

**APPLICATION OF FRACTIONAL DERIVATIVE
OPERATORS TO THE MAPPING PROPERTIES
OF ANALYTIC FUNCTIONS**

P. K. Banerji ^{*}, Lokenath Debnath ^{} and G. M. Shenan ^{*}**

Abstract

We use the modified fractional derivative operator of Saigo and the convolutions $f(z) * g(z)$ and $f(z) * h(z)$ to study the mapping properties of the function $J(g, h; \sigma)(z)$ for $\sigma \geq 0$. Further, we investigate the mapping properties of $J(g, h; \sigma)(z)$ for $f(z)$ belonging, respectively, to several subclasses of analytic functions with negative coefficients.

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