2015

CHEM 243-02 Organic Chemistry II Lab

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CH 243–02  
ORGANIC CHEMISTRY II – LABORATORY (M 3 – 5:50 PM)  
Spring 2015  
Xavier University  
Instructor: Dr. Roger A. Parker, Logan 1, 745-2064, home 771-3613,  
E-mail: parker.r@fuse.net  
Office Hours: M 10-11:30, T 1-3, R 10-11:30, and by appointment  


<table>
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<tr>
<th>NO.</th>
<th>DATE</th>
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| 1.  | 1/12 | Check-In, Safety Rules and Orientation  
**Diels-Alder Reaction (Ch. 48)**  
A. Cracking of Dicyclopentadiene  
B. Cis-Norbornene-5,6-endo-dicarboxylic Anhydride | 620  
623 |  |
| 1/19 | No Class – MLK Day | | | |
| 2.  | 1/26 – 2/23 | **NMR Spectroscopy-Alkyl substituted Benzenes (Ch. 12)** | Handout | |
| 3.  | 2/02 | Steam Distillation of Lemon Grass Oil (Ch. 6)  
Isolation of Citral (IR & NMR) | 102  
106 | |
| 4.  | 2/09 | Hydrobenzoin from benzaldehyde (Ch. 53-55)  
A. Nitric Acid Oxidation of Benzoin  
B. Sodium Borohydride Reduction of Benzil | 661  
668 | |
| 5.  | 2/16 | **Grignard Synthesis (Ch. 38)**  
A. Phenyl Magnesium Bromide  
B. Benzoic Acid | 495  
499 | |
| 6.  | 2/23 | Exam 1 (Experiments 1-4) and Dibenzalacetone (Ch. 37) | 485 | |
| 3/02 | Spring Break – No Class | | | |
| 7.  | 3/09 | A. Qualitative Analysis-Classifications  
B. Qualitative Analysis-Unknown Identification (IR & NMR) | Supplement p26-33 | |
| 8.  | 3/16 | Exam 2 (Experiments 5-7) and Esterification:n-butylacetate (GC & IR)(CH 40) | 520 | |
| 3/23 | No Class – Denver ACS Meeting | | | |
| 9.  | 3/30 | Wittig Reaction (CH 39)  
A Diels-Alder Reaction Puzzle (CH 50) | 507  
641 | |
| 4/06 | Easter Holiday | | | |
| 10. | 4/13 | Nitration of Methylbenzoate & Nitration of Bromobenzene (Ch. 28) | 401 | |
| 11. | 4/20 | Sulfanilamide from Acetanilide (Ch. 45) | 565 | |
| 4/27 | Exam 3 (Experiments 8-12) – Check out | | | |