

Editorial

New Trends on Analytic Function Theory

Serap Bulut ¹, Stanislaw Kanas ², and Pranay Goswami ³

¹*Kocaeli University, Turkey*

²*University of Rzeszow, Poland*

³*Ambedkar University Delhi, India*

Correspondence should be addressed to Serap Bulut; serap.bulut@kocaeli.edu.tr

Received 13 November 2018; Accepted 13 November 2018; Published 15 January 2019

Copyright © 2019 Serap Bulut et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

The theory of analytic functions is one of the outstanding and elegant subjects of classical mathematics. The study of univalent and multivalent functions is a fascinating aspect of the theory of complex variables and its concern primarily with the interplay of analytic structure and geometric behavior of analytic functions. The rudiments of the theory had already emerged in the beginning of the past century in the investigations of Koebe in 1907, Gronwall's proof of the area theorem in 1914, and Bieberbach's estimates of the second coefficients in 1916. The important aspects concerning the structure and geometric properties in the theory of analytic functions have been studied in more depth during the last few decades. Application and expansion of the theory of univalent and multivalent functions have been employed in numerous fields including differential equations, partial differential equations, fractional calculus, operators' theory, and differential subordinations.

This special issue published research papers and review articles of the highest quality with appeal to the specialists in a field of complex analysis based on coefficient inequalities of biunivalent functions, application of quasi-subordination for generalized Sakaguchi type functions, certain integral operator related to the Hurwitz–Lerch Zeta function, geometric properties of Cesàro averaging operators, sufficient condition for strongly starlikeness of normalized Mittag-Leffler function, and entire functions of bounded l -index: its zeros and behavior of partial logarithmic derivatives.

We do hope that the distinctive aspects of the issue will bring the reader close to the subject of current research. The most recent developments in the theory will give a thorough and modern approach to the classical theory and

presents important and compelling applications to the theory of planar harmonic mappings, quasiconformal functions, and dynamical systems.

Conflicts of Interest

The editors declare that there are no conflicts of interest.

Acknowledgments

The editors thank all the contributors and colleagues who spared time and were prompt in refereeing work.

Serap Bulut
Stanislaw Kanas
Pranay Goswami



Hindawi

Submit your manuscripts at
www.hindawi.com

