

PIEZOELECTRIC PAVEMENT

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Towards the vision, the definition of smart pavement is given based on the elements of smart organism. Smart pavement is defined as an infrastructure that composed of advanced structure and material. The natural resources used for powering purposes are limited resources. In developing countries, Amount of generated electrical energy is unable to keep up with the demand, and producing the energy. A well designed energy efficient street light system should permit traffic and pedestrian to travel at night with great visibility in safety and while reducing energy consumption and cost. The main aim of our project is to make use of the energy generated by using piezo and control the street lighting and thereby increasing their efficiency and also automating their process. In this paper, an electrical model of the piezoelectric system is represented. In addition, a prototype model is implemented where an array of piezo buzzers was connected in parallel and the output of this array is rectified and regulated and given to a PIC controller.

