## N.S.CHEMICALS



#### [ ISO 9001:2015 & GMP CERTIFIED]

Office: 601-611, DEVAVRATA, SECTOR 17, VASHI, NAVI MUMBAI-400 703, INDIA TEL. +91-22- 27895695 / 96 FAX +91-22- 27895700.

Email: info@nschemicals.in web: www.nschemicals.in

## Review

Nanoparticle research is a fascinating branch of science. The strongly size-related properties of nanoparticles offer uncountable opportunities for surprising discoveries. The often unexpected and unprecedented behavior of nanoparticles bears great potential for innovative technological applications, but also poses great challenges to the scientists.

In this paper you have used Nano Emulsions from Herbal Extracts on Organic Cotton fabrics to develop Antimicrobial and Anti-Fungal properties.

You have wisely chosen Moringa oleifera (Drumstick), Aegle Marmelos (Bael), Curry Leaves and Coconut Oil. These 4 ingredients are very much known and easily available across India. You can see the use of these in our rich culture. I am proud that you have chosen these to prove that our Rishi's were actually scientists who were using of all these products as medicines.

You have also done excellent and detailed work with 2 types of cotton with 2 different combinations. You have described the whole process of study very well in Chaper2. Materials and test methods, Chapter 3, Results and discussions and Final conclusion.

You have shown with photos of Fabric for Antimicrobial test for Gram Positive and Gram Negative bacteria. These combinations are also very much effective as Anti-Fungal agent.

I suggest you to look into its commercial side of this project. How one can be able to use this study to implement on large scale work. How we can scale up this for actual use in factories across globe.

This is excellent research done by Prabhuraj Venkatraman of Manchester Fashion Institute and Usha Sayed, Sneha Parte and Swati Korgoankar of ICT, Mumbai.

# N.S.CHEMICALS



### [ ISO 9001:2015 & GMP CERTIFIED]

**Office:** 601-611, DEVAVRATA, SECTOR 17, VASHI, NAVI MUMBAI-400 703, INDIA TEL. +91-22- 27895695 / 96 FAX +91-22- 27895700.

Email: info@nschemicals.in web: www.nschemicals.in

I am looking forward to see the use of this technology for India and worldwide. I wish you all the best for your future research.

Dr. Amod Tamhankar

Mob: +91 9820045325

Email: amod@nschemicals.in