CHAPTER FIVE

5.0 Conclusion

This project 'SOLAR POWERED LED STREET LIGHT WITH AUTO INTENSITY CONTROL' is a cost effective, practical, eco-friendly and the safest way to save energy. It clearly tackles the two problems that world is facing today, saving of energy and also disposal of incandescent lamps, very efficiently. According to statistical data we can save more that 40 % of electrical energy that is now consumed by the highways. Initial cost and maintenance can be the draw backs of this project. With the advances in technology and good resource planning the cost of the project can be cut down and also with the use of good equipment the maintenance can also be reduced in terms of periodic checks.

The LEDs have long life, emit cool light, donor have any toxic material and can be used for fast switching. For these reasons our project presents far more advantages which can over shadow the present limitations. Keeping in view the long term benefits and the initial cost would never be a problem as the investment return time is very less.

The project has scope in various other applications like for providing lighting in industries, campuses and parking lots of huge shopping malls. This can also be used for surveillance in corporate campuses and industries.

This paper elucidates the design and implementation of an automatic street light control system. The design works efficiently to turn street lamps ON/OFF. The LDR sensor is the only sensor used in this circuit. The lamps will come "ON" immediately darkness falls and go "OFF" once the illumination exceed 50 lux. With this design, the drawback of the street light system using timer controller is overcome and human intervention is completely eliminated. By this energy consumption and cost are drastically reduced.

The Automatic Street Light Control System based on Light intensity & traffic density, in the todays up growing countries will be more effective in case of cost, manpower and security as compare with today's running complicated and complex light controlling systems.

5.1 Appendices

1. ATMEL 89S52 Data Sheets.
2. PIC16F877A Data Sheets.
3. VOLTAGE REGULATOR 7805
4. ZENER DIODE
5. LM35
6. LED
7. LDR
8. DIODE IN4007

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