**IMAGE TRANSMISSION WITH OFDM USING LOW-COMPLEXITY PTS WITH DCT**

**ABSTRACT –**

Orthogonal Frequency Division Multiplexing (OFDM) is a multicarrier communication system. The feature of High data rate, Bandwidth efficiency, and immune to fading makes the OFDM systems preferred choice for modern communication system. However, this faces Peak-to-Average Power Ratio (PAPR) problem which is a major drawback. High PAPR in multicarrier transmission system degrades the performance of power amplifier. PTS is one of best technique available for PAPR reduction. But the computational complexity is high in PTS technique. In this paper, to overcome the problem of high PAPR as well as for lower complexity Interleaved partition Partial transmit sequence (PTS) technique with Discrete Cosine Transform (DCT) is proposed. Interleave partitioning reduces the computational complexity of system and use of DCT helps in enhancing the PAPR reduction ability of proposed system. Result of simulation shows that PAPR reduction capability of proposed scheme is better than conventional PTS scheme and complexity of system is also reduced.)

Key Words: OFDM, PTS, DCT, PAPR.