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**Ronald J. Gould\*** ([rg@mathcs.emory.edu](mailto:rg@mathcs.emory.edu)), Dept. of Mathematics and Computer Science,  
Emory University, Atlanta, GA 30322. *Recent Results on Saturation Numbers.*

A graph  $G$  is called an  $H$ -saturated graph if  $G$  does not contain  $H$  as a subgraph, but  $G \cup \{xy\}$  contains a copy of  $H$ , for any two nonadjacent vertices  $x$  and  $y$ . The *saturation number of  $H$* , denoted by  $sat(H, n)$ , is the minimum number of edges in  $G$  for all  $H$ -saturated graphs  $G$

Saturation numbers have proven to be more difficult to find than their counterparts, extremal numbers (the maximum number of edges in a saturated graph).

In this talk we survey some recent advances on saturation numbers for the union of cliques, books, cycles, trees and more. (Received August 25, 2008)