

“UNLEASHING THE UNLIMITED”

Our Journey of Solar Cooking



By:
Alzubair Saiyed
Virendra Dhakhada

About Us

Mr. Alzubair Saiyed

Alzubair Saiyed, is an Associate Member of Solar Cookers International (SCI) and also Life Member of Society of Fluid Mechanics and Fluid. He completed his M.Tech in Thermal Engineering from Nirma University, Ahmedabad, Gujarat, India in 2015. He is having more than 1.5 years of educational (Associate Professor at B.H. Gardi College - Rajkot) as well as 1 Year of Industrial experience. After more than two years of Research on Solar Cookers, he has been now involved in Promotional activity of Solar Cooking in Gujarat. Currently He is working as Project Manager in Gujarat Grassroots Innovation Augmentation Network (GIAN).



Mr. Virendra Dhakhada



Virendra Dhakhada, is a Member of American Society for Mechanical Engineers (ASME) since 2012. He completed his B.E in Mechanical Engineering from B.H. Gardi College of Engineering and Technology Rajkot, Gujarat, India in 2016. His main area of Interest is Solar Thermal and Solar Photovoltaic Domain. He is currently running his own Start-Up namely WeDesign24x7, which is related to Industrial Machine Designs and Modelling. Driven by his passion towards Sustainable Development, He is also become helping hand to noble cause of Promotion of Solar cooking work of his Professor Alzubair Saiyed.

Why We're Promoting Solar Cookers?

Generally, we are observing that in our society women collect and carry fire wood, and cook over smoky open stoves. That made us think about way to help them find a safer way to feed their families.

Millions of women collecting firewood every day for cooking fuel cause severe deforestation. The World Health Organization estimates that hazardous indoor air pollution from primitive cook stoves causes 2 million excess deaths every year.

Mr. Alzubair Saiyed visited four villages (Odedara, Mocha, Madhavpur & Loj) of "Maher Community" in Porbandar district, Gujarat, India. He stayed two days with them and discussed problems related to cooking.

All the women of four villages spend 3 to 4 hours to collect the fire woods only and only for cooking purpose and They have to travel about 5 to 6 kilometres to collect the fire wood at the outset of their villages. Mr. Alzubair Saiyed explained them solar cooking and they seem surprised about that. The very moment he thought that his next plan will be teaching village women's how to build their own efficient solar cookers.

Mr. Virendra Dhakhada also faced similar problem in his childhood. He observed his mother cooking in smoky environments, which causing harm to her eyes and lungs. So many peoples in his village earning their livelihoods from firewood cutting and selling. Their lives seem misery.

As a moral responsibility to aware the Indian society towards the solar cooking currently We're promoting art and science of solar cooking in various Schools, Colleges and Villages without any fees or charge.

We haven't sponsored by any other organizations or NGOs. Our passion towards solar cooking drives us to conduct workshops, seminars & training program till the date.

We prepared several models of solar cookers particular for the educational purpose and demonstrating that models in our training sessions.

Here we described our Journey of Solar Cooking....

Solar Cooking Festivals

One-day workshop on “Introduction of Solar Cooking & Gujarat Grassroots Innovations Augmentation Network” by "Saraswati Shishuvihar Vidhyalay", Sakt Sanala, Morbi

26th April 2017

Our team was invited for a one-day workshop on "Introduction of Solar Cooking & Gujarat Grassroots Innovations Augmentation Network" by the Management of "Saraswati Shishuvihar Vidhyalay", Sakt Sanala, Morbi. Near about 90 Students ranging from Class 6 to Class 8, Teachers & Parents attended our workshop. All the students build their own 40 Copenhagen Solar Cookers from the kit provided to them and boiled Chickpeas, Beans & Potatoes. School was one out of seven instrumental organization in Gujarat involved in Promoting Traditional Indian Education culture.



Alzubair Saiyed and Virendra Dhakhada delivering Introductory talk on GIAN and Solar cooking respectively



One day workshop on “Make your own Solar Cooker & Take it Home with you” at S.P.B College of Engineering & Saffrony Institute of Technology, Mehsana, Gujarat, India.

22nd February, 2017

Our team invited to conduct One Day Workshop of Solar Cooking at Technical Festival ‘Veyg 17’ of Saffrony Institute of Technology and S.P.B. Patel Engineering College, Mehsana, Gujarat. In workshop, we demonstrated 10 different models of Solar Cookers with Briefing of their Construction Methodology. After Briefing, 70 Engineering Students from Mechanical and Automobile backgrounds from 4 different institutes started building their own solar cooker. All students were very enthusiastic and within 1 hour they converted raw material into beautiful Copenhagen type Solar Cookers. Followed by Lunch break, there was live cooking session. All 70 Students simultaneously and cumulatively cooked noodles in their own Solar Cookers in stipulated time of 30 minutes.



Alzubair Saiyed is delivering Lecture



Virendra and Gaurav In the middle of 70 Copenhagen Cookers



Students Preparing for Cook Noodles



**“Women Empowerment with Solar Cooking Festival”
at Shree Kanta Vikas Gruh Girls High School, Rajkot, Gujarat, India.**

27 and 28th December, 2016

We arranged Solar Cooking Festival to empower Girls Students of Shree Kanta Vikas Gruh Girls School, Rajkot, Gujarat, India. More than 365 child scientists (Girl Students) built their own solar cookers (more than 100) on Day1, followed by Day2 when all of them simultaneously and cumulatively cooked noodles in the same solar cookers in stipulated time of 30 min.

The main objective of the solar cooking festival is to women empowerment and to aware the Indian society towards Clean Cooking Concept through Solar Cookers. More than 3 different newspaper published press notes regarding that festival. All the staff members & all girl students of school were very happy on their first experience of Solar Cooking. Their compliments on our efforts is work as fuel to continue our journey.

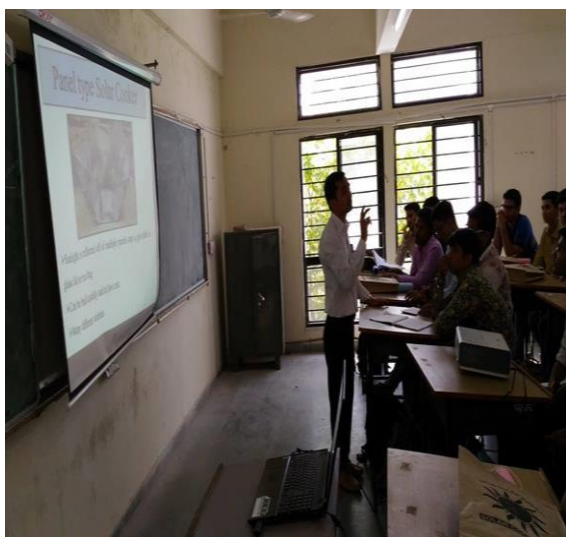


One-day Workshop on "Making of Solar Cookers" at Government Engineering College, Rajkot.

28 November 2016,

We organized one-day workshop of "Making of Solar Cookers" for the students of Government Engineering College, Rajkot. At GEC-Rajkot 120 students built their own 60 Copenhagen type Solar Cookers simultaneously and cumulatively cooked noodles in the same solar cookers in stipulated time of 30 min. It was our first "Solar Cooking Festival" and we were so excited about it. In talk, we demonstrated our 10 models of Solar Cookers to them and discussed future scope of Renewable Energy in India. Also had little talk about some of India's biggest Solar Cooking Plant and Solar Thermal power plant followed by student's questions about their final year project on such promising technologies.

Specially thanks to Prof. Devendra Marsonia, Prof. G.B. Pithva, Prof. Pravin, Prof. Kuchadiya, Dr. G.J. Vala, Prof. Jaydeep Dadhaniya to let us make this thing happen.



Alzubair Saiyed is delivering talk to 120+ students of Mechanical and Automobile Engineering at GEC-Rajkot



Solar Cooking Training Workshop

One-day Training on "Introduction of Solar Cooking & How to Build your Own Solar Cooker" at "Shree Woolenmill Kanya Shala", Jamnagar.

28th February, 2017

This was National Science Day, BirthDay of Shree C.V. Raman and also of shree Ram Krishna ParamHansa. On that day, we were invited to conducted Interactive Session on Solar Cookers at Jamnagar Kanya Taluka Shala, where 200+ students from 6 different schools attended the same.

Name of Schools are,

- | | |
|--|---------------------------------------|
| 1. Shree Woolenmill Kanya Shala. | 2. Shree Woolenmill Hindi Kumar Shala |
| 3. Shree Woolenmill Hindi Kanya Shala | 4. Shree Woolenmill Primary School |
| 5. Shree Gauseva Maha Abhiyan Kanya Shala. | 6. Kharaberaja Vadi Shala |

We're very much thankful to Sultan Bhai for inviting us, for his efforts of making such large mergers and hospitality.

Presentation on Solar Cooking practices with different model of solar cookers including how to make one by yourself was followed by live cooking demo. Students seems so excited and we talked a lot. Children's talking Science and Technology with you, what else one need to have positive day.



Training on "Solar Cooking Practices & How to make Cheap Solar Cooker at Home" at Chaprajpur, Jetpur.

8th January, 2017

Mrs. Nitaben Gundariya (President of Jetpur Taluka Panchayat) invited us for the training session on "Solar Cooking Practices & How to make Cheap Solar Cooker at Home". This session was specifically organized for the Village Women's of Champarajpur Village situated near Jetpur in Rajkot District of Gujarat.

All women were highly motivated to learn Solar Cooking. They listened each and every thing very precisely and ask meaningful questions regarding solar cookers. All women surprised when we shared story of Sharon Clausson, who is primary teacher and build one of the widely used Copenhagen Solar Cooker, we were noticing sparks in their eyes that they can build too.

There was no instrument available to deliver presentation through Presentation slides, so we deliver just oral talk and demonstrated live cooking. We're hoping for positive change in their lives by our little initiatives.



Two-days Training on "Clean Cooking Concept of Solar Cooking" at Kadavi Bai Virani Kanya Vidhyalay, Rajkot.

5 and 6th January, 2017

Our team conducted two-days training session on "Clean Cooking Concept of Solar Cooking" at Kadavi Bai Virani Kanya Vidhyalay, Rajkot. In two days, more than 400 Girl Students participated in training to learn clean cooking concepts with huge dedication. We are really happy for being instrumental in such Women empower activitiy. Specially Thanks to Principal of KVKV, Dipak Bhai & all staff members for help & support.



Short Session on Solar Cooking" at Rotary Midtown Library, Rajkot.

18th December, 2016

Invited to deliver session on Solar Cookers with live Cooking Demo at Rotary Midtown Library, Amin Marg, Rajkot. There were very few participants near about ten, But we enjoyed the discussion and spread the awareness of Clean Cooking Concept. Thank you so much to Rajkot Midtown Library, Rotary Club of Rajkot and Preeti Madam for the huge support and help.



Two-days Promotional work of “Clean Cooking Concept of Solar Cooking” at Satvik Food and Innovation Festival, Ahmadabad.

24 and 25th December, 2016

Our team was invited to promote low cost Solar Cookers at one interesting event 'Satvik Food and Innovation Festival' at Ahmadabad. It was organized by SRISTI foundation. Fortunately, we were able to demonstrate Some models of our Innov8 Solar Energy's Solar Cookers in this Exhibition.

Lots of people visited our stall during two days, we got too many questions from curious people, some the questions meant to spark few new ideas for improvement in our existing models. Learn beliefs of peoples holding them to not to use Solar Cooking technologies in their day to day lives. Overall it was proved to be great learning journey for us.

Thanks to Ramesh Sir Patel and Anamika Dey Maa'm for offering us Stall inside GIAN. It's our great pleasure that Prof. Anil Gupta Sir and Director of NIF visited our Solar Corner. It was Wonderful and Interactive days, fuelled flames of our Motivation.



Demonstration of "Low cost of Solar Cooking Solution" at Darshan Engineering College - Rajkot.

14th December, 2016

This was a National Energy Conservation Day Celebration. Our team was invited on the Inauguration Ceremony of Mobile Demonstration Van (Project Developed by GEDA and Gujarat Climate Change Department) at Darshan Institute of Engineering & Technology, Rajkot, specifically for the demonstration of Low cost models of Solar Cookers. We presented different types of Solar Cookers and explained the benefits of solar cookers applications to all the departmental faculties and also school children visiting our demonstration from nearby villages.



One-day workshop on "Making of Solar Cookers" at Shree Kanta Vikas Mahila Gruh Girls School - Rajkot.

2nd December, 2016

This was day for us to get involved in Women Empowerment with Solar Cooking. We conducted one workshop of "Making of Solar Cookers" for girls students of Shree Kanta Mahila Vikas Gruh Girls School, Rajkot. We presented Seven different models of Solar Cookers with Live Cooking Demo. All girl's students participated actively in whole day activities. We are very thankful to Shree Jayshree Ben Patel (Principal) and all staff members for support and help.



One-Day workshop on "Solar Cookers for Housewives" at Institute of Quality Education, Sister Nivedita Trust - Rajkot.

11th December, 2016

We organized workshop on Solar Cookers with the collaboration of "Divyabhaskar Newspaper Madhurima Club" only for housewives in which more than 100 housewives participated at Institute of Quality Education (Sister Nivedita Trust), Rajkot, Gujarat. We Presented eight models of Solar Cookers with Live Cooking Demo and explained them how to make your solar cookers and shared best cooking practices with them. Session was great success. Thanks to Rashmikant Saheb Trivedi, Bhushanbhai Shah, Institute of Quality Education and Sister Nivedita Trust for support.



Visit at Indian Institute of Management - Ahmedabad.

28th October, 2016

Our team was requested to pay visit and present our work to one the renowned personality in field of Grassroot Innovations Prof. Anil K Gupta Sir (Professor in IIM Ahmedabad, Exec. Vice Chair of National Innovation Foundation, Co-ordinator of SRISTI & GIAN, Founder of Honey Bee Network). We presented Six Models of Solar Cookers in front of him at Old Campus, Indian Institute of Management, Ahmedabad.

After quick demonstration, we discussed with Prof. Anil K. Gupta & Ms. Anamika Dey (Chief Innovation Manager & CEO of GIAN) about Solar Cooking Seminars & Workshops for Students of Schools & Colleges as well as for Village Women's. We get lot many good suggestions and feedbacks from them.



One-day Training workshop on “Making of Solar Cookers” at Maltabah Jafariya, Sedrana, Siddhpur.

17th October, 2016

Our team conducted our first workshop of "Making of Solar Cookers" for 300 students of Maktabah Jafariya, Sedrana Square, Sedrana, Siddhpur. We Presented Seven different models of Solar Cookers with Live Cooking Demo. There was student from many departments like Science, Commerce and Hotel Management. Even faculty and Chef of Hotel Management course learn how to use solar cooker and made saving while reducing carbon credit. All students participated actively in whole day activities.

Amazing support of Maktabah's Staff Members. They are all so kind and eagerly wait for the workshop. Even Patron In-Chief, Syed Muhammad Mujahid Husain Jafari Bawa Saheb visited our demonstration and embraced our work.



Solar Cooking Experimentations

Celebration of World Environment Day with Friends at Rajkot

5th June 2017

We decided to celebrate World Environment Day by injecting Solar Cooking Virus to our friends. For this purpose, 5 of us accumulated at one of our friend's home. We cooked Potatoes, Rice, Noodles, Soup and Garlic Bread on different models of Solar Cookers. We used Copenhagen, Panel Type, Hotpot and Vacuum Tube Type Solar Cooker. Atmosphere was so much cloudy, although we managed to cook all these items.

Event was organized at Rana Maitreya's House, we got full support of his mother for some supplementary Cooking. It wasn't possible without great efforts of all to make it happen within this short time. I hope they would be happy to learn some good practices of Solar Cooking.



Celebration of World Environment Day with Colleagues at Ahmedabad

5th June 2017

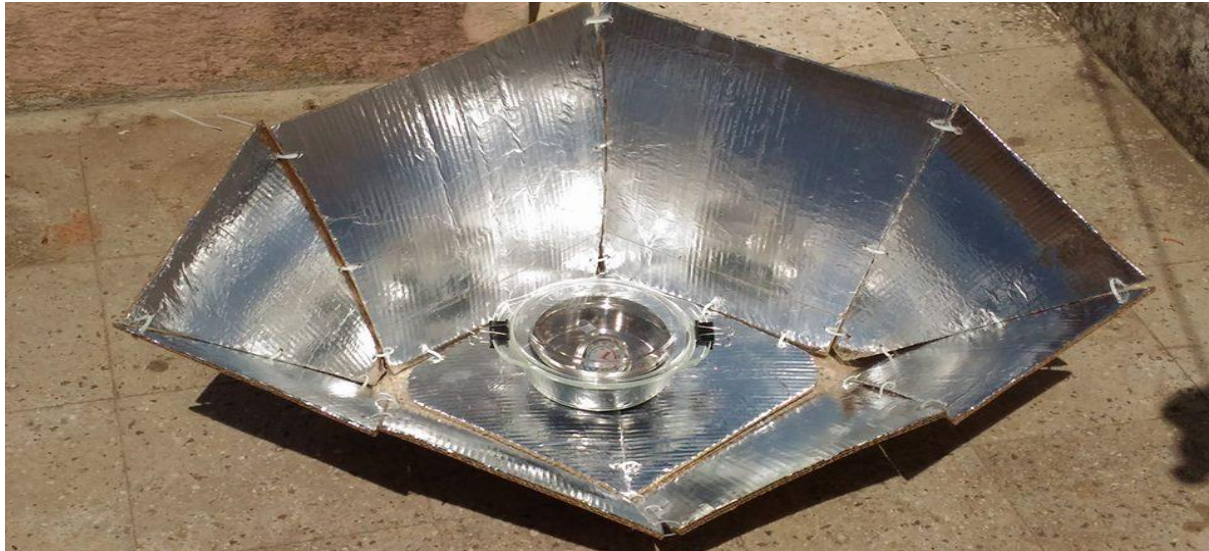
We decided to celebrate World Environment Day by spreading awareness about Solar Cookers to our colleagues. For this purpose, Mr. Alzubair Saiyed arranged short session at their office of GIAN to show his colleagues how to build their own solar cooker at Home. He builds Copenhagen Solar Cooker in front of them within hours.



Building New Hot Pot Type Solar Cooker for our Campaign

2nd March 2017

Building new Hot Pot type solar Cooker for our campaign purpose. It is made up of Aluminium Foil as a reflector and Cardboards.



Testing of Parabolic Solar Cooker

7th February 2017

On 7th February, we Tested newly received Parabolic Solar Cooker by cooking Sezwan Vegetable Pulaav for 5 persons within 30 minutes only.



Testing of Panel Type Solar Cooker

25th January 2017

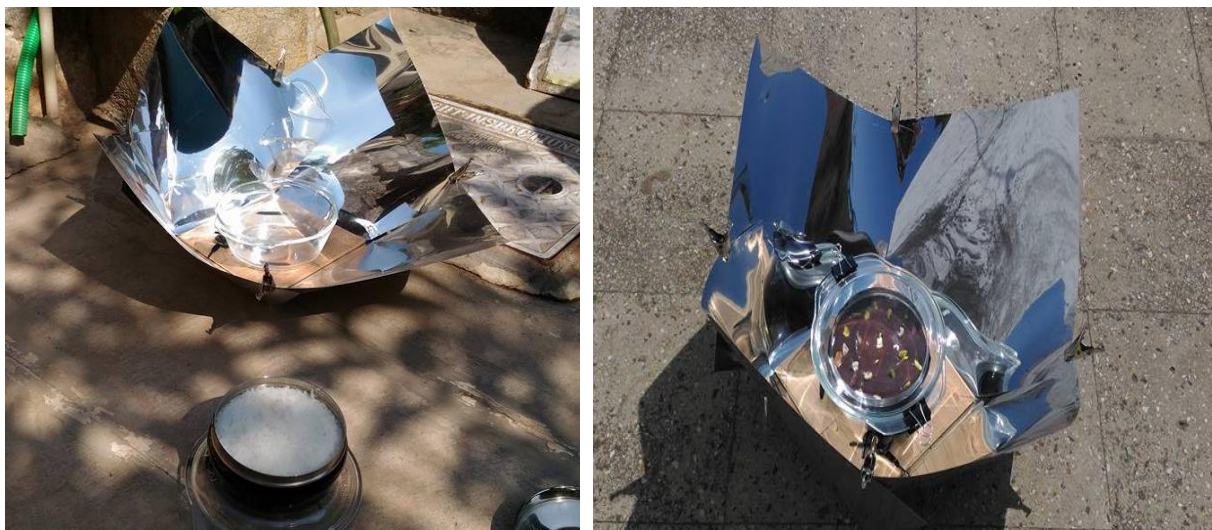
On 25th January, we conducted experiment with our newly received gift of Panel Type Solar Cooker from Prof. Elmo Dutra Filho at Solar Cookers International World Conference 2017. We baked Chocolate Brownie with the help of Panel Type Solar Cooker and it takes 2 hours of time.



Experimentation with Copenhagen Solar Cooker

17 and 18th November 2016

We began experimentation with our newly fabricated Copenhagen Solar cooker by baking Cake and Cooking Rice. It was great success.



Embracing
Gift Culture
by
Solar
Cooking

Giftng Parabolic Solar Cooker to Organic Farmer

31st March 2017

Giftng Parabolic Solar Cooker to Organic Farmer Karmshibhai Vanpariya. He is owner of Sardar Patel Organic Farm located near Keshod.

Cooker will be being tested with some of heating and drying processes of Peanuts (Groundnut), for their Organic products. Hope to hear positive feedbacks from him.

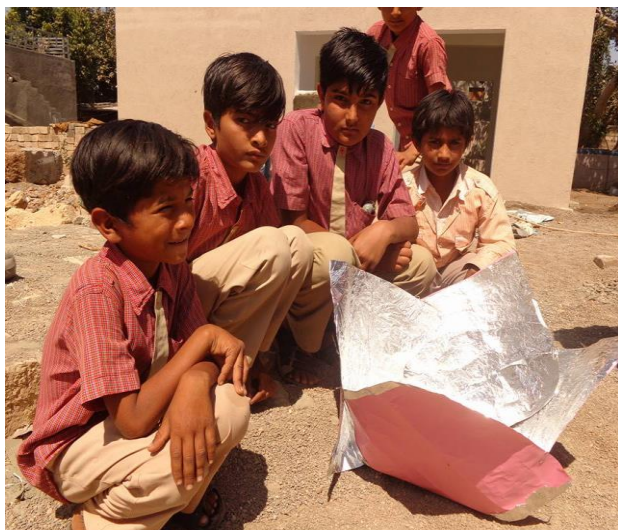


Giftng Solar Cooking Concept to Student of Ram Krishna Ashram – Rajkot



Giftng Solar Cooking Concept to Student of B.H. Gardi College of Engineering and Technology – Rajkot for their NSS Activity

14th March 2017



Press

Courages

પ્રકૃતિને વિનાશથી બચાવવા યુવાઓનો ભગીરથ પ્રયાસ

■ M.Tech, B.E. મિટેનિકલ એન્જિનિયરિંગ વિદ્યાર્થીઓએ
ટેન્ડમેડ 'સોલર કુકર' નો કર્યો રાષ્ટ્રિકાર
■ ભાગ ૩, ૧૦૦-૧૫૦ના અર્થે ધાર્યો ૫ જાલી સડે ચલ

ગરીબોને સીધી ઘોડી ખિંજ તેમજા મુલા એજેવેજ સગવડો રહે તેની યોજા છે. કાપી મટુલી કડી દિનિગિનિયાર પુર સી આવડા તથે રાષ્ટી લે છે પરંતુ કાપેલી પરત આવડા બાર મુલે સગવડવા બળજબા-જાકાંની જરૂર પડે છે. જેની વ્યવસ્થા કરવામાં પણ ખાસ

સોલાર ફુડર શહેલેમાં કેમ નથી સ્વીકાર્ય ?

આથી જ સોલાર પુરે ૬૫૨૮ બેઝીસ ટાઈમ, સમગ્ર ભારતમાં જ મુજબ જ ચલે છે અને બીજી બેઝીસ સુખ-સુખિયાના સમયમાં સોલેને લોકવાયે રહીને રહીને બચાવવાની હતી. સોલાર પુરે ૬૫૨૮ અને કેંટરોઈ સુધી સમયગણતરી થતી રહે તે સોલેર ટાઈમ પાસેની હતી. બીજી સમય હતો, આટલું મનમાં હતું, જે ખરેખર સમય નહોતો. સોલારમાં બનતી રહીને જોયેકાતે બેઝીસ ટાઈમ જોયેકાતે રહે છે અને સોલારિયમ થતો હોય છે. સમય કલ્પનામાં જે સમય બનતો હતો સોલાર પુરેમાં તેમજ સર્વ જગ્યાએ છે. સમય સમયની મન ધૃતિમાં અન્યત્ર સમય જોયેકાતે થતો હતો



અમણ શાસ્ત્રી એ, ગાયકવાડમાંથી પણ જાણીતા આધારિત મૂર્તિ તૃણ પાંચોના નામથી પણ મોટા ભાવના અધિષ્ઠાતા આવી જ મિત્રની ઓશ છે. પશુનું રાત્રે દિવાલે દુર નથી જાયરે ગરિબો આ

A man in a dark vest and blue jeans is painting a mural of a blue sky with white clouds on a wall. He is using a brush to apply paint to the wall. The mural is part of a larger project to beautify the area.

હરીને કાચીકોને બધાજાતી કોઝરમાંથી લુટવાનો મની જાણે અને નવું ખર્ચ પણ ભરી શકે :

[illegible][illegible]

સરની અને આજી
તરતરથી જે ચિત્રી
છે કે પ્રતિબિંબે અવગત
જે મુશકામ ક્ષુદ્રે જે ભૂં
જે નિશાન છે. હવે સમાપ્ત
આવી રાજે છે કે અવગત
આવી રીતે રેતરોડેશન
અવગતરેતે, કુશ રવને
સાક્ષર એવરેતે તરે
સપ્તમ પ્રેરેતે.

સાતેક દેશોમાં સોલાર કુકરનો ગ્રિપસોગ

આલોક દેશોમાં સોલાર કુકરનો ઉપયોગ

[illegible]

રસોડાના ધુમાડાથી વર્ષે ૨૦ લાખ મોટા

[illegible]

Article Published in Many Newspapers for our Solar Cooking Festival at Shree Kanta Vikas Gruh Girls High School, Rajkot.

28th December 2016



18/12/22

તા. 25/12/21

રાજકોટ, ગુરુવાર, 29 ડિસેમ્બર, 2016 | 9

સોલાર ફેસ્ટિવલ અંતર્ગત સોલાર ફૂકર બનાવાયા



રાજકોટની કાંતા શ્રી વિકાસ ગૃહ ગર્લ્સ હાઈસ્કૂલમાં બુધવારે સોલાર ફેસ્ટિવલનું આયોજન કરાયું હતું. સતત ઘટતા જતા પેટ્રોલીયમ, ઊર્જાના વૈકલ્પિક સ્ત્રોત માટે સૂર્ય મહત્વનો ભાગ ભજવે છે. સૌરા ઊર્જાનો મહત્તમ ઉપયોગ કરી ઊર્જા બચત ધાય તેવા હેતુસર શાળાની વિદ્યાર્થીનીઓ અને શિક્ષકો દ્વારા 123 જેટલા જાતે જ સોલાર ફૂકર બનાવવામાં આવ્યા હતા. આ ઉપરાંત 35 જેટલા મોડેલ પણ મુકવામાં આવ્યા હતા.

કાન્તા શ્રી વિકાસ હાઈસ્કૂલમાં યોજાયો સોલાર ફેસ્ટિવલ ક્રમ સાયન્સ ફેર

રાજકોટ

રાજકોટની સુપ્રિન્ડ શાળા કાંતા શ્રી વિકાસ ગૃહ ગર્લ્સ હાઈસ્કૂલમાં ભવ્ય સોલાર ફેસ્ટિવલ ક્રમ સાયન્સ ફેર યોજાયો જેમાં સતત ઘટતા જતા પેટ્રોલીયમ ઊર્જાના વૈકલ્પિક સ્ત્રોત માટે સૂર્ય મહત્વનો ભાગ ભજવે છે. સૌરા ઊર્જાનો મહત્તમ ઉપયોગ કરી ઊર્જા બચત ધાય તેવા હેતુસર સોલાર ફેસ્ટિવલ ફેર જેમાં શાળાની વિદ્યાર્થીનીઓ તેમજ શિક્ષકોએ 123 જેટલા સોલારફૂકર

જાતે બનાવ્યા તેમાં જ સામુહિક સ્પોર્ટ બનાવી સાથે જળ્યા કુલ નવ પ્રકારના સોલાર ફૂકર તેમજ સોરકાનસ, સોલાર હીટર પણ બનાવેલ શ્રી સેધદ અલઝમીરભાઈના માર્ગદર્શન તળે ફેસ્ટિવલ યોજાયો.

આ ઉપરાંત વિજ્ઞાનના 35 જેટલા મોડેલ પ્રયોગો, ચાર્ટસ ૨૦૩, અણિત ગમ્મતના પ્રોજેક્ટ, ડાર્ક રૂમની કૃતિઓ સાથે શાળા કક્ષાએ જ સાયન્સ ફેર

યોજાયેલ, ઉપરાંત વિજ્ઞાનની આકૃતિઓ જેમાં માનવ હૃદય, પાચનતંત્ર, ઉત્સર્જન તંત્ર, અમીબામાં વિભાજન, જેવી આબેહુમ આકૃતિ રંગોળીરૂપે દર્શાવી વિજ્ઞાનદિનની ભવ્ય ઉજવણી ફેલ.

સમગ્ર કાર્યક્રમ આચાર્યા જયશ્રીબેન વોરાના માર્ગદર્શન નીચે વિજ્ઞાન શિક્ષક વિરલબેન નિમ્બાઈ અને સવિતાબેન વિકાણીએ તૈયાર ફેલ.

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