

The Registration Form & Brochure can be downloaded from [www.actkerala.org](http://www.actkerala.org). Applicants are advised to make use of the electronic mailing facility. Selected candidates will be informed by return mail. A total of only 40 participants on first come first basis will be selected for the programme providing equal opportunity to chemistry faculty members of all colleges in EACH DISTRICT. The participants are eligible for duty leave.

**Organizing Secretary**  
**Dr. I.G. Shibi**

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Microscale chemistry is an environmentally safe pollution prevention method of performing chemical processes using small quantities of chemicals without compromising the quality and standard of chemical applications in education and industry. How to maintain a pollution-free environment and how to handle chemical wastes are subjects of increasing concern to all scientists, educators and the general public. The best way to succeed in this effort is by eliminating chemical waste at the source. Reduction of chemical use to the minimum level at which experiments can be effectively performed is known as Microscale Chemistry.

**WORKSHOPS – DATES & CENTRES**

March 4<sup>th</sup> & 5<sup>th</sup> 2014 (Tuesday and Wednesday)

HHMSPBNSS College,  
Neeramankara

March 6<sup>th</sup> & 7<sup>th</sup> 2014 (Thursday and Friday)

NSS College, Pandalam

March 13<sup>th</sup> & 14<sup>th</sup> 2014 (Thursday and Friday)

S.N College Kollam

March 18<sup>th</sup> & 19<sup>th</sup> 2014 (Tuesday and Wednesday)

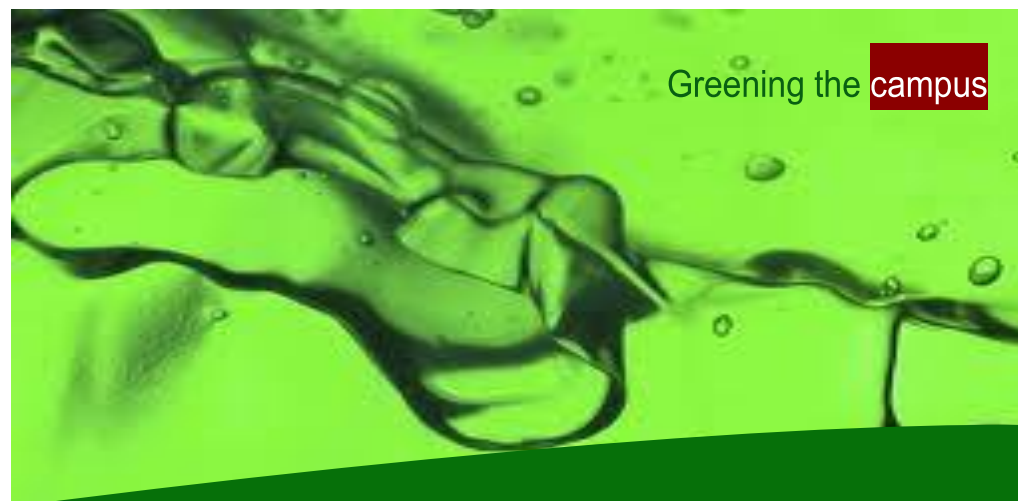
S.D. College Alappuzha

# Workshop on Microscale Experiments in Chemistry

Organized by the Board of Studies in Chemistry (Pass)

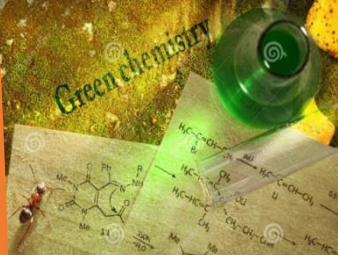
## UNIVERSITY OF KERALA

In association with the Academy of Chemistry Teachers (ACT) & The Departments of Chemistry, HHMSPB NSS College, Neeramankara, Thiruvananthapuram, NSS College, Pandalam S.N College, Kollam and S.D. College, Alappuzha



At  
HHMSPB NSS College, Neeramankara, on 4<sup>th</sup> & 5<sup>th</sup> March 2014  
NSS College, Pandalam on March 6<sup>th</sup> & 7<sup>th</sup> 2014  
S.N College Kollam on March 13<sup>th</sup> & 14<sup>th</sup> 2014  
S.D. College Alappuzha on March 18<sup>th</sup> & 19<sup>th</sup> 2014

**Sponsored by the**  
**KERALA STATE HIGHER EDUCATION COUNCIL**  
**Government of Kerala**  
Thiruvananthapuram - 695033



to be less wrong than  
yesterday



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## ABOUT THE WORKSHOP

The syllabus content of the B.Sc. Chemistry Core Programme (CBCS system) was revised wef 2013 as per the UO Ac. A V/1/31970(4)/2012 dt 26-06-2013. The 'micro scale method of analysis and two burette titration method' have been introduced in the syllabus of B.Sc. Chemistry core and complementary Lab courses from 2013 onwards. This will revolutionize the chemical curriculum of our university.

The increase in the cost of chemicals and insufficient fund have been causing great difficulty in the proper conduct of the conventional chemistry experiments in the lab. 'Microscale chemistry' is an apt and effective solution for the problem. The microscale experiments are less hazardous, environment friendly and not much time consuming. But the procedure of this type of analysis is entirely new and needs hands on training for getting expertise.

Board of Studies in Chemistry (Pass), **University of Kerala** has decided to hold two day workshops at HHNSS College Neeramankara, NSS College Pandalam, S.N College Kollam, and S.D. College Alappuzha in March 2014 for imparting hands on training to Chemistry teachers of various colleges affiliated to the University of Kerala.

The **Kerala State Higher Education Council**, Government of Kerala is sponsoring this workshop on the revision of the syllabus based on the recommendations of Prof Hridayakumari Committee report on CBCS system.



## PROGRAMME

**Day I** March 4<sup>th</sup> 2014 (Tuesday) - SEMINAR HALL & B.Sc. LAB

Registration: 9.30-10.00 am

Inauguration: 10.00-10.45 am

Tea break : 10.45-11.00 am

Session 1: Introduction to Microscale experiments (lecture) - 11.00-11.45 am

Session 2: Double burette titration - 11.45 am-01.00 pm

Lunch : 0.1.00-1.45pm

Session 3: Inorganic Qualitative analysis - 01.45 -3.45p m

**Day II** March 5<sup>th</sup> 2014 (Wednesday) - B.Sc. LAB

Session 1: Organic analysis - 10.00-11.15 am

Tea break :11.15-11.30 am

Session 2: Organic preparation - 11.30am-01.00 pm

Lunch : 01.00-1.45 pm

Session 3: Physical chemistry Practicals - 1.45 -2.45 pm

Valedictory session : 2.45-3.30 pm

**Resource persons** : Prof. S.MURUGAN, Dr. S.SUDHAKUMARI  
(Department of Chemistry, S.T. Hindu College, Nagercoil)



## ADVANTAGES OF MICROSCALE EXPERIMENTS

- Better Laboratory Air Quality.
- Least Exposure to Toxic Chemicals.
- No Fire and Explosion Hazards.
- No Spills and Accidents.
- Reduction in laboratory cost.
- Shorter experiment time.
- Lowers glass breakage cost.
- Saves storage space.
- Improves laboratory skills.
- Provides clean and productive environment.
- Promotes the principle of 3Rs: Reduce, Recover and Recycle.
- Creates the sense of 'Green Chemistry'.
- Instills an ethic of conservation among students.
- User friendly to people with physical disabilities.