

Semester	JAN 2023
Open to semester	2
Course code	<b>CH1223</b>
Course title	<b>General Chemistry Practicals I</b>
Credits	3 /
Course Coordinator & participating faculty (if any)	Moumita Majumdar, R. Boomi Shankar, Shabana Khan, Debangsu Sil, Pramod Pillai, Partha Hazra, Britto Sandanaraj?, Ramakrishna G. Bhat/ Seergazhi Srivatsan
Nature of Course	Lab
Pre-requisites	NIL
Objectives (goals, type of students for whom useful, outcome etc)	This is UG laboratory course and all BS-MS students will be exposed to basic chemistry experiments. As part of this course, the students will be carrying out regular chemistry experiments in the lab, experience in handling analytical instruments, data analysis, etc.
Course contents (details of topics /sections with no. of lectures for each)	<p>The tentative list of experiments is given below.</p> <ol style="list-style-type: none"> <li>1. Introduction to Chemistry Laboratory and Safety. Acid-Base Titration Experiment.</li> <li>2. Kinetic Study of Ester (ethyl acetate) Hydrolysis in the Presence of HCl at Room Temperature.</li> <li>3. Verification of Lambert Beer's Law and simultaneous determination of K<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> and KMnO<sub>4</sub> with the help of UV Spectrophotometer</li> <li>4. Study of Optical Activity using a Polarimeter.</li> <li>5. Estimation of iodine in iodized common salt using iodometry.</li> <li>6. Cyanotype blue printing .</li> <li>7. Dye formation: Synthesis of azo dyes.</li> <li>8. Chemiluminescence: Synthesis of Luminol and its chemiluminescence properties.</li> <li>9. Synthesis of Aspirin and Recrystallization.</li> <li>10. Insect repellent: Synthesis and characterization of N,N-diethyl-3- methylbenzamide- DEET.</li> <li>11. Estimating Calcium in milk powder through EDTA complexometry.</li> </ol>
Evaluation /assessment	<p>End-Sem Examination-40%</p> <p>Mid-Sem Examination-40%</p> <p>Others-20%</p>

Suggested readings (with full list of authors, publisher, year, edn etc.)	Will be provided in the first class.
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