

Oscillation criteria for higher order almost linear functional differential equations

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An operator differential equation is considered. A particular case of the equation is the differential equation

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

where $p \in C(\mathbb{R}_+; \mathbb{R})$, $\mu \in C(\mathbb{R}_+; (0, +\infty))$, $\lim_{t \rightarrow +\infty} \mu(t) = 1$. Oscillatory properties of solutions of this equation are given.