Future Scope of Work

In continuation with the study presented here, future work can be aimed at:

1. Scaling-up the results obtained with the laboratory study to a pilot level. This would be specially pertinent in view of the proposed pilot irradiation unit to be established at a sewage treatment plant in Baroda.

2. Screening for some other chemical sensitizer(s), as effective as ascorbic acid, but having a broader range of activity. Such a sensitizer would be helpful if it can be applied with economic advantage in an irradiator.

3. Performing precise studies to understand the ascorbic acid effect on the various membrane transport systems of the S.typhi cells. An attempt can also be made to study the exact lipids/fatty acids of the membrane, which are most significantly affected by the action of the sensitizer.

4. Checking the precise effect (of the sensitizer), by the use of radiolabelled compounds, on the cellular DNA, specially with respect to strand scission events. Effects on the DNA-repair system could also be studied.


