A Facile Aqueous-Phase Synthesis of Palladium-Iron Alloy Nanoparticles

<u>김인호</u>, 유태경^{1,†} 경희대학교; ¹경희대학교 화학공학과 (tkyu@khu.ac.kr[†])

Here we describe an aqueous route to the synthesis of highly concentrated PdFe alloy nanoparticles by reducing a mixture of Pd and Fe salts in the presence of polyethyleneimine as a stabilizer in an aqueous solution. XRD, ICP and TEM analysis show the formation of spherical PdFe alloy nanoparticles with sizes of around 10 nm. The ratio of Pd and Fe could be easily controlled by adjusting the initial ratio of Pd and Fe salt.