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**YINHUO ZHANG**, University of Hasselt

*Green rings of rank one pointed Hopf algebras of nilpotent type*

Let  $H$  be a finite dimensional pointed rank one Hopf algebra of nilpotent type, and  $G = G(H)$ , the group of group-like elements of  $H$ . We study the finite dimensional indecomposable  $H$ -modules and establish the Clebsch-Gordan formulas for the decompositions of the tensor products of indecomposable  $H$ -modules. It turns out that the Green ring  $r(H)$  is commutative and generated by one variable over the Grothendieck ring of the group algebra  $kG$  modulo one relation. The Jacobson radical of  $r(H)$  is completely determined and is a principal ideal of  $r(H)$  generated by one element. As an example, we shall describe the Green ring of the pointed rank one Hopf algebra  $H$  with  $G(H)$  a Dihedral group.