

2020 Molecular Electrochemistry MURI Review Schedule

8/10		
	Speaker	Zoom Title
9:00 -9:10	Mike Berman	Opening remark
9:10 - 9:20 am	Tim Lian	MURI overview
9:20 - 9:55am	Yogi Surendranath	Probing and controlling interfacial field-driven reactivity
9:55 - 10:30 am	Sharon Hammes-Schiffer	Interfacial electric fields at electrode surfaces: vibrational probes and graphite-conjugated acids
10:30- 10:45	Coffee break	
10:45 - 11:20 pm	Jim Mayer	Probing interfacial reactivity at self-assembled monolayers and beyond
11:20 -11:55	Adam Willard	Potential fluctuations in the electrical double-layer
11:55 – 12: 30	Marc Koper	Electrochemistry of platinum: not as noble as you think
12:30 -1:30 pm	Lunch break	
1:30 - 2:00 pm	Poster talks	1 minute /1 slide per poster
2:00 – 3:30 pm	Poster session 1	See page 2 for poster list and zoom information
3:30 – 5:00 pm	Poster session 2	See page 2 for poster list and zoom information
8/11		
		Zoom
9:00 - 9:35 am	Joe Subotnik	Advances in microkinetic and electronic structure techniques for simulating electron transfer, PCET, and CV curves.
9:35 - 10:10 am	Tito Abruna	Mechanistic insights into electrochemical processes through operando studies
10:10 - 10:45 am	Tim Lian	Operando probe of reaction intermediates in electro-reduction of CO ₂ on Cu and Au
10:45 - 11:00 am	Coffee break	
11:00 -11:35 am	Jahan Dawlaty	Tracking the Hydrogen Evolution Reaction with Stark-Shift Spectroscopic Probes
11:35- 12:10 am	Giulia Galli	First principle simulations of aqueous interfaces under illumination and under bias
12:10 - 12:30 am	Open discussion	
12:30 pm	End of meeting	
1:30 – 3:30 pm	PI wrap up	

- All talks are 25 minutes + 10-minute discussion

List of posters and Zoom room information (* Password = MURireview)

SESSION 1: 2:00-3:30, 8/10/2020

Presenter(s)	Title	Zoom Meeting ID*
Sara Gebre and Bhattacharyya Dhritiman	Electric Field Probed by in Situ Electrochemical Vibrational Stark Effect Spectroscopy	927 6346 6173
Phillips Hutchison and Robert Warburton	Modeling Field-Driven Proton-Coupled Electron Transfer at Graphite-Conjugated Catalysts	922 8633 6783
Adam Pearce, Abi Heuer and Giovanni Parada	Synthesis of SAM-based proton, electron, and proton-coupled electron transfer probes at metal surfaces	982 0122 1328
Xinyao Lu	Kinetic study of the H electroadsorption reaction using Pt single crystal electrode	980 3696 8430
Jinhui Meng	<i>In situ</i> probe of molecular effects of near surface hydroxide/oxide on Cu electrode of CO ₂ activation	999 6258 7682
Thejas Wesley	Spontaneous electrical polarization of metal surfaces affects non-polar thermal reaction kinetics at catalytic interfaces	932 5157 2641
Noreen Gentry	Evaluating and Quantifying Surface H on Colloidal Gold Nanoparticles	945 3293 2278
Michael Pegis	Thermokinetic Scaling of Inner-Sphere Electron Transfer at Graphite-Conjugated Molecular Active Sites	935 5049 6862

SESSION 2: 3:30-5:00, 8/10/2020

Presenter(s)	Title	Zoom Meeting ID*
Chaoyu Li	<i>In situ</i> probing electrode-electrolyte interface in highly concentrated electrolyte using vibrational spectroscopy	957 6498 3550
Zuxin Jin	Molecular nonadiabatic dynamics near metal surfaces: surface hopping with electronic relaxation	959 4725 1178
Aditya Limaye	A Bayesian Approach to Parameter Recovery from Cyclic Voltammetry Data	998 0421 5005
Anwasha Maitra	TBD	923 6460 1909
Jaeyune Ryu	Polarization-Induced Local pH Swing Promotes Pd-Catalyzed CO ₂ Hydrogenation	934 0096 6548
Rui Zeng	On-line Mass Spectrometric Studies of Alcohol Oxidation for Fuel Cell Applications	928 7803 0782
William Lake	Response of vibrational probes to interfacial electric fields at electrode surfaces	972 0348 8185
Alec Coffman	Kinetic Regimes of Electrochemical Voltammetry Simulations using Marcus-Hush-Chidsey instead of Butler-Volmer Rate Constants	996 0172 0606

MURI meeting home page:

<https://scholarblogs.emory.edu/echemmuri/muri-annual-review-meeting/>