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Power Generating Embedment beneath Vehicle Traffic Asphalt Roads

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Abstract : The discoveries in material sciences create an impulse in renewable energy transmission. Application techniques become more accessible by applied sciences. Variety of materials, application methods, and performance analyzing techniques can convert daily life functions to energy sources. These functions not only include natural sources like sun, wind, or water but also comprise the motion of tools used by human beings. In line with this, vehicles' motion, speed and weights come to the scene as energy sources together with piezoelectric nano-generators beneath the roads. Numerous application examples are put forward with repeated average performance, versus the differentiating challenges depending on geography and project conditions. Such holistic approach provides way for feed backs on research and improvement process of nano-generators beneath asphalt roads. This paper introduces the specific application methods of piezoelectric nano-generator beneath asphalt roads of Ahmadi Township in Kuwait.

Keywords: nano-generator pavements, piezoelectric, renewable energy, transducer

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