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## **A Review on the Effect of Conductivity in Natural Fibre Reinforced with Fillers -PEDOT-PSS/ PANI-DBSA/ TDI/ MAPP/ST/ LDPE**

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**Abstract:** In modern years, both industrial and academic world are focussing their attention toward the development of sustainable composites, reinforced with natural fibres. Recent progress in the field of intrinsically conductive polymers (ICPs) as well as conductive polymer composites (CPCs) filled with natural fibres is reviewed. The possibilities of utilizing natural fibres as fillers for ICPs as well as CPCs to form natural fibers-conducting polymer composite materials have wide potentials in the modern industries. The unique characteristics such as electrical conductivity, mechanical strength, biodegradability and recyclability enabled them to be implemented in many novel and exciting applications including antennas, chemical sensors, tissue engineering, neural probes, biosensors, drug delivery, bio-actuators, fuel cells etc. The effects of fibre contents, fibre size, chemical treatment, temperature and moisture content on the dielectric properties of the conductive composites were reviewed.

**Keywords :** Natural fibres, conductivity, chemical compositions, fillers, reinforcement.

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