

Drexel Symposium on 2D Transition Metal Compounds for Energy Applications

Sessions 1-5 are located at the Quorum at the University City Science Center, 3711 Market Street, Suite 800

Talks are 20 minutes plus 10 minutes for discussion and questions

May 1

Session 1: Advances in Synthesis

8:50 – 9:00	Introductory remarks	
9:00 – 9:30	Michel Barsoum (Drexel)	<i>What Happens Between the MXene Sheets</i>
9:30 – 10:00	Aaron Fafarman (Drexel)	<i>Prospects for MXenes as Optical Metamaterials</i>
10:00 – 10:30	André Taylor (Yale)	

10:30 – 10:45 coffee

Session 2: Structure of 2D materials

10:45 – 11:15	Mingwei Chen (Johns Hopkins)	
11:15 – 11:45	Simon Billinge (Columbia)	
11:45 – 12:15	Raymond Unocic (Oak Ridge)	<i>Role of Atomic Defects on Materials Functionality in 2D Materials</i>

12:15 – 1:30 lunch (not provided)

Session 3: Electronic Properties and Energy Storage

1:30 – 2:00	Yury Gogotsi (Drexel)	<i>High-Rate Energy Harvesting and Delivery with 2D Carbides and Nitrides</i>
2:00 – 2:30	Bing Hu (Maryland)	<i>Ion intercalation and high temperature behavior of 2D materials</i>
2:30 – 3:00	Mauricio Terrones (Penn State)	<i>Defect Engineering of 2D Materials: from doping to nanopores</i>
3:00 – 3:30	Goran Karapetrov (Drexel)	<i>Correlated electron states in transition metal dichalcogenides</i>

4:00 – 4:30 Professorship event for Yury Gogotsi
Location: Picture Gallery at Drexel

4:30 – 6:30 Poster session
Location: 3rd floor Atrium of the Bossone Engineering Building (32nd and Market)

May 2

Session 4: Ions in 2D material

8:50 – 9:00	Recap/welcome back	
9:00 – 9:00	Michael Naguib (Oak Ridge)	<i>Two-dimensional Transition Metal Carbide and Carbonitride “MXenes” as Host Materials for Ions</i>
9:30 – 10:00	Ekaterina Pomerantseva (Drexel)	<i>The influence of chemically preintercalated cations on the electrochemical properties of layered metal oxides</i>

10:00 – 10:15 coffee break

Session 5: Catalysis

10:15 – 10:45	Teddy Asefa (Rutgers)	<i>Heteroatom-Doped Nanocarbons, Metal Carbides and Layered Double Hydroxides: Catalysts for Energy Applications</i>
10:45 – 11:15	Joshua Snyder (Drexel)	<i>Activity and Stability Relationships for 2D and 3D Electrocatalytic Materials</i>
11:15 – 11:45	Aleksandra Voyvodic (Penn)	<i>2D and Layered Materials as Electrocatalysts</i>
11:45 – 12:15	Dan Strongin (Temple)	<i>Electrocatalytic activity of layered metal oxides and carbides</i>
12:15 – 12:30	Wrap up discussion	