# **Honors 2005**

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. This year twelve Seniors were awarded Honors in Chemistry. (Faculty mentors' names are in parentheses.)

# **Emily Carper** (Poutsma)

Experimental and Computational Investigations of the Proton Affinities of Pin 1 Related Substrates

#### **Daniel Chan** (DeFotis)

Study of Fe<sub>1-x</sub>Ni<sub>x</sub>Cl<sub>2</sub>•2H<sub>2</sub>O and Preparation of Deuterated Materials

#### Sara Costa (Rice)

Determination of Methylmercury in Fish Tissue by Derivatization/Extraction and Detection by Gas Chromatography-Mass Spectrometry

# Megan Dellinger (Pike)

Synthesis of Molecular and Network Complexes of Copper(I), Nickel(0) and Nickel(II) with Phosphite and Phosphine Ligands

## Jen Dertinger (Bebout)

Coordination of Heavy Metals with Biologically Relevant Ligands

#### Ethan Greenblatt (Kranbuehl)

Kinetics of Amide Bond Hydrolysis in Nylon Polymers and Small Molecules

## **Courtney Hastings** (Harbron)

Investigation of Aromatic Stacking Interactions through an Azobenzene Photoswitch

## Hillary Huttenhower (Orwoll)

Development of Select Polyimides and Poly(arylene ether)s for Radiation Shielding in Outer Space

#### Palak Oza (Abelt)

The Photochemistry of Thiobenzoates