

**FURTHER
EXPLORATIONS
IN THE
CHEMICAL WORLD**

CHM 103 LABORATORY MANUAL

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TABLE OF CONTENTS

ACTIVITY	PAGE
Laboratory Protocol and Safety	1
Using Excel for Graphing Data	3
Use of the Analytical Balance	5
Measurement Variation	11
Sampling Variation	17
The Accuracy and Precision of Volume Measuring Devices	25
Analysis of Calcium by EDTA Titration to Assess Water Hardness	31
Titrimetric Analysis of Antacid Tablets	37
More Lights, Color, Absorption!	47
Determination of the Rate Law for Crystal Violet/Sodium Hydroxide Reaction	55
Investigating a Hypothetical Initial Rate Model of the Behavior of Crystal Violet Ion (CV^+) Absorbance	61
Spectrophotometric Determination of the Equilibrium Constant for the Formation of a Complex Ion	67
An Investigation of Electrochemical Reactions	73
Conductometric Measurements	83
Characterization of a Monoprotic Weak Acid by Potentiometric Titration	89
Discovering Intramolecular Interactions	95
Studying Vibrations in Molecules	105

NOTES TO STUDENTS

Welcome to CHM 103 General Chemistry II Laboratory. You will be building on concepts uncovered in General Chemistry I using the approach encountered in CHM 101 at Prince George's Community College. Many of these activities are designed to introduce concepts before they are covered in lecture/discussion and so they may not be graded. However, it is important that you do all parts of each activity to get the full benefit.

The course covers measurement and its error, spectrophotometry and its use as an analytical tool, and electrochemical measurements. Many of the methods involve non-visible means of tracking chemical reactions. We also venture into looking at molecular structure and IR spectroscopy as a tool for identifying functional groups and use later in organic chemistry.

The Physical Sciences and Engineering Department provides numerous resources, such as guides to using ChemSketch, Chime, the TI -graphing calculator, Excel, and PowerPoint plus links to freeware to assist you in understanding topics and skills that are part of this course. We recommend the following web sites:

Physical Sciences and Engineering Department homepage

<http://academic.pgcc.edu/psc> and click on "Resources for Students"

Dr. Scott Sinex's CHM 103 page

<http://academic.pgcc.edu/~ssinex/chm103.html>

The manual, as individual pdf files or the entire manual in one file (go to bottom of page), plus interactive support materials that accompany activities are available at

<http://academic.pgcc.edu/psc/chm103>