



The research covered in our group is highly varied and ranges from understanding the roles that zinc plays in biological systems to the influence that "ansa bridges" exert on the chemistry of metallocene complexes. The importance of this topic is illustrated by the fact that zinc is a constituent of more than 300 enzymes. The active sites of these enzymes feature a zinc center attached to the protein backbone by three or four amino acid residues, the nature of which influences the specific function of the enzyme. In order to understand why different zinc enzymes utilize different amino acid residues at the active site, it is necessary to understand how and why the chemistry of zinc is modulated by its coordination environment. Answers to these questions are being provided by a study of synthetic analogues of zinc enzymes, i.e., small molecules that resemble the enzyme-active sites.

**Before Professor Parkin's talk, look up "X-Ray Crystallography"**

<http://www.columbia.edu/cu/chemistry/fac-bios/parkin/faculty.html>