

## BLDE Association's S.B. Arts and K.C.P. Science College, Vijayapur. (Re-Accredited by NAAC at 'A' Level in 3rd Cycle)



#### **ONE DAY WORKSHOP**

ON

### "MICROSCALE EXPERIMENTS IN CHEMISTRY"

7th APRIL-2017.

#### **Organized By:**

Department of Chemistry
BLDE Association
S.B. Arts and K.C.P. Science College, Vijayapur.

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"No Registration Fee"

# "WORKSHOP ON MICROSCALE EXPERIMENTS IN CHEMISTRY"

#### **INTRODUCTION:**

The rising cost of chemicals and decreased flow of funds are causing great concerns to the chemistry teachers. A tug - of - war had also been going on in recent years, to balance the budget of running practical courses and the standards of experiments to be carried out by the students. Since the economy is always the winner, the number of experiments had been the losers. A group of scientists from University of Pune and Fergusson College, Pune are striving hard to maintain the standards of experiments at a friendly budget ie., by carrying out the organic reactions in capillaries / tiles, using semimicro test tubes for heating experiments (instead of the conventional test tubes) and adopting to microscale preparations. Their attempts serve many purposes.

- (i) Cuts down the cost of chemicals.
- (ii) Experiments have become environment friendly.
- (iii) Less time consuming
- (iv) Less hazardous to the teachers, students and lab, assistants. What more it becomes affordable.

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Principal, S.B. Arts and KCP Science College VUAYAPUR

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Dept. of Chemistry
SB Arts & KCP Sc. College,
Vijayapur,

## ONE DAY WORKSHOP ON

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## MICROSCALE EXPERIMENTS IN CHEMISTRY

#### INTRODUCTION:

The rising cost of chemicals and decreased flow of funds are causing great concerns to the chemistry teachers. A tug - of - war had also been going on in recent years, to balance the budget of running practical courses and the standards of experiments to be carried out by the students. Since the economy is always the winner, the number of experiments had been the loaded. A group of scientists from University of Pune and Fergusson College, Pune are striving hard to maintain the standards of experiments at a friendly budget ie., by carrying out the organic reactions in capillaries / tiles, using semimicro test tubes for heating experiments(instead of the conventional test tubes) and adopting to microscale preparations. Their attempts serve many purposes.

(i) cuts down the cost of chemicals.

(ii) experiments have become environment friendly.

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#### Microsale Experiments in Organic Chemistry

New sets of apparatus

1. Capillaries

Capillaries will be used in the microsale experiments to

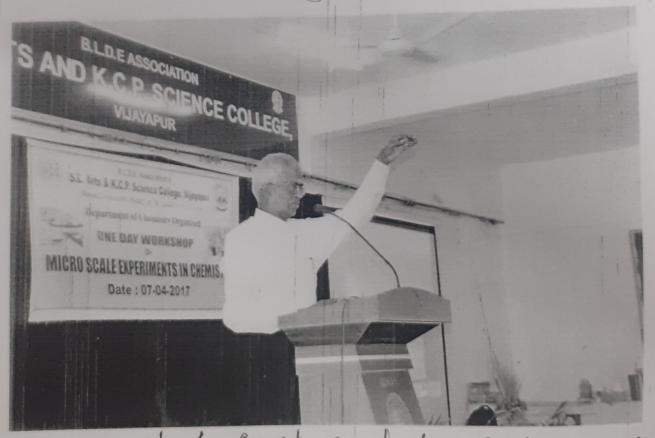
- 1. Determine physical constants such as m.p.and boiling points
- 2. To check the solubility of substances in cold solvents.
- 3. To prepare stock solutions to take various tests.
- 4. For transfer of liquids to another capillary
- 5. For spotting in TLC.

Capillaries generally are available in two types, broad bored melting point capillaries and very small bored TLC capillaries. If only the melting point

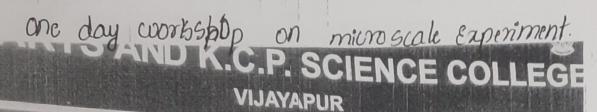
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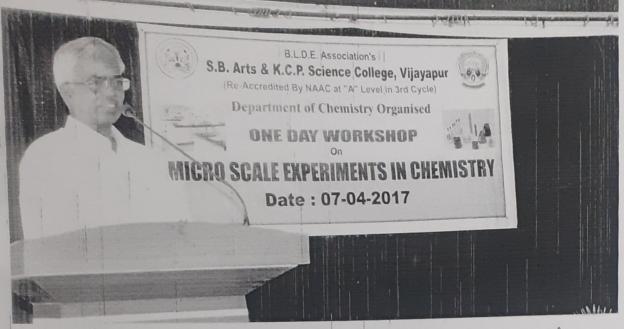


MICRO SCALE EXPTS. IN CHEMISTRY
WORK SHOP.
Dr. Muragan, Nagarkor (TN)



Chief quest speech by Dr. Muragan sir.





Micro Scale Experiments In Chemistry

Dr. Muragani sir evecomed by K.y. Pujeni sir

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## REPORT MICROSCALE EXPERIMENTS IN CHEMISTRY

Microscale chemistry experiments use small quantities of chemicals and simple equipment. These have the advantage of reducing costs, reducing safety hazards and allowing many experiments to be done quickly and sometimes outside of the laboratory.

The rising cost of chemicals and decreased flow of funds are causing great concerns to the chemistry teachers to balance the budget of running practical courses and the standards of experiments to be carried out by the students. These experiments are very useful in many ways some of uses are

- 1) cuts down the cost of chemicals.
- 2) Experiments have become environment friendly.
- 3) Less time consuming.
- 4) Less hazardous to the teachers, students and lab assistants what more it becomes affordable.

Generally capillary will be used in the microscale experiments as a apparatus . These capillaries are helps to determine physical constant such as melting point and boiling point to check solubility of substance in cold solvents to prepare stock solutions to take various tests.

Capillaries will also helps for transfer of liquids to another capillary, for spotting in TLC.

Capillaries generally are available in two types broad bored melting point capillaries and very small bored TLC capillaries. In universities modern and expensive lab glass ware is used and modern methods for detection and characterization of the produced substances are very common

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