

Inorganic Chemistry at Colorado State University



Oren Anderson



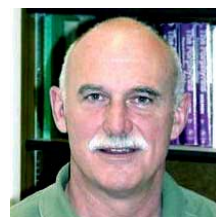
Eugene Chen



Debbie Crans



Peter Dorhout



Mike Elliott



Rick Finke

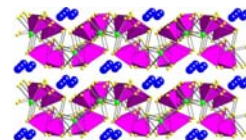
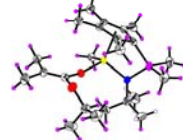
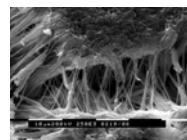
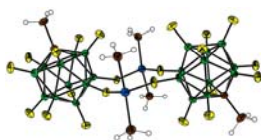


Tony Rappé

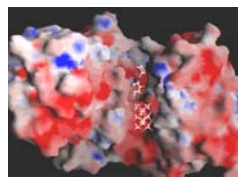


Steve Strauss

Our graduate students work on research projects that are topical, diverse, interdisciplinary, and well-funded. They are trained to solve challenging, inorganic chemistry problems using state-of-the-art instrumentation and methodologies, making them attractive candidates for key positions in chemical and high-tech industries, at national labs, and as faculty at major research universities.

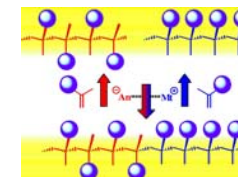


**bioinorganic chemistry • solid-state materials • polymerization catalysis • nanomaterials
kinetics and mechanisms • computational chemistry • environmental FTIR detectors
organometallics • electrochemistry • redox-active coatings • renewable energy
protein X-ray crystallography • fluorinated fullerenes and boron clusters**



Anderson Group: structural studies of inorganic compounds and proteins by means of single crystal X-ray diffraction, especially (a) hexokinase and its complexes with inorganic inhibitors and (b) human and rat kidney and brain glutaminase; www.chem.colostate.edu/opa

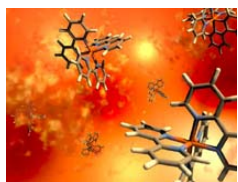
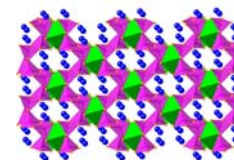
Chen Group: synthetic, mechanistic, & catalytic organometallic/polymer chemistry; diastereospecific ion-pairing polymerization for stereoblock polymers; in-situ polymerized inorganic-polymer nanocomposites; single-site anionic polymerization; www.chem.colostate.edu/eychen





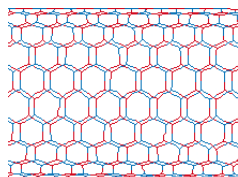
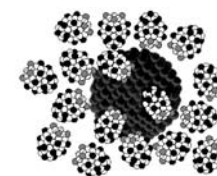
Crans Group: synthesis/characterization of vanadium and other transition metal complexes; mode of action of antidiabetic compounds; membrane systems; multinuclear NMR and EPR; vanadium as a structural and electronic analog of phosphorus; www.chem.colostate.edu/dcc

Dorhout Group: synthesis and characterization of lanthanide and actinide chalcogenides prepared at moderate temperatures in molten salts; thermoelectric and ferroelectric properties of thin films and nanoparticles; X-ray diffraction; www.chem.colostate.edu/pkd



Elliott Group: electron-transfer reactions and photo/electrochemistry of metal complexes; redox-active materials; electrochemical sensors; redox catalysis; dye sensitized solar cells; organic light emitting and organic semiconductor devices; www.chem.colostate.edu/cme

Finke Group: synthesis and kinetic/mechanistic studies emphasizing catalytic chemistry, materials chemistry, nanochemistry, environmental chemistry, analytical chemistry, and bioinorganic/organic chemistry; www.chem.colostate.edu/rgf



Rappé Group: theoretical characterization of reaction mechanisms in homogeneous and heterogeneous catalysis; new electronic structure techniques; development of force fields or model potentials for chemical reactivity studies; www.chem.colostate.edu/rappe

Strauss Group: synthesis and applications of fluorinated superweak anions; lithium battery electrolytes; nonclassical metal carbonyls; selectively halogenated fullerenes; FTIR sensors for environmental applications (*C&EN* March 31, 2003, p 35); www.chem.colostate.edu/shs



Graduate students may choose to do research in more than one group or more than one area of chemistry. We also have many interdisciplinary projects with other departments. **You have many research options** to choose from at CSU.

