




A green solid acid catalyst 12-tungstophosphoric acid $H_3[PW_{12}O_{40}]$ supported on $g-C_3N_4$ for synthesis of quinoxalines

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[Murugan Kumaresan](#), [Vadivel Saravanan](#), [Ponnusamy Sami](#) & [Meenakshisundaram Swaminathan](#) 

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Abstract

A green Keggin-type heteropoly-12-tungstophosphoric acid, ($H_3[PW_{12}O_{40}].12H_2O$) supported on graphitic carbon nitride $g-C_3N_4$ ($HPW/g-C_3N_4-40$), was developed for one-pot synthesis of quinoxaline derivatives from 1,2-diketone and 1,2-diamines. Use of green solvent, heterogeneous reaction condition, simple workup procedure, short reaction time and reusability of the catalyst are the advantages of this protocol.