## Poster Session 1 Saturday, 11:00 – 12:00 pm

Poster number	Presenter Name	Presenter's College or University	Presentation Title
P1.1	Omoluyi Adesanya	University of Chicago	Self-Monitoring Glucometer Devices Versus GBP (Glucose Binding Proteins): Developing an Alternative Biosensor to Monitor Blood Glucose Levels in Diabetic Patients
P1.2	Yilikal Ayino	Macalester College	Transient Conductivity of CVD-Graphene Films
P1.3	Nicole Barrington	Carthage College	Graphical and Statistical Analysis of Langton's Ant
P1.4	Metzere Bierlein De la Rosa	Grinnell College	The Study of a Catalytic Intermediate of Methylenetetrahydrofolate Reductase
P1.5	Max Calenberg	Grinnell College	Gas Phase Conformations of Histidine and Histidine Dipeptides
P1.6	Fernando Castro	University of Chicago	Nanoparticle Epitaxy Using Self Assembled Nanoparticle Monolayers as a Substrate
P1.7	Megan Crow	Gustavus Adolphus College	Photodegradation of the Herbicide Imazethapyr on Soybean and Corn Wax
P1.8	Rebecca Danforth	Hope College	Characterization of Tris(5-amino-1,10-phenanthroline)Iron(III/II)

P1.9	Adam De Jesus	University of Chicago	The Filament that Wobbled
P1.10	Mitch Eagles	Washington University in St. Louis	NMR Analysis of N3-phase Magnesium Borohydride and its High Temperature Transform Product
P1.11	Chris Eckberg	Grinnell College	Magnetic Characterization of RCoGa Ternaries
P1.12	Kei Fuchigami and Brian Wieliczka	St. Olaf College	Novel Transition Metal Organometallic Compounds: Adventures with Ruthy (Ru), OsMo, ChroMo, ReMo and MoMo
P1.13	Valarie Fyfe and Andrew Knight	Luther College	Detecting Trace Amounts of Environmental Pollutants by Fluorescence Spectroscopy
P1.14	Jennifer Gilbertson	Beloit College	Synthesis of Self-assembling Silver Nanoparticles for Surface Enhanced Raman Spectroscopy
P1.15	Jenna Goodrich	Macalester College	Computational Modeling of the Bimolecular Criegee Intermediate and SO <sub>2</sub> Atmospheric Reaction Mechanism
P1.16	Seth Heithaus	Grinnell College	H/D Exchange and Computational Modeling of Proline-containing Peptides in the Gas Phase
P1.17	Daphne Kao	University of Chicago	Angle Spectra of Flat 2-Tori
P1.18	Breanna Marmur	Grinnell College	Crystal Growth and Magnetic Properties of REGeSn, RE=Ho,Er,Nd

P1.19	Steven Mathe	Carthage College	Nuclear-Spin Isotope Effects in Organotin Compounds
P1.20	Joia Miller	Lawrence University	Counting Photons: An Optical Demonstration of Quantum Mechanics
P1.21	Matt Pinkelton	Knox College	Synthesis and Characterization of Novel Heteroleptic Liquid Crystal Dimers
P1.22	Leah Roth and Christian Weeks	St. Olaf College	Cryogenic Dark Matter Search
P1.23	Ian Shiach	Colorado College	Evaluating the Response of the Terrestrial Biosphere to Significant Drought
P1.24	Daniel Straus	University of Chicago	Dissociation of the vibrationally excited CH <sub>3</sub> OSO radical and its photolytic precursor, methoxysulfinyl chloride
P1.25	Michael Szmurlo	Augustana College	Synthesis of Ruthenium (II) Complexes with Phosphine-Functionalized N-Heterocyclic Carbene Ligands for Catalytic Transfer Hydrogenation
P1.26	Elena Tonc	Macalester College	Computational Studies of Atmospheric Reactions of Carbene Hydroperoxides

## Poster Session 2 Saturday, 3:45 – 4:45 pm

Poster Number	Presenter Name	Presenter's College or University	Presentation Title
P2.1	Ahmed AbuZant	Augustana College	Supercontinuum Generation in ZBLAN Fiber
P2.2	Benjamin Alterman	Macalester College	Collider Phenomenology of the Singlet Scalar
P2.3	Athanasios Athanassiadis	University of Chicago	Characterizing packings of non-convex particles using x-ray tomography
P2.4	Antony Barber	Grinnell College	Catalytic effect of transition-metals modified FAU zeolite
P2.5	Andrew Bendelsmith	Macalester College	The Determination of the Dihedral Angles of 1,2-Disubstituted Ethanes in Aqueous Lyotropic Solutions
P2.6	Alex Conway	University of Chicago	Muon Collider Detector R&D A Non- Sampling, Depth-Segmented Approach
P2.7	Fatemeh Elahi	Grinnell College	Non-Protonn Detection at Earth's Field
P2.8	Nigar Hamid	Lawrence University	Photo-induced dissolution of metal ions from fly ash particles in a nitric acid media

P2.9	Nate Hillson	St. Olaf College	Alice the Balancing Robot and Bob the Rubiks Cube Solving Robot Arm
P2.10	Maja Johnson	Gustavus Adolphus College	Abiotic Degradation of Imazamethabenz-methyl
P2.11	George Levy	Lawrence University	Analytical Strategies for Quantifying Nanoparticles' Ligands in Solution-Phase
P2.12	Sijia Liang	Beloit College	When Can You Balance a Can on its Edge?
P2.13	Ishiaka Mansaray	Macalester College	Phenomenological Studies of the Singlet Scalar Standard Model(SSM) using micrOMEGAS 2.4.1
P2.14	Natalee Raymond	Macalester College	Down-Type Fourth Generation Quarks in the Lepton plus Jets Decay Channel
P2.15	Carl Schiltz	Gustavus Adolphus College	Developing a Method to Regulate Production of Authentic mRNAs in Yeast
P2.16	Warren Shull	St. Olaf College	Atomic Transition Probabilities in Cerium
P2.17	Justin Steele	Knox College	Synthesis of Novel Long-Chain Carboxylate Copper(II) Tetramers
P2.18	Severin Thompson	Grinnell College	Synthesis of Molybdenum(VI) Imido Complexes with N-salicylidene-2-aminophenol

P2.19	Spencer Tomarken	University of Chicago	Dynamics of the Random-Field Ising Model in Rare-Earth Ferromagnets
P2.20	Douglas Vodnik	Carthage College	Bandgap Engineering in Graphene Nanomesh for Photovoltaics
P2.21	Rachel Welch	Lawrence University	Heterogeneous Photochemistry of Nitrate Chemisorbed on Aluminum Oxide Particles
P2.22	Sam Wilken	University of Chicago	Droplet Formation of Dense Suspensions
P2.23	Dallas Wulf	Luther College	Searching for Radiative Transitions in h_b(nP)  Bottomonium States
P2.24	Klevi Xhaxho	Grinnell College	Measure of overlap for Bernoulli Iterated Function Systems
P2.25	Jennifer Zelenty	University of Chicago	Development of Polarization Rotator for the Motional Stark Effect with Laser-Induced Fluorescence Diagnostic
P2.26	Fan (Peter) Zhu	Washington University in St.Louis	Contour Variability of Abdominal Anatomy on MR Images for Use in Radiotherapy