Let Sun Cook It All

at Jimmy McGilligan Centre for Sustainable Development

6th SCI World Conference 2017

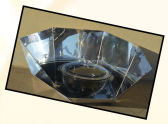
SCI SOLAR COOKERS INTERNATIONAL

JIMMY MCGILLIGAN CENTRE For Sustainable Development

Purpose:
To promote solar cooking as an integral part of our daily life. Society is generally taught to rely on few resources and we make mistake by neglecting the most convenient resource THE SUN and this centre has the core purpose of using the same for our daily energy consuption.

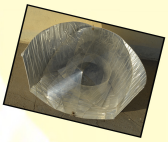
Solar Box Cooker
- Multiple pots Cooker.
- Temperature :- 100 to 175 C.
- Use both direct and diffusion radiation.
- Cooking Time :- 1.5 to 2 hour.

Haines Solar Cooker
- Developed by:- Roger Haines.
- Materials used:- MPET (metalized polyester) film bonded to 3mm of IXPE (cross-linked polyester) foam, with a white PET film backing.
- Cooking Time:- Boil water (100 C) in 1 hour.



HotPot Solar Cooker
- Manufactured by:- the Fondo Mexicano Para La Conservación de la Naturaleza(Mexico)
- Materials used:- Aluminium(reflective surface) and Steel with Enamel coating(bowl).
- Max. Temperature:- 120 C.
- Every method of cooking besides Frying and Grilling can be done.

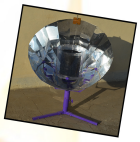
Funnel Solar Cooker
- Developed by:- Celestino Ruivo
- Materials used:- Aluminium and Cardboard.
- Cooking Method:- Baking, Boiling, Roasting etc.
- Sunlight is concentrated along a line (not a point) at the bottom of the funnel.



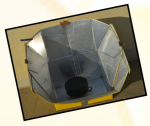
Celestino Solar Cooker
- Invented by Dr. Celestino Ruivo, University of Algarve, Portugal and manufactured by Manik Solar Innovation,Punjab.
- Sheets used :- Corrugated sheet.
- Cooking Method :- Baking, Boiling, Roasting, Drying etc.

Scheffler Cooker
- Developed by :- Wolfgang Scheffler.
- Self rotating type Cooker (15 degrees per hour).
- Temperature :- 300-350 C.
- Cooking Time :- ½ to 1hour.

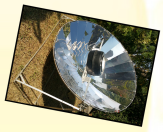
Parvati Solar Cooker
Designed by:- Mr. Ravindra and Mrs. Shobha Pardeshi.
Materials used:- Mild steel with powder coating.
Max. Temperature:- 135 C
Cooking Time:- 1 ½ to 2 hour



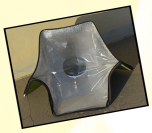
Ultra Portable Solar Cooker
- Manufactured by:- NVIS Cleantech.
- Materials used :- Aluminized Polyethylene(inside), Polyester(outside).
- Temperature:- 100-143 C



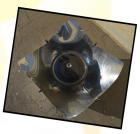
All Season Solar Cooker
- Manufactured by:- All Season Solar Company.
- Workable in low sun intensity (sunup or sundown).
- Cake, potatoes, bread, poultry, veggies :- all will cook without any adjustments.



SK14 Parabolic Solar Cooker
- Developed by :- Dr. Ing. Dieter Siefert. Solar EG.
- Cooking Time :- 15min (to boil 2L water)
- Power Delivery :- 0.4 kJ/sec.
- Efficiency :- 45%.
- Cooking Method:- Any Method including Frying and Grilling.



Copenhagen Solar Cooker
- Manufactured by:- Sharon Clausson in assembled kit.
- Temperature :- 150-190 C.
- Materials used:- Flexible Vinyl.
- Foldable Type Cooker.



Prince 15 Solar Cooker
- Developed by:- A.G. Chandak.
- Materials used:- Anodized aluminium.
- Cooking Time:- 20 min (to boil 2L water)
- Temperature:- 350-400 C.
- Power Delivery:- 0.6 kJ/sec.

Result:
Jimmy McGillian Centre for Sustainable Development is using solar cookers for every cooking methord like Baking, Frying,Roasting, Boiling, Grilling etc. They can be made with easily available material and can achieve sufficient temprature to cook any type of food.
Also, Centre's last gas cylinder was replaced 2 years ago i.e 2014which proves the efficiency and advancement of technology.This is the only place in India having 12 different designs of solar cookers. And about 40000 people have already witnessed the beauty of the centre since its inaugral which was on August 31, 2013.

Conclusion:
All solar cookers and their some characterstics have been presented together with their pictures, these all clearly shows that we can undoubtedly rely on solar cooker. The steps taken by JimmyMcGillian Centre for Sustainable Development to promote the idea and concept of sustainable developmand use of solar energy for all purpose work can take the whole idea of solar cooking to set up new benchmarks for betterment of society and community.

Reference:

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