

On certain classes of $\omega - p$ -valent functions ¹

A. T. Oladipo, Daniel Breaz

Abstract

In this paper we study new subclasses of p -valent function. Coefficient inequalities, inclusion relation, and extreme points of these classes are studied. Furthermore, relevant connections of our classes with the existing ones through various choices of the parameters involved are also considered.

2000 Mathematics Subject Classification: 30C45.

Key words and phrases: analytic, p -valently starlike, p -valently convex, coefficient inequalities, inclusion relation, extreme point.

References

- [1] S. Kanas, F. Ronning, *Uniformly starlike and convex functions and other related classes of univalent functions*, Ann. Univ. Mariae Curie-Sklodowska Sect. A, 53, 1999, 95-105.
- [2] M. Acu, S. Owa, *On some subclasses of univalent functions*, J. Inequal. Pure Appl. Math., vol. 6, no. 3, 2005, art. 70, 1-6.
- [3] A. T. Oladipo, *On certain subclasses of analytic and univalent functions involving convolution operators*, Acta Universitatis Apulensis, 20, 2009, 163-174.
- [4] A. T. Oladipo, *On subclasses of analytic and univalent functions*, Advances in Applied Mathematical Analysis, vol. 4, no. 1, 2009, 87-93.
- [5] M. K. Aouf, A. Shamandy, A. O. Mostafa, S. M. Madian, *A subclass of M - W starlike functions*, Acta Universitatis Apulensis, 21, 2010, 135-142.
- [6] M. Acu, S. Owa, *On a subclass of n -starlike functions*, Internat. J. Math. Math. Sci., 17, 2005, 2841-2846.

¹Received 8 November, 2010

Accepted for publication (in revised form) 22 March, 2012

- [7] A. Cătaş, G. I. Oros, G. Oros, *Differential subordinations associated with multiplier transformations*, Abstract Appl. Anal., 2008, ID 845724, 1-11.
- [8] F. M. Al-Oboudi, *On univalent functions defined by a generalized Salagean operator*, J. Math. Math. Sci., 27, 2004, 1429-1436.
- [9] N. E. Cho, T. H. Kim, *Multiplier transformations and strongly close-to-convex functions*, Bull. Korean Math. Soc. vol. 40, no. 3, 2003, 399-410.
- [10] N. E. Cho, H. M. Srivastava, *Argument estimates of certain analytic functions defined by a class of multiplier transformations*, Math. Compt. Modelling, 37(1-2), 2003, 39-49.
- [11] G. S. Sălăgean, *Subclasses of univalent functions*, Lecture Notes in Math. (Springer-Verlag), 1013, 1983, 362-372.
- [12] B. A. Uralegaddi, C. Somanatha, *Certain classes of univalent functions*, in Current Topics in Analytic Function Theory, H.M. Srivastava and S. Owa (Editors), World Scientific Publishing Company, Singapore, New Jersey, London, Hong Kong, 1992, 371-374.
- [13] Sezgin Akbulut, Ekrem Kadioglu, Murat Ozdemir, *On the subclass of p -valently functions*, Applied Mathematics and Computation, 147, 2004, 89-96.

A. T. Oladipo

Ladoke Akintola University of Technology
Department of Pure and Applied Mathematics
Ogbomoso, P. M. B. 4000, Ogbomoso, Nigeria
e-mail: atlab_3@yahoo.com

D. Breaz

"1 Decembrie 1918" University Alba Iulia
Department of Mathematics
510009, Alba, Romania
e-mail: breaz@yahoo.com