

HLA Group Meetings for Hilary Term 2011

Mondays in basement meeting room; speakers are responsible for setting up so that we start promptly.

- 10 January 9:00
Geoffrey Lynn *Polymer adjuvants.*
- 17 January 10:15, *Synthesis and Mechanisms Problem Class*
Phil S., Phoom, Matthew and **Will** to concoct problems from the recent literature.
- [24 January *no meeting*]
- 31 January 10:15, *Literature highlights* (6 × 4–8 min)
Mitsuhiko *Indenofluorenes: Angew. Chem. Int. Ed. 2011*, asap: DOI: 10.1002/anie.201006312
Nicola *Nanoribbons: Angew. Chem. Int. Ed. 2011*, asap: DOI: 10.1002/anie.201006593
James W. *Energy-transfer cassettes: J. Am. Chem. Soc. 2011*, 133, 51
Johannes *Oligo-carbynes: Nature Chem. 2010*, 2, 967
Philip B. *Sound sensors: Nature Chem. 2010*, 2, 977
Ismael *Structure of a cyclobutadiene: Science 2010*, 329, 299
- 7 February 10:15, "*Know your reagents*" — each talk will introduce two common reagents: What does it do? Why is it useful? General reactivity? How is it made? Who first prepared it and why? (4 × 6–12 min)
Matthew (a) DCC and (b) AIBN
Phil S. (a) BOP and (b) Bestman-Ohira Reagent MeCOCN₂PO(OMe)₂ [*Synlett* 1996, 521]
Phoom (a) Sml₂ and (b) CAN, (NH₄)₂Ce(NO₃)₆ [*Acc. Chem. Res.* 2004, 37, 21]
Will (a) proton sponge and (b) trimethylsilyldiazomethane
- 14 February 11:15, *Literature Highlights* (4 × 6–12 min)
Ismael, James R., Jon. and **Melanie** will each talk briefly about a recent paper which presents an interesting new idea. What is the idea? How is it new? Why is it significant? Why did you choose it? What might follow on from it? Please choose an article which is not closely related to your project, published in the last 6 months.
- 21 February 11:15, *Synthesis and Mechanisms Problem Class*
Philip B., Guzman and **Mitsuhiko** will concoct problems from the recent literature. The problems will be distributed by 6 p.m. on Friday or brought unseen to the meeting.
- 28 February 11:15, *Literature Highlights*: — the following papers are all highly cited. Summarise the main findings of the paper and explain its significance. You can also present recent work to illustrate the impact of the paper. (4 × 7 min)
Nicola Hunter & Sanders, "*The Nature of π-π Interactions*", *J. Am. Chem. Soc.* 1990, 112, 5525.
Jon Wang & Matyjaszewski, "*Living Radical Polymerization*", *J. Am. Chem. Soc.* 1995, 117, 5614.
Dmitry Iijima "*Helical Microtubes of Graphitic Carbon*", *Nature* 1991, 354, 56.
Igor Mirkin et al, "*DNA-based method...*", *Nature* 1996, 382, 607.
- 7 March 11:15
Georg *New IR Dyes.*
- 14 March 9:00 *Recent Progress, Current Priorities and New Targets*
Igor *Azo-porphyrin SHG dyes*
Philip B. *Porphyrin dimer peptide conjugates*
- 21 March 9:00 *Recent Progress, Current Priorities and New Targets*
Mitsuhiko *Conclusions from work in Oxford*
Melanie *Template-directed nanoring synthesis.*
Guzman *Architectures for studying spin entanglement*
- 28 March 9:00 *Recent Progress, Current Priorities and New Targets*
James W. *Design and synthesis of new voltage sensors*
James R. *SHG probes for membrane potential*
Ismael *SHG probes for membrane potential*
- 4 April 9:00 *Progress Reports from Part II Projects*
Will *Porphyrin nanorings*
Phil S. *Self-indicating caged drugs.*
Phoom *SHG probes for membrane potential*
Matthew *Porphyrin dimer rotaxanes*
- 11 April 9:00 *Recent Progress, Current Priorities and New Targets* (4 × 10–15 min)
Jon *Porphyrin-based Nonlinear Optical Materials*
Dmitry *Porphyrin nanorings*
Nicola *Anthracene-fused porphyrins for photovoltaics*

The Part II vacation is 20 April — 2 May, but it might make sense to shift this forward to 14 — 26 April