# Dr. Ambedkar College, Deekshbhoomi, Nagpur

### **Department of Chemistry**

### **American Chemical Society International Student Chapter**

Guest Lecture
On
"Green Approaches in Chemistry"

# By **Dr. H. M.Meshram**

Ex-chief Scientist, CSIR-IICT, Hyderabad

Post Graduate Department of Chemistry, Dr.Ambedkar College, Deekshabhoomi, Nagpur invited **Dr. H. M.Meshram** to deliver a guest lecture on 9<sup>th</sup>December, 2019 to the post graduate students, under the aegis of American Chemical Society International Student Chapter.

Dr Meshram is an **Ex-chief scientist in CSIR** – **Indian Institute of Chemical Research (IICT), Hyderabad.** He had done his graduation (B.Sc.) from Dr.Ambedkar College, Deekshabhoomi, Nagpur. He is a double post graduate in M.Sc. Organic Chemistry & M.Phil. in Co-ordination Chemistry & Environmental Science. He has completed his Ph.D. from Nagpur University in "Synthesis of *N*-Glucosylated Formamidines" and also has done his higher diploma from BITS, Pilani in Instrumentation and Technology. Dr Meshram has also received awards during his course of his studies. He has also worked as Post-doctoral Fellow with Dr. Rajendra S. Verma and Dr. Keneth Bettie at **DNA Technology Laboratory**, HARC, The Woodland, **Texas U.S.A.** He has 22 projects completed/developed under his guidance, credited with 90 peer reviewed international publications and he also has **25 patents** named under him. The lecture delivered by Dr.Meshram was mainly focussed on the development of **green and economically viable chemical processes**. The course of the lecture was as follows:-

- Development of Mefloquine (a potent anti-malarial drug) by a new route with indigenous chemicals was found and demonstrated to the industry for mass production.

- Development of Carbidopa (peripheral decarboxylase inhibitor) by an innovative route and exhibited to the industry for commercialisation.
- Development of 2-Methyl Pyrazine which is a chief intermediate for pyrazinamide (anti-TB drug).
- Development of Verapamil (cardiovascular drug) by an economically viable process.
- Finding of Aspartame (peptide sweetener) which is a new microorganism for the creation of peptide linkage.
- A new process for the development of fibrinogen receptor antagonist.
- Development of alternate route for fluvastatin.
- Newly found route for the development of eprosarton.
- Preparation of library of 3,5-disubstitutedisoxazoles.
- Synthesis of 4-aryl-3-oxo-2, 3-dihydropyridazinyl-2-acetic acids.
- Synthesis of 6-alkyl-2-oxo, 4-aryl-1, 2, 3, 4-tetrahydro-5-pyridimidine carboxylic acids.
- Synthesis of N-boc-4-(2-phenyl acetamido)-1, 4-diazepane
- Cyhalothrin (pyrethroid).
- NMITLI project on "Latent M. Tubercolosis" Synthesis of pyridine based new molecules and etc.

Dr.Meshram explained the mechanism of his every developed process in detail and also the thought behind it. Sir also acquainted us about the importance behind the development of concept of Green Chemistry. He is very experienced and it's our pleasure to have him in the college and enlighten us with his knowledge. He also shared his personal experiences about how he came up with some ideas and it was delighted to listen to him.

Dr Deepa Panhekar, Head ,Department of Chemistry and Faculty Advisor American Chemical Society International Student Chapter Dr Ambedkar College welcomed Dr Meshram. ACS International student chapter members Ms Swarnima Burande and Ms Sneha Burse conducted the program .The lecture was organised by Dr Deepa Panhekar. 42 students and faculty members attended the program. Dr Ratnnadeep Sawant, Mr Parag Panse , Mr Umesh Patil, Mr Manoj Neralwar and ACS International student chapter members worked hard for the success of the program.

## Dr. Ambedkar College, Deekshabhoomi, Nagpur Department of Chemistry

Date: 07/12/2019

#### Notice

The American Chemical Society (ACS) International Student Chapter, Dr. Ambedkar College, Deekshbhoomi, Nagpur is organizing a guest lecture on "Green Approaches In Chemistry" on Monday, 9th December 2019 in Department of Chemistry at 2.00 pm. The guest speaker is Dr. H. M. Meshram, Ex. Chief Scientist, CSIR-Indian Institute of Chemical Technology, Hyderabad. All the students and faculty members are hereby requested to attend the lecture.

Dr. Deepa Panhekar

Head

DEPARTMENT OF CHERISTRY DR. AMBEDIAR COLLEGE, NAGPUR

Prof. R. V. Patil

...leisting Principal Dr. Ambedfar College, Deckshabboomi, Nagpur.



Dr.Deepa Panhekar welcoming Dr.Meshram.



Dr. H. M.Meshram explaining the principles of Green Chemistry.



Dr.Meshram explaining his work on clayon which received Indian patent.



Dr.Meshram explaining green approaches in chemistry to the students.



Dr.Deepa Panhekar and Dr.Sawant presenting memento to Dr. H. M.Meshram.