

## **Second Hankel Determinant for Strongly Bi-Starlike of order $\alpha$**

### **ABSTRACT**

Let  $A$  denote the class of functions  $f(z) = z + \sum_{n=2}^{\infty} a_n z^n$  which are analytic in the open unit disc  $U = \{z : |z| < 1\}$ . Let  $S$  denote the class of all functions in  $A$  that are univalent in  $U$ . A function  $f \in A$  is said to be bi-univalent in  $U$  if both  $f$  and  $f^{-1}$  are univalent in  $U$ . Let  $\mathcal{B}_\alpha$  denote the class of bi-univalent functions in  $U$ . In this paper, we obtained the upper bounds for the second Hankel functional  $|a_2 a_4 - a_3^2|$  for strongly bi-starlike of order  $\alpha$ .