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*Bounds Of The Symmetric Division Deg Index For Graphs With Cyclomatic Number At Most 2 And With A Perfect Matching*

The Symmetric division deg (SDD) index is a well-established valuable index in the analysis of quantitative structure-property and structure-activity relationship for molecular graphs. Introduced by Vukicevic and Gasperov in 2010, the SDD index was shown to have the best correlation ability for predicting the total surface area of polychlorobiphenyls. In this talk, we will study the range of SDD-index for graphs with the cyclomatic number at most 2, that is, trees, unicyclic and bicyclic graphs. In particular, we compute the bounds for the SDD-index of these graphs, which admit a perfect matching and identify the graphs that attain these bounds.