

**UV-Driven Formation of  $\text{Co}_3\text{O}_4$ : The Role of pH**

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We have demonstrated the formation of  $\text{Co}_3\text{O}_4$  in poly(ethyleneimine) (PEI) using UV light. This method produced monodispersed rod-like spinels. Here, the importance of pH as it relates to the metal ion uptake and UV driven formation of the  $\text{Co}_3\text{O}_4$  in Poly(methylamido amine) (PMAAM) dendrimers is being investigated. At pH 10.0  $\text{Co}_3\text{O}_4$  spinels are observed, while at pH 3.9 the precursor salt is present. We suggest that the degree of protonation dictates the product formed during irradiation.