

Organic Spectroscopic Structure Determination A

Problem-Based Learning Approach

<http://www1.udel.edu/chem/valhalla//SpecBook.pdf>

Welcome! These web pages offer step-by-step instructions for solving each of the nine sample problems in Chapters One through Three. From these examples, you should learn the general principles that will allow you to work out other structures from the spectroscopic data. **Please note the correction below to Chapter Three, Example B.**

If you have corrections or suggestions, or would like fresh problems for exams, please contact me at taberdf@udel.edu

Chapter One

Example A <http://www1.udel.edu/chem/valhalla/1A.pdf>

Example B <http://www1.udel.edu/chem/valhalla/1B.pdf>

Example C <http://www1.udel.edu/chem/valhalla/1C.pdf>

Chapter Two

Example A <http://www1.udel.edu/chem/valhalla/2A.pdf>

Example B <http://www1.udel.edu/chem/valhalla/2B.pdf>

Example C <http://www1.udel.edu/chem/valhalla/2C.pdf>

Chapter Three

Example A <http://www1.udel.edu/chem/valhalla/3A.pdf>

Example B <http://www1.udel.edu/chem/valhalla/3B.pdf>

Please note corrections: As originally published, Chapter Three Example B incorrectly said “O₂”, and the (3) was missing from the 31.4, q.

Example C <http://www1.udel.edu/chem/valhalla/3C.pdf>