



KUALA LUMPUR

22nd International Conference on Sustainable Energy Technologies

Programme at a Glance

13–15 August 2026

Premiera Hotel, Kuala Lumpur



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Day 1

Thursday 13 August 2026

Opening · K1–3 · Sessions A–C

08:00	Registration opens
08:50–09:20	OPENING CEREMONY
09:20–10:05	K1 Professor Xudong Zhao From Zero to Negative: The Technological Breakthrough under Double-Carbon Strategy <i>Chair: Professor Saffa Riffat</i>
10:05–10:50	K2 Professor AbuBakr Bahaj From Engagement to Transformation: Co-Creating a Sustainability Strategy for Organisational Resilience and Stakeholder Value <i>Chair: Professor Ir. Ts. Dr Azli Abd Razak</i>
10:50–11:15	POSTER SESSION 1 and refreshments Exhibition Area, L6 #38 · #56 · #138 · #146 · #195 · #196 · #220 · #229 · #238 · #260 · #262 · #263 · #269 · #288 · #344
11:15–12:30 PARALLEL	A1 Solar Photovoltaic Materials and Applications Ballroom 2 · L6 ■ Energy Storage #57 · #159 · #134 · #218
	A2 Electrochemical Conversion and Green Hydrogen ER2 · L8 ■ Energy Storage #62 · #253 · #77 · #254
	A3 Bio-Based and Low-Carbon Building Materials ER3 · L8 ■ Low-Carbon Bldgs #107 · #168 · #224 · #108
	A4 Artificial Intelligence for Materials, Energy and Environmental Modelling ER4 · L8 ■ AI & Renewables #53 · #174 · #40 · #180
12:30–13:30	Lunch
13:30–14:15	K3 Professor Yanjun Dai Advancements of solar heating and cooling research and its application in buildings <i>Chair: Professor Jie Ji</i>
14:15–14:25	Transition to parallel rooms
14:25–16:10 PARALLEL	B1 Solar Thermal and Photovoltaic-Thermal Systems Ballroom 2 · L6 ■ Energy Storage #52 · #143 · #43 · #147 · #299
	B2 Thermochemical Energy Storage: Materials, Reactors and Seasonal Systems ER2 · L8 ■ Energy Storage #85 · #170 · #191 · #166 · #330
	B3 Sustainable Heating, Cooling and Refrigeration ER3 · L8 ■ Energy Storage #26 · #35 · #175 · #90 · #19
	B4 Intelligent Ventilation and Low-Carbon Building Control ER4 · L8 ■ AI & Renewables #29 · #23 · #215 · #289 · #311
16:10–16:40	POSTER SESSION 1 and refreshments Exhibition Area, L6 #38 · #56 · #138 · #146 · #195 · #196 · #220 · #229 · #238 · #260 · #262 · #263 · #269 · #288 · #344
16:40–18:25 PARALLEL	C1 Hydrogen Energy Systems, Electrolysers and Fuel Cells Ballroom 2 · L6 ■ Energy Storage #98 · #270 · #111 · #115 · #329 · #328
	C2 Carbon Capture, Conversion and Catalytic Processes ER2 · L8 ■ Energy Storage #217 · #164 · #171 · #230 · #186 · #11
	C3 Indoor Environment, Building Services and Low-Carbon Cooling ER3 · L8 ■ Low-Carbon Bldgs #104 · #271 · #70 · #205 · #173 · #208
	C4 Digital Twins, Simulation and Optimisation for Energy Systems ER4 · L8 ■ AI & Renewables #194 · #244 · #268 · #59 · #124 · #74
18:25	End of Day 1 programme

Day 2

Friday 14 August 2026

K4–7 · Spark · D–E · Gala

08:20–08:30	Welcome and daily announcements
08:30–09:15	K4 Professor Jie Ji Construction and Research of Self-Powered, Self-Purifying Buildings <i>Chair: Professor Hongxing Yang</i>
09:15–10:00	K5 Assoc. Professor Mardiana Idayu Ahmad From Biomass to Built Environment: Innovating Bio-Based Solutions for Smart and Resilient Energy Future <i>Chair: Professor Xudong Zhao</i>
10:00–10:20	POSTER SESSION 2 and refreshments Exhibition Area, L6 #83 · #73 · #126 · #177 · #192 · #200 · #227 · #242 · #255 · #283 · #304 · #305 · #307 · #121 · #266 · #248 · #319
10:20–12:30	Research Spark & Funding Futures Forum Ballroom 2 · L6 10:20–11:55 Research Spark 11:55–12:30 Funding Futures Forum #366 · #12 · #297 · #367 · #272 · #155 · #363 · #256 · #293 · #364 · #332 · #290 · #128 · #298 · #172 · #365
10:20–12:30 PARALLEL	D2 Photocatalysis, Solar Fuels and Renewable Hydrogen Hall · L8 ■ Energy Storage #95 · #326 · #61 · #197 · #189 · #210 · #321
	D3 Thermal Energy Storage, Heat Pumps, Refrigeration and System Integration ER2 · L8 ■ Energy Storage #181 · #67 · #137 · #198 · #24 & #25 · #39 · #222
	D4 Building Envelopes, Passive Design and Natural Ventilation ER3 · L8 ■ Low-Carbon Bldgs #370 · #130 · #223 · #281 · #131 · #314 · #350
	D5 Digital Planning and Forecasting for Renewable Energy Systems ER4 · L8 ■ AI & Renewables #100 · #41 · #226 · #265 · #246 · #133
12:30–13:30	Lunch
13:30–14:15	K6 Professor Angui Li Low-Resistance Fluid Transport Piping Systems: Theory, Methods, and Engineering Applications <i>Chair: Professor Yap Pow Seng</i>
14:15–15:00	K7 Professor Michele Bottarelli Thermal Energy Storage: unlocking the energy transition <i>Chair: Professor AbuBakr Bahaj</i>
15:00–15:20	Coffee break
15:20–18:15 PARALLEL	E1 Phase Change, Thermochemical and Adaptive Thermal Storage Materials Hall · L8 ■ Energy Storage #94 · #75 · #221 · #201 · #144 · #241 · #16 · #184
	E2 Bioenergy, Renewable Fuels and Sustainable Solar Materials ER2 · L8 ■ Energy Storage #261 · #71 · #160 · #213 · #318 · #21 · #308 · #156 · #306
	E3 Combustion, Thermal Power and Low-Carbon Fuel Conversion ER3 · L8 ■ Energy Storage #89 · #188 · #267 · #120 · #225 · #178 · #235 · #294 · #179
	E4 Thermal Management, Heat Recovery and Cooling Technologies ER4 · L8 ■ Energy Storage #259 · #207 · #113 · #251 · #276 · #190 · #320 · #182 · #176
	E5 Energy Policy, Techno-Economics and Sustainable Communities MR4 · L7 ■ Policy & Mgmt #20 · #44 · #82 · #148 · #336 · #349 · #199 · #317 · #233 · #287
19:00–22:00	★ GALA DINNER Ballroom 1 · doors open 6:30 pm

Day 3

Saturday 15 August 2026

K8–9 · Sessions F · Closing

08:20–08:30	Welcome and daily announcements		
08:30–09:15	K8 Professor Hongxing Yang Maximising power output from wind farms through yaw controls and wind turbine layout optimisation Chair: Professor Yanjun Dai		
09:15–11:45	PARALLEL	F1 Machine Learning for Thermal Systems and Energy Technologies AI & Renewables #37 · #109 · #69 · #295 · #125 · #219 · #234 · #110 F2 Building Performance, Heritage and Community Energy Low-Carbon Bldgs #101 · #250 · #351 · #68 · #310 · #132 · #292 · #315 F3 Advanced Heat Transfer, Thermal Systems and Sustainable Building Materials Energy Storage #334 · #145 · #118 · #150 · #114 · #324 · #285 · #204 · #88 F4 Urban Sustainability, Water and Inclusive City Planning Urban & Environ #157 · #243 · #183 · #247 · #316 · #331 · #264 · #252 · #286	Ballroom 2 · L6
11:45–12:15	POSTER SESSION 3 and refreshments Exhibition Area, L6 #119 · #152 · #162 · #163 · #169 · #206 · #231 · #301 · #309 · #323 · #361 · #362 · #312 · #54 · #284 · #273		
12:15–12:45	CLOSING CEREMONY		
12:45	End of conference and departures		

VENUE & KEY

Keynotes & plenary
Ballroom 2, Level 6
Parallel rooms
Ballroom 2 (Level 6) and ER2–ER4 (Level 8) on Days 1 and 3; Hall and ER2–ER4 (Level 8), plus MR4 (Level 7), on Day 2
Posters
48 posters, Exhibition Area, Level 6 — on display all three days
Gala Dinner
Friday 14 August, doors open 6:30 pm — Ballroom 1
Registration
Wednesday 12 August, 15:00–17:00 — Level 7

RESEARCH THEMES

- Energy Storage & Conversion
- Low-Carbon Buildings
- AI & Renewable Systems
- Policy & Management
- Urban & Environment

Invited Speakers

Each opens its session

B1	Professor Qiliang Wang	#52
University of Science and Technology of China, China		
“Preliminary investigations on the evacuated PVT-driven methanol electrolysis for enhanced solar hydrogen production”		
Ballroom 2 · L6		
B2	Dr Devrim Aydin	#85
Eastern Mediterranean University, Cyprus		
“Advances in Reactor Design and Renewable Integration Strategies for Low-Grade Thermochemical Energy Storage”		
ER2 · L8		
B3	Professor Ali Kilicarslan	#26
Hitit University, Türkiye		
“Experimental Energy Analysis of a Trigeneration System Based on Outdoor Air Temperature: A Case Study at Fatsa State Hospital, Türkiye”		
ER3 · L8		
B4	Dr John Kaiser Calautit	#29
University College London, United Kingdom		
“Vision-Assisted Event-Triggered Ventilation for Indoor Pollution Control in Low-Carbon Buildings”		
ER4 · L8		
D4	Professor Cruz Li	#370
Chongqing University, China		
“Zephyr City: An Energy-Efficient Solution for Urban Microclimate Enhancement”		
ER3 · L8		
D5	Professor K. Srinivas Reddy	#100
Indian Institute of Technology Madras, India		
“Optimising a Solar-Powered Intercontinental Energy Network for the One Sun One World One Grid Initiative: A Linear Programming Approach”		
ER4 · L8		
E1	Professor Shuli Liu	#94
Beijing Institute of Technology, China		
“Research of Photothermal-Driven Composite Phase Change Materials”		
Hall · L8		
E3	Professor Berkah Fajar Tamtomo Kiono	#89
Diponegoro University, Indonesia		
“Experimental Performance Study of Diesel Generator Using 40% Renewable Fuel Blends: FAME and Hydrotreated Vegetable Oil (HVO)”		
ER3 · L8		
E4	Professor Beatrice Bonfanti Pulvirenti	#259
University of Bologna, Italy		
“Advanced Thermal Management and Energy Recovery Strategies for Sustainable High-Performance Computing Infrastructures”		
ER4 · L8		
F1	Dr Hasila Jarimi	#37
Universiti Kebangsaan Malaysia, Malaysia		
“Enabling Electrification of Heating Through SuperThermalBattery”		
Ballroom 2 · L6		
F2	Professor Amin Al-Habaibeh	#101
Nottingham Trent University, United Kingdom		
“SENSE-AI: A Sensor-Enabled, Mixed-Methods AI Framework for Heritage Housing Performance Evaluation”		
ER2 · L8		

Session Chairs

Parallel sessions

A1	Professor K. Srinivas Reddy (Indian Institute of Technology Madras, India)
A2	Professor Yuanlong Cui (Shandong Jianzhu University, China)
A3	Professor Fatang Jiang (Wuhan Donghu University, China)
A4	Professor Bilsay Pastakkaya (Bursa Uludag University, Türkiye)
B1	Professor Ashmore Mawire (North-West University, South Africa)
B2	Dr Zhiwei Ma (Durham University, United Kingdom)
B3	Dr Yi Fan (Shanghai University of Electric Power, China)
B4	Professor Beatrice Bonfanti Pulvirenti (University of Bologna, Italy)
C1	Dr Arif Karabuga (Istanbul Aydin University, Türkiye)
C2	Dr Devrim Aydin (Eastern Mediterranean University, Cyprus)
C3	Assoc. Professor Mardiana Idayu Ahmad (Universiti Sains Malaysia, Malaysia)
C4	Professor Amin Al-Habaibeh (Nottingham Trent University, United Kingdom)
D2	Dr Jingyu Cao (Hunan University, China)
D3	Professor Shuli Liu (Beijing Institute of Technology, China)
D4	Dr John Kaiser Calautit (University College London, United Kingdom)
D5	Associate Professor Ir. Ts. Dr. Nik Normunira binti Mat Hassan (Universiti Teknologi MARA)
E1	Professor Guiqiang Li (University of Science and Technology of China, China)
E2	Ir. Dr. Fauziah Jerai@Junaidi (Universiti Teknologi MARA, Malaysia)
E3	Professor Ali Kilicarslan (Hitit University, Türkiye)
E4	Professor Qiliang Wang (University of Science and Technology of China, China)
E5	Dr Tajul Rosli Razak (Universiti Teknologi MARA, Malaysia)
F1	Ts. Dr. Nur Atiqah binti Ramlan (Universiti Teknologi MARA, Malaysia)
F2	Professor Cruz Li (Chongqing University, China)
F3	Professor Berkah Fajar Tamtomo Kiono (Diponegoro University, Indonesia)
F4	Dr Norhayati Mat Wajid (Universiti Teknologi MARA, Malaysia)

SESSION TITLES

DAY 1

- A1 Solar Photovoltaic Materials and Applications
- A2 Electrochemical Conversion and Green Hydrogen
- A3 Bio-Based and Low-Carbon Building Materials
- A4 Artificial Intelligence for Materials, Energy and Environmental Modelling
- B1 Solar Thermal and Photovoltaic–Thermal Systems
- B2 Thermochemical Energy Storage: Materials, Reactors and Seasonal Systems
- B3 Sustainable Heating, Cooling and Refrigeration
- B4 Intelligent Ventilation and Low-Carbon Building Control
- C1 Hydrogen Energy Systems, Electrolysers and Fuel Cells
- C2 Carbon Capture, Conversion and Catalytic Processes
- C3 Indoor Environment, Building Services and Low-Carbon Cooling
- C4 Digital Twins, Simulation and Optimisation for Energy Systems

DAY 2

- D2 Photocatalysis, Solar Fuels and Renewable Hydrogen
- D3 Thermal Energy Storage, Heat Pumps, Refrigeration and System Integration
- D4 Building Envelopes, Passive Design and Natural Ventilation
- D5 Digital Planning and Forecasting for Renewable Energy Systems
- E1 Phase Change, Thermochemical and Adaptive Thermal Storage Materials
- E2 Bioenergy, Renewable Fuels and Sustainable Solar Materials
- E3 Combustion, Thermal Power and Low-Carbon Fuel Conversion
- E4 Thermal Management, Heat Recovery and Cooling Technologies
- E5 Energy Policy, Techno-Economics and Sustainable Communities

DAY 3

- F1 Machine Learning for Thermal Systems and Energy Technologies
- F2 Building Performance, Heritage and Community Energy
- F3 Advanced Heat Transfer, Thermal Systems and Sustainable Building Materials
- F4 Urban Sustainability, Water and Inclusive City Planning