



GLOBAL ENVIRONMENTAL SCIENCE: ISSUES AND SOLUTIONS

(PART-B: SCIENCE AND HUMANITY)



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Dr. Anil Kumar Chohadla
Dr. Narendra Meena
Dr. Gayatri
Dr. Kamal Ishor Verma
Dr. Bharti Verwal

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**Global Environmental Science:
Issues and Solutions**

(Part-B: Science and Humanity)

Editors

Dr. Anil Kumar Chohadia

Dr. Narendra Nirwan

Dr. Gayatri

Dr. Kamal Kishor Verma

Dr. Bharti Veerwal

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Solar Cell: A Renewable Energy Source

Priyanka Chundawat, Yogeshwari Vyas*
Dharmendra, Purnima Chaubisa*
P.R. Ranawat, Chetna Ameta*

1. INTRODUCTION

This is the time of nanotechnology because of the variety of applications (including industrial and military). But energy crisis is a burning problem in the present era; nowadays energy is very important for the world's population because the deficiency of energy means not enough food, no warm shelters, and not even a connection to the Internet.

Man has needed and used energy at an increasing rate for his sustainable development and wellbeing. Since 1973, the word energy crisis has been continuously in the news. At present, the world is in great need of technologies which is based on renewable energy resources such as sunlight, wind, rain, waves, etc. which are not depleted by their continuous use. Every country draws its energy needs from a variety of sources. One of the promising options is to make more extensive use of renewable sources of energy derived from the sun. Solar energy is a non-depletable, pollution-free, and continuing form of energy on this planet.

Solar energy is the energy sent by the sun in the form of heat and radiation. The sun sends a tremendous amount of solar energy to earth. The sun is a star also known as a fusion reactor which is burning for the last 4 billion years. In one minute the sun provides the energy that can meet the one-year energy requirement of our population and in one single day, it provides the energy that can meet the energy requirement of the world's population for 27 years. Solar energy is a free, inexhaustible source of energy. Solar energy has several applications such as it is freely available, it is a limitless source of energy, and the sunlight can be directly converted into solar energy by using (PV) solar cells.

* Photochemistry Laboratory, Department of Chemistry, M. L. Sukhadia University, Udaipur-313001 (Raj.)