# **PNWAVS 2023 Symposium Schedule**

THURSDAY, 7 SEPTEMBER				
8:05-8:20	Elton Graugnard	Chair Greeting	<b>Boise State University</b>	
8:25-8:30	Nancy Glenn	Vice President for Research and Economic	Boise State University	
		Development, Opening Remarks		

#### Session 1 Chair: Elton Graugnard

8:35-9:15	Gurtej S. Sandhu	(Invited Keynote) Future of Memory Chip	Micron Technology
		Technology	
9:20-10:00	Sudarat Lee	(Invited) Innovations in Atomic Layer	Intel Corporation
		Deposition Enabling Angstrom Era	
		Semiconductor Manufacturing	

#### 10:00-10:30 Break and Vendor Exhibit

10:30-11:10	John F. Conley, Jr.	(Invited) TBD	Oregon State University
11:15-11:55	David Estrada	( <b>Invited</b> ) Scalable manufacturing of 2D and layered materials thin films	Boise State University

## 11:55-1:30 Lunch and Vendor Exhibit

#### Session 2 Chair: Tiffany Kaspar

1:30-2:10	Brelon J. May	(Invited) Molecular Beam Epitaxy of	Idaho National
		Transition Metal Nitrides	Laboratory
2:15-2:35	Matt McCluskey	Photoluminescence Mapping of	Klar Scientific/
		Semiconductors and Oxides	Washington State
			University
2:40-3:00	Kevin D. Vallejo	Synthesis and transport properties of rare-	Idaho National
		earth nitrides deposited via molecular beam	Laboratory
		epitaxy	

## 3:00-3:30 Break and Vendor Exhibit

3:30-4:10	Zbynek Novotny	( <b>Invited</b> ) Probing Solid-liquid Interfaces with Tender X-rays	Paul Scherrer Institute
4:15-4:35	Dan Thien Nguyen	Unveiling The Correlation Between The Solvation Sheath And Surface Reactions In Multivalent Rechargeable Batteries	Pacific Northwest National Laboratory/ Argonne National Laboratory
4:40-5:00	Xin Zhang	Molecular examination of metal ion pairs formation and competition in highly concentrated electrolyte solutions using in situ liquid SIMS	Pacific Northwest National Laboratory

## Session 3 Chair: Vaithiyalingam "Shuttha" Shutthanandan

5:00-6:45	Poster Session and Vendor Exhibit				
6:50-8:00	Ahmad Islam	d Islam (Dinner + Plenary Talk) Electronic device Air Force Research			
		development using the newest	Lab		
		semiconductor: $\beta$ -Ga <sub>2</sub> O <sub>3</sub> ,			

# FRIDAY, 8 SEPTEMBER

Session 4	<b>Co-Chairs: Josh E</b>	ixenberger and Tony Varghese	
8:05-8:45	Robert A. Kaindl	(Invited) CXFEL Labs – New Horizons for	Arizona State
		Ultrafast X-ray Science	University
8:50-9:10	Liane Moreau	Uranyl absorption into metal organic	Washington State
		frameworks: a detailed structural analysis	University
		through X-ray spectroscopy and anomalous	
		scattering	
9:15-9:35	Min-Ju Choi	X-ray Photoelectron Spectroscopy Analysis	Pacific Northwest
		for Pt 4f core-level peaks in Pt-attached	National Laboratory
		TiO <sub>2</sub> Nanoparticles	
9:40-10:00	Debashree Roy	How Surfactants Control the Morphology	Washington State
		of Au Nanocrystals	University

#### 10:00-10:30 Break and Vendor Exhibit

10:30-11:10	Lin You	(Invited) Characterizing state-of-the-art	Micron Technology
		memory structures via scanning probe microscopies (SPM)	
11:15-11:35	Sten V. Lambeets	Exploring Field-Assisted Nitrogen	Pacific Northwest
		Activation and Dissociation on Ru with	National Laboratory
		Operando Atom Probe Microscopy	
11:40-12:00	Xiang Wang	In-Situ Investigation of Nanoscale Oxide	Pacific Northwest
		Formation in GARS-prepared ODS	National Laboratory
		Powders	
12:05-12:25	Xiaoxu Li	Identical Location Transmission Electron	Pacific Northwest
		Microscopy Reveals Nanoscale Controls on	National Laboratory
		Carbon Mineralization of Silicates	

#### 12:25-1:25 Boxed Lunch (relocate to Micron Center for Materials Research)

## Session 5 Chair: Elton Graugnard

1:30-2:30	Jean-Sabin	( <b>Invited + MSMSE Seminar</b> ) Elucidating	Washington State
	McEwen	the Chemical Nature of Single-Site	University/ Pacific
		Catalysts from First Principles	Northwest National
			Laboratory