:

Student / s	Mr. Ramesh and others	Budget	Amount (Rs)
		Materials/Consumables	4,000.00
Guide/s	Dr. H G Umeshchandra	Labor	500.00
		Travel	500.00
Department	Civil Engineering	Miscellaneous	500.00
		Report	500.00
		TOTAL	6,000.00
	SIX 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 one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) 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 :

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

Alva's Institute of Engineering and 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.)

e) Projects selected for Seminar / Exhibition will be awarded.

The sanctioned amount will be sent through NEFT by Accounts Department. Please furnish the bank account details as per the format enclosed with this letter.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre 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:

- 1) The Head of the Department of
Civil Engineering
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

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

“JnanaSangama” Belagavi – 590018



**PROJECT REPORT ON
“DELINEATION OF GROUND WATER POTENTIAL ZONES
AT MOODBIDRI BY ELECTRICAL RESISTIVITY AND
REMOTE SENSING TECHNIQUE”**

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

Sponsored by Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru – 560 012

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

Submitted By

Name	USN
RAMESH	4AL15CV078
SANGANABASAV STHAVARMATH	4AL15CV088
SANGEETHA B	4AL15CV089
SHALINI C N	4AL15CV093

**Under the Guidance of
Dr. H G UMESHCHANDRA
ASSOCIATE PROFESSOR
DEPARTMENT OF CIVIL ENGINEERING**



**ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
SHOBHAVANA CAMPUS, MIJAR, MOODBIDRI – 574 225.**

2018-19

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(A Unit of Alva's Education Foundation®, Moodbidri)

"Shobhavana", Mijar, Moodbidri – 574 225, D.K.

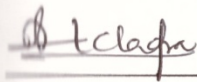
DEPARTMENT OF CIVIL ENGINEERING

Certificate

This is to certify that following students

Name	USN
RAMESH	4AL15CV078
SANGANABASAV STHAVARMATH	4AL15CV088
SANGEETHA B	4AL15CV089
SHALINI C N	4AL15CV093

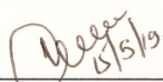
Has submitted Final report on "DELINEATION OF GROUND WATER POTENTIAL ZONES AT MOODBIDRI BY ELECTRICAL RESISTIVITY AND REMOTE SENSING TECHNIQUE" for VIII Semester Bachelor of Engineering in Civil Engineering during the academic year 2018-19. The final report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.



Signature of the Project

Guide

Dr. H G Umeshchandra



Signature of the Project

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



Signature of the Project

Principal

Dr. Peter Fernandes

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

Name of the Examiners

1.

2.

Signature with Date

ABSTRACT

A geophysical survey conducted in the Moodbidri and nearby the area of North-East part of Dakshina Kannada district using electrical resistivity method. A total 20 vertical electrical soundings has been taken to depict groundwater potential zone in the area under study and also understand the thickness of weathered zone/formation relevant to groundwater behaviors of aquifers in alluvium and in the trap rock.

Water plays a vital role in the development of agricultural activities in the study area. The surface water resources are inadequate to fulfill the water demand. Productivity through groundwater is quite high as compared to surface water, but groundwater resources have not yet been properly exploited. Keeping this view, the present study to delineate various groundwater potential zones for the assessment of groundwater availability in the Moodbidri Sub-basin, Netravati River and Dakshina Kannada. 20 Schlumberger Vertical Electrical Sounding (VES) survey were carried out in the study area. The field data were interpreted by IGIS-VES software to determine the resistivity and thickness of the different layers. Results of geophysical data were used to prepare spatial distribution map using GIS. Integration analysis was carried with thickness of first and second layer fracture zone with the corresponding resistivity maps. This map was superposed over geology map. The suitable potential zones for groundwater were delineated from first layers combinations of low resistivity with more thickness in areas occupied by Granites gneiss, Magnetite complex and Charnockite. The depth for the construction of tube-wells and dug-wells were suggested. The spatial distribution variations in different resistivity layer results are given in the findings.