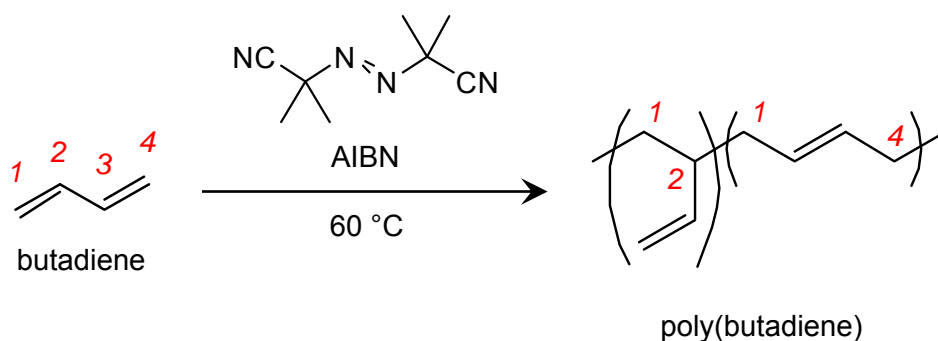


**Workshop 26**  
**Regiochemistry in Butadiene Polymerization**

In poly(butadiene), each butadiene monomer can be connected to the polymer chain at carbons 1 and 2 or at carbons 1 and 4.

1. Butadiene can be polymerized by radical polymerization (though with low molecular weight). Draw a mechanism for initiation and propagation that explains both regiochemistries.



2. Which addition—1,2 or 1,4—do you think would predominate, and why?