Sunday, March 13, 2011

16:00 Registration

19:00 Banquet

Monday, March 14, 2011

8:30 Schlueter, John
Welcome

Monday AM: Conductors I

8:40 Blundell, Stephen
Muon-spin Rotation as a Probe of Molecule-based Materials

9:30 Drichko, Natalia
Interplay of Charge Order and Superconductivity in BEDT-TTF-based Materials with ¼-filled Conductance Band

9:50 Streiffer, Stephen
Physical Sciences and Engineering

10:00 Break

10:30 Brown, Stuart
Superconductivity in Quasi-one Dimensional and Quasi-two Dimensional Molecular Conductors

10:50 Kurmoo, Mohamedally
Magnetism and Porosity in Metal-Organic Frameworks

11:10 Prassides, Kosmas
Fullerene Superconductivity 20 Years on

11:30 Krstovska, Danica
Magnetothermopower Quantum Oscillations in a Q2D Organic Conductor – a Theoretical Approach

11:50 Mori, Takehiko
Requirements for Zero-gap States in Organic Charge-transfer Salts

12:10 Lunch

13:30 Stephens, Peter
Role of Powder Diffraction in Molecule-based Materials

14:20 Stephenson, Brian
Advanced Photon Source

14:30 Mike Papka
Advance Leadership Computing

14:40 Break

15:00 Tours

APS
CNM
ALCF – Jeff Hammond

17:00 Dinner

Monday PM: Extreme Conditions

19:00 Musfeldt, Janice

Spectroscopic Investigations of Materials under Extreme Conditions

19:20 Halder, Greg

Pressure-induced Switching in Magnetic Framework Materials

19:40 Uji, Shinya

Novel Phenomena in Molecular Conductors under High Magnetic Fields

20:00 Zvyagin, Sergei

High-Field ESR in Spin Systems with Reduced Dimensionality

20:20 Goddard, Paul

Molecular Magnets and Metals in High Magnetic Fields

20:40 Wang, Xiaoping

3D Reciprocal Space Mapping by Neutron Diffraction – Visualization of Molecular and Magnetic Interactions in Real Space for Energy Storage Materials

Tuesday, March 15, 2011

8:30 Mori, Take
Welcome

Tuesday AM: Molecule-based Magnets I

8:40 Miller, Joel
Molecule-based Magnets – A Tutorial Overview

9:30 Manson, Jamie
Quantum Magnets Comprised of Strong Hydrogen Bonds

9:50 Mitchell, John
Materials for Energy

10:00 Break

10:30 Lahti, Paul
Development Strategies Taking Paramagnetic Organic Molecules to Molecular Materials

10:50 Costuas, Karine
Multifunctional Carbon-rich Organometallic Compounds: Theoretical Aspects

11:10 Batista, Cristian
Title

11:30 Jena, Peru
A New Class of Magnetic Clusters and Their Potential as Building Blocks of Novel Materials

11:50 McDonald, Ross
The Role of Charge Degrees of Freedom in Mott Insulators: Coupling of Dielectric and Magnetic Properties via Frustration in Cr-trimer Complexes

12:10 Lunch

Tuesday PM: Multifunctionality

13:30 Yamashita, Masahiro
Perspectives on Multi-Functional Single-Molecule Quantum Magnets and Single-Chain Quantum Magnets----Toward Molecular Spintronics

14:20 Zapf, Vivien
Multiferroic Behavior in Metal-organics

14:40 Henne, Tina
Educational Programs

14:50 Break

15:20 Haddon, Robert
Magnetic Phase Transitions in Phenalenyl-Based Neutral Radical Conductors

15:40 Nakhmanson, Serge
Electroactive Properties of Ferroelectric Polyvinylidene Fluoride and Related Copolymer and Oligomer Compounds

16:00 Shatruk, Michael
Title

16:20 Dalal, Naresh
Multifunctional Metal Organic Framework (MOF) Materials

16:40 Almeida, Manuel
Conducting and Magnetic Two Chain Compounds; from 1D systems to Spin-ladders

17:00 Epstein, Art
Title

17:20 Dinner

19:00 Poster session

Wednesday, March 16, 2011

8:30 Ouahab, Lahcene
Welcome

Wednesday AM: Nano and Bio

8:40 Enoki, Toshiaki
Graphene Edge is an Important Building Block for Molecule-based Magnetism

9:00 Firestone, Millie
Hierarchically Structured Electronic Conducting Polymerized Ionic Liquids

9:20 Guionneau, Philippe
Structurally Driven Properties of Molecular Switches

9:40 Lefort, Ronan
Toward Functional Hybrid Nanomaterials Based on Confined Calamitic and Discotic Liquid Crystals

10:00 Petford-Long, Amanda
Center for Nanostructured Materials

10:10 Break

10:40 Meisel, Mark
Heterostructural Films and Nanoparticles of Prussian Blue Analogs: Interface Strain Yields New Opportunities

11:00 Iwasa, Yoshi
Physics of Electrochemical Interfaces

11:20 Bendeif, Eleulmi
Structural Properties of the Thermal and Photo induced Spin Transition in Iron(II) Complexes: from the Macroscopic to the Nanoscopic Scale

11:40 Anthony, John
Molecular Design for Organic Electronic Devices: Transistors and Photovoltaics

12:00 Darling, Seth
Toward Idealized Bulk Heterojunctions in Organic Photovoltaics

12:20 Lunch

2:00 Depart for Chicago

Thursday, March 17, 2011

8:30 Prassides, Kosmas
Welcome

Thursday AM: Surfaces, Films and Interfaces

8:40 Boukheddaden, Kamel
Photoswitchable Spin-Crossover Solids: From Equilibrium to Non-equilibrium Properties

9:30 Nicolazzi, William
New model for Simulation of Domain Spatio-temporal Propagation in Spin Crossover Solids: A Defect-mediated Phase Transition?

9:50 Brooks, James
National High Magnetic Field Laboratories

10:00 Break

10:20 Awaga, Kunio
Organic Electronics based on Paramagnetic Species

10:40 Kaneto, Keiichi
Development of Extremely Air Stable n-type Organic Semiconductor for Thin Film Flexible Complementary-Field Effect Transistors

11:00 Makiura, Rie
Surface Molecular Architecture of Coordination Materials

11:20 Van Ruitenbeek, Jan
Highly Conductive Single Molecule Junctions without Anchoring Groups

11:40 Rabiller, Philippe
Original Aspects of Phase Transitions in Aperiodic Alkane-urea Inclusions Compounds

12:00 Lunch

Thursday PM: Photoproperties

13:30 Buron-Le Cointe, Marylise
Structure and Dynamics of Photo-induced Transformations: From Photostationary to Ultrafast

14:20 Pointillart, Fabrice
The Tetrathiafulvalene-amido-2-Pyridine-N-oxide Ligand as Efficient Organic Chromophore for the Sensitization of Yb(III) Luminescence: Experimental and Theoretical Studies

14:40 Vinokur, Valerii

Materials Theory Institute

14:50 Break

15:20 Neville, Suzanne
Spin Crossover Nano-materials: Thermal and Light-Induced Properties

15:40 Boillot, Marie-Laure
Photoreactive Materials Based on Spin-Crossover Fe^{II} Complexes: Properties of Nanocomposite Silica Thin Films

16:00 Koshihara, Shinya
Search for the Photo-induced Hidden Phase in Strongly Correlated Systems

16:20 Malfant, Isabelle
Molecular Switching in Photochromic Materials based on Ruthenium Nitrosyl Complexes

16:40 Yonemitsu, Kenji
Photoinduced Phase Transition Dynamics: Interplay between Correlated Electrons and Molecular Vibrations during Insulator-metal and Neutral-ionic Transitions

19:00 Banquet

Friday, March 18, 2011

Friday AM: Molecule-based Magnets II

8:30 Cador, Olivier
Some Theoretical Aspects in Molecular Magnetism

9:20 Booth, Corwin
Correlated Electron Effects in Lanthanide Organometallic Molecules

8:40 Flash presentation poster prize winner (Theory)
8:45 Flash presentation poster prize winner (Chemistry)
8:50 Flash presentation poster prize winner (Physics)
8:55 Flash presentation poster prize winner (Nano)

10:00 Break

10:20 Clerac, Rodolphe
Single Chain Magnets – New Developments

10:40 Fishman, Randy
Molecule-based Diruthenium Magnet with Interpenetrating Sublattices

11:00 Holmes, Steve
Tuning Magnetic and Optical Bistability via Building Block Synthetic Approaches

11:20 Novoa, Juan
The First-Principles Bottom-Up Methodology: A General, Systematic, and Unbiased Form of Analyzing the Magnetic Interactions in Molecule-based Magnets

11:40 Hill, Steve
Single-Molecule Magnets

12:00 Lunch

Friday PM: Spin Liquids/Conductors

13:30 Kanoda, Kazushi
Mott Physics of Correlated Electrons in Molecular Conductors

14:20 Kato, Reizo
Molecular Quantum Spin Liquid and Related Electronic States

14:40 Chakoumakos, Bryan
Neutrons at Oak Ridge National Laboratory

14:50 Break

15:20 Kuroki, Kazuhiko
Origin of Magnetism and Large Thermopower in Tau-type Organic Conductors

15:40 Wallis, John
The Synthesis and Properties of Functionalized Organosulfur Donors

16:00 Suzumura, Yoshikazu
Dirac Electron and Berry Curvature in Organic Conductors

16:20 Tanatar, Makariy
Non-magnetic Insulating Ground State of κ-$(ET)_2Cu[N(CN)_2]I$ and Mott Transition Scheme for Two-dimensional Organic Superconductors

16:40 De Souza, Mariano
Lattice Effects in Organic Charge-Transfer Salts Close to the Mott Transition

17:00 Schlueter, John
Closing comments