

## **FUTURE SCOPE OF THE STUDY**

- The innovative fabric developed through this study is not only suitable for textile museums, but also for heritage museums that contain natural artifacts like paintings that require protection from microbial and insect damage. This widens the scope of the study and offers potential benefits to a wider range of institutions/ private and public sectors involved in heritage conservation.
- Furthermore, the fabric's easy application process makes it accessible to individuals for textile preservation at home. This adds a practical aspect to the study's potential uses, as it offers a simple solution to textile preservation for households.
- In addition to museums and households, the developed fabric's finish can also be utilized in libraries to protect books from insect and microbial damage, ensuring long-term preservation of valuable literature.
- A refill of the developed nanoparticle finish can also be developed for reapplication purposes after the effectiveness of the original coat has decreased. The development of a refill would allow the preservation of textiles to continue after the effectiveness of the initial application has decreased, thereby extending the lifespan of the textiles.
- The nanoparticle finish developed under the study, can be made available in the form of a spray. Further research into the stability and application of the finish may be required to optimize its effectiveness.
- The re-fill solution of this finish can also have various applications in households, such as repelling insects and mosquitoes, can be applied to household bed linens, particularly in hospitals.
- The finish not only has the potential to repel and kill microbes and insects but it also has a natural pleasant odour making acting as an air freshener or an air purifier.
- The potential uses of this natural antimicrobial and insect repellent finish can also extend to car seat covers and public transport like buses, trains, and cabs.
- Overall, the future scope of this study is promising and has the potential to have far-reaching impacts on various industries.