

MELBOURNE INDIA POSTGRADUATE PROGRAM
AND
MELBOURNE INDIA POSTGRADUATE ACADEMY
CONFERENCE (MIPPAC 2019)

09-13 December 2019



~ VENUE ~

Theatre 3, Level 1, Alan Gilbert Building

161 Barry Street, Carlton, VIC 3053

<https://maps.unimelb.edu.au/parkville/building/104/121>

Programme

Day 1: 9th Dec 2019

Plenary Session: 09:00 AM – 11:00 AM

From	To	Min.	Event	Chair
8:00 AM	9:00 AM	30	Registration	
9:00 AM	9:10 AM	10	Welcome Note: Dr. Meenakshi Arora, Assistant Dean International-MSE and Director MIPP/A	Ashok,
9:10 AM	9:20 AM	10	Prof. Justin Zobel, Pro Vice-Chancellor, Graduate & International Research, The University of Melbourne	And
9:20 AM	9:30 AM	10	Prof. Mark Cassidy, Dean Melbourne School of Engineering, The University of Melbourne	M. Arora
9:30 AM	9:40 AM	10	Prof. Andy Martin Associate Dean Graduate Programs, Faculty of Science University of Melbourne	
9:40 AM	9:50 AM	10	Prof. SK Bhattacharyya, Director Indian Institute of Technology Kharagpur	
9:50 AM	10:00 AM	10	A/Prof. Sachin Gunthe, International Relations, Indian Institute of Technology Madras	
10:00 AM	10:10 AM	10	Prof. Tarun Gupta, Dean Research, Indian Institute of Technology Kanpur	
10:10 AM	10:20 AM	10	Dr. Sarbjit Giddey, Principal Research Scientist CSIRO and President IITaV	
10:20 AM	10:25 AM	05	MIPP/A Report 2019 Launch: Prof. Jim McCluskey, Deputy Vice Chancellor-Research	
10:25 AM	10:30 AM	05	Vote of Thanks: Prof. Ashokkumar Muthupandian, Assistant Deputy Vice Chancellor-International (India)	
10:30 AM	11:00 AM	30	Coffee break	

Technical Presentation – Session 1: 11:00 AM - 12:30 PM

From	To	Min.	Event	Chair
11:00 AM	11:15 AM	15	Aakash Gupta : Interaction of a pathogen with its host: The Talaromyces marneffeii survival and replication inside host immune cells	Prof Marcus Pandy
11:15 AM	11:30 AM	15	Jithin George : Relay-Energy Access Points for Internet-of-Things Wireless Energy Harvesting and Communications	And
11:30 AM	11:45 AM	15	Bosirul Hoque : Recovery of Gold from Waste Electrical and Electronic Equipment using Cross-linked Polymer Inclusion Membranes.	Naveena Ganapam
11:45 AM	12:00 PM	15	Vishnu Ramachandran Menon : Are native mammals more resilient to fire in fox-baited landscapes ?	
12:00 PM	12:15 PM	15	Nandakishor Desai : Computed Tomography Image Analysis in Neurological Disorder Subjects	
12:15 PM	12:30 PM	15	Srivathsan Poyyapakkam : Oxidation kinetics of C8H7	
12:30 PM	1:30 PM	60	Lunch Break	

Note: This is a work in progress. The final programme will be available by 30th November 2019.



Technical Presentation – Session 2: 01:30 PM – 03:00 PM

From	To	Min	Event	Chair
1:30 PM	1:45 PM	15	Achyut Mishra : Incorporating the geochemical impact of mm-cm scale lithological heterogeneity in reservoir models	Prof H.N. Mishra
1:45 PM	2:00 PM	15	Pavan Harika Raavi : Basinwise statistical analysis of factors limiting Tropical storm formation from an initial tropical circulation	And
2:00 PM	2:15 PM	15	Joydip Mondal : Experimental investigation of bubble-interactions	Pooja Pandey
2:15 PM	2:30 PM	15	Tushar Sikroria : Flow instabilities in supersonic impinging jets	
2:30 PM	2:45 PM	15	Himanshu Mishra: Entrainment in turbulent jets and forced plumes	
2:45 PM	3:00 PM	15	Padma Naveena Ganapam : Correlating knee joint motion and cartilage damage after anterior-cruciate-ligament reconstruction	
3:00 PM	3:30 PM	30	Coffee break	

Technical Presentation – Session 3: 03:30 PM – 04:30 PM

From	To	Min.	Event	Chair
3:30 PM	3:45 PM	15	Noor E Karishma Shaik : Development of Multispectral Camera Technology for Thermal Imaging	Prof Tarun Gupta
3:45 PM	4:00 PM	15	Pooja Pandey : Optimization of formulations for encapsulation of γ -Amino Butyric Acid and L Plantarum	And
4:00 PM	4:15 PM	15	Pawan Kumar : Wetting of Real surfaces	
4:15 PM	4:30 PM	15	Santa Maiti : A Study on the Behaviour of Vehicle Platoons and Platoon Formation and Dissolution Strategies	Abhishek Mondal

Banquet Dinner 3: 07:00 PM – 10:30 PM

From	To	Event
05:30 PM	06:30 PM	Transit to MCG
07:00 PM	07:30 PM	Networking / welcome drinks
07:30 PM	10:30 PM	Dinner

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Day 2: 10th Dec 2019

Technical Presentation – Session 4: 08:00 AM - 10:30 AM

From	To	Min.	Event	Chair
8:00 AM	8:15 AM	15	Snigdha Sarita Mohapatra : A State-of-the-art review on Integrated Urban Water Management in Urban Water Supply Security	Prof Parthasarathi Ghosh And Joydip Mondal
8:15 AM	8:30 AM	15	Shubham: Prediction of Airfoil Trailing Edge Noise using Semi-Empirical Model in Compressible regime	
8:30 AM	8:45 AM	15	Partha De : Design and Implementation of light weight cipher that are resistant to power analysis attacks	
8:45 AM	9:00 AM	15	Chinglen Meetei Tensubam : Wave induced turbulence effect on oceanic biogeochemistry and prediction of ocean color response to changing wave climate	
9:00 AM	9:15 AM	15	Aravind George : Cross-slot microfluidic channel flow	
9:15 AM	9:30 AM	15	Shreshtha Kumar Gupta : Flame-Wall Interaction: Laser Diagnostic Investigation	
9:30 AM	9:45 AM	15	Dinesh Srikar Karra : Adsorption dynamics of microbubbles in aqueous solution	
9:45 AM	10:00 AM	15	Abhisek Mondal : Porous media transport of iron nanoparticles for site remediation application: A review of lab scale column study, transport modelling and field-scale application	
10:00 AM	10:15 AM	15	Arunjunai Raja Shankar Santha Kumar : RAFT Polymerization of Methacrylates in Ionic Liquid Solvents	
10:15 AM	10:30 AM	15	Amrish Kumar Padmakumar : Ultrasound Assisted Controlled Radical Polymerization	
10:30 AM	11:00 AM	30	Coffee break	

Technical Presentation – Session 5: 11:00 AM - 12:50 PM

From	To	Min	Event	Chair	
11:00 AM	11:15 AM	15	Philip Bigi Varghese : Finite time distributed optimisation algorithms	Prof Shantanu Chattopadhyay And Pawan Kumar	
11:15 AM	11:30 AM	15	Anshul Baral : Sono-Assembled Octapeptide nanoparticles for Bio-Medical Applications		
11:30 AM	11:45 AM	15	Sourav Mondal : Cloudlets for Low-latency Applications over Fiber-Wireless Networks		
11:45 AM	12:00 PM	15	Nisha Mehta : Exploring the applicability of density functional approximations: the most comprehensive benchmark study of double hybrids and application of low-cost DFT to clam-like cyclotricatechylene capsules		
12:00 PM	12:15 PM	15	Neeta Lohani : Comparative Analysis of Heat Shock Transcription factor family in Brassica napus, B. Rapa and B. oleracea		
12:15 PM	12:30 PM	15	Krishna Chandran: Isolation and Characterization of O- and C-methyltransferase from Eucalyptus species		
12:30 PM	12:45 PM	15	Pramod Kumar Jangir: Relative performance of Directional Waverider Buoy, Laser, and WaveRadar during a Tropical Cyclone off the Northwest Coast of Australia		
12:45 PM	12:50 PM	5	Vote of Thanks (Pawan Kumar)		
12:50 PM	2:00 PM	60	GROUP PHOTO + Lunch break		

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Professional Talk / Discussion Panel: 02:00 PM - 04:30 PM

From	To	Min	Event	Chair
2:00 PM	3:45 PM	105	So, you completed your PhD - What's next? A panel discussion highlighting career opportunities after PhD <ol style="list-style-type: none">1. A/Prof. Ashok Sharma, Victoria University2. Mr. Abaran Deep, Angel investor3. Dr. Sarbjit Giddey, Principal Research Scientist CSIRO4. Mr. Steve Bungay Director and CEO, Envision IT	Shaktivesh and Abhishek Mondal
3:45 PM	4:00 PM	15	Closing remarks (M.Arora)	
4:00 PM	4:30 PM	20	Group Photo + Coffee	

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ACADEMIC WORKSHOP AT THE UNIVERSITY OF MELBOURNE WITH IIT MADRAS, KANPUR, AND KHARAGPUR

Day 3: 11th Dec 2019

From	To	Min.	Event
9:00 AM	9:15 AM	15	Welcome and introduction : Meenakshi Arora
9:15 AM	9:30 AM	15	A brief presentation about MIPP/MIPA, Opportunities for collaboration with India (SPARC, GIAN, AISRF, VAJRA, PI's for ARC Grants etc): Meenakshi Arora
9:30 AM	11:00 AM	90	A 4-minute (3-4 slides) description of the research by each participant.
11:00 AM	11:30 AM	30	Coffee break
11:30 AM	12:15 PM	45	A 4-minute (3-4 slides) description of the research by each participant (Contd.)
12:15 PM	01:00 PM	45	Break out groups based on the research interests: These groups will start discussing the ideas for collaborative work.
1:00 PM	2:00 PM	60	Lunch break
2:00 PM	5:00 PM	180	Breakout groups can choose to do one or more of following activities: <ol style="list-style-type: none"> 1. Breakout groups re-convene to continue discussions 2. Visits to labs/ faculties 3. Deliver seminars 4. Group discussions to develop ideas for collaboration

Day 4: 12th Dec 2019

From	To	Min.	Event
9:30 AM	11:00 AM	90	Groups Report back on the collaborative project ideas: Facilitated by Meenakshi Arora
11:00 AM	11:30 AM	30	Coffee break
11:30 AM	12:30 PM	60	Break out groups to brainstorm ideas about way forward
12:30 PM	01:00 PM	30	Report back and Actions
1:00 PM	2:00 PM	60	Lunch break
2:00 PM	5:00 PM	180	Breakout groups continue the networking through: <ol style="list-style-type: none"> 1. Visits to labs/ faculties 2. Deliver seminars 3. Group discussions to develop ideas for collaboration

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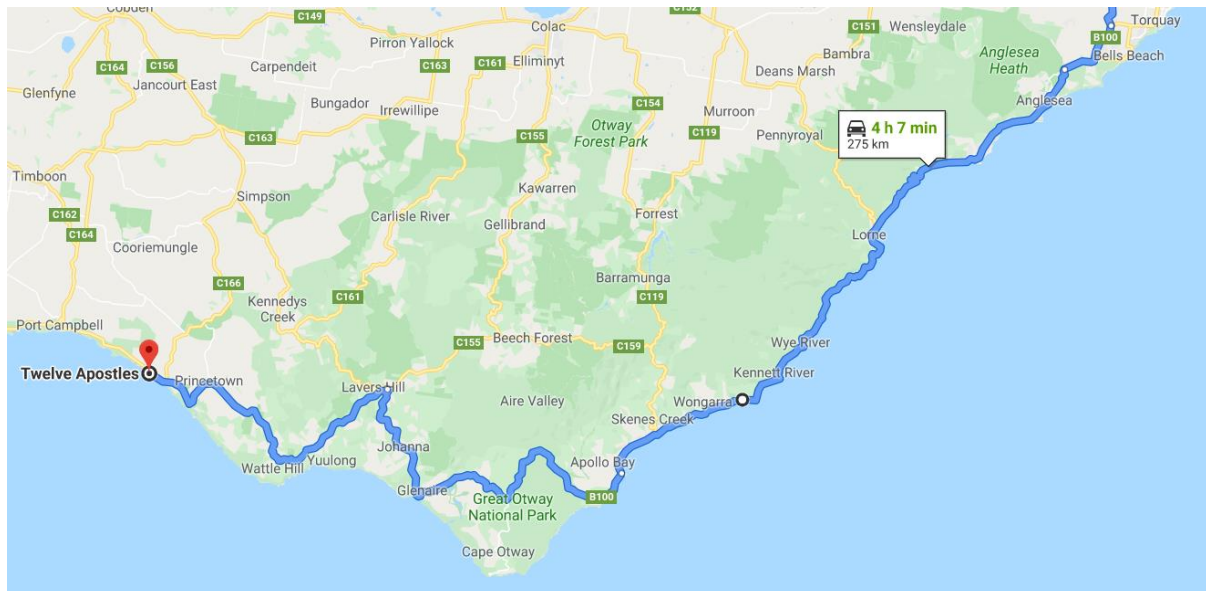
List of Participants for Workshop (Academic Staff from UoM and Partner Institutions):

1. Tarun Gupta (IITK)
2. Shantanu Bhattacharya (IITK)
3. Koushiki Mukherjee (IITKgp)
4. Santanu Chattopadhyay (IITKgp)
5. Hari Niwas Mishra (IITKgp)
6. Ramkrishna Sen (IITKgp)
7. Rajaram Lakkaraju; (IITKgp)
8. Parthasarathi Ghosh (IITKgp)
9. Sachin Gunthe (IITM)
10. Ray Dagastine (UoM)
11. Alex Johnson (UoM)
12. Kouros Khoshelham (UoM)
13. Lars Goerigk (UoM)
14. Leigh Johnston (UoM)
15. Alexander Babanin (UoM)
16. Philip Batterham (UoM)
17. Catherine Davey (UoM)
18. Jegadesan Subbiah (UoM)
19. Annapurna Devi Allu (IISER Tirupati)
20. Janardan Kundu (IISER Tirupati)
21. Kathryn Mumford (UoM)
22. Christian Brandl (UoM)
23. Bach Le (UoM)
24. Wenyan Wu (UoM)
25. Dalton Harvie (UoM)
26. Peter Scales (UoM)
27. Marcus Pandy (UoM)
28. Spas Kolev (UoM)
29. Greg Martin (UoM)
30. Udaya Parampalli (UoM)
31. Stephan Winter (UoM)

Day 5: 13th Dec 2019 – Field Trip to Great Ocean Road

From	To	Min.	Event	Venue
07:30 AM	08:00 AM	30	Assemble at Gate-10 of the University of Melbourne	Gate-10
08:00 AM	07:00 PM		Great Ocean Road trip. A light lunch will be provided. We will carry limited stock of water bottles (which could be refilled at water fountains at different tourist spots). We recommend a comfortable attire (comfortable shoes, a thin jacket / windcheater). Feel free to keep additional snacks.	
07:00 PM	07:30 PM	30	Drop-off at CBD/University Gate-10	

The Great Ocean Road – Trip overview



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