

Summary of Handouts and Similar Resources
Gladysz Research Group
Summer 2009

01. Research Organization

02. Group Meeting Schedule

03. Group Duty List

04. Summary of Handouts

05. Policies and Administration

05.01 Policy Documents TAMU (important)

05.02 Policy Documents other Groups (not important)

06. "How to Do" Series

06.01 RLi/RMgX Standardization

06.02 Solids

06.02.01 solids and melting points

06.02.02 solids and DSC

06.03 Significant Digits

06.03.01 rounding numbers

06.03.02 significant digits

06.03 Units of Pressure

06.04.01 bp vs. pressure 1

06.04.02 bp vs. pressure 2

06.04.03 manostat, how to use

06.04.04 units of pressure

06.05 Internal Standards

06.06 Solvates

06.07 How To Do Extractions

06.08 Perchlorate Hazards

06.09 R/S Rules, Chiral Rhenium

06.10 X-ray

06.10.01 X-ray Guidelines 2009

06.10.02 tips to get crystals-a

06.10.03 Crystallization in the laboratory

06.10.04 useful Xray references

06.11 Mass Spectrometry

06.12 Solvents / Purification / NMR

06.12.01 ¹H and ¹³C NMR residual solvent peak

- 06.12.01.01 deuterated NMR solvents (Cambridge)
- 06.12.01.02 deuterated NMR solvents (Cambridge 2)
- 06.12.01.03 deuterated NMR solvents (Euriso-top)
- 06.12.02 CDFCl₂ Prep
- 06.12.03 Det. Peroxides in Solvents
- 06.12.04 Det. Water in Solvents
 - J. Chem. Educ., 195, 59, 703-704
 - J. Org. Chem., 1977, 42 (18), 3060-3065 Smithers
 - J. Org. Chem., 1978, 43 (20), 3966-3968 Smithers
 - J. Org. Chem., 1981, 46 (3), 629-631 Smithers
 - J. Org. Chem., 1983, 48 (14), 2420-2422 Smithers
 - Org. Lett., 2008, 10 (20), 4413-4416 DiMagno
- 06.12.05 J(CP) Trends
- 06.12.06 Oxygen Scav. System
- 06.12.07 Solvent Purif Bluemel

07. Writing

- 07.01 Writing
- 07.02 MS Proofing Checklist
- 07.03 Endnote

08. Lab Equipment

- 08.01 Helpful IR (UV vis) Hints
- 08.02 IR microcell React-IR
- 08.03 IR of rhenium compounds 1
- 08.04 IR of rhenium compounds 2
- 08.05 Helpful NMR hints
- 08.06 Cyclic Voltammetry group
- 08.07 Cyclic Voltammetry insti
- 08.08 HPLC how to
- 08.09 glove box policies
- 08.10 Fischer Porter Bottle
- 08.11 gas circulation apparatus
- 08.12 chromatron
- 08.13 GC Handout
- 08.14 GC Vortrag
- 08.15 Mass spec isotopomer ratio
- 08.16 Mass spec problems TAMU

08.17 Vacuum Pump

08.18 solvent purification columns

09. Chemical Inventory

09.01 "how to"/policies part 1

09.02 "how to"/policies part 2

09.03 chemical storage guidelines, University

09.03.01 chemical storage regulations

09.04 lab books (sign out sheets)

10. Computer Related

08.01 hard disk management

08.03 chemdraw tutorial

11. Research Ethics

11.01 research ethics