



ChemTech

## International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555

Vol.10 No.9, pp212-219,2017

# Hydrogen Synthesis from Solar Reactor using Reverse Photosynthesis

K.Kanimozhi<sup>1</sup>, B. Raja Mohamed Rabi<sup>2</sup>

<sup>1</sup>Dept. of Electrical & Electronics Engineering, Sethu Institute of Technology  
Pullor, Tamilnadu, India

<sup>2</sup>Dept. of Mechanical Engineering, Sethu Institute of Technology  
Pullor, Tamilnadu, India

**Abstract:** In this paper a review of synthesis of hydrogen from solar energy is discussed. The analysis reports on Photovoltaic (PV) research, accomplishment and recommendations of electrolysis, photoelectrochemical hydrogen production and photoelectrochemistry technology status. The potential of solar reactor construction in India is shown with the maps, which show the yearly sum of horizontal global irradiation of solar energy. The cost of electricity from solar technologies remains too high to achieve widespread deployment of solar-derived hydrogen. A solar gas power plant is proposed in this paper. Photovoltaic technology will be attractive as a potential source of electricity if the target price of electricity for utility applications is achieved.

**Key words:** solar energy, electrolysis, photovoltaic (PV) array, photoelectrochemical (PEC) splitting of water, photoelectrochemistry, European solar radiation database.

K.Kanimozhi *et al*/International Journal of ChemTech Research, 2017,10(9): 212-219.

\*\*\*\*\*