

APPLICATIONS OF DZIOK-SRIVASTAVA LINEAR OPERATOR TO A CLASS OF MEROMORPHIC FUNCTIONS

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Abstract

In this paper, using Dziok-Srivastava linear operator, we define a new class $S^*(m, k, A, \alpha, \beta)$ of the functions

$$F(z) = \frac{1}{z^p} + \sum_{n=1}^{\infty} a_{p+n} z^{p+n}, \quad p \in \mathbb{N}, a_{p+n} \geq 0$$

which are meromorphic and p -valent in the punctured unit disc $E = \{z : 0 < |z| < 1\}$ and obtain numerous sharp results. We discuss some properties like coefficient estimates, distortion bounds, integral representations, closure theorems and inclusion property. Also we discuss the class is closed under convolution.

Key Words : *Meromorphic function, Hypergeometric function, Coefficient estimates, Distortion theorem, Closure theorem, Convolution theorem and Inclusion property.*

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