

Student–Centric Methods Adopted

Department of Chemistry

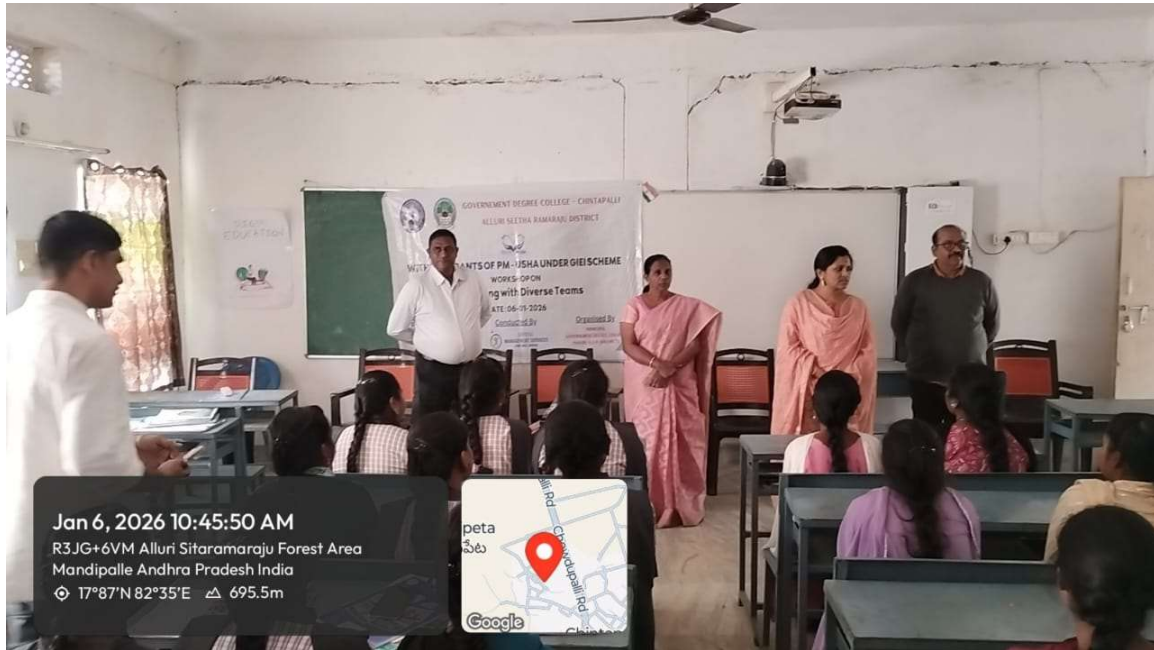
Government Degree College, Chintapalli

The Department of Chemistry adopts several student–centric teaching methods to enhance active learning, critical thinking, and practical understanding among students. These methods focus on improving students' participation and making the learning process more interactive and effective.



1. Experiential Learning

The department emphasizes learning through practical experience. Students perform various experiments in the chemistry laboratory as part of their curriculum, which helps them understand theoretical concepts in a practical manner. Laboratory sessions include qualitative and quantitative analysis, preparation of chemical compounds, and identification of organic functional groups. Field visits and demonstrations are also organized to expose students to real-life applications of chemistry.



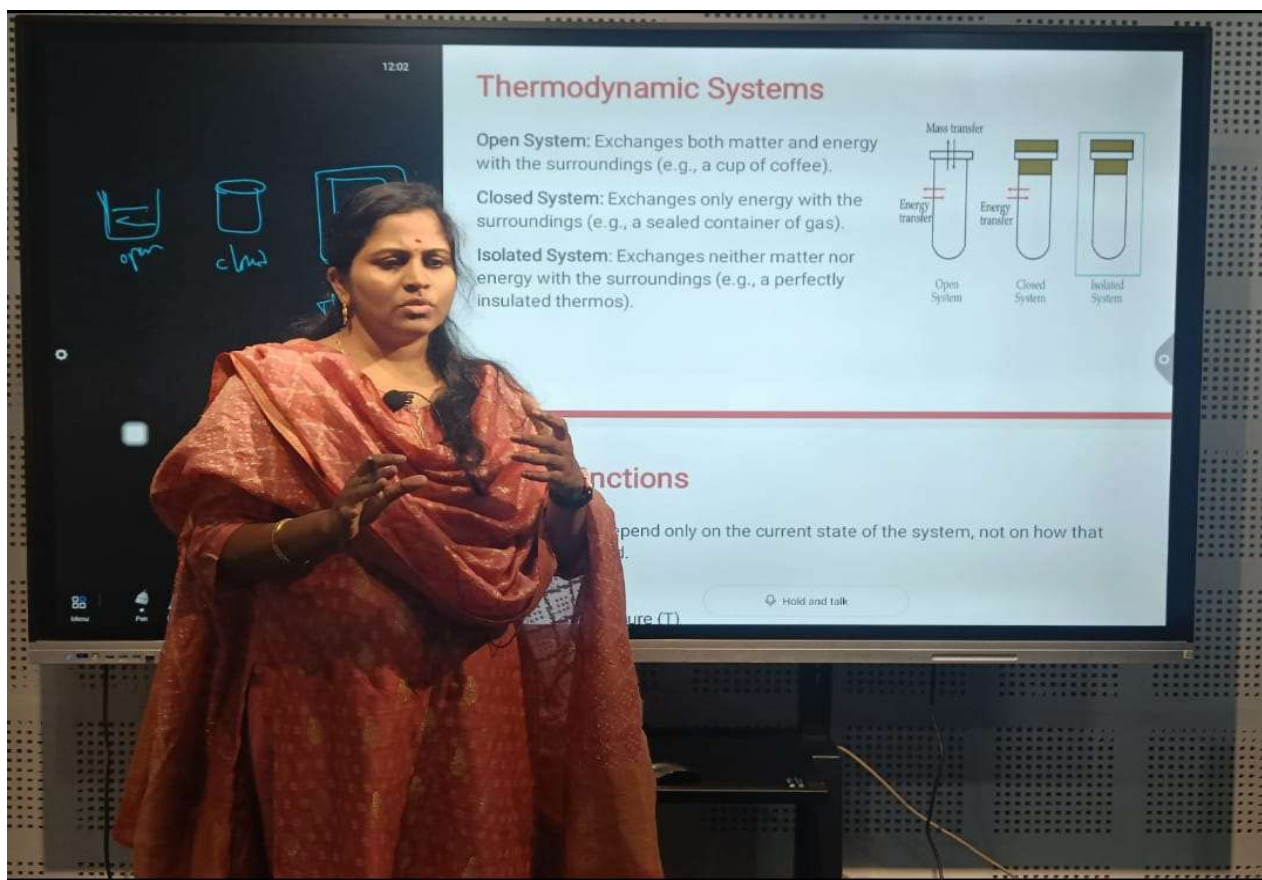
2. Participative Learning

Participative learning methods are implemented to encourage active involvement of students in the learning process. Students participate in seminars, group discussions, quizzes, poster presentations, and science exhibitions. These activities improve their communication skills, teamwork, and subject knowledge. Students also take part in departmental activities during National Science Day and environmental awareness programs.



3. Problem-Solving Method

The department encourages students to develop analytical and problem-solving skills by assigning numerical problems, reaction mechanisms, and case-based questions related to chemistry topics. Assignments and classroom exercises are given to strengthen conceptual understanding.



4. Project-Based Learning

Students undertake small projects and assignments on topics such as water analysis, environmental pollution, green chemistry, and household chemicals. These projects help students develop research aptitude and independent learning skills.



5. ICT Enabled Learning

Faculty members use ICT tools such as PowerPoint presentations, videos, and digital resources to explain complex chemical concepts. Online resources and virtual demonstrations are used to enhance students' understanding of molecular structures and laboratory techniques.



6. Peer Learning

Peer learning is encouraged in the classroom where advanced learners help slow learners in understanding difficult topics. This collaborative learning method improves confidence and academic performance.



Outcome

Through these student-centric methods, the Department of Chemistry ensures that students gain conceptual clarity, practical skills, and analytical ability which are essential for higher education and employment opportunities.

