

Honors 2004

Requirements for Honors in Chemistry include a program of research with readings from the original literature, presentation of an Honors Essay, typically about 60 pages in length, and the satisfactory completion of a comprehensive oral examination in the subject area of the research. Fourteen Seniors were awarded Honors in Chemistry. Faculty mentors' names are in parentheses.

Chip Crawford (Knudson)

Semi-Classical Wave Functions for Selected One-Electron Diatomic Molecules

Liz Culyba (Starnes)

Mechanism of Action of "Plasticizer Thiols" as Thermal Stabilizers for Poly(vinyl chloride)

Mirth Hoyt (Harbron)

Ensemble and Single Molecule Fluorescence of the HIV-1 Nucleocapsid Protein

Kelly Kennett (Landino)

Purification of Thioredoxin Reductase and the Characterization of Tubulin Repair by the Thioredoxin Reductase Repair System

Mary Kim (DeFotis)

The Magnetic Properties of $\text{Fe}_{1-x}\text{Ni}_x\text{Cl}_2 \cdot 2\text{H}_2\text{O}$ and Thermoremanent Magnetization Decay in $\text{Co}_{1-x}\text{Mn}_y\text{Fe}_{x-y}\text{Cl}_2 \cdot 2\text{H}_2\text{O}$

Nicole Litvinas (Hinkle)

The Total Synthesis of Racemic (*cis*-6-Methyltetrahydropyran-2-yl)acetic Acid

Kristin Plichta (Orwoll)

Poly(arylene ether) Synthetic Methods for Use in Outer Space Radiation Shielding

Kat Potter (Hale, VIMS)

Polybrominated Diphenyl Ether Flame Retardants in Peregrine Falcon Eggs from Coastal Virginia and Maryland

Olivia Schroeder (Poutsma)

Experimental and Computational Investigations of the Influence of Molecular Structure on Gas-Phase Proton Affinity

Todd Showalter (Starnes)

Retardants for Plasticized Poly(vinyl chloride)

Steve Silvonek (Abelt)

The Attempted Synthesis and Characterization of a Model Compound of
6-Propoynyl-2-dimethylaminonapthalene (Prodan)

Sarah Stamps (Bebout)

Synthesis and Heavy Metal Coordination of N- and S-Donating Ligands

Kathryn Taylor (Pike)

Synthesis of Copper and Zinc Complexes for Cation Exchange in Clays

Diana West (Kiefer)

Carborane-Containing Polymers for Effective Space Shielding