



**ARIGNAR ANNA GOVERNMENT ARTS COLLEGE
NAMAKKAL – 637 002**

(Re-Accredited with 'B' Grade by NAAC & Affiliated to Periyar University, Salem)

CRITERION III

3. Research, Innovations and Extension

3.1 RESOURCE MOBILIZATION FOR RESEARCH

3.2.1 Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

1. Patent

2. Illam Thedi Kalvi Scheme Tamil Nadu (Education at Doorstep)

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

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शुक्रवार
FRIDAY

दिनांक: 22/07/2022
DATE: 22/07/2022

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

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(19) INDIA

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(54) Title of the invention : DESIGN AND DEVELOPMENT OF A BIN MODEL FOR SOLAR INSTANT WATER HEATER

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Filing Date :NA

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(57) Abstract :

The Solar water heating concepts is one of the backbones for energy conversion field. Here, a novel design of bin model solar instant water heater was fabricated and now the proposed water heating system is traditionally not available. Also this heater is different from others because of its cost is low, it is environmental friendly the fabrication, maintenance is simple and the water heating time is very lesser in good climatic conditions. Bin model solar water is specially made for large scale hot water heater needs and it is framed also suitable for domestic usages. So we frame the bin model water heater to solar energy evolve, eventually, in future the setup has good response for giving hot water in proper climatic conditions. The suggested bin model solar instant water heater is easy to construct and heat vindications and it is suitable for any kind of good thermal conductivity absorber plates. We contemplate to analysis some configurations as well as got excellent outcomes in fabrication and implantation parts. In this paper, we mentioned the design and construction parts, economic considerations, temperature setup in experiment and dimensions of bin model solar instant water heater with important dimensions and epic materials are mentioned. The bin model solar instant water heater has been designed, fabricated and its performance has been evaluated in the Namakkal climatic conditions. Solar water heater is a required one, but it is expensive for rural people. In that case; the bin model solar instant water heater is a modern, simple and low cost system. This bin model solar instant water heater is fabricated without high cost components and the setup does not need the storage tank. This article presents and encompasses the technological developments of our setup. The performance and efficiency of bin model solar instant water heater is determined when using copper is an absorber part. The bin model solar instant water heater's performance, efficiency, copper plate temperature, loss ratio, mass flow was calculated and presented. This bin model solar instant water heater is ecofriendly, it used for both domestic and industrial sectors.

No. of Pages : 10 No. of Claims : 3


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Manual Art

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PUBLICATION OF THE PATENT OFFICE

FORM 1
THE PATENTS ACT, 1970
 (39 of 1970)
 &
THE PATENTS RULES, 2003
APPLICATION FOR GRANT OF PATENT
 [See sections 7,54 & 135 and rule 20(1)]

(FOR OFFICE USE ONLY)

Application No.:
 Filing Date:
 Amount of Fee Paid:
 CBR No.:
 Signature:

1. APPLICANT(S):

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Dr. G. Suresh
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Illam Thedi Kalvi

Illam Thedi Kalvi Scheme Tamil Nadu

(Education at
Doorstep)



Ms.V. Vinothini, II M. Com (Commerce), Ms. Gowsalya, II M. Com (Commerce), Ms. V. Subathra Devi D, II MA (Tamil), S. Nivetha, II MA (Tamil), and Ms. M. Sumathi, I MA (Tamil) applied to become a volunteer and be part of the Tamil Nadu government's initiative to bridge the gap created by the pandemic. Due to a lack of necessary gadgets, the socially and economically disadvantaged sections of society were unable to access online lessons taught by teachers. The Tamil Nadu government's "**Illam Thedi Kalvi**" scheme came as a blessing for the school students. As a person with social concern, they applied to become a volunteer, appeared for the examination, passed it, and were selected to teach the school children. They attended two days of training at the government school. **The government has credited Rs. 1000 as an honorarium for this social service rendered to the future pillars of our nation.**

Dr. G. G. G. G.

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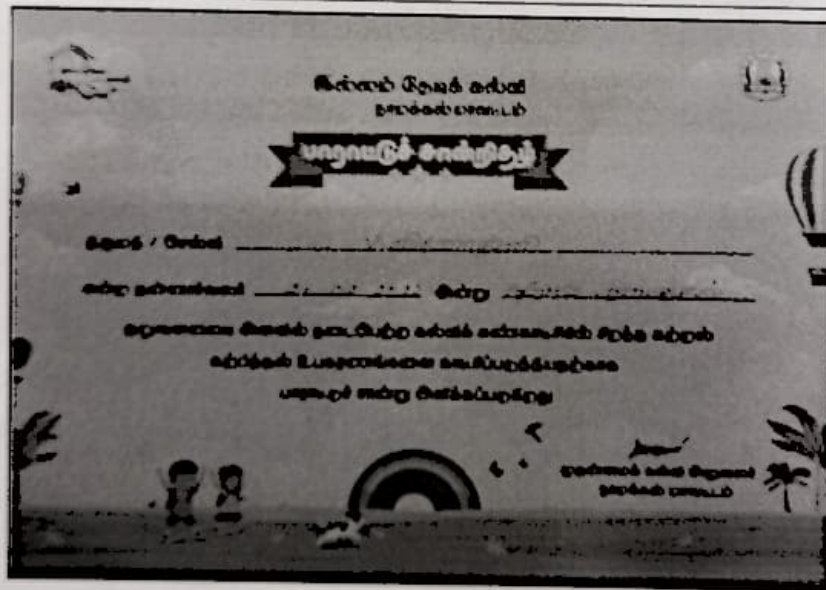


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Volunteer Name	: Ms.V. Vinothini, II M. Com (Commerce)
Center Number	: 330901160
Center Address	: Bhathrakali Street S,P. Pudur Namakkal – 637 001
No. of Student Beneficiary	: 20
Class	: Upper primary (6 th to 8 th standard)
Center Opening Date	: 05.01.2022
School Name	: Arthanari Primary School
Mobile Number	: 8428042661



Details of Ms.V. Vinothini, II M. Com (Commerce)

Ms. G. L. S. S. S.

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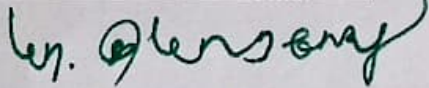


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Center Number	: 330901109
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No. of Student Beneficiary	: 20
Class	: 1 st Std to 5 th Std
Center Opening Date	: 10.01.2022
School Name	: Panchayat Union Middle School, Kavettipatti
Standard	: Primary (1 st to 5 th Standard)
Mobile Number	: 6374930725

Details of Ms. P. Gowsalya, II M. Com (Commerce)


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Volunteer Name	:	Ms. V. Subathra Devi II MA (Tamil)
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No. of Student Beneficiary	:	21
Class	:	6 th Std to 8 th Std
Center Opening Date	:	10.01.2022
School Name	:	Punchayat Union Middle School, Sevagoundampalayam, Thatthathripuram, Namakkal
Standard	:	Upper Primary (6 th to 8 th Standard)



Details of Ms. V. Subathra Devi II MA (Tamil)

Ms. V. Subathra Devi

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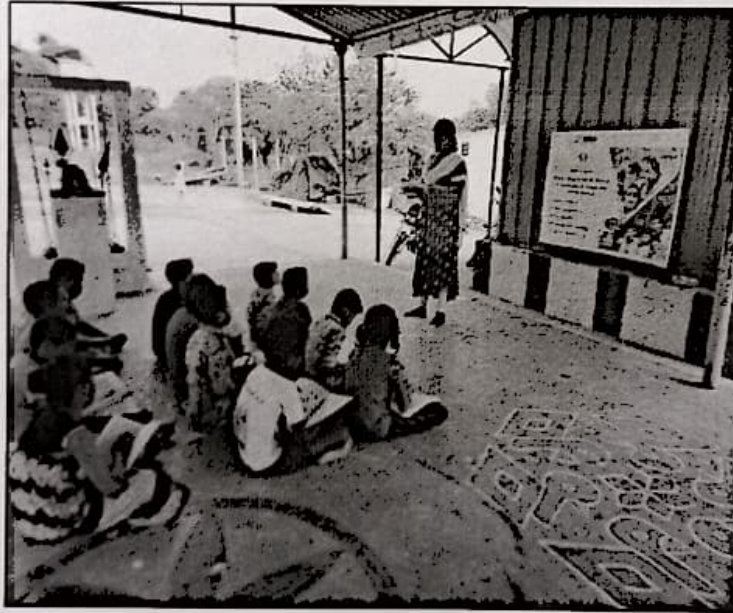
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Volunteer Name	:	Ms. S. Nivetha II MA (Tamil)
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No. of Student Beneficiary	:	20
Class	:	6 th Std to 8 th Std
Center Opening Date	:	01.07.2022
School Name	:	PUPS KANAVAIPATTI
Standard	:	Upper Primary (6 th to 8 th Standard)
Mobile no	:	6383746909



Details of **Ms. S. Nivetha, II MA (Tamil)**

W. G. S. S. S.

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Volunteer Name	:	Ms. M.Sumathi, I MA (Tamil)
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Center Address	:	Ganapathy Nagar, Kondichettipatti, Namakkal – 637 002
No. of Student Beneficiary	:	20
Class	:	1 st Std to 5 th Std
Center Opening Date	:	01.07.2022
School Name	:	union middlw school
Standard	:	Primary (1 st to 5 th Standard)
Mobile no	:	7598153708



Details of Ms. M. Sumathi, I MA (Tamil)

Ms. M. Sumathi

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