Northwestern MRSEC-IRG2 Workshop
New Opportunities in Oxides and Chalcogenides
Oct. 6, 2014
Ryan Hall, Room 4003

8:00 – Continental Breakfast buffet

8:20 – Bob Chang – IRG2 Leader, Mark Hersam – MRSEC Director, Matthew Grayson – IRG2 Co-Leader, Northwestern University

Welcome address
8:30 – David Paine, Brown University
A new approach to high performance amorphous indium zinc oxide devices

9:10 – Darrell Schlom, Cornell University
Thin-Film Alchemy: Using Strain to Dimensionality to Unleash the Hidden Properties of Crystalline Oxides

9:50 – Julia Medvedeva, Missouri University of Science and Technology
Long-range structural correlations in amorphous ternary In-based oxides from ab-initio molecular dynamics

10:30 – Coffee break & posters

11:00 – Tony Facchetti, Polyera
Solution-processed metal oxide transistors and circuits

11:40 – Chang-Beom Eom, University of Wisconsin, Madison
Multifunctional Oxide Heterostructures by Design

12:20 – Lunch & discussion & posters

2:00 – Mercouri Kanatzidis, Northwestern University
Crystalline and amorphous chalcogenides: structural complexity, interconversions, optical and phase change properties

2:40 – Jeffrey Elam, Argonne Nat'l Labs
Atomic layer deposition of metal sulfide thin films for applications in photovoltaics and energy storage

3:20 – Coffee break & posters

3:50 – Miguel Yacaman, U. Texas, San Antonio
Deep hydrodesulphirizaton of naftas: A new challenge for chalcogenides catalysts

4:30 - Janet Tate, Oregon State University
High absorbance chalcogenides for PV applications

5:10 - End of session

6:30 – Dinner for guests at Davis Street Fishmarket, 501 Davis St, Evanston