The fullerene nanoparticles influences their toxicity

반상훈, 심상준* 성균관대학교 (simsj@skku.edu*)

Fullerenes are a new class of all carbon molecules and is composed of 60 carbon atoms arranged in a soccer ball-shaped structure. fullerene particle works a light-activated antimicrobial agents. However, recently arguments have occurred about fullerene toxicity. Nanoparticles have come under scrutiny for the potential to cause environmental damage. C60 has been shown to induce toxicity in numerous cell culture. However, According to some papers, in the literature make it difficult to interpret the mechanism by which C60 toxicity is induced.

Our work show Fullerene nanoparticles toxicity though optical density, droplet test, survival cell test (Spread the solutions on the plates).

We compared two side approach for toxicity study ,one side was about concentration effects and other side as light effects.

The toxicity of Fullerene nanoparticle was determind by exposing yeast cells of concentrations and light effects.