

Telluride Science Research Center Workshop: *Interfacial Chemistry and Charge Transfer for Energy Conversion and Storage*  
 Telluride Elementary School, 447 West Columbia, Telluride, CO 81435  
**Breakfast served daily 7:45 to 8:30 am at the school**

Day	Time	Title (Speaker)
Monday 7/25		<b>Interfaces and interphases</b>
	8:20-8:30	Opening remarks
	8:30-9:20	Interfacial Aspects in the Preparation of Li-ion Battery Cathodes from Reassembled Nanosheets (C. Chan)
	9:20-10:10	Fundamental reduction and subsequent decomposition reactions of the anode SEI in lithium ion batteries (B. Lucht)
	10:10-10:40	<i>Coffee Break</i>
	10:40-11:30	Probing charge and mass transport phenomena across interfaces and interphases in Li-ion batteries (R. Kostecki)
	11:30-12:20	Uncovering interfacial phenomena in high voltage cathode materials for energy storage (S. Meng)
Tuesday 7/26		<b>Electrodes and related phenomena</b>
	8:30-9:20	Understanding decomposition of $\text{Li}_2\text{O}_2$ for $\text{Li-O}_2$ batteries (HR Byon)
	9:20-10:10	Lithium-ion Coupled Electron Transfer Reactions in Super Concentrated Electrolytes (K. Stevenson)
	10:10-10:40	<i>Coffee Break</i>
	10:40-11:30	Revealing Li-Ion Battery Processes Using Neutrons (A. Co)
	11:30-12:20	DFT based Kinetics Monte Carlo study of Li Diffusion in $\text{LiFePO}_4$ (P. Xiao)
Wed. 7/27		<b>Solid state and Mg batteries</b>
	8:30-9:20	Metal deposition for magnesium and solid-state lithium batteries (T. Arthur)
	9:20-10:10	Charge Transport Across the Lithium-Garnet Solid Electrolyte Interface (J. Nanda)
	10:10-10:40	<i>Coffee Break</i>
	10:40-11:30	Atomistic simulations of solid electrolytes (D. Siegel)
	11:30-12:20	Advancing Electrochemical Energy Storage: Redox Flow Batteries and Mg Batteries (T. Liu)
Thursday 7/28		<b>Mostly Capacitive Energy Storage</b>
	8:30-9:20	Understanding Ion Transport in Hydrated 2D Oxides for Electrochemical Energy Storage (V. Augustyn)
	9:20-10:10	Interfacial phenomena during the charging/discharging of graphene supercapacitors (B. Wood)
	10:10-10:40	<i>Coffee Break</i>
	10:40-11:30	Understanding the Capacitive Energy Storage (D. Jiang)
	11:30-12:20	Bayesian statistics to improve accuracy through identification and correction of systematic errors in DFT (T. Vegge)
	12:20-14:00	<i>Lunch</i>
	14:00-14:50	Effective Hamiltonians for double layers at crystalline interfaces (M. Radin)
14:50-15:40	Electrochemical Acoustic Interrogation of Batteries (D. Steingart)	