

श्री साईबाबा संस्थान विश्वस्तव्यवस्था,शिर्डी
श्री साईबाबा महाविद्यालय शिर्डी
भौतिकशास्त्र विभाग

दि. ०३/०१/२०२२

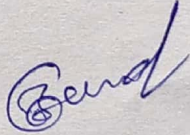
मा. प्राचार्य
श्री साईबाबा महाविद्यालय शिर्डी
श्री साईबाबा संस्थान विश्वस्तव्यवस्था, शिर्डी.

विषय – श्रीसाईबाबा प्रसादालयात सौरउर्जा व बायोगॅस प्रकल्पाला भेट देणे बाबत .
महोदय,

वरील विषयास अनुसरून श्री साईबाबा महाविद्यालयातील द्वितीय व तृतीय वर्ष विज्ञान शाखेतील भौतिक शास्त्र विषयातील विद्यार्थ्यांना विद्यापिठाच्या अभ्यासक्रमानुसार प्रत्यक्षिक साठी प्रकल्पांना भेट देणे अनिवार्य आहे. तरी विद्यार्थ्यांना श्री साईबाबा प्रसादालयात सौरउर्जा व बायोगॅस प्रकल्पाला भेट देण्यास घेऊन जाण्याची परवानगी मिळावी हि विनंती.



प्रचार्य
श्री साईबाबा महाविद्यालय, शिर्डी.


विभागप्रमुख
भौतिकशास्त्र विभाग

Shri Saibaba Sansthan Trust, Shirdi
SHRI SAIBABA COLLEGE, SHIRDI
Tal. Rahata, Dist. Ahmednagar.
DEPARTMENT OF PHYSICS

Name: Pawar Siddharth Bharal Class: SYBSc Batch: G
Practical No.: _____ Performed on: 07/01/2022
Title: Tour report : shri saibaba sansthan prasadalaya.
Signature _____

Aim: Introduction:

Solar energy is the energy of future not just an alternative was the message of second world conference on solar workers it further started that the energy will be IT Cookes food for about 3000 devolles. This is as of solar scheffer concentrates raised the water temperture to 65°C to 65°C & convert it into steam for cooking purpose
Diagram: This system integrate with the existing boiler to ensure continued cooking even of night during rainy or cloudy wheather the solar mosyphon principle. & so does not need electrical. In order to cope with increasing need of people needs, In put more stress & increasing energy needs. & evokes higher demand on available energy.

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Diagram
Obs. table
Calculation
Graph
procedure
Result

Formula: This case study aims to understand solar heating steam cooking system installed at prasdayal of shri saibaba sansthan trust shirdi.
To see that how convertical energy nowdry solar concerned organization can save lockes of ruppees source It also aims that natural resources of energy have the limitation also requiried to come of this type of project to find efficiency rectifire it's pay back period.

DEPARTMENT OF PHYSICS
PROJECT REPORT

Topic: Solar Water Heating System
Date: / /

Introduction:

Solar energy is the energy of future not just an alternative was the measure of energy used in various applications.

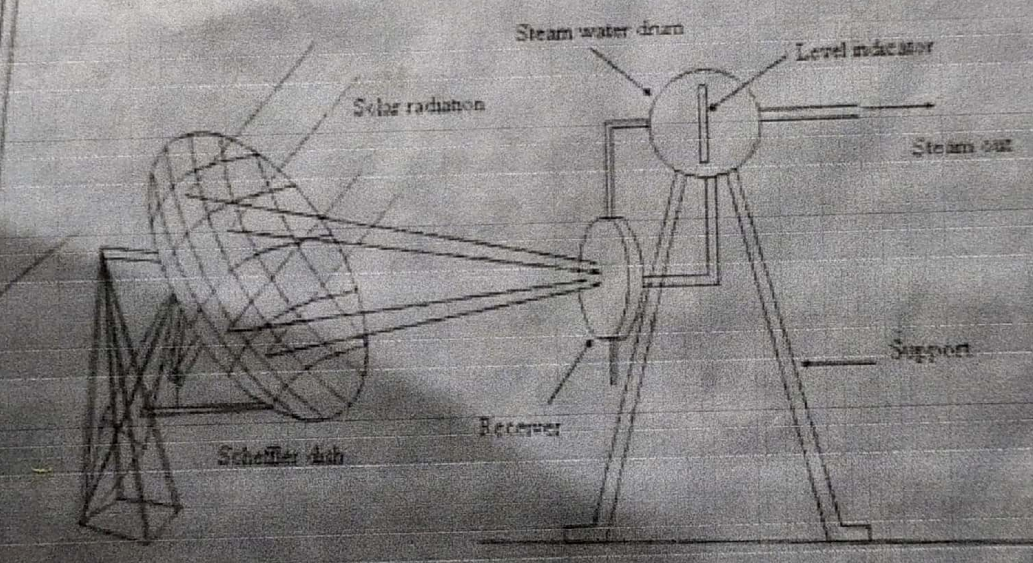


Fig 1. Schematic view of system installed at Sai Baba Sansthan's Prasadalya, Shirdi

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Title : _____

Signature

Aim: This system integrated with the existing boiler to ensure continued cooking even at night during rainy or cloudy weather the solar mesophan principle & so does not need electrical power or pump.

Apparatus:

* Working of Solar steam heating cooking system's

In the focus of each pair of scheffler concentrator (dish) the sleeping dish & standing dish are placed heat exchanger called receiver the solar falling on to the dish are reflected & concentrated on receiver place in it's focus due to concentration the temperature achieved is very high (betⁿ 450-650°C) & thus the water in receiver become boiling & becomes steam.

Above the receiver is an insulated header pipe filled half with the water the cold water enters the receivers through inner pipe & the continuous fill steam is generated the steam is stored in upper half empty portion of steam is then drawn/ or sent to kitchen through insulated pipe-lines.

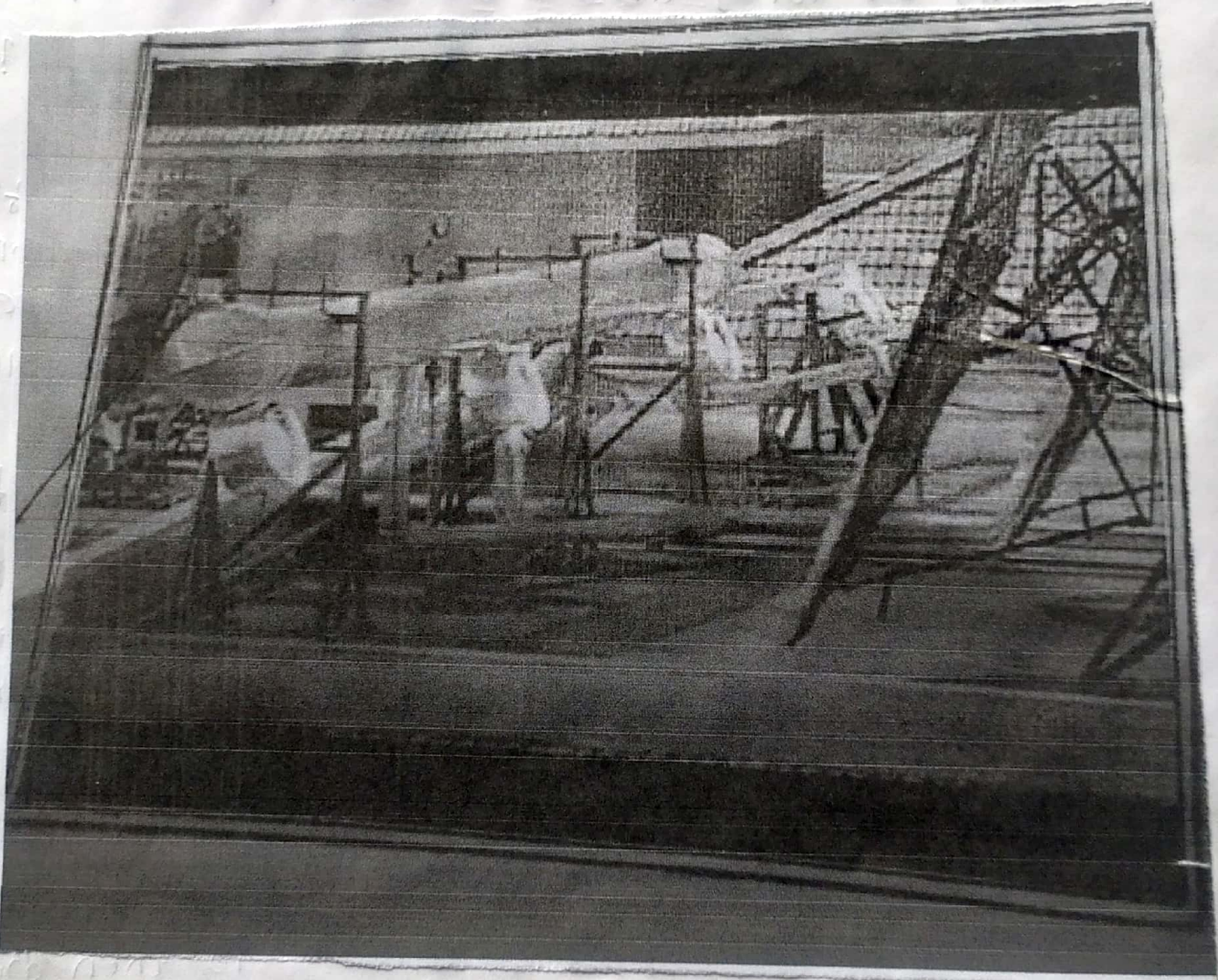
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Formula:

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SRINIVASA COLLEGE, SHRI
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— This system is used with the existing boiler
to ensure continued working even at night during
total or partial absence of solar radiation by using



or sent to kitchen for use in insulated pipe-line.

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Title : _____

Signature _____

Aim :

No	Particulars	Remark
1	Const of project.	Rs. 1.33/- cores
2	financial aid ministry of renewable energy, new delhi	Rs. 58.40/- cores
3	project completion period	160 days
4	Area of project	2500 Sq. mtr
5	Total solar dishes	73 Nos
6	Area of each dish	16.616 Sq. mtr
7	total dish collection area	1168 Sq. mtr
8	energy creates by one dish during 8 Hr period	37.840 Kcal
9	Total energy created from all dishes per day.	2762320 Kcal
10	steam generation Captacity perday.	35000 Kg /day
11	fuel used of present	L.P.G
12	calorific value	10,500 Kcal
13	Total calories generated from solar project	2762320 Kcal
14	Saving of gas	263.08 Kg/day
15	Comercial gas rate	Rs. 40.27
16	Saving of gas per day	Rs. 10,594/-
17	Saving per month.	Rs. 3,17,825/-
18	Carbon credit from project = 1958.1 MT CO ₂ X 150	Rs. 2,93,425/-
19	Subsidy. of Carbon credit from international orgination	Rs. 2,93,415/-

Appratus :

Diagram :

Formula :

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Title : _____
Signature _____

Aim:

Conclusion: The main goal of system was to reduce L.P.G gas consumption by 50%. another important goal beside financial benefits due to saving L.P.G gas was to use as natural protection its conservation + new-ventation by using renewable + clean energy.

Diagram: To promote + popularised use as solar energy M NES + MEDA have supported this project towards realization this objective.

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Tal. Rahata, Dist. Ahmednagar.
DEPARTMENT OF PHYSICS

Name: Pawar Siddharth Bharat Class: SYBSc Batch: G

Practical No.: _____ Performed on: _____

Title: Report Bio-methanation plant to Treat kitchen waste at shriSaibaba Sansthan shirdi Signature _____

Aim: Introduction:

Biogas is a mixture of mainly methane & carbon dioxide produced during the digestion of organic matter, such as animal and

Appratus: kitchen waste as well as crop residues in the absence of oxygen. Anaerobic bacteria ferment biodegradable matter, into methane (40-70%) Carbon dioxide (30-60%) hydrogen (0-1%) & hydrogen sulfide (0-3%). The ideal process temperature for the digester in regions with daily seasonal temperature fluctuations.

Viability of biogas production:

Biogas production depends on the availability of sufficient biomass feedstock, water and space for the digester. As the biogas cannot be transported over long distance, the digester has to be placed close to the home of its user, which requires sufficient for a rural household, as well as for the user.

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