

# Recent Results and Open Problems on the Minimum Size of Saturated Graphs

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## Abstract

A graph  $G$  is said to be  $F$ -saturated if  $G$  does not contain a copy of  $F$  and for any edge  $e$  in the complement the graph  $G + e$  does contain a copy of  $F$ . The minimum size of  $n$ -vertex  $F$ -saturated graphs,  $sat(n, F)$ , is investigated. We give a history of the problem, present recent results (for when  $F$  is a cycle or a complete bipartite graph) and discuss many open problems.