1067-05-423          **Younjin Kim\*** (`ykim36@illinois.edu`), Department of Mathematics, 1409 W. Green Street, Urbana, IL 61802, and **Zoltan Furedi** (`z-furedi@math.uiuc.edu`), Department of Mathematics, 1409 W. Green Street, Urbana, IL 61802. *Cycle-saturated graphs with minimum number of edges.*

A graph $G$ is called $F$-saturated if it does not contain any copy of $F$, but for any edge $e$ in the complement of $G$ the graph $G + e$ contains some $F$. The minimum size of an $n$-vertex $F$-saturated graph is denoted by $sat(n, F)$. We give almost exact asymptotics for $sat(n, C_k)$ as $k$ is fixed and $n \to \infty$ where $C_k$ is a cycle with length $k$. This is a joint work with Zoltán Füredi.