Problem Set Guidelines

Problem Set Author:

• Problem sets should be distributed one week in advance.

• Whoever is in charge of a problem set should be able to answer questions regarding reaction mechanism, selectivity, and reaction conditions for the presented problems.

• Problems should not be too long; longer problems should be divided into parts.

• Problems should have a range of difficulty levels from “beginning graduate student” level to “experienced graduate student/postdoc” level.

• Multi-step problems that provide only occasional formulas and reaction conditions should be avoided. Provide formulas for most or all of the steps. Better yet, provide key spectral data or other information that will help us to deduce the structure.

• When preparing a problem set, think of yourself as a teacher. What will a student who solves your problem learn? A mechanism? A reaction? A chemical or stereochemical principle? Notions about synthetic strategy and planning? Features of structure and bonding? There are many possibilities.

Problem Solvers:

• Problem sets should be reviewed in advance, and all graduate students and postdoctoral fellows should come prepared to present partial or complete answers to one or more problems.

• Discussion of problems within and between groups prior to the Tuesday evening problem set is encouraged. We also strongly encourage you to consult the chemical literature, although you are not encouraged to look up the actual paper with the solution to the problem itself.