

Effi-Tech

Arundhati Kar Kritika Roy Nisha Kumari

GIET University
akar20890@gmail.com

GIET University
kritiroy500@gmail.com

GIET University
rusumdevi16@gmail.com

Abstract: Increase in earth's temperature is a big concern for every one and some appliance like AC ,fridge and electricity plants which use fuels to produce electricity is also a reason for rise in temperature. So its time to think about the alternatives for better future. Due to the growing technology there is a lot of development specially in our daily needs. Lots of machines are there which we use for comfortable life but what about the earth where we live. Technology solve most of the problems but because of that new upcoming problems are developed. Its good to adopt new technology but using this technology in efficient way so that we can keep a balance between our life and environment. So the bio tech AC, fridge and new tech solar panelis alternative solution to reduce the heating effect in the environment.

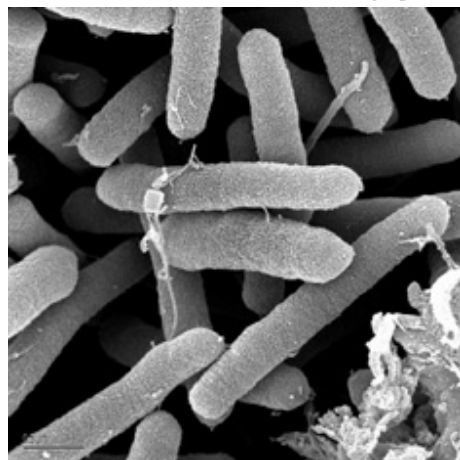
Keypoint:Eco friendly product, reduces heating effect in the environment, reduces electricity bill, enhance employability.

Introduction:

This idea contains some of the solution regarding electricity and comfortable life in low cost.

Description of product: The specifications of this technologyare:

1. Bio tech AC:We all know about the product like a battery which charges through bacteria which use in train and other purpose .Today researchers give more light toward bacteria efficiency eco-friendly products so bio AC, which is operated due to a particular bacteria's specific ability. It can come to the market with low cost and low consumption of electricity.The most important thing in this idea is a bacteria name P.Syringae a grame negative, rod shape bacteria, it is a one of the 78 species from pseudomonas genus and has aspecial ability to act as a nucleation site, called ice-nucleating proteins INPs .



Found:crops,tomatoes,beans to rice,tobacco, it is also present in the clouds.

It is also a reason for rain and snow ,it makes water molecule particularly aligned in order to promote freezing. Artificially snow making machine in ski resort also use this bacteria and now we can use this in our AC or freeze by genetic manipulation technique which cause the mutation in particular proteins of p.shyringae bacteria resulting formation of ice even in the normal temperature of water. Generally it can make ice in 0-5 degree c but by the increasing the no of nucleation site so more number of nucleation site causes freezing at higher temperature. Bio ac has a water chamber, ice nuclei chamber, cooling fans, conduction pipes .It can be kept above the roof and conduction pipe and fan are kept inside house and it has both convex and concave lenses in above the water chamber so that in summer due to convex lenses it diverse the sun ray so that formation of ice can't be interrupt and in winter due to concave lenses it focus the heat of sun so that water inside the bio ac chamber rise its temperature and supply hot water or kept the warm temperature inside the room.

2.D-humidifiers: By the use of silica gel and charcoal inside the Bio AC we can remove the moisture present inside the room and can create comfort and also reduce electricity bills because

after removable of moisture AC require low energy to cool the room.

3.New tech solar panel:It is a globe shaped solar panel with reflector and this is arranged in a tree shaped so less space consumption . Due to reflector no need for sensor which used to move the panel in the direction of sun so cost of panels will be reduced. We can get more energy instead of single plate solar panel. Reflectors are kept below the panel so that even though sun goes in any direction the solar globe can get sun ray equally and can produce electricity and can meet with the growing demand of electricity.It can enhance the earning process by selling rest electricity to the grid.

Literature survey:

Today smart homes defines a use of such appliance that will be eco-friendly consumes less electricity, clean natural sources are used for energy production. For the cooling purpose, an ice nucleation bacteria is used. This hybrid cooler and heater at the same time are cheaper to the combined cost of existing cooler and heater. This device will not consume any extra space in the rooms of our homes as it is installed at the roof. Lesser electricity is required as natural sources are used.

Problems:

Because of technology lots of issue are resolve but some problems are still there. Some problems occurs due to the AC and electricity which is a reason for causing global warming and also problem like electricity bills, high cost of renewable energy. This idea has a different approach that solves many problem and it has a wide market for AC and renewable energy.

Method/approach:

A brief definition of some techniques used to solve the above problem;

1st to reduce heating effect which occurs due to refrigerant AC by introducing a Bio AC-here it runs because of ICE

producing bacteria named as *Pseudomonas syringae* which have the ability to produce ice in normal temperature .P .bacteria cultivator use to store the bacteria and then sent it to the water pipe chamber which place at the roof then bacteria convert water into ice, after completion of ice formation due to the conduction process heat is exchanged between the room and ice pipe then cool air circulates throughout the home after going through some process.

Water heater:It is present in the same device where AC is present i.e.both AC and heater are in the same device. Here heater runs because of the specific arrangement of the device with a convex lens. Because the use of convex lens all heat is the focus in the water pipe chamber in the winter season where P.bacteria cultivator remains close to stop the bacteria flow.

2nd reducing the high cost of renewable energy producing device by use of solar globe tree with reflector. this project is more efficient and less space taking. Due to the global tree, it is compact in lesser space. In the previous panels used we sensors were used to move the panels in the direction of sunlight but here lower cost reflectors are used for that purpose.

Future scope:

It has a wide market through out the globe in Renewable energy and eco-friendly ac .The ac industries give more efforts toward their product and give more concern to make their product eco-friendly so this idea give them new revolution towards AC manufacture. Due to low cost of solar panels most of the clean energy industry want to buy this product and also it can available for individual. Not only India but also in China ,Japan, America, Russia ,Spain etc take a step to bring new revolution in eco-friendly product.

Conclusion:

Some solution can invite a big problem instead of reduce the issue but some time small ideas can make the change. Its time for India to create or develop not only the new technology but also use it in a efficient way.