



**DIFFERENTIAL EQUATIONS OF ASSOCIATED  
GENERALIZED HUMBERT POLYNOMIALS**

$$Z_{j,m,n}^{(\alpha)}(x, y, z; c)$$

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**Abstract**

We define associated generalized Humbert polynomials  $Z_{j,m,n}^{(\alpha)}(x, y, z; c)$ , (Weiping Wang and Hui Wang, Generalized Humbert polynomials via generalized Fibonacci polynomials. Appl. Math. Comput. 307 (2017), 204-216; Can Kızılateş, Bayram Çekim, Naim Tuğlu and Taekyun Kim, New families of three-variable polynomials coupled with well-known polynomials and numbers, Symmetry 11(2) (2019), 1-13) and examine differential equations satisfied by them.

**Keywords and phrases:** differential equations, generalized Humbert polynomials.

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