Microscale experiments

What are Microscale experiments?

This is doing the chemistry practical's with very minimal quantities of chemicals (5mg of solid / 1 drop of reagent) in organic and inorganic qualitative analysis. In these experiments the QUALITY is not compromised, only the QUANTITY reduced. For volumetric analysis two burette titrations can be followed. This will considerably reduce the volume of solutions to be used in volumetric analysis. Accuracy in this procedure is as good as the conventional method.

Objective of Microscale experiments: Day by day the cost of Chemicals are Sky rocketing. This is a great concern for both the management and the Staff in Schools & Colleges. This problem can be easily addressed by adopting Micro scale experiments. The department of Chemistry adopted microscale experiments from the academic year 2022-2023.

Outcomes of Microscale experiments:

If the micro scale methods are adopted in schools & Colleges this will lead to lesser consumption of (a) Chemicals & Solvents (b) LPG, Water and Electricity other benefits include Lesser time to perform the experiments and pollution free environment. In short the cost of running the Chemistry practicals will come down by about 70%.

Micro Scale Experiments obeys principle No.1 (prevention of waste) & principle No No.8 (reduce derivatives) of Green Chemistry. It fosters environmental sustainability.



Qualitative analysis of organic compound by Microscale experiments





