

Oral Presentations
Organometallic Chemistry (CHE-534)
Fall 2008

Nov. 4, 2008

During the last two weeks of class, we will review four different current topics in organometallic chemistry. You and your fellow students will organize the discussions and present at least two articles in your chosen topic. Everyone must read the articles to be presented and come prepared to ask questions and engage in a discussion. The organizers will be graded on their presentation and the audience will be graded on their participation and contributions. Listed below are the topics that I have chosen.

Presentation Day	Presenters	Topic and Articles
Dec. 2, 11:40 AM	Julia, Becky, and Maureen	<i>Alkyl-alkyl coupling</i> Article 1: G. Fu et al. JACS 2008, 130(21), 6694-5. Article 2: M. Christina White et al. JACS 2008, 130(43), 14090-1. Article 3: O. Baudoin et al. JACS 2008, 130(45), 15157-66.
Dec. 4, 11:40 AM	Liz, Sarah T., and Eden	<i>Uranium chemistry</i> Article 1: E. R. Batista et al. JACS 2008, 130(10), 2930-1. Article 2: K. Meyer et al. JACS 2008, 130(37), 12536-46.
Dec. 9, 11:40 AM	Sarah B., Mia, and Erica	<i>Group 10 reactions</i> Article 1: J. Hartwig et al. JACS 2008 ASAP Article. Article 2: M. Beller et al. JACS 2008 ASAP Article.
Dec. 11, 11:40 AM	Tu and Sarah M.	<i>Ru applications</i> Article 1: E. Meggers et al. JACS 2008 ASAP Communication. Article 2: L. Hammarstrom et al. JACS 2008 ASAP Article.

Unselected Topics and Articles:

C-H functionalization

Article 1: M. Sanford et al. [JACS 2008, 130\(40\), 13285-13293.](#)

Article 2: K. Fagnou et al. [Science 2007, 316\(5828\), 1172-5.](#)

Oxidation reactions

Article 1: M. Christina White et al. [*Science* **2007**, *318*\(5851\), 783-7.](#)

Article 2: D. Milstein et al. [*Science* **2007**, *317*\(5839\), 790-2.](#)

Uranium chemistry (2 unused articles)

Article 3: M. Eisen et al. [*JACS* **2006**, *128*\(29\), 9350-1.](#)

Article 4: K. Meyer et al. [*Angew. Chem. Int. Ed.* **2006**, *45*\(15\), 2389-92.](#)

Guidelines:

- Groups will be chosen randomly in class on Nov. 4. The first group presenting (on Dec. 2) will have the first choice of topic, the presenters on Dec. 4 will have the second choice and so on.
- Each group will present one topic and at least two articles during each 80 min. class period. I have listed articles with the topics, but if you find another article related to the chosen topic that you would rather discuss then you may do that with my permission.
- The group needs to decide how to divide the presentation of the material amongst the two or three students in each group. Nevertheless, each student should plan on presenting for roughly 20 minutes, which leaves 20 minutes for audience questions and other unanticipated events.
- The presenters should:
 - Highlight the key methods, reactions or innovations used in the articles.
 - Discuss problems encountered in the synthesis and how the researchers overcame the problems.
 - Discuss analytical techniques that confirm the author's conclusions.
- Tips for presentations:
 - Use PowerPoint and ChemDraw
 - Highlight or color the portion of the structure that is undergoing reaction to make the transformation clearer to the audience.
 - Use correct chemical descriptions of reagents and reactions. When describing a reaction of a complex molecule focus the audience attention on the functional group that is undergoing the change or is involved in the reaction.
- You will be graded on four categories: Speaking/Presentation, Organization/Clarity, Visuals/Handouts, and Audience Questions.
- All students should read all the articles being presented and be ready to discuss the articles. You will be graded on your class participation.
- And if that doesn't motivate you to pay attention, then perhaps this will: approximately 25-40% of the final exam will come from material in these articles and presentations.