TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

DOTE Campus, Chennai - 600 025

11.05.2018

Announcement: Student Project Scheme-submission of Utilisation Certificate and Seminar Paper -reg

Kind attention of Guide/HODs//Principals/Registrars,

Hope your students are about to complete the Student Projects approved by the state council. Few are not yet submitted their Utilisation Certificate and seminar paper

1.On completion all are requested to submit the Utilisation Certificate in the prescribed format (already sent) duly signed by the guide, HOD and Head of the Institution with seal.

2.The seminar paper should be sent to: enquiry.tanscst@nic.in only.

In the subject line mention your Project Code No. (as mentioned in the approval letter & also available in the approved list as in the council website).

The seminar paper should be in MS WORD FORMAT, TIMES NEW ROMAN, FONT SIZE 12, MARGINS 2.5cm ON ALL SIDES and SINGLE LINE SPACING.

The seminar paper should be strictly restricted to two pages only.

The Seminar Paper Should Not Contain any Table/Figure. Refer SAMPLE PAPER for formating.

Seminar Paper received after last date and Hard copy will not be included in the proceedings and not in the proper format as mentioned. No communication will be entertained in this regard.

3. The state council encourages the students/faculties, who want to protect the results/invention created out of the project through its Patent Information Centre at free of cost. (IPR facilitation Format enclosed).

Last date for submission without fail on or before: 25.05.2018

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MEMBER SECRETARY

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY
DOTE CAMPUS, CHENNAI - 600 025

STUDENT PROJECT SCHEME 2017-2018
UTILISATION CERTIFICATE

(TWO COPIES)

1. Name of the guide and address :

2. Name of the student(s) :

3. Title of the project :

4. Project code :

It is certified that a sum of Rs..... (Rupees) Sanctioned by the council for carrying out above mentioned student project has been utilized for the purpose for which it was sanctioned and sum of Rs. .....remaining unutilized is refunded.

Signature of the guide Signature of the HOD Signature of the REGISTRAR/PRINCIPAL/DEAN With SEAL

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TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Directorate of Technical Education Campus, Chennai – 600 025

PATENT FACILITATION FORM

PIC Reference Number:

(Given by Council) Date:

Applicant(s)	Address	Nationality
Name: Contact no.: Email:		
Inventor(s)	**Address**	**Nationality**
Name: Contact no.: Email:		
Title of the invention		
Field of invention		

- Have you approached any other institution for patenting this invention? (If yes, provide details and outcome).

Is the proposed invention novel (new)?		
i)	The Invention Is An Addition To The Existing Product/Process	YES/NO
ii)	The invention is a modification of the existing product	YES/NO
iii)	The invention is entirely new	YES/NO
Whether the proposed invention contains an inventive step?		YES/NO
Whether the proposed invention is capable of industrial application?		YES/NO

For what part of the invention, protection is needed? (tick the relevant)		
i)	Product	
ii)	Method(Process)	
iii)	Both	

Requirements to Draft Complete Specification

1.	Brief description of your invention Note : disclose the best method	
2.	Include diagrams (with proper labeling and brief description) (example : diagrams showing technical implementation, system architecture or any other diagrams)	
3.	Any experimental results available? (example : chart, graphs etc)	YES/NO
4.	what are the advantages of the present invention over existing technologies?	
5.	Unique feature of the invention	
6.	Chemical Structure (if chemical compounds involved)	
7.	If the proposed invention involves biological material, kindly fill the below details	
i)	whether deposition of the material to international depository authority of india made?	YES/NO
Ii)	Mention the characterstics of the biological material	
Iii)	What is the source and geographical origin of the biological material?	
8.	Indicate the current state of art (status of the invention)	Completed / In-Progress
9.	Is traditional knowledge involved? (usage of ayurvedic/siddha/unani knowledge)	YES/NO
10.	Present Stage Of Development (Including Scale Of Operation / Production, Validation, Quality Etc.)	
11.	Others (IF ANY)	

**Include additional sheets for explanation

Terms of service:

1. The applicant should bear the prescribed Government fee at the time of filing.
2. The applicant should strictly follow the timelines.
3. The council will provide any assistance sought for filing and further information till grant.
4. Any intimation from the Patent Office will be to the applicant's mailid/address. Hence, it is the applicant's responsibility to take over the communication from the Patent Office and get assistance from the state council.
5. The council is for facilitating IP filing, and is not responsible for any adverse office actions and hence cannot give assurance for grant of an application.

I / We certify and declare that all the information provided above are true and correct to the best of my / our knowledge and belief.

Signature with name

Date:
Place:

PATENT INFORMATION CENTRE
Tamilnadu State Council for Science and Technology
DOTE Campus
Chennai-600025.
Tel: 044–22301428 , Fax: 044 – 22301552
Email: enquiry.tanscst@nic.in, ms.tanscst@nic.in Website: www.tanscst.nic.in

SAMPLE

ADVANCED TECHNIQUE FOR SOIL MOISTURE CONTENT BASED AUTOMATIC MOTOR PUMPING FOR AGRICULTURAL LAND PURPOSE

A.AAAAA, R.RRRRRRRR, M.NNNNNNNN and N.RRRRR
Department of XXXXXXXX, AAAAAAA college
Coimbatore – 641 049

ABSTRACT

The project mainly aims in designing a system which is capable of checking the soil moisture content and automatically pumps the water into the field for agriculture purpose using solar energy. In irrigation process the most important parameter of monitoring is soil. So, the soil moisture sensor is used to find whether the soil is wet or dry. The pumping motor will pump the water only when the field is dry. The sensor sends the status of the soil to the microcontroller 8051and based on that the controller will display the status in the LCD and switch ON or OFF the submersible pump.

INTRODUCTION

Automatic irrigation system is very important in the field of agriculture.It is used to maintain the level of water or moisture in the soil where crops are planted.Moisture sensor is interfaced with 8051microcontroller. The sensor sends the status of the soil to the microcontroller and if the soil is dry the micro controller will automatically switch ON the solar poweredwater pump system and GSM modem is used to inform the owner.

MOTIVATION

The motivation for this project came from the countries where economy is based on agriculture and the climatic conditions let to lack of rains and scarcity of water. If the farm land has the water pump, manual invention by farmers is required to turn the pump on\off whenever needed.

Materials and Methods

The isolated fungal culture which was observed to produce coloured pigments on the cultured agar plate was selected and subcultured on the PDA plates. The plates were incubated at 30°C for 14 days. The fungal endophytes were mass cultivated on potato dextrose broth by placing actively growing pure culture in 1000ml Erlenmeyer flasks containing 200ml of the medium. The flasks were incubated at 37ºC for 7 days in shaker incubator at 150 rpm.

Characterization

The black pigment and pink-red pigment extracted from *Curvularia protuberata* and *Fusarium oxysporum* showed maximum absorbance of 260 and 270 nm

respectively in the range of 800 - 200 nm Wavelength UV/Vis bandwidth at 1.5 nm and received Absorbance at (Max-Min) at scan speed 400 nm/min

WORKING

Soil moisture sensor is interfaced with the controller to sense the moisture content, if the soil is dry the microcontroller automatically switches ON the submersible pump to drip water into the field and send message to the owner through GSM modem .12V Solar power is used as power supply unit, where energy is absorbed from the sun through the panel and solar charge controller is used to charge the rechargeable batteries, these batteries provide power for the system operation. The function of the inverter is that it converts the battery's voltage to AC voltage to activate the pump.

ADVANTAGES

Reduces the human intervention, Eco-friendly, Optimum level of water is used and Increasing productivity.

CONCLUSION

The Soil moisture content based irrigation system was implemented. Salient features of the system are temperature and water usage monitoring. User can easily have predefined the levels of the moisture and is regularly updatetheinformation to the owner. This project can also be implemented through IoT based technique.

Guide : Ms. S.SSSSSS, Associate Professor, Department of XXXXXXXX, AAAAAAA college , Coimbatore – 641 049