Emden-Fowler Type Differential Equations with Deviating Argument

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The Emden-Fowler differential equation

$$u^{(n)}(t) + p(t)|u(\sigma(t))|^{\lambda} sign\, u(\sigma(t)) = 0,$$

is considered, where $n \geq 2$, $\lambda > 0$, $\lambda \neq 1$, $p \in L_{loc}(R_+; R)$, $\sigma \in C(R_+; R)$, $\lim\limits_{t \to +\infty} \sigma(t) = +\infty$.

Oscillatory properties of solution of the equation are studied. In particular, sufficient (necessary and sufficient) conditions are established for this equation to have Properties A and B.