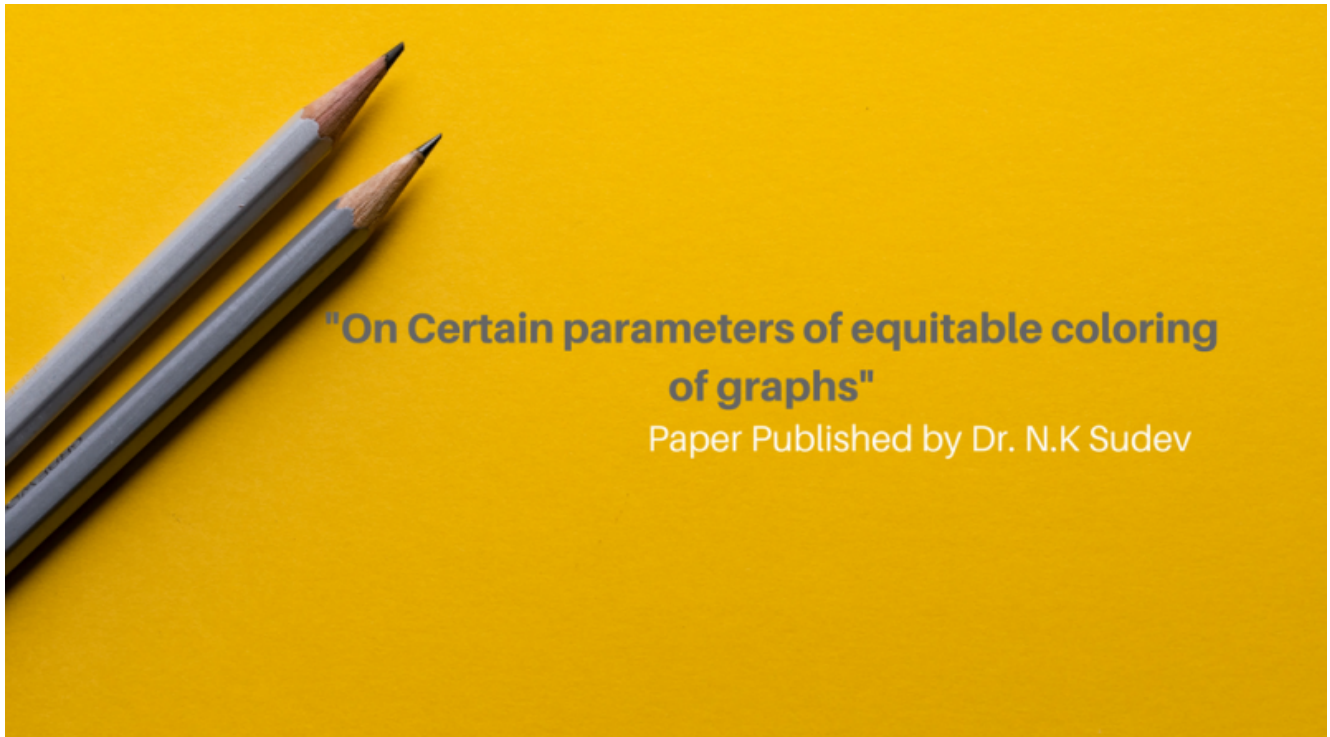
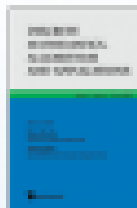


Paper by Dr. N. K. Sudev (Applied Sciences Dept) in a World Scientific journal



A paper titled "On Certain parameters of equitable coloring of graphs" authored by Dr N. K. Sudev (Asso. Professor, Department of Applied Sciences) jointly with Dr S. Satheesh (Professor and Head, Department of Applied Sciences), Ms K. P. Chithra and Dr Johan Kok (Director – Licensing, City of Tshwane, South Africa), has been published in the journal "Discrete Mathematics, Algorithms and Applications", published by World Scientific Publishing Co., Singapore.



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On certain parameters of equitable coloring of graphs

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Coloring the vertices of a graph G according to certain conditions is a random experiment and a discrete random variable X is defined as the number of vertices having a particular color in the given type of coloring of G and a probability mass function for this random variable can be defined accordingly. An equitable coloring of a graph G is a proper coloring C of G which is an assignment of colors to the vertices of G such that the numbers of vertices in any two color classes differ by at most one. In this paper, we extend the concepts of arithmetic mean and variance, the two major statistical parameters, in the theory of equitable graph coloring and hence determine the values of these parameters for a number of standard graphs.

Keywords: Graph coloring; coloring sum of graphs; coloring mean; coloring variance; g -chromatic mean; g -chromatic variance; g -chromatic mean; g -chromatic variance

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