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VNC - 2020 TASU

VIDYAVARDHINI'S NATIONAL CONFERENCE ON TECHNICAL ADVANCEMENTS FOR SOCIAL UPLIFTMENT

VNC - 2020 TASU

4TH APRIL, 2020

Organized by:
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About us:

Vidyavardhini means a Body committed to enhancement of Knowledge. Vidyavardhini was established as a registered society in 1970 by late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. It is a short, two minutes walk from Vasai Road (W) Railway Station. The college is also accessible by road from Mumbai.

Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering in six branches.

Objective of VNC 2020 TASU

Technology has always been potential tool for simplifying the way we do things. Present time demands directing the technological advancements towards addressing societal challenges such as improving health care, education environment, sanitation, agriculture, smart city, etc., VNC 2020 TASU aims to provide an opportunity to researchers, academicians, Industrialist and students to interact and share their ideologies and contributions made for social upliftment with the aid of technological advancements.

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Any other relevant topics

Publication Information

Proceedings of VNC - 2020 TASU will be published with ISBN number

1. Selected Papers will be published in International Journal of Information Technology, Published by Springer Nature, ISSN: 2511-2104 (Print Version), ISSN: 2511-2112 (Electronic Version)
2. All papers will be published in IJERT, ISSN: 2278-0181

Important Dates:

Submission of full length paper
15TH Feb 2020
Paper Acceptance Notification
22ND Feb 2020
Submission of Final Version of Paper
29TH Feb 2020
Registration Deadline
5TH March 2020
PPT Submission
20TH March 2020
Conference
4TH April 2020

Registration Fee Details:

Category of Delegates / Authors	Indian Authors & Delegates (in INR)
Full Time Students (UG)	1,500.00
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Proceedings of the 2nd VNC, VNC-2020,
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Vidyavardhini's College of Engineering & Technology (VCET), Vasai (INDIA)

Oil Skimming using Electromagnetism

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Abstract- **The spillage of oil into the environment is an ongoing concern. Marine oil spills draw much attention because the oil harms marine animals and floral life. Current methods to aid in cleaning up the oil include containment booms, oil skimmers, and dispersants. Chemical dispersants are a tradeoff between exposing coastal life to surface oil and exposing aquatic life to dispersed-chemicals.Traditional containment/diversion booms are very commonly used, but they alone cannot recover the oil. Additional machinery is necessary to aid in getting the oil out of the water. Other things such as large waves and wind can make the oil slip under or over the boom, causing it to become ineffective.**

Keywords- **Oil Skimming, Electromagnetism, electric oil skimming , high efficiency oil skimming, new methods of skimming**

1. INTRODUCTION

An environmentally safe method was developed to clean up, recover and manipulate spilled oil in water and other surfaces. The Electromagnetic Mop (EMop) also provides a solution to contain, control and possibly stop oil leaks.

The engineer is constantly confronted with the challenges of bringing ideas and design into reality. New machines and techniques are being developed continuously to make various products at cheaper rate and high quality. Taking into account the above contribution we have tried to manufacture such equipment which is accessory the EMop replacing the aforementioned in non-toxic, safe and efficient manner while increasing the efficiency of remediation process. Our method has been tested and verified at laboratories as being the safest and most efficient method.

A. Introduction to Skimming

The Oil Skimming is a process of removing or separating the oil from oil polluted coolant. The oil and coolant in mixed form is collected in the containers and one of the following methods are adopted to separate oil from coolant. Oil being lighter than coolant, it floats over the coolant. The endless belt running over the rollers adjusted such that the belt will violently smash the mixed coolant Oil will stick to the belt.

2 CONFIGURATION

To make a electromagnetic oil skimmer one has to have a long pipe to carry fluids wound with copper wire to create electromagnetism when power is supplied.

Table1. Pipe Dimensions:

Length	2 Meter
Diameter	1 ½ inch.
Material	PVC
Holes Interval	30 cm
Holes diameter	1 inch

Table2. Copper Dimensions:

Diameter	22 Gauge
Length	1 km
Specification	Varnished
No. of winding	12/cm

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for presenting paper titled

Oil Skimming using Electromagnetism (Paper ID: NTASU 1034)

in the Vidyavardhini's National conference 2020 "Technical Advancements for Social upliftments" organised by Vidyavardhini's College of Engineering and Technology, Vasai held on 27th June, 2020

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