

TSRC Workshop: Advanced Methods for De Novo Prediction of Chemical Reaction Networks  
Organizers: Bill Green (MIT) and Jim Pfaendtner (University of Washington)

List of participants/institutions and workshop venue available here:  
<https://www.telluridescience.org/meetings/workshop-details?wid=619>

Schedule:

<b>Monday July 25 (mostly PES-based methods)</b>		
8:00 - 9:00	- Breakfast (Telluride Elementary School)	
9:00 - 9:15	- Bill+Jim: Meeting over/welcome	
9:15 - 10:00	- Bill: "Predicting Complex Reaction Networks: Why and How"	
10:00 - 10:45	- Carlo: "A Systematic Approach To Investigate Potential Energy Surfaces of Reacting Systems"	
10:45 - 11:15	- Break	
11:15 - 12:00	- Karl: "Searching Potential-Energy Surfaces of Molecules"	
12:00 - 1:15	-	
1:15 - 2:00		Lunch + group hikes (there will be a few options plans to return to rooms by 4:00)
2:00 - 3:30		
3:30 - 4:15		
4:15 - 5:00		
5:00 - 5:45	- Paul: "Searching for Reaction Networks using Strings and Graphs"	
5:45 - 6:30	- Yury: "Automated Discovery of Elementary Chemical Reaction Steps by Combining Freezing String and Bery Optimization Methods with the Bond Electron Matrix Representation"	

Note: the afternoon break is to encourage small group discussions and informal interactions. We will propose a few options for lunch as well as a few different options for potential hikes. Any needed information / advance planning will be shared at least the week before the workshop.

<b>Tuesday July 26 (mostly graph theory based methods)</b>	
8:00 - 9:15	Breakfast
9:15 10:00	- Richard: TBD
10:00 10:45	- Franklin: "Automatic Mechanism Generation In Heterogeneous Catalysis"
10:45 11:15	- Break
11:15 12:00	- Judit: "KinBot, an autonomous reaction path explorer for elementary reactions"
12:00 - 1:15	Lunch
1:15 2:00	- Dimitrij: "Predicting Feasible Organic Reaction Pathways Using Heuristically-Aided Quantum Chemistry"
2:00 3:30	- Break
3:30 4:15	- Linda: "Unraveling Complex Catalytic Chemistries through Reaction Pathway Analysis"
4:15 5:00	- Group / panel discussion on standards for validating methods
5:00 - 5:45	<i>Telluride town talk</i>
5:45 - 6:30	

<b>Wednesday July 27 (mostly MD-based methods)</b>	
8:00 - 9:00	Breakfast
9:15 - 10:00	- Jim: "Molecular Dynamics Based Approaches for Enumerating Reaction Topology and Kinetics "
10:00 - 10:45	- David: "Accelerated molecular configuration space searching using the boxed molecular dynamics method "
10:45 - 11:15	- Break
11:15 - 12:00	- Group discussion (topic TBD) // afternoon lunch and/or group hike
12:00 - 1:15	-
1:15 - 2:00	
2:00 - 3:30	
3:30 - 4:15	Birgit: "Transition networks for understanding protein self-assembly"
4:15 - 5:00	Graeme: "Computational methods for simulating long time scales and for catalyst design"
5:00 - 5:45	<b><i>TSRC Wed evening picnic / dinner (included with registration)</i></b>
5:45 - 6:30	