

THERMASMART

Thermal Management of Microprocessors

3rd Thermasmart Workshop, York University, Toronto, Canada – Nov. 24-25, 2022

Bergeron Building ground floor, room 125

Thursday – Nov 24 th , 2022		
8:30 - 9:00	Registration opens	Light refreshments
9:00 - 9:20	Opening of the workshop	Prof. Prashant Valluri
		Prof. Alidad Amirfazli
9:20 – 10:20	Dr. Ben Kenny	Challenges and opportunities in thermal management for EV mobility
	(invited speaker)	
10:20 – 10: 45	Dr. Daniel Orejon	Control of Heat Transfer and Shedding on Thermoresponsive Lubricant Infused Surfaces
10: 45 – 11:10	Asst. Prof. Yutaku Kita	Transient nature of spray cooling: some clues and open questions
11:10 - 11:35	Dr. Mark Alston	Microfluidic network in optimal balancing of successive resistance for high energy transfer for
		3D ICs
11:35 – 12:00	Zhihao Zhang	Experimental investigation of the sessile droplet evaporation process based on different surface
		roughness
12:00 - 13:30	Lunch & Networking	
13:30- 13:55	Dr. Lennon Ó Náraigh	Mathematical and Physical Modelling of Industrial Drying
13:55 – 14:20	Prof. Panos Theodorakis	Droplet motion without external energy supply
14:20- 14:45	Dr. Marilize Everts	Nucleate pool boiling for surface temperature uniformity of developing flow through horizontal
		tubes
14:45 – 15:05	Coffee break	
15:05 – 15:30	Matthew Docherty	Inkjet Printing on Hydrophobic Surfaces with Conductive Ink: Practical Implementation of
		Stacked Coin Strategy
15:30 – 15:55	Giada Minozzi	Analysis of surface wettability effect on nucleate boiling with a diffuse interface method
15:55- 16:20	Khang Ee Pang	Geometric Diffuse Interface Method for Droplet Spreading
18:30	Networking Dinner	Downtown Toronto – Details to follow



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Friday – Nov 25 th , 2022			
8:30 – 9:00	Registration opens		
9:00 - 10:00	Prof. Michel Gradeck	Interaction between a dispersed flow of droplet and a heated wall beyond the Leidenfrost	
	(invited speaker)	temperature	
10:00 - 10:25	Prof. Ken Craig	CFD modelling of jet impingement boiling - an overview	
10:25 – 10: 50	Ludick Luwan	Computational investigation of surface enhancements in jet impingement and flow boiling	
10: 50 – 11:10	Coffee break & YU Poster		
11:10 – 11:35	Khaloud AL Balushi	Wetting of Binary mixtures on structured surfaces and the effect of the oxygen plasma cleaning	
11:35 – 12:00	Aneurin Hughes	Engineered surfaces with conical structures to enhance dropwise condensation in the presence	
		of a shearing airflow	
12:00 – 13:30	Lunch, Networking & YU Poster		
13:30- 13:55	Prof. Panos Theodorakis	Characteristics of HFE7100 Droplets Evaporation on Two Different Substrates	
13:55 – 14:20	Katie Thomson	Stability analysis of evaporating sessile drops comprising binary mixtures	
14:20- 14:45	Anam Abbas	Controlling Evaporation Modes of Sessile Water Droplet via Silicone Oil Grafting	
14:45 – 15:05	Coffee break & YU Poster		
15:05 – 15:30	Andrew Boyd	Characterizing Behaviour of Immersed Ellipsoids	
15:30 – 15:55	Jianrong Zhai	Molecular dynamics simulations of the transport of refrigerant water molecules through	
		hydrophobic membrane	
15:55- 16:00	Francois le Roux	Next Steps in Jet Impingement Boiling	
16:20 – 17:00	Business meeting - All	Next Steps for ThermaSmart Network & concluding remarks	

It takes about 10 min of walk from Workshop Hotel (Schulich Executive Learning Centre) on Campus to the Bergeron Building where talks are held

