

## FRAMES FOR $B(\mathcal{H})$

CHANDER SHEKHAR AND S. K. KAUSHIK

**Abstract.** The notion of Operator frame for the space  $B(\mathcal{H})$  of all bounded linear operators on Hilbert space  $\mathcal{H}$  was introduced by Chun-Yan Li and Huai-Xin Cao [1] and the notion of  $K$ -frame for an operator  $K \in B(\mathcal{H})$  was introduced by L.Guvruta [10]. In this paper, we consider the fusion of the two concepts and introduce  $K$ -operator frame as a generalisation of both  $K$ -frame and operator frame for  $B(\mathcal{H})$  and obtain some results which are more general than the results proved in [1] and [10].  $K$ -dual of a  $K$ -operator frame for  $B(\mathcal{H})$  is also introduced. Further, we also study perturbation and stability for  $K$ -operator frames for  $B(\mathcal{H})$ .

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