We claim:

1. A nanoparticle encapsulated~~ting~~ Vitamin D, wherein the nanoparticle is selected from a group comprising nanogel or PLGA nanoparticle, and wherein the Vitamin D is present in an amount of 5 to 8 wt% of the nanogel or the Vitamin D is present in an amount of 2 to 4 wt% of the PLGA nanoparticle, dispersed in a medium.
2. The nanoparticle encapsulated vitamin D ~~nanogel~~ as claimed in claim 1, wherein Vitamin D is encapsulated in agar-agar and a polymer selected from a group comprising poly(acrylamidoglycolic acid) and pectin of nanogel.
3. The nanoparticle encapsulated vitamin D ~~nanogel~~ as claimed in claim 2, wherein agar-agar is present in an amount of 30 to 35 wt% of the nanogel.
4. The nanoparticle encapsulated vitamin D ~~nanogel~~ as claimed in claim 2, wherein the polymer is present in an amount of 45 to 50 wt% of the nanogel.
5. The nanoparticle encapsulated vitamin D ~~composition~~ comprising nanogel as claimed in claim 1, wherein the concentration of nanogels dispersed in the medium is in the range from 0.15 mg/L to 0.45 mg /L.
6. The nanoparticle encapsulated vitamin D ~~composition~~ comprising nanoparticles ~~,~~ as claimed in claim 1, wherein Vitamin D is cholecalciferol.
7. The nanoparticle encapsulated vitamin D ~~composition~~ comprising nanoparticles as claimed in claim 1, wherein the concentration of the PLGA nanoparticle is 0.35 mg/L to 1 mg/L.
8. The nanoparticle encapsulated vitamin D ~~composition~~ as claimed in claim 1, where in the composition comprises one or more pharmaceutically acceptable excipients or carriers.
9. The nanoparticle encapsulated vitamin D ~~composition~~ as claimed in claim 1, wherein the medium is an aqueous medium.
10. A method for preparation of encapsulated Vitamin D nanogels as claimed in claim 1, comprising:
    a. preparing a reaction mixture comprising agar-agar, methylene bisacrylamide, Vitamin D and a monomer or polymer selected from a group comprising poly(acrylamidoglycolic) acid or pectin, wherein the concentration of Vitamin D in reaction mixture is in a range from 5 wt% to 8 wt%;

b. adding potassium per sulphate to the reaction mixture;
c. adding the reaction mixture to a sodium dodecyl sulphate solution;
d. degassing the reaction mixture with nitrogen;
e. adding glutaraldehyde to the reaction mixture; and
f. subjecting the reaction mixture to centrifugation to obtain encapsulated Vitamin D nanogels.

11. The method as claimed in claim 10, wherein Vitamin D is cholecalciferol.

12. The method as claimed in claim 10, wherein the concentration of agar-agar in reaction mixture is in a range from 9.9 mg/mL to 11.0 mg/mL.

13. The method as claimed in claim 10, wherein the concentration of the monomer or polymer in the reaction mixture is in a range from 14 mg/mL to 16 mg/mL.

14. The method as claimed in claim 10, wherein the step of degassing is done at a temperature in the range from 75°C to 85°C, preferably at 80°C and dried at 40°C.

15. The method as claimed in claim 10, wherein centrifugation is performed at a speed in the range from 14500 to 15500 rpm.

16. The method as claimed in claim 10, wherein the concentration of glutaraldehyde is in the range from 0.5 to 1.5 wt%.

17. A method for preparation of encapsulated Vitamin D PLGA nanoparticles as claimed in claim 1, comprising:
    a. preparing a reaction mixture of PLGA with Vitamin D dissolved in ethyl acetates solution;
    b. dropwise addition of Pluronics to the reaction mixture of step (a) followed by sonication of the emulsion under ice bath;
    c. solubilizing the emulsion by magnetic stirring at 1000 rpm for 2.5 hours at 25^{o}C;
    d. filtration of emulsion;
    e. cooling of the emulsion at 4^{o}C during overnight at final concentration of 10 mg/mL;
    f. centrifugation at 15000 rpm for 30 minutes and resuspension in ultrapure water.

18. The method as claimed in claim 17, wherein Vitamin D is cholecalciferol.

19. Use of nanoparticle encapsulated vitamin D ~~nanoparticles~~ as claimed in claim 1 for the preparation of an aqueous composition.

20. Use of nanoparticle encapsulated vitamin D ~~nanoparticles~~ as claimed in claim 1 as a fortifying agent in food, beverage and pharmaceutical compositions.

~~21. A method of treating a subject suffering from vitamin D deficiency by administration of a pharmaceutically effective amount of the composition as claimed in claim 5 and claim 7.~~

21. Use of the nanoparticle encapsulated vitamin D according to claim 5 or 7 in the manufacture of a medicament for the treatment of vitamin D deficiency.