

PROGRAMME

ICP
2023

INTERNATIONAL CONFERENCE ON
POLYGENERATION



26th – 28th JULY 2023

Kuta, Bali Indonesia

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UNIVERSITAT
ROVIRA I VIRGILI



SCHEDULE DAY 1, 26th July

Time	Venue	Activity	PIC
8:00	Lobby	Registration	Committee
9:00	Bale Banjar Room / Parallel I	Opening remarks / Welcome ceremony	Prof. M. Idrus Alhamid (Chairman of ICP 2023) Prof. Alberto Coronas
9:30	Bale Banjar Room/Parallel I	I Plenary Keynote	Prof. Takao Kashiwagi – Importance of Polygeneration
	Bale Banjar Room / Parallel I	Discussion	Moderator: Prof. Alberto Coronas
10:15	Balangan Room	Coffee Break	
10:30	I Parallel Sessions		
12:30	Balangan Room / Parallel I	II Plenary Keynote	Prof. Srinivasa S. Murthy – Application of Hydrogen Storage in Polygeneration Microgrids
14:00	Balangan Room	Discussion	Moderator: Assoc. Prof. Ardiyansyah
14:45	Balangan Room	Coffee Break	
15:00	II Parallel Sessions		
18:00	End of Sessions		





SCHEDULE DAY 1, 26th July

○ SESSION I – PARALLEL ROOM I

Time	PARALLEL ROOM I – Hydrogen Production	
	Session Chair: Prof. Srinivasa S. Murty	
	Paper Title	Author/Presenter
10:30	Special Session on Hydrogen Technologies (I) – Characteristics of Fuel Cells and Its Applications	Prof. Shigenori Mitshushima
10:55	4975 – Experimental and Numerical Studies on Metal Hydride Based Embedded Cooling Tube Reactor for Controlled Hydrogen Discharge	Abhishek Parida, Alok Kumar, Muthukumar Palanisamy & Amaresh Dalal
11:14	6512 – A Novel Integrated Renewable Multi-Generation System Based on Hydrogen/Ammonia Production	Du Wen & Muhammad Aziz
11:33	1513 – Advantages of The Direct Toluene Electro-Hydrogenation Electrolyser Technology for Future Storage and Transport of Hydrogen	Antonio Atienza Márquez, Toshiyuki Watanabe, Takuto Araki, Shigenoria Mitsushima, Joan Carles Bruno & Alberto Coronas
11:52	7881 – Techno-Economic Evaluation of Direct Toluene Electro-Hydrogenation Technology and Comparison with the Two-Step Hydrogenation Process	Toshiyuki Watanabe, Antonio Atienza Márquez & Shigenori Mitsushima
12:11	1348 – Analysis of AB5-Based Hydrides for Hydrogen Compression Applications	Dniesh Dashbabu & E. Anil Kumar
12:30	Lunch	





SCHEDULE DAY 1, 26th July

○ SESSION I – PARALLEL ROOM II

Time	PARALLEL ROOM II – Polygeneration	
	Session Chair: Prof. M. P. Maiya	
	Paper Title	Author/Presenter
10:30	696 – Optimal Modes of Operation and Product Cost Allocation in Sugarcane Steam Cogeneration Plants	Miguel A. Lozano, Rodrigo Guedes Dos Santos, Luis M. Sierra & José J. C. S. Santos
10:50	5333 – Performance Investigation of a Hybrid Solar Dryer Integrated with Backup Electric Heater for Mango Drying	Nayanita Kalita, Muthukumar Palanisamy & Amaresh Dalal
11:10	6898 – Optimization and Thermo-economic Analysis of a Solar Trigeneration System	Miguel A. Lozano, Daniel Sierra, Eduardo A. Pina, Luis M. Sierra & Ana Lázaro
11:30	5224 – Design and Techno-Economic Evaluation of Carbon Neutral Polygeneration Systems for Urban Districts Based on Solar Thermal Energy and Thermal Energy Storage	Eduardo A. Pina, Miguel A. Lozano, Luis M. Sierra & Ana Lázaro
11:50	8960 – Solar-Powered Ammonia-Water Absorption Chiller for Dual-Function of Air Conditioning and Water Heating Applications: System Configurations and Performance Analysis	Desy Agung, Dereje S. Ayou, Alberto Coronas, Muhammad Idrus Alhamid & Arnas Lubis
12:20	6616 – Energy, Exergy, and Exergoeconomic Optimization of a Multigeneration System Driven by Geothermal Primary Heat Source Using Multi-Objective Genetic Algorithm (MOGA)	Andi Ekariansyah, Martin Muwonge, Muhammad Rifqi Saefuttamam, Yophie Dikaimana & Nasruddin Nasruddin
12:40	Lunch	





SCHEDULE DAY 1, 26th July

○ SESSION I – PARALLEL ROOM III

Time	PARALLEL ROOM II – Renewable Power	
	Session Chair: Prof. Yong Tae Kang	
	Paper Title	Author/Presenter
10:30	7635 – Experimental Investigation of a Solar Compound Parabolic Collector System Integrated with Radiator for the Application of Space Heating	Uday Raj Singh, Manzoor Hussain & Satya Sekhar Bhogilla
10:50	904 – Simulation and Experiment of Thermosphon Cooling System for Floating Photovoltaic with Parallel Reservoir	Aura Adiyani & Yuli Setyo Indartono
11:10	1710 – Design and Optimization of Micro Radial Turbine Nozzle for Small Organic Rankine Cycle	Asybel Bonar, Ari Darmawan Pasek & Rozan W. Mudhofar
11:30	5980 – Study of Floating Photovoltaic Structure Types: Conventional and Compact	Indira Anjanique, Yuli Setyo Indartono & Farid Putra Bakti
11:50	4030 – Study of Floating PV's Floater Effect of Heat Transfer and Electricity Conversion Efficiency	Salman Alfarisi & Yuli Setyo Indartono
12:20	8275 – PVT Potential for a Small-Scale Brewing Process: A Case Study (Online)	Alan Pino, Francisco Javier & Jose
12:40	Lunch	





SCHEDULE DAY 1, 26th July

○ SESSION II – PARALLEL ROOM I

Time	PARALLEL ROOM I – Hydrogen Storage Session Chair: Dr. Antonio Atienza M.	
	Paper Title	Author/Presenter
16:00	Special Session on Hydrogen Technologies (II) “Overview on Electrolysers Technologies: Characterization and Integration with Energy Systems”	Prof. Takuto Araki
16:25	438 – On Thermodynamics of Hydrogen Storage	Mai Sheng Ng & Anutosh Chakraborty
16:44	3517 – Topology Optimized Metal Hydride Reactor for On-Board Hydrogen Storage in Mobile Application	Luthfan Adhy Lesmana & Muhammad Aziz
17:03	4086 – Absorption and Desorption Studies on Physically Mixed La _{0.7} Ce _{0.1} Ca _{0.3} Ni ₅ and Mmni _{4.5} Fe _{0.5} for Hydrogen Storage Application	Sayantan Jana & Muthukumar Palanisamy
17:22	9080 – Design Optimization and Performance Analysis of Finned Metal Hydride Reactor for Large Capacity Hydrogen Storage Application	Shubhuman Parashar, Muthukumar Planisamy & Atul Kumar Soti
17:41	5533 – Numerical Study of Polymer Embedded Metal Hydride-Based Self-Sensing Actuator	Keshav Vijayan & Mohan G





SCHEDULE DAY 1, 26th July

○ SESSION II – PARALLEL ROOM II

Time	PARALLEL ROOM II – Thermal Energy Storage	
	Session Chair: Prof. Luis M. Sierra	
	Paper Title	Author/Presenter
16:00	5703 – Use of a Low-Cost Phase Change Material Emulsion in De-Centralized Thermal Energy Storage for District Heating Network Enlargement	Giulia Rinaldi, Mónica Delgado, Ana Lázaro, José María Marín & Vittorio Verda
16:20	7227 – Analysis of a Coupled Calcium Oxide-Potassium Carbonate Salt Hydrate Based Thermochemical Energy Storage System	Akshay Chate, Srinivasa Murty S. & Pradip Dutta
16:40	6681 – Low Temperature Solar Thermal Energy Storage Using Lani5-Xmx (M=Al, Fe, Ga and Zn) Alloys	K. Sarath Babu, Dinesh Dashbabu & E. Anil Kumar
17:00	8977 – Performance Analysis of Sorption Thermal Battery Using Low-Temperature Renewable Energy	Haye Min, Huyng Won Choi, Jaehui Jeong, Jinhee Jeong & Yong Tae Kang
17:20	9226 – A Novel Multi-Level Absorption Thermal Battery with Variable Solution Flow Rate for Adjustable Output Capacity	Zhixiong Ding, Zhe Wang & Wei Wu
17:40	2173 – Thermodynamic Analysis of Cold Storage Module for Mobile Applications Based on Ce Substituted Lani5 Based Alloys	K. Sarath Babu, Chandrakala Bandaru & E- Anil Kumar





SCHEDULE DAY 1, 26th July

○ SESSION II – PARALLEL ROOM III

Time	PARALLEL ROOM III – Bioenergy	
	Session Chair: Assoc. Prof. Ardiyansyah	
	Paper Title	Author/Presenter
16:00	9225 – Low Carbon Emission Scheme of Methanol Synthesis Based on Solar-Assisted Biomass Direct Chemical Looping Process	Zhuang Sun & Muhammad Aziz
16:20	976 – Analysis and Characterization of Syngas Products from Gasification of Empty Fruit Bunch (Efb) Using Pacitan Bentonite Particles and Silica Sand	Ali Nurdin Hidayat, Edwin Permana, Prima Zuldian, Muhammad Arief Yamin & Ardian Salsa Rusmana
16:40	4599 – Multi-Objective Genetic Algorithm Optimization of Physical-Chemical Parameters of Synechococcus HS-9 Cultivation for Biomass Production with an Artificial Neural Network	Arif Rahman, Kania Dyah Nastiti, Nining Betawati Prihantini, M.A.M. Oktaufik, Surat Indijarso & Nasruddin
17:00	4007 – Development of Simplified Coal and Biomass Combustion Temperature Estimation in Co-Firing Application	Mochamad Soleh, Ito Arianto & Muhammad Syarif Hidayatullah
17:20	4611 – Biochar from Robusta Coffee Waste Subjected to Oil Extraction with the Mtbe Solvent	Qori Zulia Rahma, Yuli Setyo Indartono & Didin Mujahidin
17:40	6742 – Economic and Environmental Performance Assessment of Biogas Cookstove with Porous Radiant Burner	Arun Kumar Mahalingam & Muthukumar Palanisamy





SCHEDULE DAY 2, 27th July

Time	Venue	Activity	PIC
8:00	Lobby	Registration	Committee
8:30	Bale Banjar Room / Parallel I	III Plenary Keynote	Prof. Yulianto Nugroho -
	Bale Banjar Room / Parallel I	Discussion	Moderator: Prof. M. Idrus Alhamid
9:15	III Parallel Sessions		
11:15	Balangan Room	Coffee Break	
11:30	Bale Banjar Room / Parallel I	IV Plenary Keynote	Dr. Guillermo Zaragoza – Opportunities for membrane distillation technologies in polygeneration
	Bale Banjar Room / Parallel I	Discussion	Moderator: Prof. Kim Choon Ng
12:15	Poster Sessions		
12:30	Balangan Room	Lunch	
14:00	IV Parallel Sessions		
16:00	Balangan Room	Coffee Break	
16:15	V Parallel Sessions		
18:15	End Sessions		
20:00	Gala Dinner		





SCHEDULE DAY 2, 27th July

○ SESSION III – PARALLEL ROOM I

Time	PARALLEL ROOM I – Hydrogen Application	
	Session Chair: Prof. Nasruddin	
	Paper Title	Author/Presenter
9:15	1069 – Large Scale Molecular Simulations for the Transport and Structure Characteristics of Polymer Electrolyte Fuel Cell	Prof. Takashi Tokomatsu
9:40	5322 – Comparison of Gaseous Hydrogen, Methane, and Ethylene as Fuels for Rotating Supersonic Combustion Engine	Umar Ikwhan Mohd Rozaiddin, Mohd Fhami MD Salleh, Ahmad Dairobi Ghazali & Mazlan Abdul Wahid
9:59	6179 – Thermodynamic Analysis of the Co-Firing Combustion of Natural Gas and Mix of Ammonia-Hydrogen-Nitrogen Through Ammonia Cracking Process	Azaria Haykal Ahmad, Prihadi Setyo Darmando & Firman Bagja Juangsa
10:18	4831 – Thermochemical States Prediction of Hydrogen/Air Turbulent Diffusion Flame LES with Different Inlet Velocity	Rahmat Wluyo & Muhammad Aziz
10:37	4750 – Experimental Investigation of Dairy Biogas as Fuel for a Molten Carbonate Fuel Cell	Jaroslav Milewski, Karina Michalska & Anna Kacprzak
10:56	676 – Investigation of a Solar-Driven Cogeneration Unit for Power and Hydrogen Production Via Aspen Plus Software	Paganiotis Lykas, Angeliki Kitsopoulou, Evangelos Bellos & Christos Tzivanidis
11:15	Lunch	





SCHEDULE DAY 2, 27th July

○ SESSION III – PARALLEL ROOM II

Time	PARALLEL ROOM II – Refrigeration Session Chair: Prof. Alberto Coronas	
	Paper Title	Author/Presenter
9:15	3686 – An Improved Hybrid Air Conditioning System for Future Sustainability	Muhammad Wakil Shahzad, Qian Chen, Kim Chon Ng, Mkum Ja, Nida Imtiaz & Muhammad Ahmad Jamil
9:35	5289 – Ultrahigh-Efficiency and Cost-Effective Passive Cooling Strategy Via a Membrane-Based Moisture Desorption-Absorption Process	Zengguang Sui, Jun Shang & Wei Wu
9:55	7747 – Parametric Studies on Organic Liquid Desiccant Based Dehumidifier System for Sub-Tropical Regions	Juri Sonowal, Dhanraj Kadwal, Anandalakshmi Ramalingam & Muthukumar Palanisamy
10:15	7909 – Dynamic Modelling and Performance Prediction of a Compressor Operated Metal Hydride Based Cooling System	Sayantan Jana & Muthukumar Palanisamy
10:35	6095 – A Common Primary Energy Platform for Energy Efficiency of Air Conditioning Chillers	Kim Chong Ng, Muhammad Burhan, M Kum Ja, Doskhan Ybybraiymkul, Qian Chen, Faheem Akhtar & Muhammad Wakil Shahzad
10:55	3193 – Performance Assessment of Desiccant-Coated Heat Exchangers with Conventional Desiccants (Silica Gel, Zeolite) and Metal-Organic Framework (Al-Fum MOF) for Bus Air Conditioning Applications	Mrinal Bhowmik Jonsoo Jeong & Kiyoshi Saito
11:15	Lunch	





SCHEDULE DAY 2, 27th July

○ SESSION III – PARALLEL ROOM III

Time	PARALLEL ROOM III – Thermal Energy Storage	
	Session Chair: Prof. Yulianto N.	
	Paper Title	Author/Presenter
9:15	8607 – Performance Comparison of Mobile Thermo-Chemical Energy Storage Based Building Space Cooling System with Conventional Vapor Absorption/Compression Based Centralized HVAC System	Gowrisetti Nagamani & Bukke Kiran Naik
9:35	3497 – Experimental and Numerical Investigations for Assessing Desiccant Sorption Kinetics/Characteristics Across a Desiccant Coated Energy Exchanger	Gurav Priyadarshi, Cheepurupalli Mirali & Bukke Kiran Naik
9:55	5917 – Parametric Analysis on CO ₂ Separation from Flue Gas Under Atmospheric Conditions – Computational Study	Pasupula Eswar Babu & Bukke Kiran Naik
10:15	525 – Characterization Studies on Slag Blended Calcium Aluminate Cement Concrete for High Temperature Thermal Energy Storage Application	Aswin Karthik Chandrasekaran Muthukumar Palanisamy & Biranchi Panda
10:35	5158 – Experimental and Numerical Investigations on the Thermal Performance of Uniform and Non-Uniform Finned Latent Heat Thermal Energy Storage Systems	Suraj Tat & Muthukumar Palanisamy
10:55	7333 – Experimental Study of Conventional Savonius Wind Turbines Using Rectangular Valve-Augmentation	Muhammad Ishen & Yuli Setyo Indartono
11:15	Lunch	





SCHEDULE DAY 2, 27th July

○ SESSION IV – PARALLEL ROOM I

Time	PARALLEL ROOM I – Others	
	Session Chair: Prof. Shigenori Mitsushima	
	Paper Title	Author/Presenter
14:00	5370 – Evaluation of Energy and Generation for Xenon Storage on Functional Porous Materials	Anutosh Chakraborty & Mai Sheng Ng
14:20	7456 – Air Flow Distribution and Cooling Performance on Cold Storage for Fishery Commodity Storage (Online)	Muhammad Arif Budiyanto, Oktandio Imamudien & Muhammad Idrus Alhamid
14:40	8414 – Study on Crystallization of Sugar-Alcohols. Comparison Between Xylitol, Erythritol and Its Mixtures	Miguel Navarro, Ana Lázaro, Mónica Delgado & Gonzalo Diarce
15:00	7572 – Cycle Time Analysis of Crossflow and Counterflow Desiccant Coated M-Cycle Coolers Using Waste Heat from Diesel Generators	Pranav Kumar Iyer, V.R. Abishraj, A. Ganguly & M.P. Maiya
15:20	647 – A Diffused Double-Layer Model of Bulk Nanobubbles in Aqueous NaCl Solutions	Hilman Syaeful Alam, Priyono Sutikno, Tubagus Ahmad Fauzi Soelaiman & Anto Tri Sugiarto
15:40	5194 – Environmental Taxes and Renewable Energy Consumption: Mediating Role of Environmental Governance and Technological Innovation	Kachan Kumar Sen, Shahadat Hosan, Shamal Chandra Karmaker & Bidyut Baran Saha
16:00	Coffee Break	





SCHEDULE DAY 2, 27th July

○ SESSION IV – PARALLEL ROOM II

Time	PARALLEL ROOM II – Heat Pumps Session Chair: Prof. Fu-Jen Wang	
	Paper Title	Author/Presenter
14:00	347 – Experimental Investigations of Multi-Ejector CO2 Heat Pump System With and Without IHX	Guruchethan A.M., Siva Kumar Reddy Y., Maiya M.P. & Armin Hafner
14:20	1404 – Combined Supercritical CO2 and Organic Rankine Cycle for High-Temperature Waste Heat Recovery Applications	Bipul Krishna Saha, Syed J. Hoque & Pramod Kumar
14:40	2055 – A Novel Supercritical CO2-Based High-Temperature Waste Heat Recovery Cycle for Stable Off-Design Operations	Syed Jiaul Hoque & Pramod Kumar
15:00	6446 – Theoretical Analysis of MOF/Water Working Pairs for Adsorption Heat Transfer	Tahmid Hasan Rupam, Lei Ye, Md Amirul Islam & Bidyut Baran Saha
15:20	3081 – Thermodynamic Analysis for Prospective Application for Heat Pump at Temperatures Up to One Hundred and Fifty Degrees Celsius	Rado Purba & I Made Astina
15:40	8437 – Development and Investigation of Zwitterionic Hydrogel Sorbent for Solar Energy Storage, Humidity Control and Freshwater Production	He Shan, Primož Poredoš, Zhihui Chen, Zinge Yand & Ruzhu Wang
16:00	Coffee Break	





SCHEDULE DAY 2, 27th July

○ SESSION IV – PARALLEL ROOM III

Time	PARALLEL ROOM III – Renewable Power	
	Session Chair: Prof. Takuto Araki	
	Paper Title	Author/Presenter
14:00	3988 – Development of Rotating Supersonic Combustion Engine for the Possibility of Power Generation	Mohd Fahmi Md Salleh, Umar Ikhwan Mohd Rosaidin, Ahmad Dairobi Ghazali & Mazlan Abdul Wahid
14:20	5090 – Energy Demand Reduction in the Built Environment Using Combined Power and Cooling Cogeneration System Driven by Low-Grade Thermal Energy	Vivek T, Rakesh C, Balaji K & Praveenkumar G
14:40	3758 – Energy Analysis Combined Cycle Power Plant 500MW	Muhammad Arif Budiyanto, Adrian Ova Triandi & Nasruddin Nasruddin
15:00	8169 – Assessment of the ORC Electricity Production Potential Based on the Valorisation of Flare Gas for Downstream Petroleum Sector	Hamza Semmari, Sofiane Aberkane & Abdelkader Filali
15:20	6949 – Insight into the Adoption of Rooftop Photovoltaics Systems in Spanish Municipalities: A Regional Techno-Economic and Policy Analysis (Online)	Raul Saez, Adedamola Babajide Shobo, Dieter Boer & Manel Vallés
15:40	4904 – Computational Fluid Dynamic Simulation of Coal and Sawdust Co-Firing in Carolina-Type Boiler of 600 Mwe Steam Power Plant	Azaria Haykal Ahmad, Firman Bagja Juangsa & Prihadi Setyo Darmanto
16:00	Coffee Break	





SCHEDULE DAY 2, 27th July

○ SESSION V – PARALLEL ROOM I

Time	PARALLEL ROOM I – Others	
	Session Chair: Prof. M. Aziz	
	Paper Title	Author/Presenter
16:15	6409 – Experimental Comparison of Plain and Wavy Fin Desiccant Coated Heat Exchanger	Abishraj V.R., Gurubalan A, Maiya M.P. & Carey Simonson
16:35	7780 – Experimental Studies on Energy Conservation in Pool Boiling Heat Transfer Using Graphene Nanofluids as Bailing Medium on Structured Copper Surfaces	Samer Gajghate, Sreeram Baratula, Bidyut Saha & Swapan Bhaumik
16:55	8932 – Influence of Temperature Variation and HCl Activation on Fe Adsorption in Used Engine Oil by Dendrocalamus asper-derived Activated Carbon	Vilovater Nababan, I Nyoman Suprpta Winaya & Hendra Wijaksana
17:15	7412 – Computational and Experimental Analysis on Absorption Kinetics/Characteristics Evaluation of Three Fluid Operated Novel Hollow Fiber Membrane-Based Liquid Desiccant Dehumidifier for Aire Conditioning/Drying Application	P. K. D. Tejes & B. Karim Naik
17:35	7786 – Prediction and Optimization of Energy Use in HVAC Systems of Traditional Medicine Companies in the Tropics of Indonesia Using Genetic Algorithm Optimization (GA) with Artificial Neural Network (ANN)	Agung Tri Tjiptadi & Nasruddin Nasruddin
17:55	3827 – A System for Desalinating Seawater that is Driven by Heat: A Proof-of-Concept and a Vision for Sustainability in the Future	Raid Alrowais, Muhammad Burhan, Doskhan Ybyraiymkul, M. Kum JA, Muhammad Wakil Shahzad & Kim Chong Ng





SCHEDULE DAY 2, 27th July

○ SESSION V – PARALLEL ROOM II

Time	PARALLEL ROOM II – Other Session Chair: Prof. Ana Lázaro	
	Paper Title	Author/Presenter
16:15	9802 – Enhanced R32 Absorption onto Waste Palm-Based Activated Carbon for Designing a High-Efficiency Cooling System	Md Amirul Islam & Bidyut Baran Saha
16:35	2824 – Effect of Differential Sizing of Coupled Beds on the Performance of Metal Hydride Based Sorption Cooling	Biju John Koshy, Mohan G. & Prakash Maiya M.
16:55	6469 – A Novel Organic Rankine Cycle Integrated Heat Pump System for the Combined Power and Heating Applications – Thermodynamic, Techno-economic and Optimization approaches	Karthikeyan B., Praveen Kumar G., Ramadas Narayanan, Saravanan R. & Alberto Coronas
17:15	3683 – How does energy innovation funding impact energy poverty? Mediating role of energy technology innovation	Shahadat Hosan, Kachan Kumar Sen, Shamala Chandra Karmaker, Md. Matiar Rahman & Bidyut Baran Saha
17:35	5807 – Thermodynamics Study of a Low-Temperature Solar Trigeneration Plant Based on a Single – Effect Doble – Lift Absorption System	Abdelmajid Saoud, Joan Carles Bruno, Yasmina Boukhchana & Ali Fellah
17:55	794 – Development Seawater Cooled LiBr-H ₂ O Absorption Chilled and its Application in Industrial Waste Heat Utilization	Shuai Du, Zhenyuan Xu, Chun Yang & R.Z. Wang





SCHEDULE DAY 2, 27th July

○ SESSION V – PARALLEL ROOM III

Time	PARALLEL ROOM III – Others	
	Session Chair: Assoc. Prof. Ardiyansyah	
	Paper Title	Author/Presenter
16:15	7320 – Preliminary Design of a Positive Energy Building Using Solar PV as a Renewable Energy Resource	Indra Permana, Alya Penta Agharid & Fu Jen Wang
16:35	3583 – Parametric Investigation of a CO ² -Based Polygeneration System Driven by Renewable Energy Sources (Online)	Panagiotis Lykas, Angeliki Kitsopoulou, Evangelos Bellos & Christos Tzivanidis
16:55	9964 – Performance Analysis of Solar-Driven Absorption Heat Pump-Membrane Distillation System for Combined Desalination Brine Concentration with Feed Recirculation and Cooling Applications (Online)	Dereje S. Ayou & Alberto Coronas
17:15	8580 – Analysis and Measurement of Efficiency Losses in Photovoltaic Systems (Online)	Teodor Pulido & Joan Carles Bruno
17:35	8281 – Comparative Performance Analysis of Solar-Powered Heat Pump Systems for Decarbonization of Process Heating and Cooling Applications (Online)	Dereje S. Ayou & Alberto Coronas
17:55	6275 – Hybrid Thermo-photovoltaic Solar Microgrid Solution for Household Energy Demand. A Techno-economic Study (Online)	Gracia M. Cabello Gonzáles, Sergio J. Navas Herera, Magdalena Serrano Fernández & Francisco J. Pino Lucena





SCHEDULE DAY 3, 28th July

Time	Venue	Activity	PIC
8:00	Lobby	Registration	Committee
8:30	Bale Banjar Room / Parallel I	V Plenary Keynote	Prof. Hany Al-Ansary – Polygeneration applications based on Concentration Solar Power Technologies
	Bale Banjar Room / Parallel I	Discussion	Moderator: Prof. Nasruddin
9:15	Industry Forum & VI Parallel Sessions		
11:15	Balangan Room	Closing	
12:00	End of Conference		

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SCHEDULE DAY 3, 28th July

○ SESSION VI – PARALLEL ROOM I

Time	PARALLEL ROOM I – Industry Forum Session Chair: Prof. Alberto Coronas	
	Paper Title	Author/Presenter
9:15	Industry Forum 1: Solar Ice Maker	Iwan Chandra
9:35	Industry Forum 1: A Self-sustainable Hotel & Golf in the Mediterranean Area	Albert Cot
9:55	Industry Forum 3: Heat Transfer Fluids and Phase Charge Materials for Refrigeration and Heating Application	Rafael Matamoros
10:15	Industry Forum 4: A New Water/LiBr Absorption Heat Pump with Condensation Heat Recovery for Simultaneous Heating and Cooling Production	Juan Prieto
10:35	Industry Forum 5: Development of Photovoltaic Cold Storage Systems Using Ice for Preservation of Fruits and Vegetable in Nigeria	Victor Torres Toledo & Adebisi Adebayo Ojo

