

## Schedule of Presentations by REU Students

### Thursday, July 28, 2011 (Lewis Lab 316)

**First Session: 1:30 pm–2:30 pm** *Chair: Prof. Heffner*

1:30	Nicholas Ward	(Heffner)	The New Low Cost Apparatus for Measuring the Low Conductivities of Glass
1:45	Mia Korngruen	(Kovalskyy/ Heffner)	Effect of Light and Temperature on the Electrical Conductivity of As <sub>2</sub> S <sub>3</sub> Thin Films
2:00	Clare McDonough	(Jain)	Spectroscopic Study of Annealing in Tin-doped Gold-Ruby Glass
2:15	Patrick Wanninkhof	(Jain)	Electrical Conductivity of Gold- and Tin-doped Sodium Trisilicate Glass

**Second Session: 2:45–3:45 pm** *Chair: Prof. Heffner*

2:45	Nerrissa Mitchell	(Pearson)	Measuring Glass Fiber-Epoxy Adhesion
3:00	Becca Conneely	(Toulouse)	Crystallization in TeO <sub>2</sub> -ZnO-BaO (TZB) Glass
3:15	Jordan Thimot	(Hatalis)	Analog Design of Comparators and Operational Amplifiers using State of the Art CMOS Modeling
3:30	Dan Fredeman	(Jedlicka)	Spectroscopic, Thermal, and Mechanical Characterization of Bioactive Glass-Modified Poly(Glycerol Sebacate)

### Friday, July 29, 2011 (Lewis Lab 316)

**First Session: 9:30–10:30 am** *Chair: Prof. Hickman*

9:30	Vanessa Napoli	(McSwain)	Optical Photometry of a $\gamma$ -ray Binary
9:45	Alex Kuczala	(Hickman)	Angular Momentum Collisions of NaK with He
10:00	Billy Ferm	(Kim)	Simulation of Non-Equilibrium States in Two Dimensions
10:15	Zuri McClelland	(Dierolf)	Polarization Dependent Measurements of Eu-doped GaN

**Second Session: 10:45–11:45 am** *Chair: Prof. Biaggio*

10:45	Isaac Clark	(Biaggio)	The Exciton Dance in Organic Semiconductors
11:00	Colleen Treacy	(Biaggio)	Nonlinear Optical Properties of Organic Molecules
11:15	Rachel Henderson	(Stavola)	O-H Defect Structures in Oxides
11:30	Kaitlyn Kreutzer	(Fowler/Martin)	Li-OH Defect in MgO: A Vibrating, Spinning Top System

**Lunch Break: 11:45 am–1:00 pm** *Box lunches provided*
**Third Session: 1:00 pm–2:00 pm** *Chair: Prof. Huennekens*

1:00	Thomas Flores	(Rotkin)	Identification of Single Wall Carbon Nanotubes using Advanced Microscopy Techniques: AFM, PLE, TIRFM
1:15	Alex Edelman	(Rotkin)	Multiscale Physics of Nanotube Devices
1:30	Chris Devulder	(Rotkin)	Hollow Shells of Dipoles: A Group-Theoretical Approach
1:45	Jay Brett	(Gunton)	Encapsulation by Janus Particles

**Fourth Session: 2:15–3:15 pm** *Chair: Prof. Vavylonis*

2:15	Min Yao Lim	(Ou-Yang)	Trapping with Lasers: Bringing Nanoparticles to the Light
2:30	Sam York	(Ou-Yang)	Not from Concentrate: A Dielectrophoretic Method of Concentrating Nanoparticles
2:45	Thienbao Nguyen	(Vavylonis)	Analysis of Polarized Cell Growth and Birth Scar Distribution
3:00	Judy Zhu	(Vavylonis)	Polymerization Kinetics of Actin Filaments