

# **Analyzing Hybrid Solar Cells 2016**

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## **Abstracts**

The Sun, believed by the mankind to be just a mere centerpiece of the solar system in which we live is in reality not just a unit but an entire symphonic system which was in place much before the first humans ever walked on planet earth. This system which has been the primary energy source for origin of life on earth is in fact very well adequately positioned by nature to fulfill the needs of energy for humans for many more centuries to come.

An effort by humans to harness this abundant source of energy available around us has manifested in the form solar energy being converted to many applications as diverse as heat channelizing, electricity conversion, electro mechanical applications and many more as these. The dream of solar energy for human applications was realized in the early part of this century by the invention of solar cells which when arranged in photovoltaic arrays deliver power for bigger applications.

The next leap of invention in this direction is "Hybrid Solar Cells". Aruvian Research's report Analyzing Hybrid Solar Cells earmarks the immense potential that this technology holds for the future of mankind and the crucial impact it will have on the process of introduction of solar energy into large scale arenas of the industrialized economies.

Aruvian Research's report on Hybrid Solar Cells initiates with a strong theoretical understanding of the Solar Cell system and their subsequent propagation into photovoltaic systems including their applications derived from generational leaps as first to third generation cells. The report presents the entire gamut of PV cells in a structured family tree for easy interpretation and also delves into the applications of PV Technology in isolated environment.

The report also devotes an entire in depth section to the technical aspects of Hybrid Solar Cells systems including their history as well as mechanism, general operation



principles and the new innovations in architecture design of Hybrid Solar Cells which have opened up new markets for solar power systems. These are further explained in the efficient design choices of various configurations and new ideas contributed in this field.

Analyzing Hybrid Solar Cells is a very comprehensive tool for understanding this technology in a in depth manner and deliver thought provoking views on the marvels of this field which is nature's helping hand lent to mankind in order to preserve a way of life which is sustainable as well as in sync with our environment.



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