

formation of smaller sized selenium nanoparticles. FT-IR analysis detected the role of characteristic functional groups such as amide I band and ketones derived from the alkaloids or flavonoids in the reduction and stabilization. XRD data confirmed the formation of crystalline selenium nanoparticles. The electron dense selenium nanoparticles with typical absorption peaks noted in the EDAX spectrograph proved its elemental nature. Further TEM analysis confirmed that the synthesized selenium nanoparticles were hollow with an average size of 24.24 ± 2.95 nm. This sort of biogenic synthesis of highly stable selenium nanoparticles is a simple, low-cost and eco-friendly method.

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Author Profile



Dr. V. Ganesan is presently Associate Professor and Head of the Centre for Research and PG Studies in Botany, Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu, with cumulative teaching experience of 33 years. He has published more than 35 research articles in the National and International Journals and handled 08 projects funded by ICFRE, SERB, M.o.En.& F., UGC, TNSCST and Tamil Nadu Forest department. His research excellence has been obvious with Thomas Edition Award 2014 in Biotechnology for inspiration and knowledge distribution among young research scholars. His two research papers were ranked under Top ten publications of Advanced Biotech in the year 2011.



Mrs. B. Deepa is presently Assistant Professor of the Department of Botany, The Standard Fireworks Rajaratnam College for Women, Sivakasi, Tamil Nadu, with a teaching experience of 12 years. She received University I Rank in UG and College I Rank in PG. She has published 02 research articles in the National and International Journal. Her specialization area is Bioinspired synthesis of metal nanoparticles and their applications in biomedical field.