

## Jack's lemma for certain subclasses of analytic functions defined by a new fractional linear operator

### ABSTRACT

The theory of functional operator has been employed in several areas of mathematics, especially in the geometric function theory in the open unit disk. By utilizing the Moment-Generating function, we define a new fractional linear operator in the open unit disk. We discuss some geometric properties of this operator on some subclasses by applying the concept Jack's lemma.

**Keyword:** Analytic functions; Convex function; Hadamard product; Jack's lemma; Linear operator; Moment-Generating function; Starlike function