

## RNA-Mediated Control of Metal Nanoparticle Shape

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In 2005, we reported on the selection of RNA sequences that mediate the formation of hexagonal and cubic particles from aqueous solutions containing the organometallic precursor  $[\text{Pd}_2(\text{DBA})_3]$  (DBA = dibenzylideneacetone). The use of aqueous solutions containing organic cosolvents is common when performing RNA in vitro selections for RNA catalysts of organic reactions.<sup>1</sup> The aqueous solutions used in our work may contain 1–10% THF as cosolvent. Another report claims that it is not possible to prepare aqueous/organic solutions of  $[\text{Pd}_2(\text{DBA})_3]$  without observing the formation of a precipitate.<sup>2</sup> However, as shown in Figure 1, our solutions are clearly free from gross precipitates. Indeed, others have reported the preparation of aqueous solutions of  $[\text{Pd}_2(\text{DBA})_3]$  using only 0.05% v/v of the cosolvent Triton X.<sup>3</sup>



**Figure 1.** Photograph of a 400  $\mu\text{M}$  solution of  $[\text{Pd}_2\text{DBA}_3]$  in a 90%  $\text{H}_2\text{O}$ /10% THF mixture.

### Literature Cited

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