



A New Subclass of k -Uniformly Convex Functions with Negative Coefficients

Authors: [Hari M. Srivastava](#), [T.N. Shanmugam](#), [C. Ramachandran](#), [S. Sivasubramanian](#),

Keywords: Analytic functions; Univalent functions; Coefficient inequalities and coefficient estimates; Starlike functions; Convex functions; Close-to-convex functions; k -Uniformly convex functions; k -Uniformly starlike functions; Uniformly starlike functions; Hadamard product (or convolution); Extreme points; Radii of close-to-convexity, starlikeness and convexity; Integral operators.

Date Received: 31/05/07

Date Accepted: 15/06/07

Subject Codes: Primary 30C45.

Editors: [Themistocles M. Rassias](#),

Abstract: The main object of this paper is to introduce and investigate a subclass $\mathcal{U}(\lambda, \alpha, \beta, k)$ of normalized analytic functions in the open unit disk Δ , which generalizes the familiar class of uniformly convex functions. The various properties and characteristics for functions belonging to the class $\mathcal{U}(\lambda, \alpha, \beta, k)$ derived here include (for example) a characterization theorem, coefficient inequalities and coefficient estimates, a distortion theorem and a covering theorem, extreme points, and the radii of close-to-convexity, starlikeness and convexity. Relevant connections of the results, which are presented in this paper, with various known results are also considered.



[Download Screen PDF](#)



[Download Print PDF](#)



[Send this article to a friend](#)



[Print this page](#)

[search](#)

[\[advanced search\]](#)

[copyright 2003](#)

[terms and conditions](#)

[login](#)