

ENERGY OF GRAPHS AND ITS NEW BOUNDS

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Abstract: In organic chemistry, finding out theoretically the total π -electron energy of conjugated carbon compound is one of the interesting concept. Later during the year 1970, I. Gutman was successful in achieving this by defining a term called energy of a graph, $\mathbb{E}(G)$ for any graph G with m edges and n vertices. It is not that easy to find energy of any general graph. This problem was solved by obtaining bounds for $\mathbb{E}(G)$. Initially bounds for energy of any graph G are obtained by using McClelland bounds. Koolen and Moulton improved the McClelland's upper bounds. In this article we established new energy bounds with the help of Holder's inequality.

Keywords and Phrases: Adjacency matrix, graph spectrum, Bounds for energy of graph.

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