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Green synthesis of Iron (Fe) Nano Particles from the extract of the shell of Green Coconut

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Recently the green synthesis of nano particles involving plant extract has attracted the attention of researchers.

In the present research, Iron (Fe) nano particles have been synthesized from the aqueous extract of the shell of "Green Coconut" (a very common fruit in Asian subcontinent) at room temperature. Synthesized pano particles were characterized using

Coconut" (a very common fruit in Asian subcontinent) at room temperature. Synthesized nano particles were characterized using UV-visible spectrophotometer. The change in color and pH was also observed significantly.

Novelty of this present study is that a waste shell of green coconut carries a good amount of Iron (Fe) nano particles (about 1.100 g per 10 ml of the mixture of the extract of the shell of green coconut, FeCl₃ and NaBH₄), which can be synthesized using membrane filtration procedure and without using heat. Therefore, the procedure is very cost effective and eco friendly.

Thus, the procedure can be an economic and effective alternative for the large-scale synthesis of iron nano particles.

Biography:

I am Moonazzah Sayeda Naz from Bangladesh and just completed my under graduation program in "Environmental Science and Management" from Independent University Bangladesh (http://www.iub.edu.bd/). Now I am on the way to complete my post graduation in "Environmental Management" from the same institution.