

IMAT 2021 PROGRAMME SCHEDULE
1ST NOVEMBER 2021
UNIVERSITI TEKNOLOGI MALAYSIA

TIME		AIRMEET					
8:30 – 8:40		Housekeeping announcement & Welcoming remarks by Emcee					
8:40 – 8:45		Opening Speech by Chair of IMAT - Prof. Mazlan Abdul Wahid					
8:45 – 8:50		Speech by Honorary Chair of IMAT - Prof. Muhammad Idrus Alhamid					
8:50 – 8:55		Speech by Honorary Chair of IMAT - Prof. Kim Choon Ng					
8:55 – 9:00		Address by President of SAREK - Prof. Kim Min Soo					
9:00 – 9:10		Opening Speech by Chair of ICSERA - Prof. Normah Mohd Ghazali					
9:10 – 9:20		Officiating Speech by Chair of School of Mechanical Engineering - Prof. Ir. Zaini Ahmad					
9:20 – 9:25		UTM – montage					
		PLENARY 1					
9:30 – 10:20	<i>Speaker</i>	Prof. Ruzhu Wang					
	<i>Chairman</i>	Prof. Normah Mohd Ghazali					
	<i>Host</i>	Mr. Jaya					
10:20 – 10:35		TEA BREAK					
		Invited Speaker IMAT 1		Invited Speaker IMAT 2		Invited Speaker IMAT 3	
10:35 – 11:05	<i>Speaker</i>	Prof. Agus Pamitran		Prof. Kim Choon Ng		Prof. Haslinda Mohamed Kamar	
	<i>Chairman</i>	Prof. Mazlan A.Wahid		Prof. Ir. Hayati Abdullah		Dr. M. Noor Afiq Witri	
	<i>Host</i>	Mr. Mohd Amri		Mr. Mohd Hilmi		Mr. Ahmad Mustafa	
TIME		AIRMEET (15 minutes + 5 min Q&A)					
Session	Session 1A	Session 2A	Session 3A	Session 4A	Session 5A	Session 6A	Session 11A
Track	IMAT - Combustion	IMAT - Biofuel	IMAT – Thermo-fluid	IMAT – Thermo-physical Properties	IMAT - Heat Transfer	IMAT - Energy Conservation	ICSERA
Session Chair	Prof. M. Farid/Dr. Mohd Fairus	Dr. Hasbullah	Prof. Harinaldi/Dr. Hidayat	Prof. Kim Choon Ng/Prof. Mazlan	Prof. Nasrudin/Dr. Kameil	Prof. Ir. Hayati/Dr. Md. Mizanur	Dr. Mohsin/Dr. Ibtisham
Session Host	Mr. Mohd Amri	Mr. Mohd Hilmi	Mr. M. Syafiq	Mr. Ahmad Mustafa	Mr. Rossli	Mr. Ferdaus	Ms. Jannah
Physical Room	Dewan Seminar	Bilik Sangfor	Bilik Ruckus	Bilik Juniper	Bilik HIK Vision	Bilik Aruba	Bilik Mesyuarat Web dan Multimedia
11:10 – 11:30	7	6	2	65	39	1	
11:30 – 11:50	14	13	54	51	50	49	
11:50 – 12:10	11	16	62	25	88	64	
12:10 – 12:30	47	17	46	48	56	74	
12:30 – 12:50	68	27	40	10	45	75	
12:50 – 1:10	8	28	42	30	69	77	
1:10 – 2:30		LUNCH & SOLAT					
		PLENARY 2					
2:30 – 3:20	<i>Speaker</i>	Prof. Simone Hochgreb					
	<i>Chairman</i>	Prof. Mazlan Abdul Wahid					
	<i>Host</i>	Mr. Jaya					

TIME							
AIRMEET (15 minutes + 10 min Q&A)							
Sesion	Session 1B	Session 2B	Session 3B	Session 4B	Session 5B	Session 6B	Session 11B
Track	IMAT - Combustion	IMAT - Biofuel	IMAT – Thermo-fluids	IMAT – Thermo-physical Properties/ Environmental Eng.	IMAT - Heat Transfer	IMAT - Energy Conservation	IMAT – Thermo-fluids
Session Chair	Prof. Yulianto/ Dr. M. Noor Afiq Witri	Dr. Mohd Fairus/Dr. Hasbullah	Dr. Hidayat	Dr. Umni/Dr. Norazila	Dr. Aminuddin/ Dr. Natrah	Dr. M. Wakil Shahzad/Dr. Md. Mizanur	Dr. Mohsin/Dr. Zul-hilmi
Session Host	Mr. Mohd Amri	Mr. Mohd Hilmi	Mr. M. Syafiq	Mr. Ahmad Mustafa	Mr. Rossli	Mr. Ferdaus	Ms. Jannah
Physical Room	Dewan Seminar	Bilik Sangfor	Bilik Ruckus	Bilik Juniper	Bilik HIK Vision	Bilik Aruba	Bilik Mesyuarat Web dan Multimedia
3:25 – 3:45	15	29	23	67	36	81	66
3:45 – 4:05	21	19	24	26	63	79	37
4:05 – 4:25	31	83	32	53	82	76	61
4:25 – 4:45	35	80	91	72	73	20	89
4:45 – 5:00	TEA BREAK						
5:00 – 5:20	12	43	5	70	87	86	92
5:20 – 5:40	84	60	57	9	93	85	71
5:40 – 6:00	4	90	41	22	94	55	
6:00 – 6:20	Closing Remark						

Session	Physical Room	Location
1	Dewan Seminar	Aras 4 UTMDigital
2	Bilik Sangfor	Aras 2 UTMDigital
3	Bilik Ruckus	Aras 2 UTMDigital
4	Bilik Juniper	Aras 2 UTMDigital
5	Bilik HIK Vision	Aras 2 UTMDigital
6	Bilik Aruba	Aras 2 UTMDigital
11	Bilik Mesyuarat Web dan Multimedia	Aras 4 UTMDigital

IMAT 2021 PLENARY AND INVITED SPEAKER DETAILS

PLENARY 1 9:30 – 10:20	Adsorbents for Energy Conversion and Management, and Its Cross to Energy-water-air Nexus	Prof. Ruzhu Wang Shanghai Jiao Tong University (SJTU)
INVITED SPEAKER IMAT 1 10:35 – 11:05	Sea-water Ice Slurry Generator	Prof. Agus Pamitran Universitas Indonesia
INVITED SPEAKER IMAT 2 10:35 – 11:05	A Common Energy Platform for Evaluating Energy Efficiency of Desalination Plants.	Prof. Kim Choon Ng King Abdullah University of Science & Technology (KAUST)
INVITED SPEAKER IMAT 3 10:35 – 11:05	Covid19: It's Transport in a Confined Space	Prof. Haslinda Mohamed Kamar Universiti Teknologi Malaysia
PLENARY 2 2:30 – 3:20	Narrowing the Gap between Experiments and Models in Turbulent Reacting Flows	Prof. Simone Hochgreb University of Cambridge

SESSION 1 IMAT – COMBUSTION

TIME	IMAT	TITLE	AUTHORS	AFFILIATION
Airmeet Session 1A IMAT - Combustion				
Session Host: Mr. Mohd Amri			Chairman: Prof. Mohd Farid M. Said /Dr. Mohd Fairus	
11:10 – 11:30	7	Flameless Combustion mode as a Promising Trend: A Review on its Fundamental, role towards Emissions Reduction, Fuel consumption and Performance Enhancement	Abdelgader Agilah Gheidan , Mazlan A. Wahid and Anthony Chukwunonso Opia	Universiti Teknologi Malaysia
11:30 – 11:50	14	Effect of Preheating on Combustion Characteristics of a Swirling Flameless Combustor	Najib Aminu Ismail , Raid Abid Alwan, Mazlan Abdul Wahid and Aminuddin Saat and Mohammed Bashir Abdulrahman	Universiti Teknologi Malaysia
11:50 – 12:10	11	Numerical Investigation on Air-Fuel Configurations on the Emission Features in a Vortex Flameless Combustion at Various Thermal intensity	Abdelgader Agilah Gheidan and Mazlan A. Wahid	Universiti Teknologi Malaysia
12:10 – 12:30	47	A Review of Liquid Fuel Flameless Combustion with Various Flow Configurations	Mohammed Bashir Abdulrahman , Mazlan Abdul Wahid, Ali Asmayou, Mohd Fairus Mohd Yasin and Md Mizanur Rahman	Universiti Teknologi Malaysia
12:30 – 12:50	68	Thermal and Emission Characteristics of Liquid Fuel flameless Combustion in a Forward Flow Combustion Chamber	Mohammed Bashir Abdulrahman , Mazlan Abdul Wahid, Ali Asmayou, Md. Mizanur Rahman and Mohd Fairus Mohd Yasin	Universiti Teknologi Malaysia
12:50 – 1:10	8	The Effect of Fuel Composition on Asymmetric Flameless Combustion Characteristics	Abdelgader Agilah Gheidan , Mazlan A. Wahid, Fudhail A Munir and Muhammad Amri Mazlan Wahid	Universiti Teknologi Malaysia
1:10 - 2:30	LUNCH & SOLAT			
Airmeet Session 1B IMAT - Combustion				
Session Host: Mr. Mohd Amri			Chairman: Prof. Yulianto/ Dr. M. Noor Afiq Witri	
3:25 – 3:45	15	Experimental of Rotating Detonation Engine with Asymmetric Vortex Combustion Chamber Shape Combustion Chamber	Ahmad Dairobi Ghazali , Mazlan Abdul Wahid, Muhammad Hafiz Azeman and Muhammad Amri Mazlan	Universiti Teknologi Malaysia
3:45 – 4:05	21	Early Assessment of Thermal Analysis Rotating Detonation Engine	Muhammad Hafizuddin Azeman , Mazlan Abdul Wahid, Ahmad Dairobi Ghazali and Muhammad Amri Mazlan	Universiti Teknologi Malaysia
4:05 – 4:25	31	Wave Propagation Characteristics in Pre-detonator on Rotating Detonation Engine Initiation	Muhammad Amri Mazlan , Mazlan Abdul Wahid, Ahmad Dairobi Ghazali and Hafizuddin Azeman	Universiti Teknologi Malaysia
4:25 – 4:45	35	A Modified Single-Step Chemistry Mechanism for Biogas Detonation Simulations	Mohammad Nurizat Rahman , Mazlan Abdul Wahid and Mohd Fairus Mohd Yasin	Universiti Teknologi Malaysia
4:45 – 5:00	TEA BREAK			
5:00 – 5:20	12	Numerical Simulation on a Modified Trapped Vortex Combustor	Dharsannen Sri Selvam, Norwazan Abdul Rahim, Mohd Rashdan Saad, Syahar Syawal, Hasan Mohd Faizal and Mohd Rosdzimin Abdul Rahman	Universiti Pertahanan Nasional Malaysia /Universiti Teknologi Malaysia
5:20 - 5:40	84	Influence of Equivalence Ratio on Emissions in Meso-Scale Vortex Combustor	Ali Asmayou , Mazlan Abdul Wahid and Mohammed Bashir Abdulrahman	Universiti Teknologi Malaysia
5:40 – 6:00	4	Prospects and Challenges of Nanofluids as Improved Fuel Diesel and Gasoline Engines: A Critical Review	Ahmed Sule , Zulkarnain Abdul Lattif and Mohd Azman Abas	Universiti Teknologi Malaysia
6:00 – 6:20	CLOSING REMARK			

SESSION 2 IMAT – BIOFUEL

TIME	IMAT	TITLE	AUTHORS	AFFILIATION
Airmeeet Session 2A IMAT - Biofuel				
Session Host: Mr. Mohd Hilmi			Chairman: Dr. Hasbullah	
11:10 – 11:30	6	Emission Mechanism and Investigation of Biofuel Combustion Characteristics at Different Techniques Towards NOx Emission Reduction: An Overview	Abdelgader Agilah Gheidan , Mazlan A. Wahid and Anthony Chukwunonso Opia	Universiti Teknologi Malaysia
11:30 – 11:50	13	Advance Thermal Configuration Using CFD in Co-firing Coal and Biomass	Mohd Khairul Hafiz Md Lias and Mazlan Abdul Wahid	Universiti Teknologi Malaysia
11:50 – 12:10	16	Thermal Characteristics of Biogas Flameless Combustion in Asymmetric Meso-scale Combustor	Ali Asmayou , Mazlan Abdul Wahid and Mohammed Bashir Abdulrahman	Universiti Teknologi Malaysia
12:10 – 12:30	17	Combustion Performance of a Single Cylinder Diesel Engine Fueled with Palm Oil Biodiesel Fuel Blends	Muhammad Qadri Rusli , Mohd Farid Muhammad Said, Ahmad Mustafa Sulaiman, Mohd Rozi Mohd Perang, Harrison Lau Lik Nang, Nur Sulihatimarsyila Abd Wafti, Mazlan Said and Mohd Kameil Abdul Hamid	Universiti Teknologi Malaysia
12:30 – 12:50	27	The Experimental of Performance Three Variations Gasoline with Bioethanol Blends (E80) on Engine Motorcycle Test Bench with Setting ECM	Pandega Hariyanto , Yoshua Calvin, Addarda Irsyad, Muchalis Masuku, Cahyo Wibowo and Bambang Sugiarto	Universitas Indonesia
12:50 – 1:10	28	Performance and Emission of Gasoline RON 88 – Bioethanol High Percentage Blends on Motorcycle Engine Test Bench	Addarda Irsyad Usman , Pandega Hariyanto, Yoshua Lian Calvin, Muchalis Masuku, Cahyo S. Wibowo, Muhammad Hanifuddin and Bambang Sugiarto	Universitas Indonesia
1:10 - 2:30	LUNCH & SOLAT			
Airmeeet Session 2B IMAT - Biofuel				
Session Host: Mr. Mohd Hilmi			Chairman: Dr. Mohd Fairus/Dr. Hasbullah	
3:25 – 3:45	29	Effect of Nitrous-oxide on Laminar Burning Velocity and Flame Stability of Biogas Combustion	Shehab Elhawary , Aminuddin Saat, Mazlan Abdul Wahid and Mohd Zarhamdy Md Zain	Universiti Teknologi Malaysia
3:45 – 4:05	19	Combustion Behaviour of Palm Kernel Shell Torrefied by Mild Pressurization Technique	Mohd Faizal Hasan , Mohamad Zulhlimi Mat Ail and Mohd Farid Muhamad Said	Universiti Teknologi Malaysia
4:05 – 4:25	83	Spray Characteristic of Diesel Engine Injector by Using Palm Biodiesel as Fuel	Siti Nurhidayah Mohd Fauzi , Zulkarnain Abdul Latiff, Natrah Kamaruzaman and Mohd Farid Muhamad Said	Universiti Teknologi Malaysia
4:25 – 4:45	80	Density, Isothermal Compressibility & Isobaric Expansivity Measurement of Binary Mixture Containing Waste Cooking oil (WCO) & Propan-1-ol at 300.15 K	Sunita Rani, Nisha Sangwan and Rajesh K Siwach	Baba Masthath University and Women Gov. College Gohana - India
4:45 – 5:00	TEA BREAK			
5:00 – 5:20	43	Impact of Biodiesel B30 on Engine Oil Viscosity in Real-World Agricultural Conditions	Mohd Rozi Mohd Perang , Mohd Azman Abas, Zulkarnain Abdul Latiff and Mohd Farid Muhamad Said	Universiti Teknologi Malaysia
5:20 – 5:40	60	Nigeria Palm Oil Biodiesel Production Optimization as Post Covid-19 Green Energy and Economic Recovery Strategy	Ahmed Sule , Zulkarnain Abdul Latiff and Mohammed Azman	Universiti Teknologi Malaysia
5:40 – 6:00	90	Study on The Optimal Stack Diameter on The Efficiency of Thermoacoustic Engine	Irna Farikhah , E. A. Elsharkawy, Harto Nuroso, Mega Novita, Dian Marlina, Kwartriani Rahmatunnisa, Irfan Abd. Rahim, Mohd Zarhamdy Bin Md Zain, Khairunnisa Mohd. Paad and Ahmad Nadhif Masruri	Universitas PGRI Semarang/Kyushu University/SMA Generus Mandiri/Universiti Malaysia Perlis/UTM/Universita s Diponegoro
6:00 – 6:20	CLOSING REMARK			

SESSION 3 IMAT – THERMOFLUIDS

TIME	IMAT	TITLE	AUTHORS	AFFILIATION
Airmeet Session 3A IMAT - Thermofluids				
Session Host: Mr. Muhammad Syafiq			Chairman: Prof. Harinaldi/Dr. Hidayat	
11:10 – 11:30	2	Influence of Guide Walls on the Aerodynamic Performance of a Vertical-Axis Wind Turbine	Roaa Ansaf , Zambri Harun and Mohammed Rasidi	Universiti Kebangsaan Malaysia
11:30 – 11:50	54	A Study on the Use of Brim on a Tidal Turbine with Diffuser Augmentation	Andika Ikhsan Kamil , Harinaldi and Ridho Irwansyah	Universitas Indonesia
11:50 – 12:10	62	Development of Wave-Induced Loads Program for Global Ship Hull Strength	Kurniawan Teguh Waskito and Yanuar	Universitas Indonesia
12:10 – 12:30	46	Drag Reduction of Float Design of Adaptation of Sailfish Body with Deadrise Angle Variation by CFD	Antoni , Gunawan, Alessandro Utomo Alessandro Utomo and Yanuar	Universitas Indonesia
12:30 – 12:50	40	Thermal Null-Offset of Open and Closed Water Tank in Dynamic Environment	Reski Septiana , Ibnu Roihan and Raldi Artono Koestoer	Universitas Indonesia
12:50 – 1:10	42	Influence of Operational Speed and Tunnel Length on Piston Wind Characteristics in Jakarta-Bandung High-Speed Railway Project	Panji Malik Subhani and Harinaldi	Universitas Indonesia
1:10 - 2:30	LUNCH & SOLAT			
Airmeet Session 3B IMAT - Thermofluids				
Session Host: Mr. Muhammad Syafiq			Chairman: Dr. Hidayat	
3:25 – 3:45	23	Comparison of Flow Characteristics between Fluid and Coupled Fluid-Structure Interaction of an Automotive Mixed Flow Turbocharger Turbine	Noor Zafirah Abu Bakar and Muhamad Hasbullah Padzillah	Universiti Teknologi Malaysia
3:45 – 4:05	24	Secondary Flow Characteristic inside A Mixed Flow Turbocharger Turbine Volute at Different Operating Conditions	Amiza Azmi and Muhamad Hasbullah Padzillah	Universiti Teknologi Malaysia
4:05 – 4:25	32	Three- Dimensional Elastic Cantilever Plate Attached to A Solid Block Using FSI Solver in Open FOAM Technology	Maimouna Al Manthari and Perumal Nithiarasu	University of Tech. and Applied Sciences Oman/Swansea University UK
4:25 – 4:45	91	Numerical Investigation into Trapezoid Surface Texture of Journal Bearing and RBD Palm Oil as Lubricant	Zuraidah Rasep , Muhammad Noor Afiq Witri Muhammad Yazid, Syahrullail Samion and Nor Azwadi Che Sidik	Universiti Kuala Lumpur (MICET)/ Universiti Teknologi Malaysia
4:45 – 5:00	TEA BREAK			
5:00 – 5:20	5	Flame-front Detection Using High-Speed Chemiluminescence and 2-D Mie-scattering Imaging via Endoscopic Access	Mohd Syahar Mohd Shawal, Suhairil Meon, Juri Saedon and Syahar Shawal	Universiti Teknologi MARA
5:20 – 5:40	57	Development of Cost-efficient Schlieren Flow Visualization using Short Focal-length Spherical Mirror	Yahya Dimas , Ridho Irwansyah and Harinaldi	Universitas Indonesia
5:40 – 6:00	41	Entropy in Macroscopic Thermodynamics: How Should be Presented and Understanding?	Ahmed Bufares	University of Benghazi, Libya
6:00 – 6:20	CLOSING REMARK			

SESSION 4 IMAT – THERMOPHYSICAL PROPERTIES & ENVIRONMENTAL ENGINEERING

TIME	IMAT	TITLE	AUTHORS	AFFILIATION
Airmeet Session 4A IMAT – Thermophysical Properties & Environmental Engineering				
Session Host: Mr. Ahmad Mustafa			Chairman: Prof. Kim Choon Ng /Prof. Mazlan	
11:10 – 11:30	65	Characterization of Soy Wax Synthesized with Graphene and MAXene for Building Thermal Management	Titin Trisnadewi , Eny Kusriani, Dwi Marta Nurjaya and Nandy Putra	Universitas Indonesia
11:30 – 11:50	51	Modelling of Single Wall Carbon Nanotube Growth in Diffusion Flame	Muhammad Syafiq Ridhwan Selamat, Muhammad Thalhhah Zainal, Mohd Fairus Mohd Yasin and Norikhwan Hamzah	Universiti Teknologi Malaysia
11:50 – 12:10	25	Carbon Nanomaterials Synthetization of Tire Pyrolysis Oil Using Laser and Spray Pyrolysis Techniques	Muhammad Mat Junoh , Aminuddin Saat, Mohd Faizal Hasan and Mohd Zarhamdy Md Zain	Universiti Teknologi Malaysia
12:10 – 12:30	48	Experimental Analysis on the Effect of Height-Above-Burner on Growth Region Characteristics and Morphology of Synthesized CNT in Methane Diffusion Flame	Muhammad Hilmi Ibrahim , Norikhwan Hamzah, Mohd Fairus Mohd Yasin and Nurul Adilla Mohd Subha	Universiti Teknologi Malaysia
12:30 – 12:50	10	Briquetting of Mixture of Empty Fruit Bunch (EFB) Fibre and Starch binder: The Effect of Compaction Pressure, Mixing Ratio, Drying Duration and Drying Technique	Muhammad Ariff Hanaffi Mohd Fuad, Mohd Faizal Hasan, William Chong Woei Fong and Farid Nasir Ani	Universiti Teknologi Malaysia
12:50 – 1:10	30	Effect of Storage Temperature to Carbon Deposit on Biodiesel Blend	Aulia Rifai , Jonathan Kevin, Vito Hutagalung, Jajang Amir Hidayat and Bambang Sugiarto	Universitas Indonesia
1:10 - 2:30	LUNCH & SOLAT			
Airmeet Session 4B IMAT – Thermophysical Properties & Environmental Engineering				
Session Host: Mr. Ahmad Mustafa			Chairman: Dr. Ummikalsom/Dr. Norazila	
3:25 – 3:45	67	Tribology Characteristic of Cartilage Replacement using Pin on Disc Experiment	Mohamad Mazwan Mahat, Salmiah Kasolang, Nurul Nadiyah Mohd Kamaldin and Mohd Syahar Mohd Shawal	Universiti Teknologi MARA
3:45 – 4:05	26	The Impact Critical Characteristic of Methanol Contaminant on Lubricant Properties Vehicle SI Engine	Rona Malam Karina , Milda Febria, Catur Y. Respatiningsih, Riesta Anggarani, Lies Aisyah, Setyo Widodo, Rizkia Malik, May Muchar, Dimitri Rulianto, Emi Yuliarita, Sylvia Ayu Bethari and Cahyo Setyo Wibowo	Research and Development Centre for Oil and Gas Technology "Lemigas", Indonesia
4:05 – 4:25	53	Comparison of Active and Passive Controls to Prove the Degradation Time	Sealtial Mau , Yanuar and Achmad Riadi	University of Nusa Cendana/Universitas Indonesia
4:25 – 4:45	72	Common Platform for Evaluating Energy Efficiency of Desalination Plants	Kim Choon Ng, Muhammad Burhan, Qian Chen, Doskhan Ybyraiymkul, Faheem Akhtar, Mkum Ja, Raid Alrowais and Muhammad Wakil Shahzad	King Abdullah University of Science and Technology (KAUST)/Northumbria University, UK
4:45 – 5:00	TEA BREAK			
5:00 – 5:20	70	The Impact of Operational Flexibility on Electricity Production: A Case Study of a Waste-to-Energy Pilot Project in Bantargebang, Indonesia	Priska Alfatri Hendrayanto, I Putu Angga Kristyawan, Muhammad Hanif and Wiharja	BPPT, Indonesia
5:20 – 5:40	9	Open LCA Life Cycle Assessment Tool to Determine Environmental Life Cycle Hot Spots: Demonstrated to an Aluminium Patrolling Ship	Md Mizanur Rahman and Mohd Zamri Mohd Nor	Universiti Teknologi Malaysia
5:40 – 6:00	22	Techno-Economic Readiness and Acceptance Analysis Study of End-of-Life Vehicles (ELV) Implementation in Malaysia	Ahmad Nizam Che Kasim, Nurhidayah Mat Hashim, Noor Azuan Hashim and Zambri Harun	Universiti Kebangsaan Malaysia
6:00 – 6:20	CLOSING REMARK			

SESSION 5 IMAT – HEAT TRANSFER

TIME	IMAT	TITLE	AUTHORS	AFFILIATION
Airmeeet Session 5A IMAT – Heat Transfer				
Session Host: Mr. Rossli			Chairman: Prof. Nasrudin/Dr. Kameil	
11:10 – 11:30	39	Numerical Study of Laminar Convective Heat Transfer Study of Al ₂ O ₃ -H ₂ O:EG Nanofluids	Ales Daniel and Ridho Irwansyah	Universitas Indonesia
11:30 – 11:50	50	Design and Analysis of Battery Thermal Management System Employing Air Cooling Method	Zeluyvenca Avista , Ubaidillah, Dominicus Danardono Dwi Prija Tjahjana, Eko Prasetya Budiana, Muhammad Nizam and Indri Yaningsih	Universitas Sebelas Maret, Indonesia
11:50 – 12:10	88	Temperature Evaluation of Pouch Lithium-ion Battery Module at Different Cells Arrangement and Thermal Conditions	Mohd Ibthisham Ardani , Mat Hussin Ab. Talib, Zul-Hilmi Che Daud, Zainab Asus, Norazila Othman and Mohd Aifaa Mohd Ariff	Universiti Teknologi Malaysia
12:10 – 12:30	56	Experimental on Transient Heating and Cooling of Natural Circulation Flow using A FASSIP-02 Large Scale Experimental Facility	Mulya Juarsa , Dedy Haryanto, Ainur Rosidi, Giarno, G. Bambang Heru K. and Adhika Enggar Pamungkas	BATAN, Indonesia
12:30 – 12:50	45	Investigation on Natural Convection in Heterogeneous Porous Enclosures Using Generalized Convection Model	Abhijit Verma and Gaurav Tomar	Indian Institute of Science, Bangalore, India
12:50 – 1:10	69	Unsteady Free Convection in Rectangular Enclosures Containing a Darcy-Forchheimer-Brinkmann Medium	Abhijit Verma and Gaurav Tomar	Indian Institute of Science, Bangalore, India
1:10 - 2:30	LUNCH & SOLAT			
Airmeeet Session 5B IMAT – Heat Transfer				
Session Host: Mr. Rossli			Chairman: Dr. Aminuddin/Dr. Natrah	
3:25 – 3:45	36	Optimization of Microchannel Heat Sink for Thermal Performance and Pressure Drop using Central Composite Design of Experiment	Mohamad Nur Hidayat Mat , Normah Mohd Ghazali and Patrice Estellé	Universiti Teknologi Malaysia
3:45 – 4:05	63	Comparison of 3D Modelling of Single Phase and Two-Phase Flow of Nanofluid through Corrugated Channels.	Elhadi Abugnah , Wan Saiful-Islam Wan Salim and Abdulhafid Alfaghi	Universiti Tun Hussein Onn Malaysia
4:05 – 4:25	82	Optimization of a Boron Nitride Nanotubes Nanofluid-Cooled Microchannel Heat Sink at Different Concentrations	Nur Liyana Nabihah Yusof, Hieifarith Suffri Shamsuddin, Patrice Estellé, Normah Mohd Ghazali and Ummikalsom Abidin	Universiti Teknologi Malaysia
4:25 – 4:45	73	Interpolated Thermophysical Properties for Minimum Thermal Resistance of a Microchannel Heat Sink	Hieifarith Suffri Shamsuddin, Patrice Estellé, Normah Mohd-Ghazali, Maziah Mohamad and Ummikalsom Abidin	Universiti Teknologi Malaysia
4:45 – 5:00	TEA BREAK			
5:00 – 5:20	87	Supercooling Effects on The Drag of a Free-Falling Sphere	Muhammad Sofwan bin Mohamad , Irfan Abdul Rahim, Mohd Zarhamdy Md Zain, Coinneach Mackenzie Dover and Khellil Sefiane	Universiti Malaysia Perlis/Universiti Teknologi Malaysia/ University of Texas at Austin US/ University of Edinburgh UK
5:20 – 5:40	93	Indirect Evaporative Cooling System Improvement: A Review	Mohd Fahmi Md Salleh and Mazlan Abdul Wahid	Universiti Teknologi MARA/Universiti Teknologi Malaysia
5:40 – 6:00	94	Experimental and Numerical Investigation of Natural Convection over a Constant Heat Flux Vertical Plate	Noman Ashraf and Mazlan Abdul Wahid	Imam Abdulrahman Bin Faisal University/Universiti Teknologi Malaysia
6:00 – 6:20	CLOSING REMARK			

SESSION 6 IMAT – ENERGY CONVERSION

TIME	IMAT	TITLE	AUTHORS	AFFILIATION
Airmeet Session 6A IMAT – Energy Conversion				
Session Host: Mr. Ferdaus			Chairman: Prof. Ir. Hayati/Dr. Md. Mizanur	
11:10 – 11:30	1	Low-GWP Refrigerant blends as Replacements of R410A for Domestic Heat Pumps	Changru Yang , Nobuo Takata, Kyaw Thu and Takahiko Miyazaki	Kyushu University, Japan
11:30 – 11:50	49	A Review of Recent Advances in Liquid Desiccant Dehumidification and Air-Conditioning	Oldy Fahlovi , Nandy Putra and Dinni Agustina	Universitas Indonesia
11:50 – 12:10	64	Investigation on Micro CT Based Method for Performance Estimation of Copper Sintered-Wick Heat Pipe	Dinni Agustina and Nandy Putra	Universitas Indonesia
12:10 – 12:30	74	Thermodynamics Analysis of Revised OTEC Rankine Cycle using Ammonia Refrigerant	Muhammad Aiman Wafi Suruji, Nazri Nasir, Norazila Othman, Wan Zaidi Wan Omar and Shabudin Mat	Universiti Teknologi Malaysia
12:30 – 12:50	75	Performance Characteristics of Coolant Additives for Vehicle Cooling System	Brent Dylan Junus , Zulkarnain Abdul Latiff and Mohd Rozi Mohd Perang	Universiti Teknologi Malaysia
12:50 – 1:10	77	Study Experimental Dehumidification System Working with Liquid Desiccant	Wisnu Indrawan , Muhammad Alhamid and Arnas Lubis	Universitas Indonesia
1:10 - 2:30	LUNCH & SOLAT			
Airmeet Session 6B IMAT – Energy Conversion				
Session Host: Mr. Ferdaus			Chairman: Dr. Muhammad Wakil Shahzad/Dr. Md Mizanur	
3:25 – 3:45	81	Long Short-Term Memory Neural Network Model for The Control of Temperature in a Multi-Circuit Air Conditioning System	Ibrahim Oleolo , Hayati Abdullah, Ismail Mustapha, Maziah Mohamad, Mohammad Nazri Mohd Jaafar, Akmal Baharain and Sapiah Sulaiman	Universiti Teknologi Malaysia
3:45 – 4:05	79	Initial Design Parameters Optimization of Air-Cooled Solar Thermal Ammonia-Water Absorption Chiller	Desy Agung , M. Idrus Alhamid, Arnas Lubis and Nasruddin	Universitas Indonesia
4:05 – 4:25	76	Domestic Ejector Air-Conditioning System Performance Using Different Ejector and Refrigerant Type	Nurul Aida Nabila Abdul Halim , Zulkarnain Abdul Latiff and Mohd Rozi Mohd Perang	Universiti Teknologi Malaysia
4:25 – 4:45	20	An Advance Air-Conditioning System for Future Sustainability	Muhammad Wakil Shahzad and Kim Choon Ng	Northumbria University, UK/ King Abdullah University of Science and Technology (KAUST)
4:45 – 5:00	TEA BREAK			
5:00 – 5:20	86	Experimental Study on the Improvement of Thermal Comfort Inside a Car Cabin	Mohd Kameil Abdul Hamid , Rajwinder Singh, Mohd Zarhamdy Md Zain, Zul Hilmi Che Daud, Izhari Izmi Mazali and Abd Rahim Abu Bakar	Universiti Teknologi Malaysia
5:20 – 5:40	85	Experimental Investigation of Local Thermal Sensation of Vehicle Passengers During Cooldown	Muhammad Noor Afiq Witri Muhammad Yazid, Haslinda Mohamed Kamar, Mohd Zukhairi Abd Ghapar, Mohd Aizad Sazrul Sabrudin and Nurfarizal Rasid	Universiti Teknologi Malaysia
5:40 – 6:00	55	Effects of Horizontal Wall-Mounted Air Supply on Particle Distribution in an Operating Room: A Simulation Approach	Huiyi Tan , Keng Yinn Wong, Wah Yen Tey, Syie Luing Wong, Bemgba Bevan Nyakuma, Mohd Hafiz Dzarfan Othman, Xinyou Ho, Haslinda Mohamed Kamar, Chew Tin Lee and Muhd Suhaimi Deris	Universiti Teknologi Malaysia
6:00 – 6:20	CLOSING REMARK			

SESSION 11 IMAT – THERMOFLUIDS

TIME	IMAT	TITLE	AUTHORS	AFFILIATION
Airmeet Session 11A ICSERA				
Session Host: Ms. Jannah			Chairman: Dr. Mohsin/ Dr. Ibtisham	
11:10 – 11:30			ICSERA	
11:30 – 11:50			ICSERA	
11:50 – 12:10			ICSERA	
12:10 – 12:30			ICSERA	
12:30 – 12:50			ICSERA	
12:50 – 1:10			ICSERA	
1:10 - 2:30	LUNCH & SOLAT			
Airmeet Session 11B IMAT - Thermofluids				
Session Host: Ms. Jannah			Chairman: Dr. Mohsin/ Dr. Zul-hilmi	
3:25 – 3:45	66	A Laboratory-scale Study of Cleanroom Design for Ambient Haze Condition	Rizkyandra Wintantomo and Yulianto Sulisty Nugroho	Universitas Indonesia
3:45 – 4:05	37	Skin and Body Temperature Parameter Calibration of MAX30100 Sensor Module Based on Arduino-Uno	Juan Karnadi , Ibnu Roihan and Raldi Artono Koestoer	Universitas Indonesia
4:05 – 4:25	61	Effect of Magnetic Field on the Velocity Distribution of Gallium and Galinstan in Circular Microchannel	Amnani Rosland, Natrah Kamaruzaman and Mohsin Mohd Sies	Universiti Teknologi Malaysia
4:25 – 4:45	89	Simplified Approach for Braking Pressure Applied to a Thin Concave Composite Wall Calculation	Sofiene Helaili	ISTEUB / LASMAP (EPT), Carthage University, Tunisia
4:45 – 5:00	TEA BREAK			
5:00 – 5:20	92	Investigation on the Effect of Surface Texture Depth into the Performance of Journal Bearing using CFD	Zuraidah Rasep , Muhammad Noor Afiq Witri Muhammad Yazid, Syahrullail Samion and Nor Azwadi Che Sidik	Universiti Kuala Lumpur (MICET)/ Universiti Teknologi Malaysia
5:20 – 5:40	71	Inertial Flow Focusing Device Fabricated using 3D-printed Mold and Replica Molding Technique	Ummikalsom Abidin , Nur Anis Humaira Mohamad and Fazila Mohd Zawawi	Universiti Teknologi Malaysia
5:40 – 6:00				
6:00 – 6:20	CLOSING REMARK			