

UG CHEMISTRY – BEST PRACTICE 10-4-18

Title: - Lab on Wheels (L.O.W)

Objectives:- The chemistry department has adopted this best practices Lab on wheels since 2015 with the following objectives.

- ❖ To provide practical knowledge of chemistry to students from the govt. & private schools.
- ❖ To develop a sense of duty and service towards society among the students.
- ❖ To achieve a sense of job satisfaction to the faculty.

Context:- Science is an important and most useful subject taught to students from primary level of education. Along with theoretical knowledge, practical knowledge of science helps in understanding and inculcating interest and scientific temperament. Experiments help in making the explanation and understanding of the concept clear and easy.

Practice:- Keeping this problem in view the programme lab on wheels or L.O.W for short was started in the academic year 2015-16 most of the schools seldom have laboratories to provide practical knowledge of science to students. When they come to college education their knowledge of science and scientific concepts is poor and inadequate. They are unable to grasp the advanced concepts of science.

As a part of this programme, a team of meritorious students are appointed as members of L.O.W by the chemistry department. This committee make a prior visit to the schools in Vijayawada 1town area and secure appointment for demonstration in consultation with the school authorities.

The team carries experiment kits such as glass ware, equipment reagents as per the requirement stated by the school authorities. Students are encouraged to actively participate in the experiments by handling the equipment and doing the experiment in their own.

The team then visits the schools at least twice in every academic year and demonstrate simple experiments to students from 7th to 10th class and also according to the requirements of their school curriculum.

The team is accompanied by a faculty member from the department of chemistry to guide and interact with the students. Necessary information is also provided through charts, exhibits and class room discussion besides demonstration. Apart from these we tried to remove superstitions and also create detect adulteration using certain chemicals.

Evidence of Success:

The immense response received from students and teachers of the schools was greatly inspiring and motivating to us. It has encouraged us to extend the programme to other schools

in the vicinity. The increased enthusiasm and involvement of students in conducting the experiments is very encouraging. Our demonstration and effort was highly successful in not only improving and enhancing the knowledge of students but also in inculcating an increased interest in scientific knowledge and developing scientific temperament and awareness among students. It also helped in removing superstitious and false notions and creating an idea on adulteration of food and other products which enables them to protect their health. The awareness on food preservatives also helped them to be cautious and protect themselves from carcinogenic substances.

Problems encountered:

- Transporting certain sensitive chemicals and reagents and delicate equipment proved a difficult and hard task.

Future Plan

- ❖ We propose to design a fool proof carrier to carry the equipment and procure a minivan to transport the equipment and conduct the programme successfully.
- ❖ Portable set up for reagents bottles and equipment.
- ❖ Transportation should be improved
- ❖ To purchase display charts are exhibited.
- ❖ To teach more experiments to students for demonstration and increase the no. of visits to schools.

Lab on Wheels

Details of the schools visited by the LOW committee (department of Chemistry)

2015-2016

<u>S. No</u>	<u>Name of the School Visited</u>
1	NSR School, Vijayawada-9
2	Sri. Aruna High School Vijayawada - 1

2016-2017

<u>S. No</u>	<u>Name of the School Visited</u>
1	Sri. Annapoorna Devi UP School, Vijayawada
2	Telaprolu Raja School, Vijayawada - 1

2017-2018

<u>S. No</u>	<u>Name of the School Visited</u>
1	Sri. Sun flower H School Vijayawada – 1
2	Kavi Kumar UP School Vijayawada-1

Department of Chemistry Best Practice - Lab on Wheels (LOWS)



Laboratory on Wheels the programme inaugurated by Dr. V. Narayana Rao, Principal



Students & Faculty Members of Chemistry Department demonstrates the experiments for School Children



School students



Students noted down the observations of experiments



Students & Faculty Members of Chemistry Department demonstrates the experiments for School Children



Student explaining the experiments to the school children



Student explaining the experiments to the school children



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