

## **Cost comparison of the detection techniques for optical spectrum CDMA system**

### **ABSTRACT**

The advantage of employing the subtraction detection technique in the optical spectrum code division multiple access (OSCDMA) has been largely recognized. In this paper, the comparison between the complementary and AND subtraction detection techniques for the OSCDMA in terms of cost and performance is investigated as they are very important factors in optical communication systems. Result of SNR/cost shows that the AND subtraction detection technique tends to increase when the number of weights increases.

**Keyword:** Detection technique; Optical spectrum CDMA; Cost; KS (Khazani-Syed) code