



POWER

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



ADITYA ENGINEERING COLLEGE (A)

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ABOUT ELECTRICAL DEPARTMENT

Established as one of the major departments of the Institute, the Department of Electrical and Electronics Engineering at Aditya strives to produce highly competent engineers equipped with advanced professional knowledge, entrepreneurial thinking, professional and ethical attitude, critical problem solving and analytical skills through effective teaching learning process, research and industrial collaboration.

The faculty of the department, a rich blend with academic and industrial experience, have been constantly carrying out research on many cutting-edge technologies with regular publications in ELSEVIER and other top international journals. The academic quality of the department is reflected by the laurels won by the students and the distinguished positions in industry and academia occupied by alumni.

The department strives to upgrade the knowledge of faculty and students by organizing various Workshops, Industry-Institute Interactions, Continuous Improvement Programs inviting eminent personalities from Industry and academic Institutions, Seminars and Research activities. Students are provided internship programs in various power plants and industries like Reliance, SAIL, HPCL, GMR, GVK, VTPS, Vizag steel plant, ONGC, APGPCL, APEPDCL etc.

The department spares no expense to equip the labs with latest equipment like Three phase AC Integrated Machine, DC Integrated Machine, Wireless Transmission of Electric Power using Tesla Coil and technical software like MATLAB & P-Spice

VISION OF THE DEPARTMENT

To excel in electrical education, research, and technology in tune with societal needs.

MISSION OF THE DEPARTMENT

MISSION 1

Impart quality education and entrepreneur skills.

MISSION 2

Provide cutting edge technologies for research and sustainability in collaboration with industry.

MISSION 3

Nuture professional ethics and lifelong learning in tune with societal needs.

The Power of Solar Energy

A.Eswari (20A95A0202)

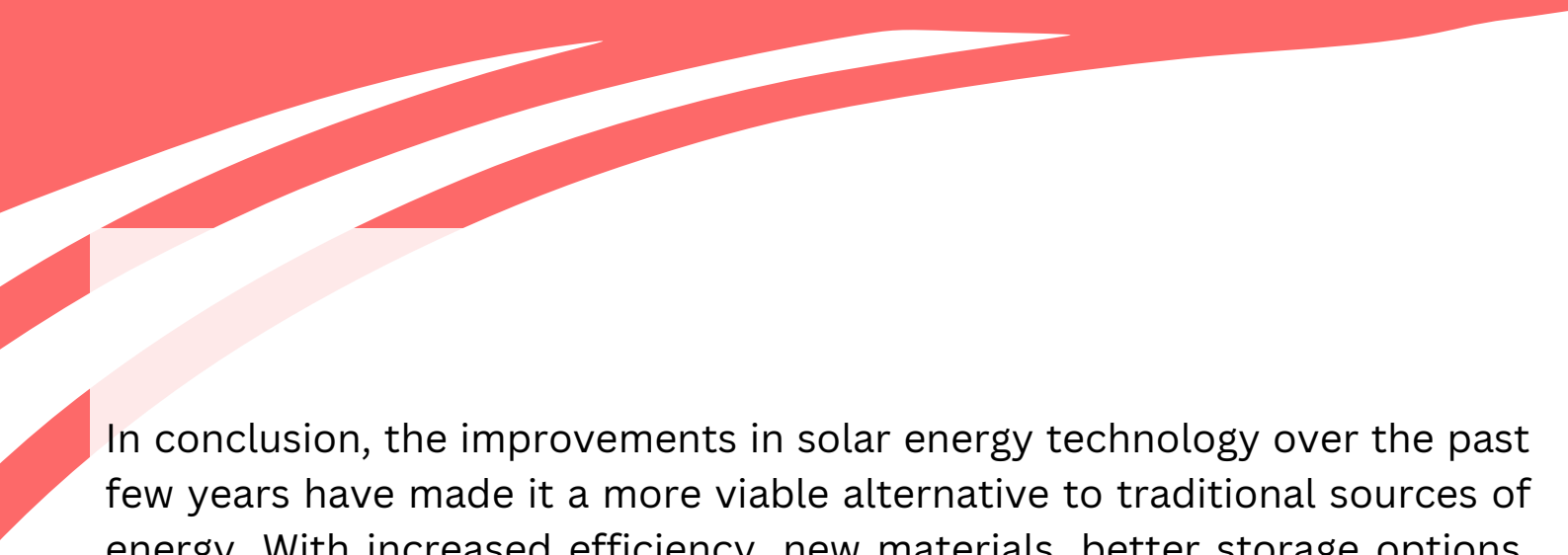
Solar energy has been gaining popularity as a viable alternative to traditional sources of energy such as coal and oil. In recent years, there have been significant improvements in the technology used to harness solar energy, making it more efficient and affordable than ever before.

One of the most significant improvements in solar technology has been the development of more efficient solar panels. Modern solar panels are made with high-quality silicon cells that can convert sunlight into electricity with an efficiency of up to 23%. This is a significant improvement from earlier panels, which had an efficiency of around 15%. The increase in efficiency has made solar energy more cost-effective, as fewer panels are needed to generate the same amount of electricity.

Another key improvement has been the development of new materials for solar panels. Thin-film solar panels, for example, are made with materials such as copper, indium, gallium, and selenium. These materials are much cheaper than traditional silicon, making them a more affordable option for generating electricity from the sun.

In addition to improvements in the technology used to generate solar energy, there have also been advances in the way solar energy is stored and used. Battery storage systems are now available that allow homeowners and businesses to store excess energy generated by their solar panels for use at a later time. This makes solar energy a more reliable source of power, as it can be used even when the sun is not shining.

Finally, there have been significant improvements in the design of solar panels. Modern solar panels are sleek and can be installed on a variety of surfaces, including roofs and walls. This makes them a more attractive option for homeowners and businesses who want to generate their own electricity without sacrificing the appearance of their property.



In conclusion, the improvements in solar energy technology over the past few years have made it a more viable alternative to traditional sources of energy. With increased efficiency, new materials, better storage options, and more attractive designs, solar energy is becoming a more accessible and cost-effective option for homeowners and businesses alike. As technology continues to improve, we can expect even more advances in solar energy in the years to come.

"Satellite Technology: Advancements and Applications in 2020"

by: P.Chandu

In recent years, satellite technology has become increasingly advanced, enabling new applications and services that were previously impossible. One of the most exciting developments in this field is the use of satellite constellations to provide global internet coverage.

One such initiative is Starlink, a satellite internet constellation launched by SpaceX, which aims to provide high-speed internet to even the most remote areas of the world. The Starlink constellation consists of thousands of small satellites in low Earth orbit, which work together to provide a seamless internet connection to users on the ground.

The advantages of satellite-based internet are clear. Unlike traditional broadband, which relies on physical infrastructure such as cables and telephone lines, satellite internet can be accessed from virtually anywhere on the planet. This makes it an ideal solution for rural or remote areas that lack traditional broadband infrastructure.

In addition to providing internet connectivity, satellite technology has a wide range of other applications. Satellites can be used for weather forecasting, environmental monitoring, and even national security. They can also provide critical communication links in the event of natural disasters or other emergencies.

Another promising application of satellite technology is in the field of precision agriculture. Satellites can be used to monitor crops and soil moisture levels, enabling farmers to optimize their use of water and fertilizer. This not only improves crop yields but also reduces the environmental impact of farming.



The use of satellite technology is also transforming the way we map and understand our planet. Satellites can provide detailed images of the Earth's surface, which can be used to create accurate maps and monitor changes over time. This information is valuable for a wide range of applications, from urban planning to disaster response.

In conclusion, satellite technology is rapidly advancing, and its applications are becoming increasingly diverse. From providing internet connectivity to monitoring the environment, satellite technology is transforming the way we live and work. As this technology continues to evolve, we can expect even more exciting developments in the future.

PHOTOGRAPHY



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PHOTOGRAPHY

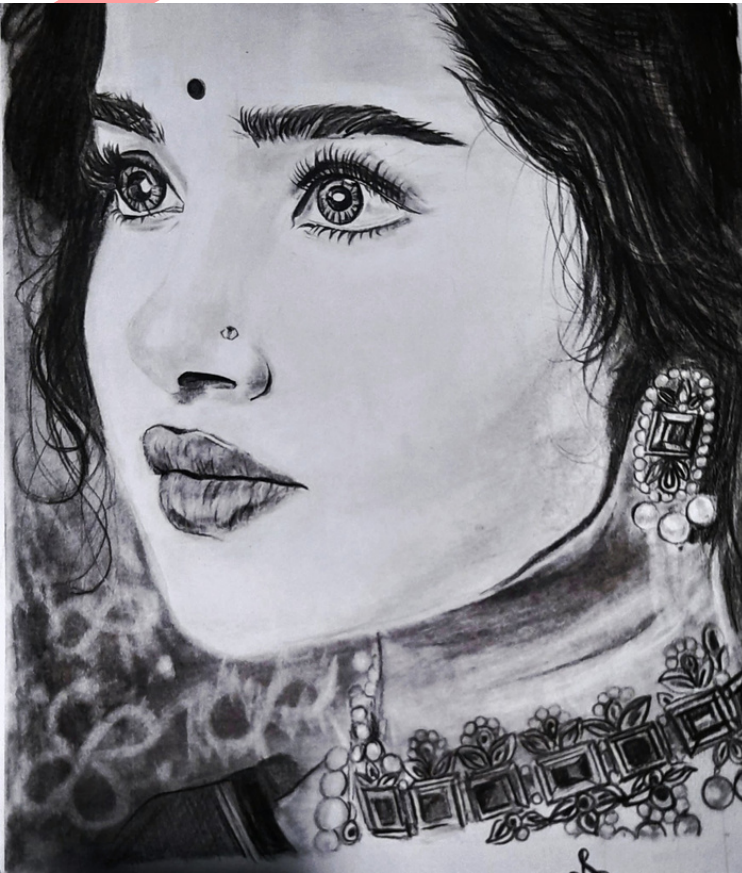


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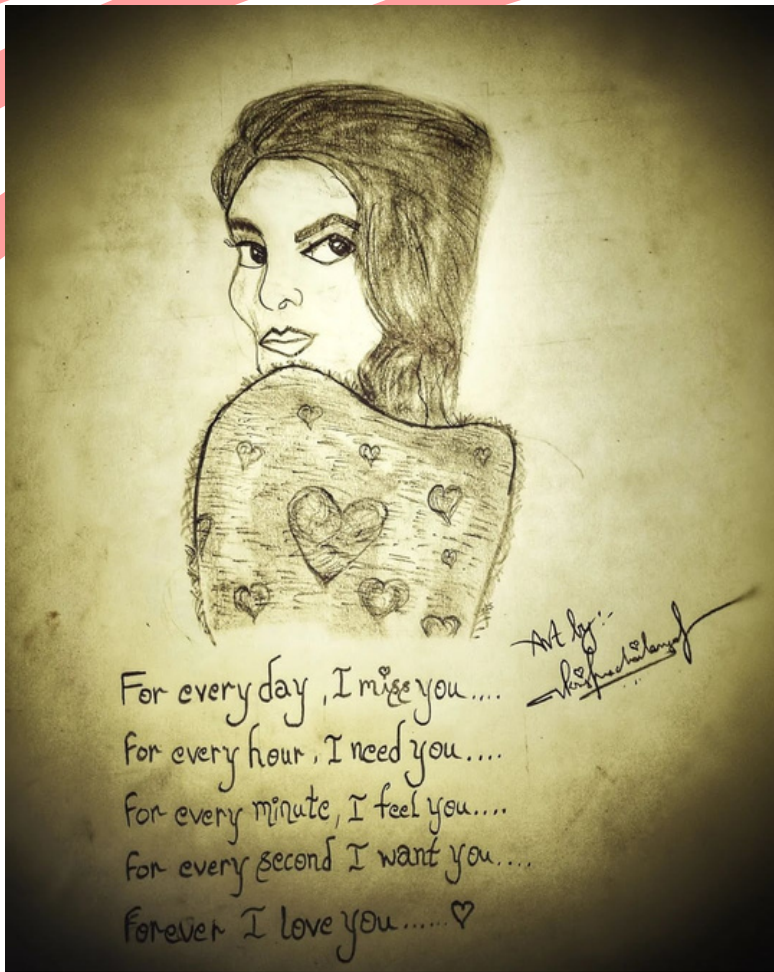
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