

Development of Silver Nanoparticles as an Antibacterial Water Filter

TECHNOLOGY DESCRIPTION

This technology focuses on using a cheaper alternative with a combination of silver nanoparticles and cellulose paper as water filter for Escherichia coli.

TECHNOLOGY FEATURES

This technology is able to provide water free of contamination that can be consumed without any adverse health effects. It provides a cheap and easy water filtration unit at point of use. This employs easy preparation method and useful in emergency situations.

ADVANTAGES

- Easy preparation method
- Cheaper
- Safe

INDUSTRY OVERVIEW

Prospect Industry: Environment & Energy Industry

Technavio's market research analyst predicts that global water purifier market to grow steadily at a CAGR of over 14% during the forecast period. The increase in water-borne diseases due to contamination of water is one of the primary drivers for the growth of the market. Every 21 seconds, a child dies; and 3.4 million people globally dies every year due to water related disease according to a report by World Health Organization. Nearly 99 percent of deaths, occur in developing world. The global water purifiers' market revenues are anticipated to grow at the compounded annual growth rate of around 10% during 2013-18 which is forecasted to double in its revenue size by the end of 2018. In the global water purifier market, Asia Pacific is anticipated to be the leading as well as the most rapidly growing region during the forecast period. This segment is anticipated to register a CAGR of 11.4% from 2016 to 2024. The opportunity in the global water purifier market is expected to be worth US\$97.89 billion by 2024, expanding at a CAGR of 8.0% from 2016 to 2024. The global water purifier industry is highly fragmented with the presence of regional players, dominating in their respective regions. Asia Pacific is the biggest market for water purifiers where China & India are the major contributors. The demand for water purifiers has surged radically over the last 5 year period attracting giants like Panasonic and Life is Good (LG) to launch their own water purifiers. The product is expected to benefit several potential market segments which includes the end user (customers), retailers and companies. The end users can be contacted directly using personal selling, whereas the retailers can be contacted via direct marketing. The product can also be marketed directly to other business using exhibition as well as personal selling.



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