

SCHEDULE

8:15am Breakfast (The Commons – outside Panera)

9:00am **Opening Remarks – Dr. Harris Wong** (PFTH 1200)

9:10am Announcements – Dr. Ingmar Schoegl (PFTH 1200)

Morning Session 1

	Outstanding Research Assistant Competition (PFTH 1200)		
	Chair: Wencai Li (Co-Chair: John J Hebert)		
9:20 – 9:40am	Cheng Yan - From Drug Molecules to Thermoset Shape Memory Polymers: a Machine		
	Learning Approach (Dr. Guoqiang Li)		
9:40 – 10:00am	Ondrej Labik - Integration of Solar + Storage Installation Upstream in Modular Housing		
	(Dr. Isabelina Nahmens)		
10:00 – 10:20am	Shahrior Ahmed - Kinematic Modeling of a Spatial Screw-Driven Continuum Robot		
	(Dr. Hunter Gilbert)		

10:20am Break

Morning Session 2

	Session A2 (PFTH 1200)	Session B2 (PFTH 1263)
	Chairs: Debaroty Roy , Wencai Li	Chairs: Mojtaba Talachian, Farid Sahebsara
10:40 – 11:00am	Connor Becnel- Temperature	Saber Nemati- Vision transformers in
	measurements in the reaction zone of a	automated material characterization;
	small-scale hybrid rocket combustor	(Dr. Shengmin Guo)
	using TDLAS (Dr. Shyam Menon)	-
11:00 – 11:20am	Sachin Dahiya- Micro heat-exchanger to	Farid Sahebsara- Avoiding flip ambiguities
	cool cerebrospinal fluid	during sequentially grown;
	(Dr. Manas Gartia)	(Dr. Marcio de Querioz)
11:20 – 11:40am	Ryan Meraux- A film cooling based	Chase LeMaire- Tunable passive shock and
	approach to mitigate dust ingestion	vibration isolators for rotational isolation
	driven turbine blade damage	(Dr. Hunter Gilbert)
	(Dr. Shyam Menon)	
11:40 – noon	Salar Saadatian- Analytic solutions of	Josh Nguyen- Robotic manipulators
	heat and mass transfer in flat heat pipes	performing smart sanding operation: a
	with porous wicks (Dr. Harris Wong)	vibration approach (Dr. Corina Barbalata)

Noon Lunch (The Commons – outside Panera)

Afternoon Session

	Session A3 (PFTH 1200)	Session B3 (PFTH 1263)
	Chairs: Farid Sahebsara, Debaroty Roy	Chairs: John J Hebert , Mojtaba Talachian
1:20 – 1:40pm	Reza Namakian- Combined molecular	Mohana Gurunadhan- A numerical
1	dynamics/Monte Carlo simulation	investigation of melt layer effects on hybrid
	(Dr. Moldovan & Dr. Meng)	consumption of liquefying fluids
		(Dr. Keith Gonthier)
1:40 – 2:00pm	Siavash Sarrafan- A novel 2W-SMP	James Leung- Experimental and
1	syntactic foam actuator	computational study of droplet-shockwave
	(Dr. Guoqiang Li)	interaction for pure fluids and nanofluids
		(Dr. Shyam Menon)
2:00 – 2:20pm	Yunxia Wang- A 3D printed jet mixer	Domingo Elias Soto- Catalyst shape
1	for centrifugal microfluidics	optimization for the reduction of hotspots in
	(Dr. Wanjun Wang)	an exothermic reaction;
		(Dr. Wong & Dr. Nandakumar)
2:20 – 2:40pm	Madeline Kirby- Predictive thermal	Clifford LeBlanc- Scale up of a novel method
	modeling and characterization of	to maximize Malonyl-CoA in Escherichia Coli
	ultrasonic consolidation process for	(Dr. Marcio de Querioz)
	woven thermoplastic composites	
	(Dr. Genevieve Palardy)	
2:40 - 3:00pm	Luis Velazquez- Development and	Varun Viswamithra- A study on the impact
	implementation of a UV curable resin	of elevated air temperatures on flame stability
	extruder for additive manufacturing	and NOx emissions (Dr. Shyam Menon)
	application (Dr. Corina Barbalata)	

3:00pm Break & Group Photo

	Award Ceremony
3:30 – 4:00pm	Raffle & Award Presentation
	Best Presentation Award
	Outstanding Research Assistant Award
4:00pm	Closing Remarks

Adjourn