Generalized composite Hurwitz rings as PF-rings and PP-ring

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Abstract. Let $(R_n)_{n \geq 0}$ be an ascending chain of commutative ring with identity and D be either the generalized composite Hurwitz series ring or generalized composite Hurwitz polynomial ring. In this talk, we give equivalent conditions for the ring D to be PF-rings or PP-ring.

Keywords: PP-rings, PF-rings, generalized composite Hurwitz series ring, generalized composite Hurwitz polynomial ring.

References

[1] A. Benhissi, Ideal structure of Hurwitz series ring, Beitrage Algebra Geom. 48 (2007) 251-256.

[2] A. Benhissi, PF and PP-properties in Hurwitz series ring, Bull. Math. Soc. Sci.

Math. Roumanie 54 (2011) 203-211

[3] A. Benhissi and F. Koja, Basic properties of Hurwitz series rings, Ric. Mat. 61 (2012) 255-273.

[4] S. Hizem, Power series over an ascending chain of rings, Com. Algebra 40 (2012) 4263-4275.