Curriculum Vitae of
Dr. Md Hasanuzzaman, World's Top 2% Scientists, 2020 -2024; World's Top 20, 2024

Associate Professor
Higher Institution Centre of Excellence (HICoE)
UM Power Energy Dedicated Advanced Centre (UMPEDAC)
Room - 16, Level - 18, Wisma R&D, Universiti Malaya
Jalan Pantai Baharu, 59990 Kuala Lumpur, Malaysia
H/P: +60146322032 (WhatsApp, WeChat, Line)
Tel: +603-22463405/3246; Fax: +603-22463257
e-mail:hasan@um.edu.my; hasan.buet99@gmail.com

Researcher ID and data:
ORCID: 0000-0001-9642-5406
Scopus Author ID: 23569048700
Researcher ID: H-1242-2015
UM Expert: https://umexpert.um.edu.my/hasan
Google Scholar: https://scholar.google.com.my/citations?user=4O3KgKoAAAAJ&hl=en
Linkedin Profile: https://www.linkedin.com/in/drhasanuzzaman/
Google Scholar: *h-index*: 55, *i10-index*: 135, Citation: 12,638
Scopus: *h-index*: 48, Citation: 8787
Web of Science: *h-index*: 43, Citation: 6365

Table of Contents

1. Summary of Work Experience and Achievements: 2
2. Education 3
3. Administrative Duties 3
4. Student Supervision 4
4. 1 Doctor of Philosophy (PhD) Completed 4
4.2 Master of Philosophy (M.Phil.) and Master Degree Completed 5
4.3 PhD and Master's Degree Ongoing 8
5. Teaching Undergraduate and Postgraduate Level 9
5.1 Postgraduate Level 9
5.2 Undergraduate Level 9
6. Research Interest 9
7. Research Grant 10
8. Consultancy 16
9. Keynote/ Invited Speaker 17
10. Award/Scholarship/Recognition 21
11. Professional Membership 22
12. Editor/ Editorial Board Member 23
13. Expert Evaluator / Examiner / Technical Contributions 24
14. Active Journal Reviewer (Invited Reviewer for Journal Article) 31
15. Publication List 32
15.1 Book/Book Chapter: 32
15.2 Journal 33
15.3 Conference 50

1. Summary of Work Experience and Achievements:

- **Associate Professor (DS53)**, UMPEDAC, Universiti Malaya (09 December 2019 to Present)
- **Senior Lecturer (DS51)**, UMPEDAC, Universiti Malaya (18 April 2012 to 08 December 2019)
- **Visiting Research Scholar/Professor,** Southwest Jiaotong University, China; University of Indonesia, Indonesia**.**
- **World's Top 20,** Highly Ranked Scholar in Energy Conservation by Scholar GPS, USA, 2024
- **World's Top 2% Scientists** by Elsevier & Stanford University for 2024, 2023, 2022, 2021 & 2020
- **Associate Editor**, Alexandria Engineering Journal (AEJ), Elsevier, SCI Journal, Q1, IF6.626 (2021), https://www.journals.elsevier.com/alexandria-engineering-journal
- **Regional Editor:** Regional Editor, Journal of Thermal Engineering (Scopus Indexed, SJR (2020): 0.29, Q3), https://eds.yildiz.edu.tr/journal-of-thermal-engineering
- **Guest Editor:** Special Issue, Renewable Energy, Elsevier, SCI Q1, IF: 8.001, (2020), (https://www.journals.elsevier.com/renewable-energy)
- **Editorial Board Member**: Energy & Environment (SCI Journal, Sage, IF 3.154 (2021), https://uk.sagepub.com/en-gb/asi/energy-environment/journal202462#editorial-board)
- **Programme Coordinator,** (18 April 2012 to 03 September 2020), **Master of Renewable Energy**, UMPEDAC, Institute for Advanced Studies, UM (**Double Degree Programme with Kyoto university, Japan**)
- **Expert / Consultant: Field of Energy, Project Under:** United Nations Industrial Development Organization (**UNIDO**); Ministry of Energy, Green Technology and Water (**KeTTHA**), Malaysia; Academy of Sciences Malaysia (**ASM**), Tenaga Nasional Berhad Research (TNBR), Malaysia
- **Expert Certification:** ***Energy Efficiency and Solar Thermal Technology*** by United Nations Industrial Development Organization (**UNIDO**) and Standard and Industrial Research Institute of Malaysia (**SIRIM**) (Expert Course 1 & 2; On Job Training completed, Final report submitted)
- **External and Internal Examiner for PhD Thesis:** Malaysian and Overseas Universities
- **Keynote / Invited Speaker:** International & National Conferences/ Semester / Workshop
- **Member of the Higher Degrees Committee** (Ahli Jawatankuasa Ijazah Tinggi), UMPEDAC, University Malaya
- **Auditor:** Internal Auditor, Self-Audit Exercises for Institute of Advanced Studies (IAS), Universiti Malaya
- **Journal Publication: Q1: 68, Q2: 37,** Science Citation Index (SCI)**: 119,** Scopus**: 151,** Non-SCI/Non-Scopus**: 10,** Total Publication**: 161**
- **Research Grant:** Total RM 8,130,374; as PI: RM 705,053
- **International Research Grant**: Total RM 2,909,803; as PI: USD 30,900 (RM 125,910)
- **Postgraduate Supervision**: (Completed: 74; Ongoing: 22)
- **Teaching**: (Renewable Energy, Foundation of Renewable Energy, Energy Policy, Energy Economic, Advance Research Methodology, etc)
- **Associate Editor-in-Chief**, International Journal of Renewable Energy Resources
- **Coordinator of Laboratory:** (Penyelaras Makmal), UMPEDAC, Universiti Malaya
- **Chairman,** 7th International Conference on Clean Energy and Technology 2025 (CEAT2025), 1-2 October 2025, Wyndham Grand Bangsar, Malaysia organized by UMPEDAC, Universiti Malaya
- **Publication Chair,** International Conferences (CEAT 2023, IPCER2022, ISF 2019, IET-CEAT2018, 2016, 2014, 2013).
- **Research Assistant** (19 January 2006 to 31 December 2011**)**, Department of Mechanical Engineering and UMPEDAC, Universiti Malaya, Kuala Lumpur, Malaysia.

2. Education

- **Doctor of Philosophy (Ph. D.),** 22 December 2011, Full Research, (**University of Malaya Excellence Award 2012**, Outstanding Achievement in the category of Doctor of Philosophy completion period in less than 3 years), Faculty of Engineering, University of Malaya, Malaysia.
  - Research Field: Energy
  - Research Tittle: Energy, Exergy and Environmental Analysis for Energy Intensive Industrial Equipment in Malaysia
- **Master of Engineering Science (M. Eng. Sc.),** 27 November 2008, Full Research, Faculty of Engineering, University of Malaya, Malaysia
  - Research Field: Energy
  - Research Tittle: Heat and Moisture Transfer and Energy Performance of a Refrigerator with Open and Closed Door Condition
- **Bachelor of Science in Mechanical Engineering (B. Sc. Engg. (Mech)),** June 2005, Coursework and Research, Department of Mechanical Engineering, Bangladesh University of Engineering and Technology (BUET), Bangladesh
  - **Selected Courses**
    - Thermal Engineering, Thermodynamics, Air Conditioning and Refrigeration, Internal Combustion Engine, Power Plant Engineering, Automobile Engineering, Petroleum Engineering, Heat and Mass Transfer, Fluid Mechanics & Fluidics.
    - Engineering Mechanics, Mechanics of Solid, Mechanics of Machinery, Machine Design, Instrumentation and Measurement & Numerical Analysis.
  - Research Field: Heat Transfer
  - Research Tittle: An Experimental Investigation of Natural Convection Heat Transfer from a Hot V-Corrugated Plate to a Cold V-Corrugated Plate

3. Administrative Duties

- **Evaluation Panel, Proposal Enhancement Unit Committee** (4 January 2023 to date), Research Grant Proposal Evaluation, Proposal Enhancement Unit (Panel Penilai Di Bawah Jawatankuasa Unit Pemantapan Kertas Cadangan), Universiti Malaya
- **Technical Panel for Research Grant Evaluation**, UMPEDAC (Panel Penilai Teknikal Permohonan Geran Penyelidikan), 2 December 2024 to 31 December 2026
- **Univesiti Malaya Bright Scholarship Program Screening** Committee (Jawankuasa Tapisan Program UM Bright Scholarship), 4 December 2024 to 31 December 2026
- Chairman, Panel for PhD Candidature Defense- Wong Hwee Ling
- **Programme Coordinator,** (18 April 2012 to 03 September 2020), **Master of Renewable Energy**, UMPEDAC, Institute for Advanced Studies, UM (**Double Degree Programme with Kyoto university, Japan**). The double degree programme was officially launched in Semester 2 Session 2015/2016 (February 2016) under Institute for Advanced Studies (formerly, Institute of Postgraduate Studies; https://ias.um.edu.my/master).
  - Programme palming and development
  - Course design and development

- Monitoring and Continuous Quality Improvement

- **Coordinator of Research Laboratory** (Penyelaras Makmal), UMPEDAC, University of Malaya
  - Solar Thermal Energy Research Laboratory, Level 15, Wisma R&D, University of Malaya
  - Solar Cells Energy Research Laboratory, Level 4, Wisma R&D, University of Malaya
- **Member**, Curriculum Review Committee, UMPEDAC, University Malaya
- Member, Specification and Price Evaluation Committee (Ahli Jawatankuasa Penilaian Specifikasi dan Harga), UMPEDAC, University Malaya
- **Coordinator of Laboratory** (Penyelaras Makmal), UMPEDAC, University Malaya
- **Internal Auditor Panel**, Institute for Advanced Studies, University Malaya
- **Head, Publication & Technical Review Committee,** International Postgraduate Conference for Energy Research 2022, 19 December 2022, Pullman Hotel, Kuala Lumpur
- **Chief Editor**, IOP Conference Series: Earth and Environmental Science, 15 September 2022 to 31 January 2023
- **Head, Publication & Technical Review Committee**, 6th International Conference on Clean Energy and Technology 2023, 7-8 June 2023, Bayview Hotel, Penang, Malaysia
- **Chief Editor**, IOP Conference Series: Earth and Environmental Science, 07 September 2022 to 31 July 2023
- **Head, Research Grants Management Unit**, UMPEDAC (Ketua Unit Pengurusan Geran Penyelidikan di UMPEDAC), University Malaya
- **Publication Chair**, IET Int. Conf. on Clean Energy and Technology, 2018, 2016, 2014, 2013.

4. Student Supervision

4.1 Doctor of Philosophy (PhD) Completed

14. **Yu Hui Fang (PhD Thesis Submitted for Examination, 28 December 2024**), Energy Analysis, Economic and Environmental Impacts of Photovoltaic Waste Materials Management in Malaysia, Universiti Malaya.
13. **Mohamad Shukor Abdul Rahim (PhD Passed with Minor Corrections, 24 January 2025**), Modelling and Experimental Performance Investigation on Real Time Fuzzy-PID Controller for Active Water Cooling of Photovoltaic Based Energy System, Universiti Malaysia Perlis, Malaysia
12. **Wan Afin Fadzlin Binti Wan Mohd Fadzli** (**PhD Completed with Distinction,** Senate: 28 November 2024**)** Modeling and Performance Analysis of Dual-Coil Heat Exchanger Integrated Thermal Energy Storage System in Solar Water Heaters, Universiti Malaya.
11. **Mukhamad Faeshol Umam** (**PhD Completed,** Senate: 25 July 2024), Experimental Performance Investigation of Nanofluids-Based Photovoltaic Thermal Systems, Universiti Malaya.
10. **Nur Ayeesha Qisteena Binti Muzir (PhD Completed**, Senate: 23 November 2023**),** Modeling and Analysis of Energy, Economic and Environmental Impact of the Conventional and Electric Cars in Malaysia, Universiti Malaya.
9. **Muthu Kumaran A/L Gunasegaran** (**PhD Completed**, Senate: 23 November 2023**),** Analysis of Energy, Environmental Impact and Cost Effectiveness for Fast-Food Restaurant Commercial Building, Universiti Malaya
8. **Muhammad Firdaus Bin Mohd Zublie** (**PhD Completed**, Senate: 27 September 2023), Design and Analysis of Sustainable Clean Energy Integration in a Malaysian Higher Educational Institution, Universiti Malaya

7. **Siti Birkha Binti Mohd Ali** (**PhD Completed**, Senate: 27 September 2023), Analysing Parameters for Energy Efficiency Retrofitting Initiatives for High-Rise Buildings Through an Integrated Approach, Universiti Malaya
6. **Mohammed Moinul Islam (PhD Completed**, Senate: 28 July 2022), Experimental Investigation and Performance Analysis of Nano Enhanced Phase Change Material based Photovoltaic Thermal System, University of Malaya
5. **Laveet Kumar (PhD Completed,** Senate: 27 January 2022**),** Model development and real time experimental investigation of solar industrial process heating system, University of Malaya
4. **A.B.M. Abdul Malek (PhD Completed**, Senate: 28 February 2020), Energy, Economic and Environmental Analyses of Biomass Based Power Generation in Malaysia, University of Malaya
3. **Fayaz Hussain** (**PhD Completed**, Senate: 25 April 2019**)**, Numerical and Experimental Investigation of the Performance of PCM Based Photovoltaic Thermal System, University of Malaya
2. **Mohammad Aminul Islam** (**PhD Completed**, Senate: 27 September 2018), An Investigation of Potential Induced Degradation of Solar Photo-voltaic Modules Under Malaysian Climate Condition, University of Malaya
1. **Afroza Nahar** (**PhD Completed**, Senate: 22 June 2017) Numerical Investigation and Modelling of Solar Photovoltaic/Thermal Systems, University of Malaya

4.2 Master of Philosophy (M.Phil.) and Master Degree Completed

Note:

- *Master of Philosophy (M.Phil.), Full Research Mode*
- *Master of Renewable Energy, Course Work (30 Credits) and Research (12 Credits)*
- *Master of Engineering, Course Work (30 Credits) and Research (12 Credits)*

62. **Abdullah Basuhaib (M.Phil. Completed**, Senate: 27 June 2024**),** Development and Performance Analysis of Solar Photovoltaic Hybrid Thermal System for Water Heating and Electrification, University of Malaya
61. **Mohammad Abdullah Al Mamun** (**M. Phil. Completed**, Senate: 23 February 2018) Effect of Tilt Angle and Shading on Power Generation of Solar Photovoltaic System, University of Malaya
60. **Md. Khairul Islam** (**M.Phil. Completed**, Senate: 24 November 2016) Performance analysis of solar thermal power system, University of Malaya
59. **Mohammad Mafizur Rahman** (**M.Phil. Completed**, Senate: 24 November 2016) Effect of Various Operating Conditions on the Performance of Photovoltaic Module, University of Malaya
58. **Nur Safinah Binti Saharom (Master of Renewable Energy,** Completed September 2024**)** Feasibility Analysis and Environmental Impact Assessment of Solid Waste Based Energy in Kuala Lumpur
57. **Edy Mustaqim bin Muhamad (Master of Renewable Energy,** Completed September 2024**)** Analysis the Impact of Carbon Footprint in Ports towards the Sustainable Goal
56. **Khairunnisyah Binti Abu Bakkar (Master of Renewable Energy,** Completed September 2024**)** Economic and Environmental Impact Assessments of Carbon Credit for Solar Generation in Malaysia.
54. **Cynthia Chin (Master of Renewable Energy,** Completed September 2024**)** Analysis the Impact of Low Carbon Transport in Malaysia.
54. **Nor Aniezan Binti Mohd Ihsan (Master of Renewable Energy,** Completed September 2024**)** Analysis the Environmental Impact and Carbon Credit for Electrical Vehicles in Malaysia.

53. **Azraq bin Ashari (Master of Renewable Energy,** Completed September 2024**)** Electric Vehicle in Malaysia - Study on the Impact of Customer Awareness, Government Policies & Incentive on Market Growth and Its Contribution to Carbon Emission.
52. **Yoon Khay Kit (Master of Renewable Energy,** Completed July 2024**)** Impact of Traffic Jam and Mileage of EV on the Life Cycle Energy Cost.
51. **Ridzwan Bin Tajol Aros (Master of Renewable Energy,** Completed July 2024**)** Energy, Economic and Environmental Impact Assessments of Plugin Hybrid Electric Vehicle in Malaysia.
50. **Ramabarathi Ramasamy (Master of Renewable Energy,** Completed July 2024**)** Economic and Environmental Impact Assessments of Carbon Credit for Power Generation Sectors in Malaysia.
49. **Sharanya Varatharajoo (Master of Renewable Energy,** Completed July 2024**)** Economic and Environmental Impact Assessments of Carbon Tax for Industrial Sector in Malaysia.
48. **Lu Tingxuan (Master of Renewable Energy,** Completed February 2024**)** Effect of the Different Parameters on Energy Consumption of Electric Vehicles in China.
47. **Li Zhijie (Master of Renewable Energy,** Completed February 2024**)** Energy, Economic and Environmental Impact Assessments of Commercial Hydrogen Car in China.
46. **Qing Zhang (Master of Renewable Energy,** Completed September 2023**)** Energy, Economic and Environmental Impact Assessments of Hybrid Electric Vehicle in China.
45. **Sitti Khadijah Binti Shahul Hamid (Master of Renewable Energy,** Completed September 2023**)** Economic and Environmental Impact Assessment of Carbon Storage in Malaysia
44. **Siddiqin Rabbani Bin Malek Ridwan (Master of Renewable Energy,** Completed July 2023**)** Energy, Economic and Environmental Impact Assessments of Battery and Hybrid Electric Vehicle in Malaysia.
43. **Muhammad Thaqif bin Tamunif (Master of Renewable Energy,** Completed July 2023**)** Economic analysis of electric vehicle battery recycling and disposal in Malaysia
42. **Thenmalar Rajoo (Master of Renewable Energy,** Completed July 2023**)** Energy, Economic and Environmental Impact Analysis of Natural Gas Based Power Generation in Malaysia
41. **Nurkunasegri Devi (Master of Renewable Energy,** Completed September 2022**)** Analysis of Metal Extraction from Electric Vehicle Lithium Ion Battery Through Sustainable Recycling.
40. **Agashtteeya Rajendra Prasath (Master of Renewable Energy,** Completed February 2022**),** Development of Technical Standards for Design, Installation and Maintenance of Solar Power Systems at Oil and Gas Facilities, University of Malaya
39. **Nurdianah Binti Mustafa (Master of Renewable Energy,** Completed February 2022**)** Energy, economic and environmental impact analysis of electric vehicle battery recycle and disposal in Malaysia, University of Malaya
38. **Athaya Fairuz Mahadita (Master of Renewable Energy,** Completed September 2021**)** Energy, economic, and environmental impact assessment of solar water desalination in Indonesia, University of Malaya
37. **Md Mominul Islam (Master of Renewable Energy,** Completed September 2021**)** Energy, economic, and environmental impact assessment of Biomass based power plant in Bangladesh, University of Malaya
36. **Zu Zu May (Master of Renewable Energy,** Completed September 2021**)** Energy, economic, and environmental impact assessment of solar thermal power in Myanmar, University of Malaya
35. **Zhao Xudong (Master of Renewable Energy,** Completed September 2021**)** Energy, economic and environmental impact analysis of 10 MW PV power plant in China, University of Malaya
34. **Elarefbellah Mohamed Said Kaal (Master of Renewable Energy,** Completed September 2021**)** Environmental impact assessment and analysis the cost of carbon in Lebanon, University of Malaya
33. **Ratanashangkari A/P Chandran (Master of Renewable Energy,** Completed September 2021**)** Energy, economic and environmental impact analysis of phase change materials based cold storage transportation system in Malaysia, University of Malaya

32. **Sandra Abe J. Geraman (Master of Renewable Energy,** Completed July 2021**)**, Carbon Dioxide Reduction Technologies, Policies and Effectiveness Analysis for Malaysia, University of Malaya
31. **Nur Farah Syazwani binti Ab Kadir (Master of Renewable Energy,** Completed July 2021**),** Analysis of Energy Consumption of Institutional Building in Sarawak, University of Malaya
30. **Ahmad Syahmi bin Mohamad Shahir (Master of Renewable Energy,** Completed July 2021**),** Economic and Environmental Analysis of a Standalone PV System in Remote,University of Malaya
29. **Noor Syahida Binti Mohd Fuat (Master of Renewable Energy,** Completed July 2021**),** Analysis of Energy Consumption and Potential Energy Saving of a Government Office Building, University of Malaya
28. **Nico Goetzel (Master of Renewable Energy,** Completed July 2021**),** Analysis **of** Production Costs and Forecasting Electric Vehicles Battery for Germany and Malaysian Market, 2020/2021
27. **Idlan Bin Hafiz (Master of Renewable Energy,** Completed July 2021**),** Analysis of Total cost of Ownership and Adaptability of ICE and Fuel Cell Vehicles, 2020/2021
26. **Lee Wuen Han (Master of Renewable Energy,** Completed September 2020) Evaluation of Solar Photovoltaics System Deployment in Malaysia Via Business Models in Post Feed-In Tariff Era, 2016/2017
25. **Tan Sze Chia (Master of Renewable Energy,** Completed September 2020**),** Energy and Environmental Impact Assessment of Recycle and Disposal PV Modules Materials, 2016/2017
24. **Wei Yiming (Master of Renewable Energy,** Completed September 2020**),** Development of an Integrated solar micro-power sewage treatment equipment 2019/2020
23. **Taiki Namba (Master of Renewable Energy,** Completed September 2020**),** Efficient electrochemical reduction of CO_2 combined with solar energy, 2019/2020
22. **Wan Afin Fadzlin Binti Wan Mohd Fadzli (Master of Renewable Energy,** Completed July 2020**),** Modelling and Optimization of Thermal Energy Storage System for Potential Solar Thermal Power Plant in Malaysia, 2018/2019
21. **Manu Menon (Master of Renewable Energy,** Completed July 2020**),** Modeling and Optimization of Renewable Energy Integration in Oil and Gas Platforms, 2018/2019
20. **Lim Jun Wei (Master of Renewable Energy,** Completed July 2020**),** Modelling and Performance Analysis of PV Based Power Generation Towards Net-Zero Energy Buildings, 2018/2019
19. **Siti Asnor Raihan Agus Salam (Master of Renewable Energy,** Completed December 2019**),** Energy, Economic and Environmental Impact Assessment of Wave based Power Generation in Malaysia, 2018/2019
18. **Ashvini Nair Sivasengaran (Master of Renewable Energy,** Completed December 2019**),** Energy and Environmental Impact Assessment of Thermal Energy Storage for Industrial Processes Heat in Malaysia, 2018/2019
17. **Sivasankari Ranganathan (Master of Renewable Energy,** Completed December 2019**),** Economic and Environmental Impact Analysis of Non-toxic, Biodegradable Nanocellulose Fibrils Reinforcement in Paper and Pulp Industry, 2018/2019
16. **Muhammad Hafiz Aman Zaharil (Master of Renewable Energy Completed,** June 2019), Performance Analysis of Concentrated Parabolic Troup Solar Collector with Different Fluids and Operating Conditions, 2017/2018
15. **Abu Syakireen Bin Abd Rahman (Master of Renewable Energy Completed,** June 2019), Analyses the effect wear on transmissivity, absorptivity, reflectivity of the PV glass and performance of PV system.
14. **Azri Adi Bin Arbai (Master of Renewable Energy Completed,** June 2019), Energy Consumption, Economic and Environmental Analysis of Elevators and Escalators.
13. **Gobinath Muniandy (Master of Renewable Energy Completed**, December 2018**),** Energy, Economics and Environmental Impact of Natural Gas Vehicles over Conventional Vehicles.

12. **Hazel Ronella Makulin (Master of Renewable Energy Completed**, December 2018**)**, Energy, Economics and Environmental Analysis of Solid Waste Based Energy in Malaysia.
11. **Yudai Tanaka** (**Master of Renewable Energy Completed**, May 2018) Energy, Environmental and Economic Assessment of Photocatalytic Methane Production.
10. **Amir Bin Asmail** (**Master of Renewable Energy**, Completed May, 2018) Energy, Economics and Environmental Analysis of PV based Zero Carbon Buildings.
9. **Nur Ayeesha Qisteena Binti Muzir** (**Master of Renewable Energy Completed**, May 2018) Impact of Energy Consumption of Conventional and Electric Car in Kuala Lumpur, Malaysia.
8. **Goh Kuan Thai** (**Master of Renewable Energy Completed**, May 2018) Analysis of Energy, Economic and Environmental Impacts for Integrated Palm Oil Mill Effluent (POME) Biogas Plant with Solar PV Based Energy System in Malaysia.
7. **Ng Chien Ming** (**Master of Engineering Completed**, February 2016) Alternative energy sources and energy management for industry.
6. **Norlina Binti Md Saion** (**Master of Engineering Completed**, August 2014) Smart Grid System Overview and It's Prospect in Australia.
5. **Jorinda Wong Yuh Ru** (**Master of Engineering Completed**, July 2014) Prospect and Policy of Solar PV Based Energy in Industrial Sector in Malaysia.
4. **Chin Weng Kok** (**Master of Engineering Completed**, July 2014) Smart Grid Energy Savings.
3. **Fatin Mardiah Binti Hitam** (**Master of Engineering Completed**, July 2014) Prospects, Policies and Challenges of Smart Grid in Asia.
2. **Suraya Fattanah Binti Mohamed** (**Master of Engineering Completed**, July 2014) Prospects, Policies, and Challenges of Smart Grid in America.
1. **Nur Iqtiyani Ilham** (**Master of Engineering Completed**, January 2014) Prospect, Policies and Challenges of Smart Grid in Europe.

4.3 PhD and Master's Degree Ongoing

1. **Nurul Aida Binti Sulaiman (PhD),** Modelling, Performance Analysis and Cost Effectiveness Assessment of PVT System in Malaysia, 2023/2024
2. **Xiaopei Wong (PhD),** Energy and Safety Performance Analysis, Economic and Environmental Impact Assessments of Hydrogen Fuel Car, 2023/2024
3. **Hafeez Khoharo (PhD),** Modelling and development of cooling system for thermal management system of an electric vehicle high-energy lithium-ion battery, 2022/2023
4. **Die Jie (PhD),** Energy in Transition: Renewable Power in China Throughout the Supply Chain, 2020/2021
5. **Wei Haoran (PhD),** Improving Energy Efficiency through Local Public Intervention: Comparative Analysis between China and the Malaysia, 2020/201
6. **Md. Aminur Rahman (PhD)**, Energy Management through Hybrid Vehicle in Bangladesh: Comparison with Conventional Vehicle, 2020/2021, Bangladesh University of Professional
7. **Farhan Hussain (M.Phil.),** Forecast Modelling, Trend and Performance Analysis of Energy Demand and Power Generation, 2023/2024
8. **Taher Hasan Nakib (M.Phil.),** Modelling, Energy and Economic Analysis of an Ocean Thermal Power Plant in Malaysia, 2022/2023
9. **Zhen Dong Sham (M.Phil.),** Modelling, Simulation and Optimization of Cooling Tower and Chiller Plant, 2021/2022
10. **Liew Shan Kun (M.Phil.),** Modelling, and Optimization of Solar-Assisted Heating System for Makeup Water in Vacuum Deaeration Process, 2021/2022

11. **Muhammad Shazwan bin Mazuar (Master of Renewable Energy)** Economic and Environmental Impact Assessments of Carbon Tax for Transportation Sector in Malaysia, 2022/2023
12. **Yuovendra Sivaganese (Master of Renewable Energy)** Feasibility Analysis of Wind Power Plant for Highways Energy Harvesting in Malaysia, 2022/2023
13. **Izzat Zikri Bin Kamarulzaman (Master of Renewable Energy)** Forecasting and Analysis the Environmental Impact of Private Cars in Malaysia, 2023/2024
14. **Hamizah Syamimi Binti Supian (Master of Renewable Energy)** Energy, Economic & Environmental Impact Analysis of Hydrogen Usage in Malaysian Industries, 2024/2025
15. **Hafiz M Rasul (Master of Renewable Energy)** Environmental Impact Analysis of Coal and Gas based Power Plant in Malaysia, 2024/2025
16. **Muhammad Alfizry (Master of Renewable Energy)** Analysis the Cost Effectiveness of Hydrogen Vehicle in Malaysia, 2024/2025
17. **Amira Binti Mohamed Noor (Master of Renewable Energy)** Cost Effectiveness and Environmental Impact Analysis of Hydrogen based Power Generation in Malaysia, 2024/2025
18. **Mohd Faizal Ghazali (Master of Renewable Energy)** Economic and Environmental Impact Assessment of Carbon Capture and Storage in Malaysia, 2024/2025
19. **Zhang Jiayu (Master of Renewable Energy)** Economic and Environmental Impact Assessment of Carbon Credit in Transportation Sector in China, 2024/2025
20. **Kok Poh Ee (Master of Renewable Energy)** Economic & Environmental Impact Analysis of Vehicle to Grid in Malaysia, 2024/2025

5. Teaching Undergraduate and Postgraduate Level

5.1 Postgraduate Level

- **PhD level:** HMX8001: Advanced Research Methodology
- **Master Level:**
  - HQA7004: Energy Policy
  - HQA7006: Foundation of Renewable Energy
  - HQA7013: Renewable Energy
  - HVX7001: Research Methodology
  - KXGX6101: Research Methodology

5.2 Undergraduate Level

- **Fourth year:** KMEM4364 (Internal Combustion Engine), KMEM4351 (Energy Management in Building and Industry), KMEM4345 (Refrigeration)
- **Third year:** KMEM3119 (Heat Transfer**)**
- **Second year:** KMEM2216 (Applied Thermodynamics), KMEM 2111 (Applied Engineering Mathematics),
- **First year:** KMEM1108 (Fundamentals of Fluid Mechanics), KMEM1103 (Introduction to Manufacturing Technology), KMEM1208 (Dynamics), KMEB1170 (General Engineering Practice)

6. Research Interest

- **Thermal Engineering** (Heat Transfer, Cooling and Heating, Heat to Power, Thermofluids, Phase Change Material (PCM), Thermodynamics, Power Plant Engineering)

- **Renewable Energy** (PV, PV/Thermal, Solar Heat in Industrial Process, Renewable Energy Conversion, Energy System Analysis, Environmental Impact, Energy and Sustainable Development)
- **Energy Policy** (Energy Policy, Energy Efficiency, Energy Economics, Energy Forecasting, Environmental Impact Assessment, Life Cycle Assessment)
- **Energy and Buildings** (Renewable Energy Integration, Cooling and Heating, Solar Cooling System, Energy Performance Analysis & Management, Low Energy Building, Green Building)
- **Electric and Hydrogen Vehicle** (Transport Decarbonization Policy, Electric Vehicles, EV Battery, Battery Thermal Management, Hydrogen Storage, Alternative Fuel, Hydrogen Utilization, Hydrogen Vehicle)
- **Sustainability, Carbon Pricing and Policy** (Sustainability, Low Carbon Policy, Carbon Pricing, Carbon Tax)

7. Research Grant

Research Grant Summary:
National/ University Grant: Total RM 8,130,374; as PI: RM 705,053;
International Research Grant: Total RM 2,909,803; as PI: USD 30,900 (RM 125,910).

33. Project title: Electricity Planning for 100 % Renewable Energy in Interconnected Islanded Power Systems
Project No: NKB-541/UN2.RST/HKP.05.00/2024
Project Leader: Prof. Widodo Wahyu Purwanto, University of Indonesia, Indonesia.
Researcher: Associate Prof. Dr. Md. Hasanuzzaman
Funding source: International Indexed Publication Research Grant (PUTI) Q1 Scheme, University of Indonesia
Amount of fund: IDR 150,000,000 (RM 44,512.50)
Duration: April 2024 to November 2025

32. Project title: Microalgae Power: Sustainable Bioelectricity Generation and CO_2 Sequestration in Biophotovoltaic Systems Integrated with Palm Oil Mill Effluent Utilization
Project No: 125/UN62.21/DT.07.00/2024
Project Leader: Associate Prof. Dr. Muhamad Maulana Azimatun Nur, Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia.
Researcher: Dr. Md. Hasanuzzaman
Funding source: Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia
Amount of fund: IDR 150,000,000 (RM 44,042.86)
Duration: May 2024 to December 2024

31. Project title: Akaun RMF Dan Insentif - Md. Hasanuzzaman
Project No: RMF1797-2021
Project Leader: Associate Prof. Dr. Md. Hasanuzzaman
Funding source: Universiti Malaya
Amount of fund: 36,962.01
Duration: 01/04/2021 to 08/12/2024

30. Project title / travel grant: AUA Scholars Award Program (2023-2024)
Awardee / Project Leader: Associate Prof. Dr. Md. Hasanuzzaman.

Funding source: Asian Universities Alliance (AUA)
Amount of fund: USD 2500 (RM 11,500)
Duration: January 2024 to December 2024

29. Project title: Simulation and optimization of the performance of rooftop Photovoltaic array in west Sichuan province
Project number: 2024YFHZ0245
Project Leader: Associate Prof. Dr. Jinzhi Zhou, Southwest Jiaotong University, China.
Researcher: Dr. Md. Hasanuzzaman
Funding source: Sichuan Provencial Department of Science and Technology
Amount of fund: CNY200,000 (RM 130,582.86)
Duration: January 2024 to December 2025

28. Project title: Paving the Way to a Carbon Neutral University of Malaya Campus and a Green Future through Carbon Credits
Project No: BKP008A-2023-KP
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Prof. Ir. Dr. Nasrudin Abd Rahim, Prof. Ir. Dr. Shaliza Ibrahim, Dr. Tengku Adeline Adura Tengku Hamzah, Dr. Zainorfarah Zainuddin, Dr. Adi Ainurzaman Jamaludin, Assoc. Prof. Dr. Zul Ilham Zulkiflee Lubes, Dr. Wan Abd Al-Qadr Imad Wan Mohtar, Dr. Mohd Istajib Mokhtar, Associate Prof. Dr. Zeeda Fatimah Mohamad, Ir. Dr. Khairunnisa Hasikin, Mr. Noor Azril Ramli, Mr. Affan Nasaruddin, Mr. Mohd Fadhli Rahmat Fakri, Mr. Muhammad Faris Ali, Mr. Mohd Shukri Hadafi Md Nor, Mr. Muhammad Izzat Izzuddin Hamdan, Dr. Roziana Ramli
Funding source: Bantuan Khas Penyelidikan (BKP Special), Special Research Grant
Amount of fund: RM 150,000
Duration: 17/07/2023 to 16/07/2025 (24 Months)

27. Project title: Economic and Social Impact Analysis of EV Ownership (WP2: Impact of Electric Vehicle Charging on Electrical Power Grid)
Project No: IIRG002B-2023
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Prof. Ir. Nasrudin Abd Rahim, Prof. Ts. Dr. Jeyraj Selvaraj, Dr. Siti Rohani Sheikh Raihan, Dr. Che Hang Seng, Dr. Tan Chia Kwang, Dr. Mohamad Fathi Mohamad Elias and Dr. Jafferi Jamaludin
Funding source: Universiti Malaya Impact-Oriented Interdisciplinary Research Grant Programme (IIRG) Cycle 5/2022
Amount of fund: RM 82,000
Duration: 01/07/2023 to 30/06/2025 (24 Months)

26. Project title: Discipline Innovation and Talent Introduction Base of Low Carbon Building Technologies for Rail Transportation
Project number: B23021
Project Leader: Prof. Dr. Yanping Yuan, Southwest Jiaotong University, China.
Researcher: Dr. Md. Hasanuzzaman
Funding source: Ministry of Science and Technology of the People's Republic of China
Amount of fund: CNY 3,000,000 (RM 1,912,784.21)
Duration: 01/2023 to 12/2027 (48 Months)

25. Project title: Investigating Social Psychology Factors for User Behaviour Change towards Energy Efficiency and Conservation in Educational Building Typology through Green Interventions
Project number: FP002-2019A
Project Leader: Dr. Noor Suzaini Mohamed Zaid
Researcher: Dr. Md. Hasanuzzaman, Prof. Ir. Nasrudin Abd Rahim, Dr. Nik Elyna Myeda Bt Nik Mat, Dr. Wan Puspa Melati
Funding source: Fundamental Research Grant Scheme (FRGS),
Amount of fund: RM 221,050
Duration: 01/09/2019 to 31/08/2022 (36 Months)

24. Project title: Thermal Analysis of Designed Solar Thermal/ Photovoltaic Hybrid Collector System for Air/ Water Heating and Electrification of Building Applications
Project number: IF005-2021
Project Leader: Associate Prof. Dr. Jeyraj Selvaraj
Researcher: Dr. Md. Hasanuzzaman, Puan Norridah Amin
Funding source: ASEAN University Network / Southeast Asia Engineering Education Development Network (AUN/SEED-Net)
Amount of fund: RM 225,893.38
Duration: 02/01/2021 to 31/12/2022 (24 Months)

23. Project title: Key Technologies of Resources Conservation for Green Buildings
Sub-project number: 2020YFE0200300-06
Main project title: Research, Development and Application of Green Building Technologies and Standards in 'One Belt, One Road' Countries. Project number: 2020YFE0200300, Funding amount: CNY 15,920,000, main project leader: Chong Meng, China Academy of Building Research)
Project Leader: Prof. Dr. Yanping Yuan, Southwest Jiaotong University, China.
Researcher: Dr. Md. Hasanuzzaman
Funding source: Ministry of Science and Technology of the People's Republic of China
Amount of fund: CNY 600,000 (RM 361,960)
Duration: 06/2020 to 05/2023 (36 Months)

22. Project title: Modelling, Design and Performance Analyses of PV/T Based Power Generation Different Type of Nearly Net-Zero Energy Buildings in Malaysia
Project number: IIRG015B-2019
Project Leader: Dr. Md. Hasanuzzaman
Co-Researcher: Prof. Ir. Nasrudin Abd Rahim, Assoc. Prof. Dr. Jeyraj Selvaraj, Prof. Dr. Şule ERTEN-ELA, Dr. Mohd Faizal Fauzan
Funding source: University of Malaya Impact-Oriented Interdisciplinary Research Grant
Amount of fund: RM 84,043
Duration: 13/05/2019 to 12/05/2022 (36 Months)

21. Project title: Real-time Online Monitoring of Energy Consumption and Carbon Emission Achieving Nearly Net-Zero Energy Buildings
Project number: IIRG015C-2019
Project Leader: Prof. Ir. Nasrudin Abd Rahim
Co-Researcher: Dr. Md. Hasanuzzaman, Assoc. Prof. Dr. Jeyraj Selvaraj
Funding source: University of Malaya Impact-Oriented Interdisciplinary

Research Grant
Amount of fund: RM 92,043
Duration: 13/05/2019 to 12/011/2021 (30 Months)

20. Project title: Investigation of the effect of wear on PV module glass surface for mechanical cleaning system (**TTRF, Japan, Project 17A05:** http://www.ttrf.org/awarded/awarded-2017.html)
Project number: IF007-2018
Project Leader: Dr. Md. Hasanuzzaman
Co-Researcher: Prof. Ir. Nasrudin Abd Rahim, Prof. Ir. Masjuki Hassan, Assoc. Prof. Dr. Abul Kalam
Funding source: Taiho Kogyo Tribology Research Foundation (TTRF), Japan
Amount of fund: USD 28,400 (RM 114,409.59)
Duration: 01/01/2018 to 31/12/2020 (42 Months)

19. Project title: Investigation on the Next Generation Renewable Energy Generators based on M.O.R.E Intelligent Power Electronics Converters.
Project number: MO013-2016
Project Leader: Dr. Che Hang Seng
Co-Researcher: Dr. Md Hasanuzzaman, Prof. Ir. Dr. Nasrudin Abd Rahim, Assoc. Prof. Dr. Jeyraj Selvaraj, Dr. Ahmad Elkhateb
Funding source: Ministry of Higher Education, Malaysia
Amount of fund: RM 189,000.00
Duration: 01/06/2017 to 31/05/2019 (2 years)

18. Project title: Investigation the Factors That Affecting the Degradation of Photo-voltaic Module
Project number: PG136-2015B
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Md. Aminul Islam
Funding source: Postgraduate Research Fund (PPP)
Amount of fund: RM 11,200
Duration: 01/04/2016 to 01/04/2019 (36 Months)

17. Project title: Performance Analysis of Nano Particle Mixed PCM Based Thermal Management System for Photovoltaic Module
Project number: PG214-2016A
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Mohammed Moinul Islam
Funding source: Postgraduate Research Fund (PPP)
Amount of fund: RM 4,000
Duration: 25/10/2016 to 25/10/2019 (36 Months)

16. Project title: Solar Assisted Ejector Cooling System: Development and Performance Analysis
Project number: PG216-2016A
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Md. Fayez Hussain
Funding source: Postgraduate Research Fund (PPP)
Amount of fund: RM 4,000
Duration: 25/10/2016 to 25/10/2019 (36 Months)

15. Project title: Impact of PV/T on Net-zero Energy Residential Building in Malaysia
Project number: RP016A-15SUS
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Prof. Dr. Nasrudin Abd Rahim, Prof. Dr. Hew Wooi Ping, Dr. Jeyraj Selvaraj, Dr. Norhayati Binti Mahyuddin, Dr. Adarsh K. Pandey
Funding source: University of Malaysia Research Grant (UMRG)
Amount of fund: RM 107, 900
Duration: 27/05/2015 to 27/05/2018

14. Project title: Development of Zero Energy Cooling System for Solar Photovoltaics
Project number: RP016B-15SUS
Project Leader: Prof. Dr. Nasrudin Abd Rahim
Researcher: Dr. Md. Hasanuzzaman,
Funding source: University of Malaysia Research Grant (UMRG)
Amount of fund: RM 113,400
Duration: 27/05/2015 to 27/05/2018

13. Project title: Monitoring and Control of a Grid-Connected PV System on Residential Buildings
Project number: RP016C-15SUS
Project Leader: Dr. Jeyraj Selvaraj,
Researcher: Dr. Md. Hasanuzzaman
Funding source: University of Malaysia Research Grant (UMRG)
Amount of fund: RM 94,900
Duration: 27/05/2015 to 27/05/2018

12. Project title: Carbon Abatement Module for University of Malaya Eco-Campus: Addressing Urban Heat Island and Climate Change Impact
Project number: LL021-16SUS
Project Leader: Dr. Noor Suzaini binti Mohamed Zaid
Researcher: Dr. Md. Hasanuzzaman, Prof. Dr. Nasrudin Abd Rahim, Dr. Hazreena Binti Hussein, Dr. Wang Chen, Dr. Nurshuhada Zainon, Dr. Nik Elyna Myeda bt Nik Mat, Dr. Sugumaran a/l Manickam
Funding source: UM Living Lab Grant Programme - SUS (Sustainability Science)
Amount of fund: RM 70,910
Duration: 01/05/2016 to 30/04/2017

11. Project title: Analysis of Human Behaviour Pattern in an Office Building
Project number: LL012-15SUSL
Project Leader: Dr. Unaizah Hanum Obaidellah,
Researcher: Dr. Md. Hasanuzzaman
Funding source: UM Living Lab Grant Programme (UM LLGP)
Amount of fund: RM 54,000
Duration: 15/12/2015 to 15/12/2017

10. Project title: Analysis of cooling effect and performance improvement of solar PV module
Project number: RG150-12AET
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Prof. Dr. Nasrudin Abd Rahim, Prof. Dr. Hew Wooi Ping, Dr. Jeyraj Selvaraj

Funding source: University of Malaysia Research Grant (UMRG)
Amount of fund: RM 117,500
Duration: October 2012 to March 2016

9. Project title: Microwave Pretreatment of Palm Oil Empty Fruits Bunches (POEFB) for Ethanol Production
Project number: PG032-2013A
Project Leader: Dr. Md. Hasanuzzaman
Researcher: Md. Farhad Hossain
Funding source: PPP
Total Amount of fund: RM 10, 000
Duration**:** 06/09/2013 to 05/9/2016

8. Project title: Rural electrification in Malaysia, Indonesia and Thailand
Project number: RP026/2013E
Project Leader: Prof. Dr. Nasrudin Abd Rahim
Researcher: Dr. Md. Hasanuzzaman
Funding source: UMRG
Total Amount of fund: RM 100, 000
Duration**:** 17/12/2012 to 31/07/2015

7. Project title: Saving energy through energy audit in solar system
Project number: KT005-2013A
Project Leader: Prof. Dr. Nasrudin Abd Rahim
Researcher: Dr. Md. Hasanuzzaman
Funding source: Ministry of Higher Education
Total Amount of fund: RM 140, 425
Duration**:** 01/08/2013- 31/01/2026

6. Project title: Campus Network Smart Grid System for Energy Security
Project Leader: Prof. Dr. Nasrudin Abd Rahim
Researcher: Dr. Md. Hasanuzzaman
Funding source: High Impact Research Grant, Ministry of Higher Education, Malaysia
Total Amount of fund: RM 3,292,800
Duration**:** 2012 to 2016

5. Project title: Heat transfer and energy consumption of a refrigerator during the open- and closed-door condition
Project Leader: Md. Hasanuzzaman
Funding source: VOT F (Internal funding source)
Amount of fund: RM 7, 500
Duration: 2007-2008 (1 year)

4. Project title: Energy efficient nano coating to control solar radiation through the glasses of building windows
Funding source: MOSTI (Ministry of Science, Technology and Innovation)
Amount of fund: RM 115, 300
Duration of RA: Since January 08 to May 09.

3. Project Title: Development and performance investigation of hydrocarbons and refrigerants mixture for domestic refrigerator.
Funding source: MOSTI (Ministry of Science, Technology and Innovation)
Amount of fund: RM113, 600
Duration of RA: 2006 and 2007

2. Project title: Moisture transfer and energy performance of a refrigerator freezer with open and closed door conditions
Funding source: VOT F (Internal funding source)
Amount of fund: RM 1, 000
Duration: 2006-2007 (1 year)

1. Project title: Development and conservation of a domestic refrigerator to a solar powered refrigerator.
My Role: Researcher
Project leader: Prof. Dr. Saidur Rahman
Researcher: Prof. Dr. Masjuki Hj Hassan, Md. Abdus Sattar
Amount of fund: RM50, 000

8. Consultancy

1. Consultant, Transport Sector: TNBR / Q53/2020- Engagement of Specialist Collaborator to Conduct the Life Cycle Assessment (LCA) and Economic Benefit Analysis of Electric Vehicles in Malaysia
Consultant: Dr. Md. Hasanuuzaman
Project Leader: Prof. Dr. Nasrudin Abd. Rahim
Funding Source: Tenaga Nasional Berhad Research (TNBR) Sdn Bhd
Amount: RM 138,000
Project Duration: (November 2020 – March 2021)

2. Consultant, Transport Sector: ITB NO: MGTC/ITB03/2019, Development of Electric Vehicle Roadmap, Malaysia
Consultant: Dr. Md. Hasanuuzaman
Project Leader: Prof. Dr. Nasrudin Abd. Rahim
Funding Source: Malaysian Green Technology Corporation (MGTC), Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC)
Amount: RM 400,000
Project Duration: (May 2018 – December 2018)

3. Consultant, Transport Sector: UNIDO RFx Number 7000002429, Baseline Study and Data Collection on Energy, Environment and Socio-Economics on Langkawi, Malaysia
Consultant, Transport Sector: Dr. Md. Hasanuuzaman
Project Leader: Prof. Ir. Dr. Nasrudin Abd. Rahim
Funding Source: United Nations Industrial Development Organization, Ministry of Energy, Green Technology and Water, Malaysia, Amount: USD 100,000 (RM 400,000)
Project Duration: 1 year 3 months (October 2017 – December 2018)

4. Proof Reader (2016): Preliminary Study on Demand Side Management (DSM), United Nations Industrial Development Organization, Economic Planning Unit (EPU), Prime Minister's Department, Malaysia (26 October 2016 to 01 November 2016)

5. Research Fellow (2013-2014): Mega Science Transportation Sector, Academy of Sciences Malaysia
Research Fellow, Road Transport Sector: Dr. Md. Hasanuuzaman
Project Leader: Prof. Dr. Nasrudin Abd. Rahim
Funding source: Academy of Sciences Malaysia, Amount: RM 300,000.00
Project duration: 9 months (August 2013 – March 2014)

6. Research Assistant (2010): Property maintain and management cost-effective way to control cost and improve income through energy audit and energy consumption study on the air conditioning system under the leadership of Prof. Dr. Saidur Rahman
Funding source: Permodalan Nasional Berhad (PNB)
Amount approved: RM 29,980.00
Project duration: 3 months (October –December 2010)

7. Research Assistant (2009): A detailed study on consumer behavior towards electricity consumption and end uses of electricity in the industrial sector under the leadership of Prof. Dr. Nasruddin Abd Rahim
Funding source: Tenega Nasional Berhad (TNB)
Amount approved: RM 399,400.00
Project duration: 9 months (June 2006-March 2007)

9. Keynote/ Invited Speaker

55. Invited Speaker (28-30 August 2024): 7th International Conference on Renewable Energy and Environment Engineering (REEE 2024), 28-30 August 2024, Nantes, France. For details: https://reee.net/invited.html

54. Keynote Speaker (23-25 August 2024): International Conference on Clean Energy and Low Carbon Technologies (CELCT 2024), 23-25 August 2024, Chongqing, China. For details: https://www.celct.net/Speakers

53. Keynote Speaker (29-30 June 2024): Green Energy and Decarbonization Challenges in Energy Sector and Its Future, 10th GoGreen Summit - Malaysia 2024, 29-30 June 2024, Kuala Lumpur, Malaysia organized by Bioleaque, Mahsa Univ, UTM, UTHM,--. For details: https://gogreen.bioleagues.com/#speaker

52. Keynote Speaker (24-26 Maya 2024): 3rd International Conference on Advanced Electronics, Electrical and Green Energy (AEEGE 2024), 24-26 May 2024, Chengdu, China. For details: http://www.aeege.net/Speakers.html

51. Invited Speaker (Asian Universities Alliance (AUA) Scholars Award Program 2023-2024 Scholar): Invited by Faculty of Engineering, University of Indonesia, Workshop and Hands on Training: Writing and Publishing High Impact Review and Research Papers, 27-28 February 2024, FTUI – Universitas Indonesia, Indonesia.

50. Invited Speaker: Seminar on Decarbonization and Sustainability Challenges in Energy Sector and Potential Solutions, 26 February 2024, Institute of Technology Bandung, Indonesia.

49. **Invited Speaker (Asian Universities Alliance (AUA) Scholars Award Program 2023-2024 Scholar):** Seminar Series on Future Energy 2024, Invited by Faculty of Engineering, University of Indonesia, 21-23 February 2024, FTUI – Universitas Indonesia, Indonesia.
48. **Keynote Speaker (26-27 January 2024):** International Conference on Advancing Knowledge from Multidisciplinary Perspectives in Engineering & Technology (ICAKMPET-2024), 26-27 January 2024, Acacia Hotel Manila, Manila, Philippines. Details: https://www.icakmpet.com/tentative-program.php
47. **Keynote Speaker (19-21 January 2024):** International Conference on Power Electronics and Artificial Intelligence （PEAI 2024）19-21 January 2024, Xiamen, China. Details: https://www.icpeai.org/
46. **Invited Speaker (14-16 November 2023)**: Solar Energy Integration in Building System, 13th International Symposium on Heating, Ventilation and Air Conditioning (ISHVAC 2023), 14 - 16 November 2023 organized by Tsinghua University, Beijing, China. Details: http://ishvac2023.org/program
45. **Keynote Speaker (12-13 September 2023)**: Decarbonization and Smart Technologies in Energy Sector for Sustainable Development, International Conference on Smart and AI Enabled Technology for Sustainable Development 12 – 13 September 2023, Organized by The NorthCap University, India. Details: https://sait.ncuindia.edu/
44. **Speaker for Professional Certification Program (4 September 2023 – 7 December 2023):** Speaker for Professional Certification Program of Solar PV System Design (Program Pentauliahan Professional Rekabentuk Solar PV) for Module 1: Module 1: Energy & Sustainable Development under Ministry of Higher Education for implement the program in collaboration with Malaysian Green Technology and Climate Change Corporation (MGTC), Duration: 26 hours, 4 – 7 September 2023.
43. **Invited Speaker (23-24 August 2023)**: Green Energy and Decarbonization Technologies in Energy Sector for Sustainable Development and Green Economy, International Conference on Sustainable Development and Green Economy in Small Islands 2023 (IC-SDGESI 2023), 23– 24 August 2023, Bela International Hotel, Ternate, Indonesia, Organized by Khairun University, Indonesia. Details: http://ic-sdgesi.unkhair.ac.id/
42. **Keynote Speaker (16 August 2023)**: Decarbonization and Sustainability Challenges in Energy Sector and Its Future, 4th International Symposium on Materials and Electrical Engineering (ISMEE 2023) 16 August 2023 at Holiday Inn Resort Baruna, Bali, Indonesia, hosted by: Department of Electrical Engineering Education, Universitas Pendidikan Indonesia. Details: https://ismee.id/
41. **Invited Speaker (08 – 11 July, 2023)**: 9th International IFSs and Contemporary Mathematics and Engineering Conference (IFSCOM-E 2023), 08-11 July 2023, Mersin, Turkey. Organized by Tarsus University, Turkey. Details: https://ifscom.com/?page_id=279
40. **Keynote Speaker (30 June – 02 July, 2023)**: International Conference on Power, Grid and Energy Storage 2023 (PGES 2023) 30 June – 02 July 2023, Hangzhou, China. Details: http://www.ic-pges.org/speaker
39. **Invited Speaker (June 2023):** International Conference on Clean Energy and Technology 2023 (CEAT 2023), 7 - 8 June 2023, Bayview Hotel Georgetown Penang, Malaysia.
38. **Invited Speaker (May 2023) for Scientific Writing Seminar:** Scientific Paper Writing for High Impact Journals and Its Ethical Issues, Organized by School of Mechanical Engineering, Southwest Jiaotong University, China.
37. **Invited Speaker (May 2023):** Performance of PV, PVT, PVT-PCM and Nano-based Thermal Property Enhancement of PCM for Photovoltaic Thermal Systems, Organized by School of Mechanical Engineering, Southwest Jiaotong University, China.

36. **Keynote Speaker (April 2023):** Solar Energy Integration in Building System, International Exchange and Seminar on Green Building - Key Technologies of Solar Energy, Heat Pump and Latent Heat Storage Integration for Green Buildings 8 April 2023 (Online), Organized by School of Mechanical Engineering, Southwest Jiaotong University, China.
35. **Invited Speaker / Keynote Speaker (Feb 2023):** Malaysia-Japan International Conference on Nanoscience, Nanotechnology and Nanoengineering 2023 (MJIC 2023) 24-26 Feb 2023, Villea Port Dickson, Port Dickson, Malaysia. Details: https://nanoscitech.uitm.edu.my/index.php/invited-speakers
34. **Invited Speaker (Jan 2023):** Global Challenges in Energy and Environmental Sectors: Prospects of Renewable Energy, 7th International Conference on Energy and Environmental Science 2023 (ICEES 2023), 6-8 January 2023, Changsha, China, sponsored by Central South University, Details: http://www.icees.org/invited.html
33. **Speaker for Professional Certification Program (Nov 2022- Feb 2023):** Speaker for Professional Certification Program of Energy and Environment (Program Pensijilan Profesional Dalam Tenaga Dan Alam Sekitar), Solar Energy and Energy Efficiency (Tenaga Solar dan Kecekapan Tenaga) for Module 1: Energy and Sustainable Development and Module 2: Renewable Energy Recourses and Applications under Ministry of Higher Education for implement the program in collaboration with Malaysian Green Technology andClimate Change Corporation (MGTC), Duration: 40 hours, 14 - 21 November 2022.
32. **Invited Speaker (Visiting Professor):** Invited by Faculty of Engineering, University of Indonesia, Workshop & Seminar on "Scientific Paper Writing for High Impact Journal and Its Ethical Issues", 10 to 11 November 2022, FTUI – Universitas Indonesia, Indonesia.
31. **Guest Speaker:** Future Energy Talks: Energy Transition in South East Asia, Challenges & Opportunities, Public Lecture (program for UI academics and the general public) organized by Faculty of Engineering & Institute of Energy Studies, University of Indonesia, 09 November 2022, Wednesday, 19.00-21.00 (Western Indonesia Time = GMT+07), Ruang Makara 04, Smart Meeting Room, Gedung Dekanat FTUI – Universitas Indonesia, Indonesia.
30. **Invited Speaker:** 5th International Conference on Nanoengineering Technology Devices and Materials 2022 (IC-NET 2022), entitle " Challenges of Nanoparticles based Thermal Property Enhancement of Phase Change Materials" 11-12 October 2022, Glenmarie Hotel and Golf Resort, Shah Alam, Selangor, Malaysia, co-organized by the Institute of Science, Universiti Teknologi MARA (UiTM) with Nagoya Institute of Technology (NITech), Nagoya, Japan, National Institute of Technology Kagawa College (NITKC), Kagawa, Japan, National Nanotechnology Centre (NNC), Ministry of Science, Technology and Innovation (MOSTI), Faculty of Applied Sciences, Universiti Teknologi MARA and Malaysia Nanotechnology Association (MNA).
29. **Invited Speaker (Resource Person):** Five-day International Faculty Development Program on "The Role of Artificial Intelligence in Renewable Energy Applications, 1-5 August 2022, Organizes by KPR Institute of Engineering and Technology, Tamil Nadu, India.
28. **Invited Speaker:** Enhancing Energy Sustainability for Planetary Health, UM Planetary Health 2022 (Aug 2022), 10.00 -12.00 noon (Friday), 5th August 2022, online (zoom meeting) Institute for Advanced Studies, University of Malaya, Malaysia
27. **Invited for Motivational Talk Show**: Invited by Director, Office of External Affairs, North South University (One of the Top-Ranking University in Bangladesh, QS Ranking 2023), Online, Zoom Platform, Time: Jun 12, 2022 12:30- 01.30PM, Dhaka, Bangladesh
26. **Invited Speaker: Plenary Session**, Challenges of Solar Thermal Energy: Prospects of Thermal Energy Storage and Phase Change Materials, International Workshop Phase Change Materials and Applications (PCMA22), 10 February 2022, Organized by University of Laghouat, Algeria

25. **Keynote Speaker:** Challenges in Sustainable Energy and Environment: Prospects of Renewable Energy, International Conference on Nature Science, Education and Engineering (ICNSEE 2022), 10-11 February 2022, Toronto, Canada, Organized by World Association of Nature Science, Education and Engineering (WANSEE), Sponsored by: NSRIC Inc. London, ON, Canada.
24. **Keynote Speaker:** Impact of Renewable Energy on Sustainable Energy and Environment, 5th International Conference on Emerging Trends in Mechanical & Industrial Engineering 4-5 March 2022 Organized by Department of Mechanical Engineering, The NorthCap University, India.
23. **Keynote Speaker:** Challenges in Energy and Environmental Sectors: Prospects of Renewable Energy, 6th International Conference on Energy, Environment and Sustainable Development 2022 (EESD 2022) 17-19 January 2022 Organized by Mehran University of Engineering and Technology (MUET) and Ziauddin University, Pakistan, https://eesd.muet.edu.pk/
22. **Invited Speaker:** International Workshop on Solar Thermal Energy Storage 13-14 December 2021 Organized by Department of Hydro and Renewable Energy (HRED), Indian Institute of Technology Roorkee (IIT, Roorkee), India
21. **Invited Speaker:** Challenges in Energy Sector: Modelling and Optimization of Solar Thermal Power Plant, 6th International Conference on Advances in Mechanical Engineering 20 - 22 October 2021, Yildiz Technical University, Istanbul, Turkey, http://icameconference.yildiz.edu.tr/.../INVITED-SPEAKERS
20. **Keynote Speaker:** Global Challenges in Industrial Process Heat Supply: Prospects of Solar Thermal Energy, Global Congress and Expo on Power and Energy Engineering Conference, 12-14 July 2021, Barcelona, Spain, https://www.scientificfederation.com/energy-engineering-technology/
19. **Invited Speaker:** Challenges in the Energy Sector and the Prospects of Renewable Energy, Environmental Engineering Webinar Series (ENVIRO WEBTALK2021) 17- 22 May 2021 Organised by Lovely Professional University, India
18. **Keynote Speaker:** Challenges of Energy and Environmental Sectors of Bangladesh: Prospects of Renewable Energy, 6th International Conference on Engineering Research, Innovation and Education (ICERIE 2021) on 26- 28 February 2021, Sylhet, Bangladesh, http://icerie-sust.org/
17. **Invited Speaker:** Prospects and Challenges of Renewable Energy and Energy Storage, 29 January 2021 (Online Seminar Via Zoom, 8.00 PM Malaysia, 7.0 PM Indonesia Time), Sebelas Maret University (Universitas Sebelas Maret), Indonesia
16. **Keynote Speaker:** Global Challenges in the Energy Sector: Prospects of Thermal Energy, the 2020 6th International Conference on Energy Science and Chemical Engineering (ICESCE 2020), 17-19 July 2020, Dali, China, http://www.icesce2020.org/keynote
15. **Invited Speaker:** Scientific Paper Writing for High Impact Journals and Its Ethical Issues, 04 December 2020 (Online Seminar Via Zoom, 8.30 PM Malaysia, 7.30 PM Indonesia Time), University of Indonesia (Universitas Indonesia), Indonesia, http://www.metal.ui.ac.id/index.php/visiting-professor-prof-hasanuzzaman/.
14. **Invited Speaker:** How to Publish in a High Impact Journal and Its Ethical Issues, 22 November 2020 (Online Seminar Via Zoom, 9.30 PM Malaysia, 7.30 PM Bangladesh Time), Department of Mathematics, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.
13. **Invited Speaker (Sponsored Participant):** The 13th AUN/SEED-Net Regional Conference on Energy Engineering (RCEneE) in conjunction with the 3rd International Conference on Smart City Innovation held by Universitas Indonesia (UI) 27-28 October 2020, Grand Inna Bali Beach Hotel, Indonesia.
12. **Invited Speaker:** How to Publish High Impact Journal and Its Ethical Issues, Swedish Iraqi Studies Network, 12 September 2020 (Online Lecture, 8.00 PM Malaysia Time), Lund University, Sweden
11. **Invited Speaker:** Global Advancement of Solar Thermal Energy Technologies, Future Prospects and Challenges, One-week Short-term Staff Training Program on "Recent Trends in Energy

Conversion Technologies" (SSTP-RTECT 2020), July 13-19, 2020, Curtin University Malaysia, https://sstp-rtect.curtin.edu.my/speakers/

10. **Invited Speaker for Research Seminar:** Global Challenges in the Energy Sector! Prospects of Photovoltaic and Photovoltaic Thermal Energy, 15 October 2019, 10.10 Am- 11.10 AM, Graduate School of Energy Science, Kyoto University, Kyoto, Japan, https://www.energy.kyoto-u.ac.jp/en/2019/10/22/hasanuzzamanlecture/.
9. **Invited Speaker:** Challenges and Prospects of Photovoltaic Energy, International Conference on Advanced Technologies in Electrical Engineering, 2019 (ICATEE19), India, https://icatee2019.com/speakers/.
8. **Invited Speaker for Research Seminar:** How to Write a Good Thesis and Ethical lssue, 8 July 2018 (Sunday) 4.00PM- 5.00PM, Seminar Room (ME-219), 1st Floor, EME Building, Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh.
7. **Invited Speaker for Research Seminar:** How to Write a Good Thesis and Ethical issue, 11 July 2018 (Wednesday) 11.30AM – 1.30PM, Green Seminar Hall, Green University of Bangladesh, Dhaka, Bangladesh.
6. **Invited Speaker for Workshop:** Investment of Nanotechnology in Renewal Energy: Principles and Applications (INRE 2017), 13 December 2017, Auditorium, Kongzi Institute, University of Malaya, Kuala Lumpur, Malaysia.
5. **Invited Speaker:** Symposium on Asean University Network (AUN)-Kyoto University (KU), 23-24 November 2015, University of Malaya, Kuala Lumpur, Malaysia
4. **Invited Speaker:** Current Challenges of Energy Sector and Prospects of PV/PVT Systems" Postgraduate Research on Energy (ProE) Symposium 2017, 6-7 September 2017, Hotel Sentral, Kuala Lumpur, Malaysia
3. **Invited Speaker,** Hands Holding Session: Publish and Perish! - If Plagiarised, 16 October 2017, UMPEDAC, University of Malaya
2. **Invited Speaker**: 5th International Conference on Engineering and Innovative Materials (ICEIM 2016), International Academy of Computer Technology (IACT), September 10-12, 2016, Kuala Lumpur, Malaysia
1. **Invited Speaker:** Saving Electricity**,** Our Earth Our Responsibility, UMCares Royal Club, 8.00pm – 11.30pm, 4 December 2015, Dewan Gemilang Kolej Kediaman Raja Dr. Nazrin Shah, University of Malaya

10. Award/Scholarship/Recognition

26. **World's Top 2% Scientists** by Elsevier & Stanford University for 2024, https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/7
25. **World's Top 20 Highly Ranked Scholars** for 2024 by Scholar GPS in Energy Conservation, For details: https://scholargps.com/scholars/68783105267211/md-hasanuzzaman
25. **Top 10 Scientists in Malaysia (Mechanical Engineering),** Engineering & Technology, AD Scientific Index 2025.
24. **AUA Scholars Award 2023-2024**, Asian Universities Alliance (AUA) Scholars Award Program 2023-2024, List of Awardees, 15 December 2023, http://www.asianuniversities.org/info/1095/1630.htm (updated 18-12-2023).
23. **Excellence Bangladeshi Academician Award 2024**: Honouring Bangladeshi Excellence in Education and Community Engagement 2024 organised by Dhaka University Alumni Association Malaysia (DUAAM), Kuala Lumpur, Malaysia.
22. **World's Top 2% Scientists** by Elsevier & Stanford University for 2023 (listed 20th among the 110 UM Top 2% Scientists).

21. **World's Top Scientists, Engineering and Technology** by AD (Alper-Doger) Scientific Index, World Scientist and University Rankings 2024.
20. **Universiti Malaya Excellent Service Awrad 2023** (for the service year of 2022), Anugerah Perkhidmatan Cemerlang (APC2023) Untuk Tahun 2022, Universiti Malaya.
19. **World's Top 2% Scientists** by Elsevier & Stanford University for 2022 (listed 21st among the 108 UM Top 2% Scientists).
18. **World's Top Scientists, Engineering and Technology** by AD (Alper-Doger) Scientific Index, World Scientist and University Rankings 2023.
17. **World's Top 2% Scientists** by Elsevier & Stanford University for 2021(listed 27th among the 101 UM Top 2% Scientists)
16. **Top Scientists, Engineering and Technology** by reseach.com, 2021 (the ranking contains h-index, publications and citation values collected on December 6th, 2021), listed 48th among top scientists in Malaysia.
15. **World's Top 2% Scientists** by Elsevier & Stanford University for 2020 (listed 33rd among the 80 UM Top 2% Scientists)
14. **Universiti Malaya Excellent Service Certificate 2021**, (for the service year of 2020), Panel of Human Resource Development, University of Malaya (Panel Sijil Perkhidmatan Cemerlang (SPC) Profesor Madya Dr. Md. Hasanuzzaman, Profesor Madya DS53, Panel Pembangunan Sumber Manusia (PPSM) Universiti Malaya (26.03.2021))
13. **Excellent Oral Presentation Award** (2019), The 4th International Conference on Materials Technology and Applications (ICMTA2019), October 11-14, 2019, Kyoto, Japan
12. **Gold Medal**, Innovation Competition on Energy Saving in Building Design, Ipoh International Summit on Professionalism, Research and Education (INSPIREd, 2019), 17-19 September 2019, Ipoh, Perak, Malaysia
11. **Outstanding Scientist Award 2017** (Awards for Publication Citation), i-Proclaim Annual Research Awards 2017 (ARA 2017), Malaysia
10. Outstanding Reviewer, International Journal of Heat and Mass Transfer, Achieved: Sept 2017
9. Outstanding Reviewer, Applied Thermal Engineering, Achieved: June 2017
8. Recognized Reviewer, Energy Conversion and Management, Achieved: May 2017
7. Outstanding Reviewer, Energy Strategy Reviews, Achieved: May 2017
6. Outstanding Reviewer, Solar Energy, Achieved: April 2017
5. Outstanding Reviewer, Applied Energy, Achieved: April 2017
4. Outstanding Reviewer, Energy, Achieved: December 2016
3. **University of Malaya Excellence Award** 2012, Outstanding Achievement in Doctor of Philosophy (PhD), University of Malaya, 2012, 10 December 2012
2. Scholarship of Graduate Research Assistantship Scheme, University of Malaya, Malaysia.
1. Scholarship of Bangladesh Scholarship Council and the Nippon Foundation, Japan, 2003-2004.

11. Professional Membership

- **Life Fellow (Fellow Number: F18001 ME)**, Bangladesh Society of Mechanical Engineers, BUET, Bangladesh, Since 06 November 2018.
- **Professional Member ASME (Membership ID Number 000102084347),** American Society of Mechanical Engineers, USA, Since 28 June 2018.
- **Member (M/94983712),** Institute of Electrical and Electronics Engineers (IEEE), Since 03 June 2018.
- **Member (2544),** World Society of Sustainable Energy Technologies, United Kingdom, Since 03 November 2021.

- **Member,** International Solar Energy Society, Germany, 08 July 2016 – 31 December 2018
- **Member** (***M/22675***), The Institution of Engineers Bangladesh, Since 27/06/2008.
- **Member** (***ASHAE#8129238***), ASHAE, American Society of Heating, Refrigerating and Air-Conditioning Engineers.
- **Senior Member (100746),** Asia-Pacific Chemical, Biological& Environmental Engineering Society (APCBEES)
- **Member (*M/80338898*),** International Association of Computer Science and Information Technology
- **Member,** International Society of Ocean, Mechanical and Aerospace for Scientists and Engineers (ISOMAse), 15 Sep 2014.
- **Member,** Pro-TEM, Process Industry Thermal Energy Management
- **Member,** Sustainable Energy and Environment Forum
- **Member,** Greenhouse Gas Management Institute,

12. Editor/ Editorial Board Member

- **Associate Editor**, Alexandria Engineering Journal (AEJ), Elsevier, SCI Journal, Q1, IF6.28 (2022), https://www.journals.elsevier.com/alexandria-engineering-journal
- **Editorial Board Member**, Energy and Built Environment, Elsevier, Scopus Index Journal, Q1, CiteScore 15.2 (2024), https://www.sciencedirect.com/journal/energy-and-built-environment,
- **Regional Editor,** Journal of Thermal Engineering (Scopus Indexed, SJR (2020): 0.29, Q3), Yildiz Technical University, Turkey, https://eds.yildiz.edu.tr/journal-of-thermal-engineering/EditorialBoard
- **Editorial Board Member**: Energy & Environment (SCI Journal, Sage, IF 3.154 (2021), https://uk.sagepub.com/en-gb/asi/energy-environment/journal202462#editorial-board)
- **Academic Editor (**Editorial Board Member**), Energy**, The Scientific World Journal (Scopus Indexed Journal, https://onlinelibrary.wiley.com/page/journal/8086/homepage/editorial-board
- **Editorial Board Member**: International Journal of Renewable Energy Development (Scopus Indexed, SJR (2020): 0.33, Q3), https://ejournal.undip.ac.id/index.php/ijred/index
- **Guest Editor:** Special Issue, Renewable Energy, Elsevier (SCI Journal Q1, IF: 6.274, 2019), (https://www.journals.elsevier.com/renewable-energy)
- **Guest Editor:** Special Issue (2022) Energy Technology and Sustainable Energy Systems, Sustainability (Journal Impact Factor 3.215, 2020), https://www.mdpi.com/journal/sustainability/special_issues/Energy_Technology_and_Sustainable_Energy_Systems
- **Guest Editor:** Special Issue (2022) Energies, Open Access Journal "Solar Energy: Future Prospects, (Journal Impact Factor 3.004, 2020), https://www.mdpi.com/journal/energies/special_issues/Solar_Energy_Future_Prospects.
- **Guest Editor:** Advances in Mechanical Engineering (Impact Factor: 1.161 (2019), Special Issue (2020): Renewable Energy Integration in Building Systems, SAGE Journal, (https://journals.sagepub.com/page/ade/call-for-papers/special-issues/renewable-energy-integration-in-building-systems)
- **Associate Editor-in-Chief:** International Journal of Renewable Energy Resources
- **Associate Editor:** Journal of Mechanical and Energi Systems, https://journal.unesa.ac.id/index.php/jmes/about/editorialTeam
- **Editor,** Eksergi, http://jurnal.upnyk.ac.id/index.php/eksergi/pages/view/editorial
- **Editorial Board Member:** SCIREA Journal of Energy(http://www.scirea.org/journal/Energy)
- **Editorial Board Member:** International Journal of Transportation and Logistics Management (http://gvschoolpub.org/journals/IJTLM/)

- **Editorial Board Member:** The International Journal of Computer-aided Mechanical Design and Implementation (IJCMDI), http://gvschoolpub.org/journals/IJCMDI/eb.php

13. Expert Evaluator / Examiner / Technical Contributions

- **Auditor:** Internal Auditor, Self-Audit Exercises for Institute of Advanced Studies (IAS), Universiti Malaya (3 years) from 2nd May 2024 to 1st May 2027
- **Internal Panellist / Evaluator for PRGS 2024**: Research Proposal Prototype Research Grant Scheme (PRGS) under the Ministry of Education, Malaysia, Malaysia, University of Malaya, Cycle 2024 Research Grant.
- **Chairman** for Candidature Defense Panel (Rushdina Roslan (22064794/1)) Master of Philosophy Institute for Advanced Studies (IAS) Semester II, Session 2023/2024
- **Internal Panellist / Evaluator for FRGS 2024**: Research Proposal Fundamental Research Grant Scheme (FRGS) under the Ministry of Education, Malaysia, Malaysia, University of Malaya, Cycle 2024 Research Grant.
- **External Examiner for Mahesh M (PhD) Thesis, 2024:** Investigation on Performance Analysis of the Cascade Refrigeration System Using Eco-Friendly Refrigerants, Anna University, India.
- **Chairman** for Proposal Defense (Panel (Wu Ruiting (S2166983/2)) Doctor of Philosophy Institute for Advanced Studies (IAS) Semester II, Session 2023/2024
- **Panellist / Panel Member for NANOCAT, UM Academic Staff (Associate Professor) Appointment:** 08 March 2024 (Friday), Time: 10:00 AM, Meeting Room, NANOCAT, Level 3, Block A, IPS Building, University of Malaya, 50603 Kuala Lumpur.
- **External Examiner for A S M Monjurul Hasan (PhD) Thesis, 2023:** Industry 4.0 technologies for industrial energy management: assessing the synergies and impacts on production resources and operational performances, University of Technology Sydney, Australia.
- **Visiting Research Scholar (13-20 May 2023),** School of Mechanical Engineering, Southwest Jiaotong University, Chengdu, China.
- **Internal Panellist / Evaluator for UMREG 2023:** Universiti Malaya Research Excellence Grant (UMREG) 2023, Universiti Malaya Research Cluster
- **Examiner for Ruiting Wu (S2166983/1)** Research Project, Feasibility Study of Carbon Pricing Implementation in Malaysia, Master of Renewable Energy, Research Project, September 2023, University of Malaya.
- **Examiner for Mohamad Syahin Bin Zaini (17188403/2)**, Research Project, Modelling and Performance Analysis of Bifacial PV System in an Oil Palm Plantation Land in Johor, Malaysia, September 2023, University of Malaya.
- **Examiner for Peizhe Xu (S2187850/1)**, Research Project, New Building Material Produced from A Mixture of Waste, September 2023, University of Malaya.
- **External Examiner for Ghafram Al Shahri Omar Ali Said (PhD) Thesis, 2023:** Intelligent Systems for Enhancing Photovoltaic Efficiency Using Heuristic Optimisation Approaches, Universiti Tenaga Nasional (UNITEN), Kuala Lumpur, Malaysia.
- **External Examiner for Ramanand Kaippilly Radhakrishnan (PhD) Thesis, 2023:** Battery-Integrated Demand Response for a Transactive Energy Market, Asia Pacific University of Technology and Innovation, Malaysia.
- **External Examiner for Rohaizan Bin Omar (Master) Thesis, 2023:** An Investigation Microgrid System for Sustainable Energy Supply: A Case Study of the Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah, Faculty of Engineering, Universiti Malaysia Sabah Malaysia.

- **Examiner for Norridah Binti Amin (17032965/2)** Research Project: Evaluation on Energy Performance of Wisma R&D Based on Developed Building, Master of Renewable Energy, Research Project, July 2023, University of Malaya.
- **Examiner for Tahsin Anjum (S2124943/1)**, Research Project, Experiment design of PVT System with Efficient thermal transfer, Master of Renewable Energy, Research Project, July 2023, University of Malaya.
- **Internal Panellist / Evaluator for FRGS 2023**: Research Proposal Fundamental Research Grant Scheme (FRGS) under the Ministry of Education, Malaysia, Malaysia, University of Malaya, Cycle 1/2023 Research Grant.
- **Internal Panellist / Evaluator for TIN 2023**: TIN Board Research Grant, 2023 (Penilaian Permohonan Geran Penyelidikan Lembaga Timah Bagi Tahun 2023), University of Malaya.
- **External Examiner for Yathin Krisna (PhD) Thesis, 2022:** MXene Based New Class of Molten Salt Heat Transfer Fluid for the Performance Enhancement of Parabolic Trough Collector, Taylor's University, Malaysia.
- **Panellist / Panel Member for NANOCAT UM Academic Staff (Lecturer/Senior Lecturer) Appointment:** 09 December 2022 (Friday), Time: 03:15 PM, Meeting Room, NANOCAT, Level 3, Block A, IPS Building, University of Malaya, 50603 Kuala Lumpur.
- **Parallel Session Chair**, Session 3A (Session A, 11:00 am – 1:00 pm), Studio 3 (Parallel Session 3) & Session 1C (Session C, 03:45 am – 05:15 pm), Studio 1 (Parallel Session 1), International Postgraduate Conference for Energy Research (IPCER) 2022, Level 3, 19 December 2022 (Monday), Pullman Kuala Lumpur Bangsar Hotel, Kuala Lumpur, Malaysia.
- **Internal Examiner for Osama Majeed Butt (17198355/1 / HVA180039) (PhD) Thesis, 2022:** Development of a Solar PV Integrated Water Electrolyzer System for Solid Municipal Waste Incinerator, University of Malaya, Malaysia
- **THE's 2023 Ranking,** *Times Higher Education*'s annual Global Academic Reputation Survey 2023, 15 December 2022.
- **Internal Panellist / Evaluator for TRGS 2022**: Research Proposal Trans-Disciplinary Research Grant Scheme (TRGS) under the Ministry of Education, Malaysia, Malaysia, University of Malaya, Cycle 1/2022 Research Grant.
- **Head of Publication & Technical Review Committee**, International Postgraduate Conference on Energy Research (IPCER2022) on 19th December 2022 at Pullman Hotel Kuala Lumpur, Malaysia.
- **Panellist / Panel Member for NANOCAT UM Academic Staff (Lecturer/Senior Lecturer) Appointment:** 28 October 2022 (Friday), Time: 10:30 AM, Meeting Room, NANOCAT, Level 3, Block A, IPS Building, University of Malaya, 50603 Kuala Lumpur.
- **Internal Panellist / Evaluator for FRGS 2022**: Research Proposal Fundamental Research Grant Scheme (FRGS) under the Ministry of Education, Malaysia, Malaysia, University of Malaya, Cycle 1/2022 Research Grant.
- **Internal Examiner for Oon Erixno (17058248/1) (PhD) Thesis, 2022:** Modeling an Energy Management of Hybrid Micro-Combined Heat and Power System for Residential Applications, University of Malaya, Malaysia
- **External Examiner for Sridhar Sripadmanabhan Nadar Indira (PhD) Thesis, 2022:** Energy-Exergy Analysis of a Hybrid Concentrated Photovoltaic/Thermal System Integrated with Solar Thermoelectric Generator, Taylor's University, Malaysia
- **External Examiner for Wong Weng Pin (Master) Thesis, 2022:** Economic Analysis of Parabolic Trough Collector System in Malaysia, China and United States, Xiamen University Malaysia, Malaysia

- **External Examiner for Aneurin Nanggar Anak Nyandang (Master) Thesis, 2022:** Effect of Different Cooling Methods for Power Generation in Parabolic Solar Dish Concentrator Using Thermoelectric Generator, Universiti Teknologi MARA, Malaysia
- **External Examiner for Lok Jia Jun (Master) Thesis, 2022:** Optimised Industrial Demand-Side Management Models for Energy Cost and Peak Load Reduction, Multimedia University, Malaysia
- **Examiner / Assessor PhD Candidature Defence, 2022**: Muhammad Husnain Ashfaq (17202542) Development of a bidirectional DCDC converter for off-board EV fast charger, University of Malaya
- **Examiner / Assessor PhD Candidature Defence, 2022**: Muhammad Zulhadi Iskandar Bin Radzi (17168558) Characterization of Manganese-Based Spinel as Cathode Material for Lithium-Ion Batteries, University of Malaya
- **Examiner / Panel for PhD Thesis Seminar, 2022:** Khaw Yan Ngee, State Analysis of Decentralised Control DC Micro Grid for Rural Area, University of Malaya
- **Examiner / Assessor PhD Proposal Defence, 2022:** Noraz Al Khairi Bin Noran (S2002085) Investigation on Photovoltaic Thermal System Using Carbon Based High Thermal Conductive Nano-Enhanced Phase Change Materials, University of Malaya
- **Auditor:** Internal Auditor, Self-Audit Exercises for Institute of Advanced Studies (IAS), Universiti Malaya (2 years) from 1st May 2022 to 30th April 2024
- **Examiner** for Mr Ridwan Muhammad (S2038045/1), Experimental Design of Novel Tempered Glass-based Solar Photovoltaic Thermal Panel with Efficient Thermal Transfer, Master of Renewable Energy, Research Project, 2022, University of Malaya.
- **Examiner** for Mr Kong Qi Yan (17218530/1), Daylight as Passive Design in Commercial Building, Master of Renewable Energy, Research Project, 2022, University of Malaya.
- **Panellist / Panel Member for NANOCAT UM Academic Staff (Senior Lecturer) Appointment:** 02 December 2021 (Thursday), Time: 2:30 PM, Meeting Room, NANOCAT, Level 3, Block A, IPS Building, University of Malaya, 50603 Kuala Lumpur
- **External Examiner for Sikander Ali Abbasi (PhD) Thesis, 2021:** Modeling and Analysis of Sectoral Electricity Consumption and Power Generation Mix in Pakistan, Mehran University of Engineering & Technology, Jamshoro, Pakistan
- **Technical Committee,** 2022 7th International Conference on Advances on Clean Energy Research (ICACER 2022) 20-22 April 2022, Barcelona, Spain.
- **Technical Committee,** 2022 6th International Conference on Energy Economics and Energy Policy (ICEEEP 2022) 20-22 April 2022, Barcelona, Spain.
- **Technical Committee,** 2022 3rd Asia Conference on Renewable Energy and Environmental Engineering (AREEE 2022), 27-29 March 2022, Singapore.
- **External Examiner for Somanath Swamy R H M(PhD) Thesis, 2021:** Experimental Investigation to Achieve HCCI & Augmentation of Diesel Swirl Injection Using a Novel Rotating Diesel Swirl Diffuser, Visvesvaraya Technological University, India
- **Judge (EDMAT-42 UM),** Engineering Development Motivation and Awareness Training Program 42 (EDMAT-42), Persatuan Kejuruteraan Universiti Malaya (PKUM), 25-28 February 2021, University of Malaya, Malaysia
- **PhD Research Proposal Evaluation for Sooraj Kumar, 2021:** Development of Novel and Efficient Biomass Catalyst for Biodiesel Production & Its Engine Performance, Mehran University of Engineering & Technology, Jamshoro, Pakistan
- **External Examiner for Shivaprasad Desai (PhD) Thesis, 2021:** Computational analysis and experimental investigation of an inlet air swirl in CI engines through inlet ports, inlet valves and manifolds to enhance CI engine's performance, Visvesvaraya Technological University, India
- **Reginal Chair**, 2021 IEEE The 4th International Conference on Power and Energy Applications (ICPEA 2021) 9-11 October 2021, Pusan National University, Busan, South Korea.

- **Reviewer Boards Members**, International Agritech Great Competition 2021 (IAGC 2021), Innovative Ideas in Solving Current Food, Science and Technology, Energy, and Environment problems, 1-12 September 2021, Universitas Brawijaya, Indonesia
- **Technical Committee**, 2021 IEEE 4th International Conference on Renewable Energy and Power Engineering, 9-11 October 2021, Beijing, China.
- **Internal Panellist / Evaluator**: Research Proposal Fundamental Research Grant Scheme (FRGS) under the Ministry of Education, Malaysia, University of Malaya, Cycle 1, 2021 Research Grant.
- **External Panellist / Evaluator**: Research Proposal Fundamental Research Grant Scheme (FRGS) under the Ministry of Education, Malaysia, Xiamen University Malaysia (XMUM), Cycle 1, 2021 Research Grant.
- **Panellist / Panel Member for NANOCAT UM Academic Staff Appointment:** 10 February 2021 (Wednesday), Time: 9:30 AM, Meeting Room, NANOCAT, Level 3, Level 3, Block A, IPS Building, University of Malaya, 50603 Kuala Lumpur
- **Examiner** for Mr Huot Murdy, Master of Renewable Energy, Research Project, 2021: Fabrication and Real-Time Performance of Novel Glass Photovoltaic and Photovoltaic-Thermal Panels Using Monocrystalline and Polycrystalline Cells
- **External Examiner for S. Prakash (PhD) Thesis, 2020:** Experimental studies on performance combustion and emission characteristics of DI diesel engine using Pongamia biodiesel as an alternate fuel, Vinayaka Missions Research Foundation, India
- **FRGS Panel Reviewer**, Feb 2020, Proposal Reviewer Panellist, Internal Reviewer University of Malaya
- **External Examiner for Sanjay Singh (PhD) Thesis, 2020:** Experimental Investigation on Combustion and Emission Characteristics of Algae Biodiesel Fuelled VCR Engine Using Advanced Techniques, Vinayaka Missions Research Foundation, India
- **Examiner** for Ms Tan Ai Peng, Master of Renewable Energy, Research Project, 2020: The impact of Net-Energy Metering on Utility Revenue Requirement in Malaysia
- **Examiner/Assessor** for Mathew George, Candidature Defence for PhD, Performance Analysis of Concentrated Photovoltaic Thermal System Using Phase Change Material, University of Malaya.
- **Technical Committee**, 2021 International Joint Conference on Energy, Electrical and Power Engineering (CoEEPE2021, www.coeepe.org) 17-19 September 2021, Frankfurt, Germany
- **External Panellist / Evaluator**: Research Proposal Fundamental Research Grant Scheme (FRGS) under the Ministry of Education, Malaysia, Centre for Advanced Research on Energy (CARe), Universiti Teknikal Malaysia Melaka (UTeM), Technical University of Malaysia Malacca, 05 February 2020.
- **External Examiner:** PhD (Mr. Ramsundar Sivasubramanian) Thesis Proposal Defence, Design and Development of a Transparent Nanogenerator Integrated with a Photovoltaic Module for Dual-Mode Power Generation, Taylors University, Malaysia
- **Technical Committee,** 2021 International Conference on New Energy Research and Applications (ICNERA 2021) 22-24 January 2021, Sanya, China
- **QS World University Rankings**, QS Global Academic Survey 2020, February 05, 2020
- **Technical Committee,** 2021 6th International Conference on Advances on Clean Energy Research (ICACER 2021, http://www.icacer.com/) 15-17 April 2021, Barcelona, Spain
- **Technical Committee,** 2021 3rd International Conference on Environment, Resources and Energy Engineering (EREE 2021) 15-17 July 2021, Singapore.
- **Technical Committee,** 5th International Conference on Environmental and Energy Engineering (IC3E 2021) 19-21 March 2021, Yangzhou, China
- **External Evaluator**: Research Project Funding Program of the Science, Technology, Knowledge and Innovation Ministry's National Research and Development Agency, FONDECYT, Chile.

- **QS World University Rankings**, QS Global Academic Survey 2020, February 05, 2020
- **Technical Committee,** 2020 2nd International Conference on Environment, Resources and Energy Engineering (EREE2020) 24-26 July 2020, Singapore.
- **Technical Committees,** 2020 IEEE 3rd International Conference on Renewable Energy and Power Engineering (REPE 2020) 9-11 October 2020, Edmonton, Canada.
- **Technical Committees,** 2020 IEEE 3rd International Conference on Renewable Energy and Power Engineering, 9-11 October 2020, Canada.
- **Technical Committee,** 2020 International Conference on Frontiers of Energy and Environment Engineering (CFEEE2020) 22-24 June 2020, Prague, Czech Republic.
- **Panellist / Panel Member for NANOCAT UM Academic Staff Appointment:** 14 February 2020 (Friday), Time: 9:30 AM, Meeting Room, NANOCAT, Level 3, Level 3, Block A, IPS Building, University of Malaya, 50603 Kuala Lumpur
- **Panellist for JACEP Scholarship Interview:** 21 June 2019**,** Japan ASEAN Collaborative Education Programme (JACEP) 2019, Master of Renewable Energy for Double Degree Programme with Kyoto University, Japan.
- **Technical Committee,** International Conference on Energy Economics and Energy Policy (ICEEEP 2019), April 5-7, 2019, Coimbra, Portugal
- QS World University Rankings, QS Global Academic Survey 2019, February 07, 2019
- **Assessors of M Phil Candidature Defense for Usman Ahmed**: Development and Characterization of Platinum Free, Conducting Polymer Based Counter Electrode in dye Sensitized Solar Cell, 13 December 2018, University of Malaya.
- **Publication Chair:** International Scientific Forum 2019 (ISF2019) 16-17 December 2019, Mudzaffar Hotel, Ayer Keroh, Melaka, Malaysia, (https://umconference.um.edu.my/ISF2019).
- **Expert Panelist for PhD Thesis:** 15 March 2019, Amirul Syafiq Abdul Jaafar, UM Power Energy Dedicated Advanced Centre (UMPEDAC), Institute for Advanced Studies, University of Malaya.
- **Technical Committee,** International Conference on Advances on Clean Energy Research (ICACER 2019) April 5-7, 2019, University of Coimbra, Portugal.
- **Workshop Chair:** Thermal Engineering, Solar Thermal in Industrial Process, International Scientific Forum 2019 (ISF2019) 16-17 December 2019, Mudzaffar Hotel, Ayer Keroh, Melaka, Malaysia, (https://umconference.um.edu.my/ISF2019).
- **Technical Committee,** International Conference on Energy Economics and Energy Policy (ICEEEP 2019), April 5-7, 2019, Coimbra, Portugal
- **Technical Committee,** International Conference on New Energy and Environment Engineering (ICNEE 2019), May 3-5, 2019, Singapore.
- **Chairman for Research Project Seminar,** Master of Engineering (Power System) 23 May 2018, UMPEDAC Seminar Room Level 15, UMPEDAC, Wisma R&D, University of Malaya
- **Assessors of M Phil Candidature Defense for Usman Ahmed**: Development and Characterization of Platinum Free, Conducting Polymer Based Counter Electrode in dye Sensitized Solar Cell, 13 December 2018, University of Malaya.
- **Internal Examiner for Nabilah Husna Binti Mohammad Farijal (Master of Renewable Energy) Thesis, 2018:** Mathematic Modeling of Fuel Cell for Electric Vehicle Application, University of Malaya, Malaysia
- **Expert Panellist**, Reviewing Research Proposal, Bangladesh Energy and Power Research Council (EPRC), Bangladesh.
- **Publication Chair:** The **5**rd IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia, (http://ceat-icgsce.com/index.php/committee/organizing-committee).

- **Technical Committee,** International Conference on New Energy and Environment Engineering May 25-27, 2018, Singapore.
- QS World University Rankings, QS Global Academic Survey 2018, 25 January 2018
- **Technical Committees,** 2018 IEEE International Conference on Renewable Energy and Power Engineering, November 24-26, 2018 Toronto, Canada.
- **Session Chair:** S-2C: Session 2C, The **5**th IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia, (http://ceat-icgsce.com/index.php/committee/organizing-committee).
- **Technical Committee**, International Conference on Power and Renewable Energy (ICPRE-2018) in Berlin, Germany
- **Technical Committee**, committee and reviewer for ESRE 2019 during May 27-29, 2019 in Bali, Indonesia
- **Technical Committee**, International Conference on New Energy and Environment Engineering May 25-27, 2018, Singapore
- **External Examiner for Chandragowda M (PhD) Thesis, 2018:** Investigation of Low Cetane Fuels (Vegetable Oils) in CI Engine with Catalytic Combustion Using Semi–Adiabatic Bi-Metallic Piston, Visvesvaraya Technological University, India
- **Committee for Information Technology:** The 5rd IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia, (http://ceat-icgsce.com/index.php/committee/organizing-committee)
- **Internal Examiner for Md Shouquat Hossain (PhD) Thesis, 2018:** Energy, Exergy and Economic Analysis of Phase Change Material Based Hybrid Photovoltaic Thermal Systems, University of Malaya, Malaysia
- **External Examiner for Manjunatha K (PhD) Thesis, 2017:** Investigation of Alcohols as Substitute Fuel in Semi-Adiabatic Air-Gap Bimetallic Crown Piston Diesel Engine and Reduction of Aldehydes from the Exhaust Gases, Visvesvaraya Technological University, India
- **Chairman for Research Project Seminar,** 2 Students, Master of Engineering (Power System) 04 December 2017, Meeting Room Level 4, UMPEDAC, Wisma R&D, University of Malaya
- **Expert View** on QS World University Rankings, 2017 QS World University Rankings Feb 23, 2017
- **Assessors of PhD Candidature defense** for Amirul Syafiq Bin Abdul Jabar (HHD150011): Self-Cleaning Glass Using Graphene Mesoporous Titania Film, 04 December 2017, University of Malaya.
- **Information Technology Coordinator, CEAT2018:** 5the Clean Energy and Technology Conference (CEAT2018)
- **Technical Committee Member:** International Conference on Power and Renewable Energy (ICPRE 2017), University of Electronic Science and Technology of China, Chengdu, China during September 20-23, 2017.
- **Panellist for PhD / Postdoctoral Scholarship Interview:** The Human Life Advancement Foundation (HLAF), Malaysia (https://www.hlaf.org.my/)
- **Member, UI GreenMetric 2017,** Renewable Energy, University of Malaya, UM Sustainable Development Solutions Network (UM SDSN), Sustainability Science Research Cluster (SuSci RC)
- **Assessors of PhD Candidature defense** for Muhammad Shakeel Ahmad (HHD160004): Lectrodeposited Coating of Metal Oxide and Semiconductor Nanostructures for Photovoltaic Applications, 04 December 2017, University of Malaya
- **Internal Examiner for Muhammad Syahmi bin Zulkifli**, **Master of Engineering (Power Systems) Thesis, 2017:** Analysis and Evaluation of Energy Saving Devices for Low Voltage Domestic Application
- **UMPEDAC Representative,** Graduan Aspire: Career& Postgraduate Fair 2017, Dewan 3, 4, & 5 @ KLCC, 20-21 May 2017.

- **Chairman for Research Project Seminar,** Master of Engineering (Power System) 23 May 2017, UMPEDAC Seminar Room Level 15, UMPEDAC, Wisma R&D, University of Malaya
- **Chairman for Candidature Defense** (3PhD, I M Phil) 16 January 2017, Seminar Room Level 15, UMPEDAC, Wisma R&D, University of Malaya
- **Assessor for Proposal Defense**, (1 PhD, 2 M.Phil) 20 January 2017, Seminar Room Level 15, UMPEDAC, Wisma R&D, University of Malaya
- **Proof Reader:** Economic Planning Unit (EPU), Prime Minister's Department, Malaysia (26 October 2016 to 01 November 2016)
- **Expert View** on QS World University Rankings, 2016 QS World University Rankings May 25, 2016
- **External Examiner for Ms. Teo Wan Chee (M. Eng. Sc.) Thesis, 2016:** Development of Solar Assisted Chemical Heat Pump Dryer for Agriculture Produces, Faculty of Engineering and Technology, Multimedia University, Malaysia
- **Internal Examiner for Seyed Mahdi Moosavian (PhD) Thesis, 2016:** Optimization Of Smart Microgrid With High Renewable Energy Penetration Considering Residential Flexible Loads, University of Malaya, Malaysia
- **Session Chair:** S-3B: Session 3B, Room 10 Chairs: Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia), Hideaki Ohgaki (Kyoto University, Japan), The 4th IET International Conference on Clean Energy and Technology (CEAT 2016), 14 - 15 November 2016, Kuala Lumpur, Malaysia, (http://umconference.um.edu.my/ceat2016).
- **Session Chair:** S-5B: Session 3B, Room 10 Chairs: Md. Hasanuzzaman (University of Malaya & UM Power Energy Dedicated Advanced Centre (UMPEDAC), Malaysia), The 4th IET International Conference on Clean Energy and Technology (CEAT 2016), 14 - 15 November 2016, Kuala Lumpur, Malaysia, (http://umconference.um.edu.my/ceat2016).
- **Internal Examiner for Shoki Kosai (Master of Renewable Energy) Thesis, 2016:** Energy Supply-Demand Analysis for an Off-Grid Zero Energy Building, University of Malaya, Malaysia
- **Technical Committee Member:** 2nd International Conference on Advances on Clean Energy Research (ICACER 2017), 7-9 April 2017, Berlin, Germany (http://www.icacer.com/)
- **Technical Committee Member**: 2017 International Conference on Energy Economics and Energy Policy (ICEEEP 2017). 7-9 April 2017, Berlin, Germany (http://www.iceeep.com/index.html)
- **Publication Chair:** The 4rd IET International Conference on Clean Energy and Technology (CEAT 2016), 14 - 15 November 2016, Kuala Lumpur, Malaysia, (http://umconference.um.edu.my/ceat2016).
- **Chairman for Proposal Defense** (3 PhD and 2 M. Phil Students), 23-24 May, Seminar Room Level 15, UMPEDAC, Wisma R&D, University of Malaya
- **Chairman for Candidature Defense** (5 PhD and 3 M. Phil Students), 23-24 May, Seminar Room Level 15, UMPEDAC, Wisma R&D, University of Malaya
- **Committee Member** (UMPEDAC Representation), Working Group On Credit Hours for Post-Grad Supervision, University of Malaya (9 May 2016 - 03 June 2016)
- **Interned Examiner**, Assessor for PhD Proposal defense, Thesis (Narendren Rengasamy), (2016-2016)
- **Technical Committee**, 5th International Conference on Engineering and Innovative Materials (ICEIM 2016), International Academy of Computer Technology (IACT), September 10-12, 2016, Kuala Lumpur, Malaysia
- **Expert View** on QS World University Rankings, 2015 QS World University Rankings March 10, 2015
- **Member, Technical Committee**, 3rd International Conference on Renewable Energy and Environment (ICREE 2015) September 5-6, 2015, Shanghai, China (http://www.icree.org/com.html).

- **International Program Committee**, International Conferences on Instrumentation control, Cognitive science, Optics, Micro electromechanical system, and Information technology (ICACOMIT), October 29-30, 2015 at Bandung, Indonesia
- **Interned Examiner**, Assessor for PhD Candidature defense, Thesis, (2015-2015)
- **Session Chair:** Session 2: Renewable Energy and Applications, International Conference on Power, Energy, and Communication Systems 2015 (IPECS 2015), 24-25 August 2015, Perlis Malaysia (http://www.ipecs2015.org/)
- **Expert View** on QS World University Rankings, 2014 QS World University Rankings April 02, 2014
- **Member, Technical Committee:** 4 International Conference on Engineering and Innovative Materials (http://www.iceim.org), 3-4, September, 2015, Penang, Malaysia
- **Publication Chair:** The 3rd IET International Conference on Clean Energy and Technology (CEAT 2014), 24 - 26 November 2014, Sarawak, Malaysia, (http://umconference.um.edu.my/ceat2014).
- **Publication Chair:** The 2013 IEEE Conference on Clean Energy and Technology (CEAT 2013), 18 - 20 November 2013, Langkawi, Malaysia **(**http://www.myias.org/ceat2013/**).**
- **Session Chair:** Session 1: Advanced Materials Engineering and Processing Technologies, 3rd International Conference on Engineering and Innovative Materials (ICEIM 2014), 4-5 September 2014, Kuala Lumpur, Malaysia (http://www.iceim.org/prog.html)
- **Session Chair:** Energy System 1, The 2013 IEEE Conference on Clean Energy and Technology (CEAT 2013), 18 - 20 November 2013, Langkawi, Malaysia (http://www.myias.org/ceat2013/).
- **Track Chair:** Energy Conversion, the 3rd IET International Conference on Clean Energy and Technology (CEAT 2014), 24 - 26 November 2014, Sarawak, Malaysia, (http://umconference.um.edu.my/ceat2014).
- **Member Technical Committee,** International Conference of Francophone Engineers and Technicians (CITEF 2014), Rafic Hariri University Campus – Hadath - Beirut – Lebanon from 16 to 18 October 2014
- **Session Chair**, **International Conference for Technical Postgraduates** 2009 (TECHPOS 2009),14-15 December, 2009, Legend Hotel, Kuala Lumpur, Malaysia
- **Committee member**, **National Conference on Tribology**, May 2009, MYTRIBOS (ISBN 978-783-4204-1-3)

14. Active Journal Reviewer (Invited Reviewer for Journal Article)

- Applied Energy, Elsevier, (ISI and Scopus Index)
- Applied Thermal Engineering, Elsevier, (ISI and Scopus Index)
- Energy Conversion and Management, Elsevier, (ISI and Scopus Index)
- Energy Reports, Elsevier, (ISI and Scopus Index)
- Energy, the international Journal, Elsevier, (ISI and Scopus Index)
- International Journal of Heat and Mass Transfer, Elsevier, (ISI and Scopus Index)
- International Journal of Refrigeration, Elsevier, (ISI and Scopus Index)
- Journal of Cleaner Production, Elsevier, (ISI and Scopus Index)
- Journal of Energy Storage, Elsevier, (ISI and Scopus Index)
- Measurement, (ISI and Scopus Index)

- Powder Technology, Elsevier, (ISI and Scopus Index)
- Renewable & Sustainable Energy Reviews, Elsevier, (ISI and Scopus Index)
- Renewable Energy, Elsevier, (ISI and Scopus Index)
- Solar Energy, Elsevier, (ISI and Scopus Index)
- Journal of Solar Energy Engineering, ASME, (ISI and Scopus Index)
- Clean Technologies and Environmental Policy, Springer, (ISI and Scopus Index)
- Journal of Thermal Analysis and Calorimetry, Springer, (ISI and Scopus Index)
- Energy & Environment, Sege, (ISI and Scopus Index)
- Environmental Progress and Sustainable Energy, Wiley, (ISI and Scopus Index)
- International Journal of Energy Research, Wiley, (ISI and Scopus Index)
- International Journal of Ambient Energy, Taylor & Francis, (ISI and Scopus Index)
- International Journal of Green Energy, Taylor & Francis, (ISI and Scopus Index)

15. Publication List

15.1 Book/Book Chapter:

5. **Book: M. Hasanuzzaman** (2022) Technologies for Solar Thermal Energy: Theory, Design and, Optimization, Paperback ISBN: 9780128239599, 1st Edition, 25 March 2022, Pages 384, Publisher: Academic Press, Elsevier, https://www.elsevier.com/books/technologies-for-solar-thermal-energy/hasanuzzaman/978-0-12-823959-9

4. **Book: M. Hasanuzzaman**, Nasrudin Abd Rahim (2019) Energy for Sustainable Development: Conversion, Demand, Supply and Management, ISBN: 9780128146453, 1st Edition, Pages 218, Publisher: Academic Press, Elsevier, https://www.elsevier.com/books/energy-for-sustainable-development/hasanuzzaman/978-0-12-814645-3

3. **Book Chapter:** Rahim, N.A., Che, H.S., **Hasanuzzaman, M.**, and Habib, A (2019), Towards Cleaner Cities: Renewable Energy Initiatives in Malaysia, Chapter 8, Devising a Clean Energy Stratrgy for Asian Cities, Publisher: Springer, Online ISBN: 978-3-319-50654-8, Editor: Hooman Farzaneh, 2019; pp 165-186.

2. **Book Chapter:** M.E. Karim, A.B. Munir, F. Muhammad-Sukki, **M. Hasanuzzaman**, (2018) Polymer nanocomposites and related legal issues: An overview, New Polymer Nanocomposites for Environmental Remediation, Section 27, Publisher: Elsevier, ISBN: 978-0-12-811033-1, Editors: Chaudhery Mustansar Hussain, Ajay Kumar Mishra 2018; pp 679–698

1. **Book Chapter:** Pandey, A.K., Rahim, N.A., **Hasanuzzaman, M.**, Pant, P.C., and Tyagi, V.V. (2017) Solar Photovoltaics (PV): A Sustainable Solution to Solve Energy Crisis, Green Technologies and Environmental Sustainability, Chapter 7, Publisher: Springer, Online ISBN: 978-3-319-50654-8, Editors: R. Singh, S. Kumar, 2017; pp 157-178.

15.2 Journal

Journal Publication Summary: Q1: 68, Q2: 37, Science Citation Index (SCI)**: 119,** Scopus**: 151,** Non-SCI/Non-Scopus**: 10,** Total Publication**: 161**

162

161 H. F. Yu, **M. Hasanuzzaman***, N. A. Rahim (2025) Environmental Impact of Photovoltaic Modules in Malaysia: Recycling versus landfilling, Renewable and Sustainable Energy Reviews 210, 115177. DOI: https://doi.org/10.1016/j.rser.2024.115177 (SCI/SCOPUS Cited Publication) **(Q1, IF: 16.3; CiteScore 31.2), Elsevier Journal**

160 Farhan Hussain, **M. Hasanuzzaman***, Nasrudin Abd Rahim, Multivariate Machine Learning Algorithms for Energy Demand Forecasting and Load Behavior Analysis, Energy Conversion and Management: X, 100903, DOI: https://doi.org/10.1016/j.ecmx.2025.100903 (Available online 28 January 2025) (SCI/SCOPUS Cited Publication) **(Q1, IF: 7.1; CiteScore 8.8), Elsevier Journal**

159 Taher Hasan Nakib, **M. Hasanuzzaman***, N. A. Rahim1, M. Ahsan Habib, N.N. Adzman; N. Amin (2025) Global Challenges of Ocean Thermal Energy Conversion and Its Prospects: A Review, Journal of Ocean Engineering and Marine Energy, DOI: https://doi.org/10.1007/s40722-024-00368-4 (Online on 13 December 2024) (SCI/SCOPUS Cited Publication) **(Q3, IF: 1.6), Springer Journal**

158 Nur, M. M. A., Mahreni, Murni, --- **Hasanuzzaman, M.** (2025). Innovative strategies for utilizing microalgae as dual-purpose biofertilizers and phycoremediators in agroecosystems. Biotechnology Reports, 45, e00870. doi: https://doi.org/10.1016/j.btre.2024.e00870 (SCOPUS Cited Publication) **(CiteScore 15.9), Elsevier Journal**

157 Upama Nasrin Haq, M. M. Rahman Khan, Adnan Maroof Khan, **M. Hasanuzzaman**, M. Riaz Hossain (2025). Global initiatives for industry 4.0 implementation and progress within the textile and apparel manufacturing sector: a comprehensive review. International Journal of Computer Integrated Manufacturing, 1–26. https://doi.org/10.1080/0951192X.2025.2455655 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.7; CiteScore 9.0), Taylor and Francis Journal**

156 Wan Afin Fadzlin, **M. Hasanuzzaman***, N.A. Rahim (2024) Real-Time Outdoor Experiment and Performance Analysis of Dual-Coil Heat Exchanger Integrated Thermal Energy Storage, Journal of Energy Storage 81, 110420, DOI: https://doi.org/10.1016/j.est.2024.110420 (SCI/SCOPUS Cited Publication) **(Q1, IF: 9.4; CiteScore 10.3), Elsevier Journal**

155 H. F. Yu, **M. Hasanuzzaman***, N. A. Rahim (2024) Modelling, Analysis and Forecasting of Photovoltaic Waste in Malaysia Towards Sustainable Recycling By 2050, Resources, Conservation & Recycling 209, 107774, https://doi.org/10.1016/j.resconrec.2024.107774 (SCI/SCOPUS Cited Publication) **(Q1, IF: 13.2; CiteScore 22.9), Elsevier Journal**

154 A. Basuhaib, J. Selvaraj, **M. Hasanuzzaman***, T. Anjum, L. Kumar, (2024) Experimental Investigation the Effect of different Operating Parameters and Optimized the Water-based PVT System for Domestic Applications, Solar Energy 268, 15 January 2024, 112278, DOI:

https://doi.org/10.1016/j.solener.2023.112278 (SCI/SCOPUS Cited Publication) **(Q2, IF: 6.7; Q1**, **CiteScore 13.1), Elsevier Journal**

153 Lim Jun Wei, M. M. Islam, **M. Hasanuzzaman***, Erdem Cuce (2024) Energy Consumption, Power Generation and Performance Analysis of Solar Photovoltaic Module Based Building Roof, Journal of Building Engineering 90, 1 August 2024, 109361, https://doi.org/10.1016/j.jobe.2024.109361 (SCI/SCOPUS Cited Publication) **(Q1, IF: 6.4; CiteScore 8.3), Elsevier Journal**

152 Supriatna, N. K., Zuldian, P., Aminuddin, Purawiardi, I., Aprianti, N., Gunawan, Y., Fariza, O., Raksodewanto, A.A., Alamsyah. R., **Hasanuzzaman, M.**, Surjosatyo, A. (2024). Experimental investigation and performance evaluation of Samanea saman leaves and twigs gasification from urban residential garden waste as alternative future energy. Bioresource Technology Reports 27(2024), 101950. doi: https://doi.org/10.1016/j.biteb.2024.101950 (SCOPUS Cited Publication) **(CiteScore 7.2), Elsevier Journal**

151 Haoran Wei, **M. Hasanuzzaman*,** J. Selvaraj (2024) Decision study and ANN-assisted multi-criteria optimization of a novel three-state solar-driven integrated process using energy storage for hydrogen liquefication: A case study for Malaysian solar status, Journal of Energy Storage 99 (Part A), 1 October 2024, 113216, DOI: https://doi.org/10.1016/j.est.2024.113216 (SCI/SCOPUS Cited Publication) **(Q1, IF: 8.9; CiteScore 11.8), Elsevier Journal**

150 Dai, J., Abdulwahab, A., Selvaraj, J., **Hasanuzzaman, M***., Kedia, A., & Fengli, W. (2024). A comprehensive techno-eco-environmental investigation of an efficient biodiesel generation procedure through hydrodynamic cavitation. Thermal Science and Engineering Progress 55 (October 2024), 102916. doi: https://doi.org/10.1016/j.tsep.2024.102916 (SCI/SCOPUS Cited Publication) **(Q1, IF: 5.1; CiteScore 7.2), Elsevier Journal**

149 A. Rashid; T.H. Nakib; T. Shahriar; M. A. Habib; **M. Hasanuzzaman** (2024) Energy and Economic Analysis of an Ocean Thermal Energy Conversion Plant for Bangladesh: A Case Study, Ocean Engineering 293, 1 February 2024, 116625, DOI: https://doi.org/10.1016/j.oceaneng.2023.116625 (SCI/SCOPUS Cited Publication) **(Q1, IF: 5.0; Q1**, **CiteScore 6.6), Elsevier Journal**

148 Haoran Wei, **M. Hasanuzzaman*,** J. Selvaraj (2024) Energy/freshwater Sustainability in Urban Areas through a Novel Solar-Driven System with H_2 production/liquefaction: Techno-Economic Evaluation and Multi-Objective Optimization, Process Safety and Environmental Protection 118 (August) 317-335, https://doi.org/10.1016/j.psep.2024.05.050 (SCI/SCOPUS Cited Publication) **(Q1, IF: 7.8; Q1**, **CiteScore 10.8), Elsevier Journal**

147 Jie Dai, J. Selvaraj, **M. Hasanuzzaman*,** Huifen Helen Cai (2024) Scientometric analysis of research hotspots in electrochemical energy storage technology, Journal of Energy Storage 93, 112300, DOI: https://doi.org/10.1016/j.est.2024.112300 (SCI/SCOPUS Cited Publication) **(Q1, IF: 9.4; CiteScore 10.3), Elsevier Journal**

146 M. Masrur Hossain, Tanvir Shahriar, M. Ahsan Habib, **M. Hasanuzzaman***, M. Navid Inan (2024) Techno-economic and Environment Assessment of Landfill and Sewage Treatment Plant Based Combined Power Generation System: A Case Study for Dhaka, Biomass

Conversion and Biorefinery 14 (1), Pages 701 – 717, https://doi.org/10.1007/s13399-022-02422-3 (SCI/SCOPUS Cited Publication) **(Q2, IF: 4.0), Springer Journal**

145 F. M. Abed, I.S. Farhan, T. A. Yassen, **M. Hasanuzzaman***, M.M. Islam, M.S. Kassim (2024) Modelling and Performance Investigation of a Solar Chimney Power Plant with Glass-covered Solar Collector, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 46 (1), 5201-5218, DOI: https://doi.org/10.1080/15567036.2024.2326661 (SCI/SCOPUS Cited Publication) **(Q3, IF: 2.902) Taylor and Francis Journal**

144 Laveet Kumar, **M. Hasanuzzaman**, N.A. Rahim, Ahmad K. Sleiti (2024) Thermo-economic Analysis of a Solar-assisted Industrial Process Heating System, International Journal of Energy Research, Volume 2024, Article ID 4614066, Doi: https://doi.org/10.1155/2024/4614066 (SCI/SCOPUS Cited Publication) **(Q1, IF: 4.600)**

143 Mohamad Shukor Abdul Rahim, Mohammad Faridun Naim bin Tajuddin, Mohd Sazli Saad, **M. Hasanuzzaman**, Azralmukmin Azmi, Mohd Fayzul Bin Mohammed (2024) Modeling, Experimental Investigation and Real-Time Control of Active Water Cooling for Photovoltaic Modules, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 46 (1): 3979-3995, DOI: 10.1080/15567036.2024.2326194 (SCI/SCOPUS Cited Publication) **(Q3, IF: 2.902) Taylor and Francis Journal**

142 M. Faeshol Umam, **M. Hasanuzzaman***, N.A. Rahim, (2023) Modeling and Performance Analysis of Spiral and Serpentine Collectors based Photovoltaic Thermal System in Peninsular Malaysia, Sustainable Energy Technologies and Assessments 58, August 2023, 103373, doi.org/10.1016/j.seta.2023.103373 (SCI/SCOPUS Cited Publication) **(Q1, IF: 8.0), Elsevier Journal**

141 Athaya Fairuz, M. Faeshol Umam, **M. Hasanuzzaman***, N.A. Rahim, I.M. Mujtaba (2023) Modeling and Analysis of Hybrid Solar Water Desalination System for Different Scenarios in Indonesia, Energy Conversion and Management 276, 15 January 2023, 116475, https://doi.org/10.1016/j.enconman.2022.116475 (SCI/SCOPUS Cited Publication) **(Q1, IF: 11.533; Q1**, **CiteScore 18.0), Elsevier Journal**

140 Fayadh M. Abed, Maki H. Zaidan, **M. Hasanuzzaman***, Laveet Kumar, Ibrahim J. Qadri, Abdullah K. Jasim (2023) Modeling and Performance Analysis of Geothermal Energy based Air Conditioning in Building in Iraq, Journal of Building Engineering 77, 15 October 2023, 107420, DOI: https://doi.org/10.1016/j.jobe.2023.107420 (SCI/SCOPUS Cited Publication) **(Q1, IF: 6.40), Elsevier Journal**

139 Ishtiak Mahmud, Mohtarima Begum Medha, M. **Hasannuzaman*** (2023) Global challenges of electric vehicle charging systems and its future prospects: A review, Research in Transportation Business & Management, 49 (August 2023), 101011, https://doi.org/10.1016/j.rtbm.2023.101011 (SCI/SCOPUS Cited Publication) **(Q2, IF: 4.8), Elsevier Journal**

138 Tahsin Anjum, A. A. S. Basuhaib, J. Selvaraj, L. Kumar, **M. Hasanuzzaman** (2023) Performance investigation of tempered glass based photovoltaic panel integrated with back cooling hollow chamber, Energy Sources, Part A: Recovery, Utilization, and Environmental

Effects 45 (4), 2023, 11733-11751, https://doi.org/10.1080/15567036.2023.2262441(SCI/SCOPUS Cited Publication) **(Q3, IF: 2.9) Taylor and Francis Journal**

137 Afroza Nahar, Salma Parvin, **Hasanuzzaman,** M., Rahim, N.A. (2023) Second Law Analysis for Free Convection in an L-Shaped Cavity Filled with Nanofluid, AIUB Journal of Science and Engineering 22 (2), 132 – 144, DOI: https://doi.org/10.53799/ajse.v22i2.438 (SCOPUS Cited Publication, **Q4; CiteScore 0.5)**

136 Hasan, M. M., Haque, M. E., Zahin, M. T. N., Islam, M. M., Habib, M. A., & **Hasanuzzaman, M.** (2023). A comparative analysis of energy consumption and GHG emission by the private vehicles of different fuel types in Dhaka, Bangladesh. Energy Nexus, 11 (September) 2023, Article number 100222. Doi: 10.1016/j.nexus.2023.100222 (ESCI/SCOPUS Cited Publication) **(Q1, IF: 8.0; Q1**, **CiteScore 7.7), Elsevier Journal**

135 Afroza Nahar, Salma Parvin, Hasanuzzaman, M., Rahim, N.A. (2023) Thermo-fluid Physiognomies of a Photovoltaic Thermal Collector: A Comparative Study with Different Flow Channel Materials, ASME Journal of Solar Energy Engineering 145(1): 011001 (13 pages), Paper No: SOL-21-1282, https://doi.org/10.1115/1.4054661 (SCI/SCOPUS Cited Publication) (**Q2, IF: 2.384), ASME Journal**

134 M. Washim Akram, **M. Hasannuzaman***, Erdem Cuce, Pinar Mert Cuce (2023) Global technological advancement and challenges of glazed window, facade system and vertical greenery-based energy savings in buildings: A comprehensive review, Energy and Built Environment 4 (2): 206-226, https://doi.org/10.1016/j.enbenv.2021.11.003 (SCOPUS Cited Publication) (**Q1**, **CiteScore 6.2**), **Elsevier Journal**

133 Lai, F., Zhou, J., Lu, L., Hasanuzzaman, M., & Yuan, Y. (2023). Green building technologies in Southeast Asia: A review. Sustainable Energy Technologies and Assessments, 55, 102946. doi: https://doi.org/10.1016/j.seta.2022.102946 (SCI/SCOPUS Cited Publication) **(Q1, IF: 8.0; Q1**, **CiteScore 6.5), Elsevier Journal**

132 Muzir, N. A. Q., **M. Hasanuzzaman*,** & Selvaraj, J. (2023). Modeling and Analyzing the Impact of Different Operating Conditions for Electric and Conventional Vehicles in Malaysia on Energy, Economic, and the Environment. Energies 2023, 16(13), 5048; https://doi.org/10.3390/en16135048 (SCI/SCOPUS Cited Publication) **(Q3, IF: 3.2)**.

131 Muhammad Firdaus Mohd Zublie, **M. Hasanuzzaman*** and N. A. Rahim (2023) Energy Efficiency and Feasibility Analysis of Solar Power Generation Using Hybrid System of an Educational Institution in Malaysia, International Journal of Photoenergy, Volume 2023, Article ID 1673512, 13 pages, https://doi.org/10.1155/2023/1673512 (SCI/SCOPUS Cited Publication) (**Q2, IF: 3.2**)

130 Selvaraj, J., Tharmarajah, N., Faeshol Umam, M., Kumar, L., **Hasanuzzaman, M.,** Abd Rahim, N., & Abdulmuhsen Saleh Basuhaib, A. (2023). Comparative Experimental Investigation on Front Cooling for Tempered Glass Photovoltaic Thermal System. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 45(3), 7245-7261.

doi:10.1080/15567036.2023.2220663(SCI/SCOPUS Cited Publication) **(Q3, IF: 2.902) Taylor and Francis Journal**

129 Bablu K Ghosh, **M. Hasanuzzman**, Ismail Saad, Mohammad Kamal Hossain (2023) Photovoltaic technologies photo-thermal challenges: Thin active layer solar cells significance, Optik 274, March 2023, 170567, https://doi.org/10.1016/j.ijleo.2023.170567 (SCI/SCOPUS Cited Publication) **(Q2, IF: 2.840; Q2, CiteScore 4.8), Elsevier Journal**

128 Rashid, M.E., M.R. Khan, R.U. Haque, and **Hasanuzzaman*, M.** (2023) Challenges of Textile Waste Composite Products and Its Prospects of Recycling: A Review, Journal of Material Cycles and Waste Management, 25, 1267–1287, https://doi.org/10.1007/s10163-023-01614-x (SCI/SCOPUS Cited Publication) **(Q3, IF: 3.579; Q2, CiteScore 4.8), Springer Journal**

127 M.A. Karim Miah, Nuruzzaman Rakib, M. Ahsan Habib, **M. Hasanuzzaman***, Sujoy Saha (2023) Techno-economic Analysis and Environmental Impact Assessment of 3 MW Photovoltaic Power Plant in Bangladesh: A Case Study Based on Real Data, Environment, Development and Sustainability 25, 15205–15223, https://doi.org/10.1007/s10668-022-02634-7 (SCI/SCOPUS Cited Publication) **(Q2, IF: 4.080), Springer Journal**

126 M.K. Islam, A. Nahar, **M. Hasanuzzaman,** N.A. Rahim (2022) Experimental Performance Investigation of a Nanofluid Based Parabolic Trough Concentrator in Malaysia, AIUB Journal of Science and Engineering 21 (3): 152-158. DOI: https://doi.org/10.53799/ajse.v21i3.437 (SCOPUS Cited Publication, **Q4; CiteScore 0.5)**

125 Ratanashangkari Chandran, **M. Hasanuzzaman***, Müslüm Arıcı, Laveet Kumar (2022) Energy, Economic and Environmental Impact Analysis of Phase Change Materials for Cold Chain Transportation in Malaysia, Journal of Energy Storage 55, Part A, 1 November 2022, 105481, https://doi.org/10.1016/j.est.2022.105481 (SCI/SCOPUS Cited Publication) **(Q1, IF: 8.907; CiteScore 8.4), Elsevier Journal**

124 Mojumder, M.R.H., F. Ahmed Antara, **M. Hasanuzzaman***, B. Alamri, and M. Alsharef (2022) Electric Vehicle-to-Grid (V2G) Technologies: Impact on the Power Grid and Battery. Sustainability, 2022. 14(21): 13856, https://doi.org/10.3390/su142113856 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.889)**.

123. Kumar, L., **Hasanuzzaman, M*,** Rahim, N.A. (2022) Real Time Experimental Performance Assessment of a Photovoltaic Thermal System Cascaded with Flat Plate and Heat Pipe Evacuated Tube Collector, ASME Journal of Solar Energy Engineering 144(1): 011004 (12 pages), Paper No: SOL-21-1064, https://doi.org/10.1115/1.4051861 (SCI/SCOPUS Cited Publication) **(Q2, IF: 2.384), ASME Journal**

122. Nico Goetzel, **M. Hasanuzzaman*,** An Empirical Analysis of Electric Vehicle Cost Trends: A Case Study in Germany, Research in Transportation Business & Management 43 (June 2022), 100825, https://doi.org/10.1016/j.rtbm.2022.100825 (SCI/SCOPUS Cited Publication) **(Q2, IF: 4.286), Elsevier Journal**

121 Yadai Tanaka, **M. Hasanuzzaman*,** (2022) Energy, Economic and Environmental Assessment of Photocatalytic Methane Production: A Comparative Case Study between Japan and

Malaysia, Global Energy Interconnection 5(2), 192-205, https://doi.org/10.1016/j.gloei.2022.04.016 (ESCI/SCOPUS Cited Publication) (**Q4, IF:0.32; Q2**, **CiteScore 4.2**), **Elsevier Journal:**

120 Selvakumar Pandiaraj, Tamilvanan Ayyasamy**, Md Hasanuzzaman**, Ganesh Angappan, Suresh Muthusamy, Hitesh Panchal, Ravita Lamba, Chidozie Ezekwem, Mamoona Munir & Suma Christal Mary Sundararajan (2022) An experimental investigation on a locally fabricated dryer integrated with a novel solar air heater for the drying of potato slices, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 44:4, 9811-9826, DOI: 10.1080/15567036.2022.2143967 (SCI/SCOPUS Cited Publication) **(Q2, IF: 2.902; Q1, CiteScore 4.6), Taylor and Francis Journal**

119. Yu, H.F., **M. Hasanuzzaman***, N.A. Rahim, N. Amin, and N. Nor Adzman (2022) Global Challenges and Prospects of Photovoltaic Materials Disposal and Recycling: A Comprehensive Review. Sustainability, 2022. **14**(14): p. 8567. https://doi.org/10.3390/su14148567 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.889)**.

118. Khodadad Mostakim, **M. Hasanuzzaman*** (2022) Global Prospects, Challenges and Progress of Photovoltaic Thermal System, Sustainable Energy Technologies and Assessments, 53 (2022) 102426, https://doi.org/10.1016/j.seta.2022.102426 (SCI/SCOPUS Cited Publication) (**Q2, IF: 7.632**), **Elsevier Journal**

117 Shoki Kosai, Sazalina binti Zakaria, Hang Seng Che, **Md Hasanuzzaman**, Nasrudin Abd Rahim, ChiaKwang Tan, Radin Diana R. Ahmad, Ahmad Rosly Abbas, Katsuyuki Nakano, Eiji Yamasue, Wei Kian Woon, Ammar Harith Ahmad Amer, Estimation of Greenhouse Gas Emissions of Petrol, Biodiesel and Battery Electric Vehicles in Malaysia Based on Life Cycle Approach, Sustainability 2022, 14(10), 5783; https://doi.org/10.3390/su14105783 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.889)**

116. Jinan Abdulhasan Salim, Baraa M. Albaker, Muwafaq Shyaa Alwan, **M. Hasanuzzaman*** (2022) Hybrid MPPT Approach Using Cuckoo Search and Grey Wolf Optimizer for PV Systems under Variant Operating Conditions, Global Energy Interconnection, 5 (6), 627-644, https://doi.org/10.1016/j.gloei.2022.12.005 (ESCI/SCOPUS Cited Publication) (**Q4, IF:0.32; Q2**, **CiteScore 4.6**), **Elsevier Journal**

115. Nur Ayeesha Qisteena Muzir, Md. Rayid Hasan Mojumder, **Md. Hasanuzzaman***, Jeyraj Selvaraj (2022) Challenges of Electric Vehicles and Its Prospects in Malaysia: A Comprehensive Review, Sustainability 2022, 14(14), 8320; https://doi.org/10.3390/su14148320 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.889)**

114. Fayadh M. Abed, Ahmed H. Ahmed, **M. Hasanuzzaman***, L. Kumar, Nasur M. Hamaad (2022) Experimental investigation on the effect of using chemical dyes on the performance of single-slope passive solar still, Solar Energy 233: 71-83, https://doi.org/10.1016/j.solener.2021.12.060 (SCI/SCOPUS Cited Publication) (**Q2, IF: 7.188**), **Elsevier Journal**

113. Djabir Abdoulaye Djabir, Azian Hariri, Mohamad Nur Hidayat Mat, & **Md. Hasanuzzaman** (2022). Thermal Comfort of Indoor Open Spaces at University Library in Malaysia. Journal of

Advanced Research in Fluid Mechanics and Thermal Sciences, 94(2), 142–165. https://doi.org/10.37934/arfmts.94.2.142165 (SCOPUS Cited Publication) (**Q3**, CiteScore 1.6)

112. M. Washim Akram, Muhammad Firdaus Mohd Zublie, **M. Hasanuzzaman***, Nasrudin Abd Rahim (2022) Global Prospects, Advance Technologies and Policies of Energy-Saving and Sustainable Building Systems: A Review, Sustainability 14(3), 1316; https://doi.org/10.3390/su14031316 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.889)**

111. Erdem Cuce, Abhishek Saxena, Pinar Mert Cuce, Harun Sen, Hasan Eroglu, S Shanmuga Priya, K Sudhakar, **M Hasanuzzaman** (2022) Performance assessment of solar chimney power plants with natural thermal energy storage materials on ground: CFD analysis with experimental validation, International Journal of Low-Carbon Technologies 17:752–759, https://doi.org/10.1093/ijlct/ctac001 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.071)**

110 M. A. A. Mamun, M. M. Islam, **M. Hasanuzzaman***, J. Selvaraj (2022) Effect of Tilt Angle on the Performance and Electrical Parameters of a PV Module: Comparative Indoor and Outdoor Experimental Investigation, Energy and Built Environment 3(3): 278-290, https://doi.org/10.1016/j.enbenv.2021.02.001 (SCOPUS Cited Publication) (**Q1**, **CiteScore 6.2,** SJR (2021) 1.57), **Elsevier Journal**

109. Umam, M. F., **Hasanuzzaman*, M.,** & Rahim, N. A. (2022). Global Advancement of Nanofluid-Based Sheet and Tube Collectors for a Photovoltaic Thermal System, Energies 15(15), 5667, https://doi.org/10.3390/en15155667 (SCI/SCOPUS Cited Publication) **(Q3, IF: 3.2)**.

108. Md. Rayid Hasan Mojumder, **M. Hasanuzzaman***, Erdem Cuce (2022) Prospects and Challenges of Renewable Energy-based Microgrid System in Bangladesh: A Comprehensive Review, Clean Technologies and Environmental Policy 24: 1987–2009 (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.636), Springer Journal**

107. Salma Parvin, Ayesha Siddiqua, **Hasanuzzaman, M.,** (2022) Numerical Simulation for Nanofluid Flow in a Wall Driven Cavity with Solid Hindrance: Impact of Thermal Conductivity Ratio and Heat Generation, Journal of Nanofluids 11 (2): 251–262 (SCI/SCOPUS Cited Publication) **(Q4, IF:4.1)**

106. Erdem Cuce, Pinar Mert Cuce, Salvatore Carlucci, Harun Sen, Kumarasamy Sudhakar**, M. Hasanuzzaman**, Reza Daneshazarian (2022) Solar Chimney Power Plants: A Review of the Concepts, Designs and Performances, Sustainability 14 (3), 1450, **https://doi.org/10.3390/su14031450** (SCI/SCOPUS Cited Publication) **(Q2, IF: 3.889)**

105. Kumar, L., **Hasanuzzaman, M*,** Rahim, N.A., Islam, M.M. (2021) Modelling, Simulation and Outdoor Experimental Performance Analysis of a Solar-assisted Process Heating System for Industrial Process Heat, Renewable Energy 164:656-673(ISI/SCOPUS Cited Publication) **(Q1, IF: 8.001), Elsevier Journal**

104. Azwin Kamarulzaman, **M. Hasanuzzaman***, N.A. Rahim (2021) Global Advancement of Solar Drying Technologies and Its Future Prospects: A Review, Solar Energy 221:559-582 (ISI/SCOPUS Cited Publication) (**Q2, IF: 5.742**), **Elsevier Journal**

103. Mardy Huot, Laveet Kumar, Jeyraj Selvaraj, **M. Hasanuzzaman,** Nasrudin Abd Rahim (2021) Performance Investigation of Tempered Glass-Based Monocrystalline and Polycrystalline Solar Photovoltaic Panels, International Journal of Photoenergy, 2021, 2335805, 8 pages (ISI/SCOPUS Cited Publication) (**Q3, IF: 2.113**).

102. Ali, S. B. M., M. **Hasanuzzaman*,** Rahim, N.A., M.A.A. Mamun, U.H. Obaidellah (2021) Analysis of Energy Consumption and the Potential Energy Savings of an Institutional Building in Malaysia, Alexandria Engineering Journal, 60(1): 805-820 (ISI/SCOPUS Cited Publication) **(Q1, IF: 3.732), Elsevier Journal**

101. Fayadh M. Abed, Maki H. Zaidan, **M. Hasanuzzaman***, L. Kumar, Abdullah K. Jasim, (2021) Modelling and experimental performance investigation of a transpired solar collector and underground heat exchanger assisted hybrid evaporative cooling system, Journal of Building Engineering 44: 102620, 1-17 (ISI/SCOPUS Cited Publication) (**Q1, IF: 5.318**), **Elsevier Journal**

100. M.M. Islam, **M. Hasanuzzaman***, N.A. Rahim, A.K. Pandey, M. Rawa, L. Kumar (2021) Real Time Experimental Performance Investigation of a NePCM based Photovoltaic Thermal System: An Energetic and Exergetic Approach, Renewable Energy 172:71-87, https://doi.org/10.1016/j.renene.2021.02.169 (ISI/SCOPUS Cited Publication) (**Q1, IF: 8.001**), **Elsevier Journal**

99. Sumit Saha, Abu Raj Md. Ruslan, A.K.M. Monjur Morshed, **M. Hasanuzzaman*** (2021) Global Prospects and Challenges of Latent Heat Thermal Energy Storage: A Review, Clean Technologies and Environmental Policy 23(2): 531-559 (ISI/SCOPUS Cited Publication) (**Q2, IF: 3.636**), **Springer Journal**

98. A.B.M.A. Malek, **M. Hasanuzzaman*,** N. A. Rahim, Y. A. Al –Turki, (2021) Energy, Economic and Environmental Analysis of 10-MW Biomass Gasification Based Power Generation in Malaysia, Energy & Environment 32(2): 295–337 (ISI/SCOPUS Cited Publication) **(Q3, IF: 2.945)**

97. Saboor Shaik, Manvendra Bhardwaj, Somya Agarwal, Raja Sekhar Yendaluru, **M. Hasanuzzaman**, K.V. Sharma (2021) Evaluation of optical transmissivity of transparent materials on the performance of solar flat plate collectors, ASME Journal of Solar Energy Engineering 143 (5): 054501 (7 pages) (ISI/SCOPUS Cited Publication) **(Q2 IF: 2.384), ASME Journal**

96. Fayadh M. Abed, Muhammad A. Eleiwi, **M. Hasanuzzaman***, M. M. Islam, Khaleel I. Mohammed (2020) Design, Development and Effects of Operational Conditions on the Performance of Concentrated Solar Collector Based Desalination System Operating in Iraq, Sustainable Energy Technologies and Assessments 42:100886, 1-13 (ISI/SCOPUS Cited Publication) **(Q2, IF: 354353), Elsevier Journal**

95. Zaharil, H.A., **Hasanuzzaman*, M** (2020) Modelling and Performance Analysis of Parabolic Trough Solar Concentrator for Different Heat Transfer Fluids under Malaysian Condition, Renewable Energy 149: 22-41 (ISI/SCOPUS Cited Publication) **(Q1, IF: 8.001), Elsevier Journal**

94. Nardia Zubir, **M. Hasanuzzaman*** and N.A. Rahim (2020) Experimental Investigation the Effect of Cleaning on the Optical and Mechanical Properties of PV Module Glasses, Materials Science Forum 990: 291-295 (SCOPUS Cited Publication)

93. A.B.M.A. Malek, **M. Hasanuzzaman***, N. A. Rahim (2020) Prospects, Progress, Challenges and Policies for Clean Power Generation from Biomass Resources, Clean Technologies and Environmental Policy 22 (6) 1229-1253 (ISI/SCOPUS Cited Publication) (**Q2, IF: 3.636**), **Springer Journal**

92. Ali, S. B. M., Mehdipoor, A., Lotfi, N., Mehdipoor, S., **Hasanuzzaman, M**., Rahim, N.A. (2020) Application of Building Information Modelling (BIM) in Analysing the Building Energy Performances of an Office Building, International Journal of Advanced Science and Technology 29: 262 - 282 (*SCOPUS-Indexed*)

91. H. Fayaz, N.A. Rahim, **M. Hasanuzzaman*,** R. Nasrin, A. Rivai (2019) Numerical and Experimental Investigation of the Effect of Operating Conditions on Performance of PVT and PVT-PCM, Renewable Energy 143: 827-841 (ISI/SCOPUS Cited Publication) **(Q1, IF: 5.439), Elsevier Journal**

90. Tanvir Shahriar, M. Ahsan Habib, **M. Hasanuzzaman*,** M. Shahrear-Bin-Zaman, (2019) Modelling and Optimization of Searaser Wave Energy Converter based Hydroelectric Power Generation for Saint Martin's Island in Bangladesh, Ocean Engineering 192 (15 November 2019) 106289 (ISI/SCOPUS Cited Publication) **(Q1, IF: 2.730), Elsevier Journal**

89. Laveet Kumar, **M. Hasanuzzaman***, N.A. Rahim (2019), Global advancement of solar thermal energy technologies for industrial process heat and its future prospects: A review, Energy Conversion and Management 195: 885-908 (ISI/SCOPUS Cited Publication) **(Q1, IF: 6.377), Elsevier Journal**

88. Afroza Nahar, **M. Hasanuzzaman**, N.A. Rahim, S. Parvin (2019) Numerical investigation on the effect of different parameters in enhancing heat transfer performance of photovoltaic thermal systems, Renewable Energy 132: 284-295 (ISI/SCOPUS Cited Publication) **(Q1, IF: 5.439), Elsevier Journal**

87. H. Fayaz, N.A. Rahim, **M. Hasanuzzaman*,** A. Rivai, R. Nasrin (2019) Numerical and Outdoor Real Time Experimental Investigation of Performance of PCM Based PVT System, Solar Energy 179: 135-150 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.374), Elsevier Journal**

86. R. Nasrin, **M. Hasanuzzaman**, N.A. Rahim (2019) Effect of Nanofluids on Heat Transfer and Cooling System of the Photovoltaic/Thermal Performance, International Journal of Numerical Methods for Heat and Fluid Flow 29(6): 1920-1946 (ISI/SCOPUS Cited Publication) **(Q1, IF: 2.450)**

85. M. K. Islam, M. **Hasanuzzaman*,** N.A. Rahim, A. Nahar (2019) Effect of Nanofluid Properties and Mass-Flow Rate on Heat Transfer of Parabolic-Trough Concentrating Solar System, Journal of Naval Architecture and Marine Engineering 16(1): 33-44 (ISI/SCOPUS Cited Publication).

84. U. H. Obaidellah, M. Danaee, M. A. A. Mamun, **M. Hasanuzzaman**, N. A. Rahim (2019) An Application of TBP Constructs on Energy-saving Behavioural Intention among University Office Building Occupants: A Pilot Study in Malaysian Tropical Climate, Journal of Housing and the Built Environment 34 (2): 533- 569 (ISI/SCOPUS Cited Publication) **(Q3, IF: 1.329), Springer Journal**

83. M.A. Islam, **M. Hasanuzzaman***, N.A. Rahim (2018) A comparative investigation on in-situ and laboratory standard test of the potential induced degradation of crystalline silicon photovoltaic modules, Renewable Energy 127:102-113 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.357), Elsevier Journal**

82. Bo Xiang, Xiaoling Cao, Yanping Yuan, **M. Hasanuzzaman**, Chao Zeng, Yasheng Ji, Liangliang Sun (2018) A novel hybrid energy system combined with solar-road and soil-regenerator: Sensitivity analysis and optimization, Renewable Energy 129: 419-430 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.357), Elsevier Journal**

81. M.A. Islam, **M. Hasanuzzaman***, N.A. Rahim (2018) Effect of Different Factors on the Leakage Current Behavior of Silicon Photovoltaic Modules at High Voltage Stress, IEEE Journal of Photovoltaics 8(5): 1259 - 1265 (ISI/SCOPUS Cited Publication) **(Q1, IF: 3.712), IEEE Journal**

80. H. Fayaz, R. Nasrin, N.A. Rahim, **M. Hasanuzzaman** (2018) Energy and Exergy Analysis of the PVT System: Effect of Nanofluid Flow Rate, Solar Energy169: 217–230 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.018), Elsevier Journal**

79. NI Ilham, MZ Hussain, N H Abd Rahman, EH Mat Saat, S Firdaus, MN Amalina, M. Hasanuzzaman (2018) Energy Consumption and Low Carbon Initiatives in an Academic Building: A Case Study in Malaysia, International Journal of Engineering & Technology, 7 (4.22): 170-175 (Non-ISI/ Non-SCOPUS Cited Publication)

78. R. Nasrin, N.A. Rahim, H. Fayaz, **M. Hasanuzzaman** (2018) Water/MWCNT Nanofluid based Cooling System of PVT: Experimental and Numerical Research, Renewable Energy 121: 286-300 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.357), Elsevier Journal**

77. Siti Birkha Mohd Ali, **M. Hasanuzzaman**, N.A. Rahim, M. Amirhosein (2018) Analysing the Impact of Glazing Material and Shading Devices towards Energy Consumption, Cost Saving and Carbon Reduction in Home Design Application Using BIM, International Journal of Renewable Energy Resources 8(2): 13-21.

76. M.A. Islam, **M. Hasanuzzaman***, N.A. Rahim (2018) Experimental Investigation of on-site Degradation of Crystalline Silicon PV Modules under Malaysian Climatic Condition, Indian Journal of Pure & Applied Physics 56: 226-237 (ISI/SCOPUS Cited Publication) **(Q4, IF: 0.521)**.

75. R. Nasrin, **M. Hasanuzzaman**, N.A. Rahim (2018) Effect of High Irradiation on Photovoltaic Power and Energy, International Journal of Energy Research 42: 1115-1131 (ISI/SCOPUS Cited Publication) **(Q1, IF: 2.598)**.

74. M.A. Islam, **M. Hasanuzzaman***, N.A. Rahim (2018) Investigation of the potential induced degradation of on-site aged polycrystalline PV modules operating in Malaysia, Measurement 119: 283-294 (ISI/SCOPUS Cited Publication) **(Q1, IF: 2.359), Elsevier Journal**

73. M. M. Rahman, J. Selvaraj, N.A. Rahim, **M. Hasanuzzaman** (2018) Global Modern Monitoring Systems for PV based power generation: A Review, Renewable & Sustainable Energy Reviews 82: 4142–4158 (ISI/SCOPUS Cited Publication) **(Q1, IF: 8.050), Elsevier Journal**

72. T. H. Oh, **M. Hasanuzzaman***, J. Selvaraj, S. C. Teo, S. C. Chua (2018) Energy Policy and Alternative Energy in Malaysia: Issues and Challenges for Sustainable Growth - An update, Renewable & Sustainable Energy Reviews 81: 3021-3031 (ISI/SCOPUS Cited Publication) **(Q1, IF: 8.050), Elsevier Journal**

71. R. Nasrin, **M. Hasanuzzaman,** N.A. Rahim (2018) Effect of High Irradiation and Cooling on Power, Energy and Performance of a PVT System, Renewable Energy 116: 552-569 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.357), Elsevier Journal**

70. Afroza Nahar, **M. Hasanuzzaman,** N.A. Rahim (2017) Numerical and experimental investigation on the performance of a photovoltaic thermal collector with parallel plate flow channel under different operating conditions in Malaysia, Solar Energy 144: 517-528 (ISI/SCOPUS Cited Publication) **(Q1, IF:3.685), Elsevier Journal**

69. M.A.A. Mamun, **M. Hasanuzzaman***, J. Selvaraj (2017) Experimental Investigation of the Effect of Partial Shading on Photovoltaic Performance, IET Renewable Power Generation 11(7): 912-921(ISI/SCOPUS Cited Publication) **(Q2, IF: 2.635), IET Journal**

68. **M. Hasanuzzaman***, Ummu Salamah Zubir, Nur Iqtiyani Ilham, Hang Seng Che (2017) Global Electricity Demand, Generation, Grid System and Renewable Energy Polices: A Review, WIREs Energy and Environment 6 (3):1-18, DOI: 10.1002/wene.222 (ISI/SCOPUS Cited Publication) **(Q2, IF:2.889)**.

67. M.K. Islam, **M. Hasanuzzaman,** N.A. Rahim (2017) Global Renewable Energy Resources, Smart Power Generation and Environmental Impacts, International Journal of Renewable Energy Resources 7 (2):15-19

66. Mohammad Mafizur Rahman, **M. Hasanuzzaman***, Nasrudin Abd Rahim (2017) Effects of Operational Conditions on the Energy Efficiency of Photovoltaic Modules Operating in Malaysia, Journal of Cleaner Production 143: 912-924 (ISI/SCOPUS Cited Publication) (**Q1, IF: 4.959**), **Elsevier Journal**

65. Afroza Nahar, **M. Hasanuzzaman*,** N.A. Rahim (2017) A Three-Dimensional Comprehensive Numerical Investigation of Different Operating Parameters on the Performance of a Photovoltaic Thermal System with Pancake Collector, ASME Journal of Solar Energy Engineering 139: 031009 (16 pages); Paper No: SOL-16-1239, doi: https://doi.org/10.1115/1.4035818 (ISI/SCOPUS Cited Publication) **(Q2, IF:1.571), ASME Journal**

64. Nur Iqtiyani Ilham, **M. Hasanuzzaman***, M. Hosenuzzaman (2017) European smart grid prospects, policies, and challenges, Renewable and Sustainable Energy Reviews 67: 776-790 (ISI/SCOPUS Cited Publication) **(Q1, IF: 6.798), Elsevier Journal**

63. A.B.M. Abdul Malek, **M. Hasanuzzaman***, Nasrudin Abd. Rahim, Yusuf A. Al –Turki (2017) Techno-economic Analysis and Environmental Impact Assessment of a 10 MW Biomass-based Power Plant in Malaysia, Journal of Cleaner Production 141: 502-213 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.959), Elsevier Journal**

62. R. Nasrin, M.A. Alim, **M. Hasanuzzaman** (2016) Assisted Convective Heat Transfer and Entropy Generation in a Solar Collector Filled with Nanofluid, Journal of Naval Architecture and Marine Engineering 13 (2):135-150 (ISI/SCOPUS Cited Publication)

61. M.M. Islam, A.K. Pandey, **M. Hasanuzzaman,** N.A. Rahim (2016) Recent Progresses and Achievements in Photovoltaic- Phase Change Material Technology: A Review with Special Treatment on Photovoltaic Thermal-Phase Change Material Systems, Energy Conversion and Management 126: 177–204 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.801), Elsevier Journal**

60. **M. Hasanuzzaman***, A.B.M.A. Malek, M. M. Islam, A.K. Pandey, N.A. Rahim (2016) Global Advancement of Cooling Technologies for PV Systems: A Review, Solar Energy 137: 25-45 (ISI/SCOPUS Cited Publication) **(Q1, IF: 3.685), Elsevier Journal**

59. S. Mollik, M.M. Rashid, **M. Hasanuzzaman***, M.E. Karim, M. Hosenuzzaman (2016) Prospects, Progress, Policies, and Effects of Rural Electrification in Bangladesh, Renewable and Sustainable Energy Reviews 65: 553-567 (ISI/SCOPUS Cited Publication) **(Q1, IF: 6.798), Elsevier Journal**

58. Mohammad Ahsan Habib, **M. Hasanuzzaman***, M. Hosenuzzaman, Asif Salman, Md. Riyad Mehadi (2016) Energy Consumption, Energy Saving and Emission Reduction of a Garment Industrial Building in Bangladesh, Energy 112: 91-100 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.292), Elsevier Journal**

57. M.A. Islam, M.M. Rahman, M.S. Parvez, M.S. Islam, **M. Hasanuzzaman**, W.P. Hew (2016) Tangible effect of Mn on the dielectric properties of Nd doped Bismuth Titanate ceramic, Journal of the Australian Ceramic Society, 52 (1): 89 – 94 (ISI/SCOPUS Cited Publication) **(Q2, IF:0.960), Springer Journal**

56. Mohammad Mafizur Rahman, **M. Hasanuzzaman***, N.A. Rahim (2015) Effects of Various Parameters on PV Module Power and Efficiency, Energy Conversion and Management 103: 348–358 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.380), Elsevier Journal**

55. S.A.A. Tarusan, **M. Hasanuzzaman***, M. Azri, N.A. Rahim (2015) Present Status of Solar Photovoltaic Cells in Asia, International Journal of Renewable Energy Resources 5: 45-50

54. Farhad M. Hossain, **M. Hasanuzzaman***, N.A. Rahim, H.W. Ping (2015) Impact of renewable energy on rural electrification in Malaysia: a review, Clean Technology and Environmental Policy 17(4):859–871) (ISI/SCOPUS Cited Publication) **(Q2, IF: 1.671), Springer Journal**

53. M.K. Islam, **M. Hasanuzzaman**, N.A. Rahim (2015) Modelling and analysis on the effect of different parameters on a parabolic-trough concentrating solar system, RSC Advances 5: 36540-36456 (ISI/SCOPUS Cited Publication) **(Q1, IF: 3.708)**.

52. M.N.H. Khan, K.J. Ahmad, S. Khan, **M. Hasanuzzaman** (2015) Leakage Current Paths in PV Transformer-Less Single-Phase Inverter Topology and Its Mitigation through PWM for Switching, International Journal of Power Electronics and Drive Systems, 6 (1):148-159 (SCOPUS Cited Publication)

51. **M. Hasanuzzaman,** A.Q. Al-Amin, S. Khanam, M. Hosenuzzaman (2015) Photovoltaic power generation and its economic and environmental future in Bangladesh, Journal of Renewable and Sustainable Energy 7 (1): 013108 (1-12) (ISI/SCOPUS Cited Publication) **(Q3, IF: 0.925)**.

50. M. Hosenuzzaman, N.A. Rahim, J. Selvaraj, **M. Hasanuzzaman**, A.B.M.A. Malek, A. Nahar (2015) Global Prospects, Progress, Policies, and Environmental Impact of Solar Photovoltaic Power Generation, Renewable and Sustainable Energy Reviews 41: 284-297 (ISI/SCOPUS Cited Publication) **(Q1, IF: 5.510), Elsevier Journal**

49. Afroza Nahar, **M. Hasanuzzaman*,** N.A. Rahim, M. Hosenuzzaman (2014) Effect of Cell Material on the Performance of PV System, Advance Materials Research 1043:12-16 (ISI/SCOPUS Cited Publication)

48. Islam, M.A., **Hasanuzzaman*, M.,** Rahim, N.A, Nahar, A., Hosenuzzaman, M. (2014) Global Renewable Energy Based Electricity Generation and Smart Grid System for Energy Security, The Scientific World Journal, Volume 2014, Article ID 197136, Page 13 (ISI/SCOPUS Cited Publication) **(Q2, IF: 1.219)**.

47. **M. Hasanuzzaman***, M. F. Hossain, N. A. Rahim (2014) Palm oil EFB: Green Energy Source in Malaysia, Applied Mechanics and Materials 619: 376-380 (ISI/SCOPUS Cited Publication)

46. M.B. Ali, R. Saidur, **M. Hasanuzzaman***, T. A. Ward (2013) Energy and emission analysis in the Malaysian food industries, Environmental Progress & Sustainable Energy 32 (3): 777-783 (ISI/SCOPUS Cited Publication) **(Q2, IF: 1.649)**.

45. S.A.A. Tarusan, N.A. Rahim, **M. Hasanuzzaman** (2013) A review on performance improvement of solar crystalline silicon photovoltaic cells, International Journal of Renewable Energy Resources, 3 (1): 19-26 (Non-ISI/Non-SCOPUS Cited Publication)

44. M.M. Rahman, S. Parvin, **M. Hasanuzzaman***, R. Saidur and N.A. Rahim (2013) Effect of Heat-Generating Solid Body on Mixed Convection Flow in a Ventilated Cavity, Heat Transfer Engineering 34 (15): 1249-1261, DOI: https://doi.org/10.1080/01457632.2013.730919 (ISI/SCOPUS Cited Publication) **(Q2, IF: 0.892)**.

43. F. Ahmed, A.Q. Al Amin, **M. Hasanuzzaman***, R. Saidur (2013) Alternative Energy Resources in Bangladesh and Future Prospect, Renewable and Sustainable Energy Reviews 25: 698- 707 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.567), Elsevier Journal**

42. R. Saidur, M.T. Sambandam, **M. Hasanuzzaman*,** D. Devaraj, S. Rajakarunakaran, M.D. Islam (2012) An energy flow analysis in a paper based industry, Clean Technologies and

Environmental Policy 14(5): 905-916 (ISI/SCOPUS Cited Publication) **(Q2, IF:1.753), Springer Journal**

41. R. Saidur, M.T. Sambandam, **M. Hasanuzzaman***, D. Devaraj, S. Rajakarunakaran (2012) An analysis of actual energy savings in an Indian cement Industry through energy efficiency index, International Journal of Green Energy 9(8): 829-840 (ISI/SCOPUS Cited Publication) **(Q3, IF: 0.744), Taylor and Francis Journal**

40. R. Saidur, M. Razaei, W.K. Muzammil, M.H. Hassan, S. Paria, **M. Hasanuzzaman*** (2012) Technologies to recover exhaust heat from internal combustion engines, Renewable and Sustainable Energy Reviews **16** (8): 5649-5659 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.567), Elsevier Journal**

39. **Hasanuzzaman*, M**., M.M. Rahman, H.F. Öztop, N.A. Rahim, and R. Saidur (2012) Effects of Lewis number on heat and mass transfer in a triangular cavity. International Communications in Heat and Mass Transfer **39**(8):1213-1219(ISI/SCOPUS Cited Publication) (**Q1, IF: 2.208**), **Elsevier Journal**

38. **Hasanuzzaman, M.,** H.F. Öztop, M.M. Rahman, N.A. Rahim, R. Saidur, and Y. Varol (2012) Magnetohydrodynamic natural convection in trapezoidal cavities. International Communications in Heat and Mass Transfer **39**(9):1384-1394(ISI/SCOPUS Cited Publication) (**Q1**, **IF: 2.208**), **Elsevier Journal**

37. O. Afshar, R. Saidur, **M. Hasanuzzaman***, M. Jameel (2012) A Review of Thermodynamics and Heat Transfer in Solar Refrigeration System, Renewable and Sustainable Energy Reviews 16 (8): 5639-5648 (ISI/SCOPUS Cited Publication) **(Q1, IF: 4.567), Elsevier Journal**

36. Saidur R, Meng T C, Said Z, **Hasanuzzaman M** and Kamyar A (2012) Evaluation of the effect of nanofluid-based absorbers on direct solar collector, International Journal of Heat and Mass Transfer 55 (21-22): 5899-907 **(Q1, IF: 1.898), Elsevier Journal**

35. **M. Hasanuzzaman***, N.A. Rahim, M. Hosenuzzaman, R. Saidur, I.M. Mahbubul and M.M. Rashid (2012) Energy savings in the combustion based process heating in industrial sector, Renewable and Sustainable Energy Reviews, 16 (7): 4527-4536 **(Q1, IF:4.567), Elsevier Journal**

34. A. Kamyar, R. Saidur, **M. Hasanuzzaman** (2012) Application of Computational Fluid Dynamics (CFD) for Nanofluids, International Journal of Heat and Mass Transfer, 55(15–16): 4104-4115 (ISI/SCOPUS Cited Publication) **(Q1, IF: 1.898), Elsevier Journal**

33. M.M. Rahman, S. Parvin, N.A. Rahim, **M. Hasanuzzaman** and R. Saidur (2012) Simulation of mixed convection heat transfer in a horizontal channel with an open cavity containing a heated hollow cylinder, Heat Transfer- Asian Research, 41(4):339-353 (SCOPUS Cited Publication)

32. M. M. Rahman, M. M. Billah, N.A. Rahim, R. Saidur and **M. Hasanuzzaman** (2012) Finite Element Simulation of MHD Mixed Convection in a Double-Lid Driven Enclosure with a Square Heat-Generating Block, ASME Journal of Heat Transfer- Transactions of the ASME,

134 (June), 062501:1-8, https://doi.org/10.1115/1.4006010 (ISI/SCOPUS Cited Publication) **(Q2, IF: 0.940), ASME Journal**

31. R. Saidur, **M. Hasanuzzaman*** and N.A. Rahim (2012) Energy, economic and environmental analysis of the Malaysian industrial compressed-air systems, Clean Technologies and Environmental Policy 14(2): 195-210 (ISI/SCOPUS Cited Publication) **(Q2, IF:1.753), Springer**

30. **M. Hasanuzzaman*,** R. Saidur and N.A. Rahim (2012) Analysis of energy and exergy of an annealing furnace, Applied Mechanics and Materials, 110-116: 2156-2162 (ISI/SCOPUS Cited Publication)

29. Hakan F. Öztop, M.M. Rahman, A. Ahsan, **M. Hasanuzzaman**, R. Saidur, Khaled Al-Salem and N.A. Rahim (2012) MHD natural convection in an enclosure from two semi-circular heaters on the bottom wall, International Journal of Heat and Mass Transfer 55(7-8): 1844-1854 (ISI/SCOPUS Cited Publication) **(Q1, IF: 1.898), Elsevier Journal**

28. M.M. Rahman, S. Parvin, N.A. Rahim, M.R. Islam, R. Saidur and **M. Hasanuzzaman** (2012) Effects of Reynolds and Prandtl number on Mixed Convection in a Ventilated Cavity with a Heat-Generating Solid Circular Block, Applied Mathematical Modelling 36 (5): 2056-2066 (ISI/SCOPUS Cited Publication) **(Q1, IF: 1.371), Elsevier Journal**

27. M.M. Billah, M.M. Rahman, U.M. Sharif, N.A. Rahim, R. Saidur and **M. Hasanuzzaman** (2011) Numerical analysis of fluid flow due to mixed convection in a lid-driven cavity having a heated circular hollow cylinder, International Communications in Heat and Mass Transfer 38(8): 1093-1103 (ISI/SCOPUS Cited Publication) **(Q1, IF:1.609), Elsevier Journal**

26. R. Saidur, **M. Hasanuzzaman,** T.M.I. Mahlia, N.A. Rahim, H.A. Mohammed (2011) Chillers energy consumption, energy savings and emission analysis in an institutional building, Energy 36 (8): 5233-5238 (ISI/SCOPUS Cited Publication) **(Q1, IF:3.565), Elsevier Journal**

25. M. Thirugnanasambandam, **M. Hasanuzzaman,** R. Saidur, M.B. Ali, S. Rajakarunakaran, D. Devaraj, N.A. Rahim (2011) An analysis of electrical motors load factors and energy savings in an Indian cement industry, Energy 36 (7): 4307-4314, https://doi.org/10.1016/j.energy.2011.04.011 (ISI/SCOPUS Cited Publication) **(Q1, IF:3.565), Elsevier Journal**

24. **M. Hasanuzzaman***, R. Saidur, N.A. Rahim (2011) Energy, exergy and economic analysis of an annealing furnace, International Journal of Physical Sciences 6(6): 1257-1266, https://doi.org/10.4028/www.scientific.net/AMM.110-116.2156 (ISI/SCOPUS Cited Publication) **(Q2, IF:0.540)**

23. M.M. Billah, M.M. Rahman, R. Saidur and **M. Hasanuzzaman** (2011) Simulation of MHD mixed convection heat transfer enhancement in a double lid-driven obstructed enclosure, International Journal of Mechanical and Materials Engineering, 6(1): 18-30 (SCOPUS Cited Publication), **Springer Journal**

22. **M. Hasanuzzaman*,** R. Saidur and H.H. Masjuki (2011) Effects of different variables on moisture transfer of household refrigerator-freezer, Energy Education Science and Technology Part A-Energy Science and Research 27 (2): 401-418 (ISI Cited Publication) **(Q1, IF:9.333)**

21. M.M. Rahman, M.M. Billah, N.A. Rahim, N. Amin, R. Saidur and **M. Hasanuzzaman** (2011) A Numerical Model for The Simulation of Double-Diffusive Natural Convection in A Right-Angled Triangular Solar Collector, International Journal of Renewable Energy Research 1 (2): 50-54 (Non-ISI/Non-SCOPUS Cited Publication)

20. **M. Hasanuzzaman***,* N.A. Rahim, R. Saidur and S.N. Kazi (2011) Energy savings and emission reduction for rewinding and replacement of industrial motor, Energy 36 (1): 233-240, https://doi.org/10.1016/j.energy.2010.10.046 (ISI/SCOPUS Cited Publication) **(Q1, IF:3.565), Elsevier Journal**

19. R. Saidur, T.M.I. Mahlia and **M. Hasanuzzaman** (2011) Developing energy performance standard, label and test procedures and impacts analysis for commercial chillers, Energy Education Science and Technology Part A: Energy Science and Research, 27(1): 175-190 (ISI Cited Publication) **(Q1, IF:9.333)**

18. M.M. Rahman, M.M. Billah, M.A.H. Mamun, R. Saidur and **M. Hasanuzzaman** (2010) Reynolds and prandtl numbers effects on MHD mixed convection in a lid-driven cavity along with joule heating and a centered heat conducting circular block, International Journal of Mechanical and Materials Engineering 5(2): 163-170 (SCOPUS Cited Publication), **Springer Journal**

17. R. Saidur, **M. Hasanuzzaman***, S. Yogeswaran, H.A. Mohammed, M.S. Hossain (2010) An end-use energy analysis in a Malaysian public hospital, Energy 35(12): 4780 – 4785, https://doi.org/10.1016/j.energy.2010.09.012 (ISI/SCOPUS Cited Publication) **(Q1, IF:3.565), Elsevier Journal**

16. R. Saidur, **M. Hasanuzzaman** and N.A. Rahim (2010) Energy use, energy savings and environmental analysis of industrial boilers and compressors, International Journal of Thermal and Environmental Engineering, 1(1): 29-36 (Non-ISI/Non-SCOPUS Cited Publication)

15. R. Saidur, E.A. Abdelaziz, **M. Hasanuzzaman** and M.A.H. Mamun (2010) A study of energy efficiency, economic and environmental benefits of a cooling tower, International Journal of Mechanical and Materials Engineering 5(1): 87-94 (SCOPUS Cited Publication)

14. R. Saidur, N.A. Rahim and **M. Hasanuzzaman** (2010) A review on compressed air energy use and energy savings, Renewable and Sustainable Energy Reviews 14(4): 1135-1153, https://doi.org/10.1016/j.rser.2009.11.013 (ISI/SCOPUS Cited Publication) **(Q1, IF:4.952), Elsevier Journal**

13. **M. Hasanuzzaman*,** R. Saidur and H.H. Masjuki (2009) Effects of operating variables on heat transfer, energy losses and energy consumption of household refrigerator-freezer during the closed door operation, Energy 34(2): 196-198, https://doi.org/10.1016/j.energy.2008.11.003 (ISI/SCOPUS Cited Publication) **(Q1, IF:2.952), Elsevier Journal**

12. Saidur R, **Hasanuzzaman, M**, Hasan. M.M. and Masjuki H.H. (2009) Overall thermal transfer value of residential buildings in Malaysia, Journal of Applied Sciences 9(11): 2130-2136, DOI: 10.3923/jas.2009.2130.2136 (SCOPUS Cited Publication)

11. R. Saidur, H.H. Masjuki and **M. Hasanuzzaman** (2009) Performance of an improved solar car ventilator, International Journal of Mechanical and Materials Engineering 4(1): 24-34 (SCOPUS Cited Publication)

10. R. Saidur, H.H. Masjuki, **M. Hasanuzzaman,** G.S. Kai (2008) Investigation of energy performance and usage behavior of domestic refrigerator freezer using clustering and segmentation, Journal of Applied Sciences 8(21): 3957-3962, DOI: 10.3923/jas.2008.3957.3962 (SCOPUS Cited Publication)

9. R. Saidur, M.I. Jahirul, **M. Hasanuzzaman** and H.H. Masjuki (2008) Analysis of exhaust emissions of natural gas engine by using response surface methodology, Journal of Applied Sciences 8(19): 3328-3339, DOI: 10.3923/jas.2008.3328.3339 . (SCOPUS Cited Publication)

8. **Hasanuzzaman, M.**, Saidur, R and Masjuki, H.H. (2008) Moisture transfer and energy losses of household refrigerator-freezer during the closed door operation, International Journal of Mechanical and Materials Engineering 3(1): 30-37 (SCOPUS Cited Publication)

7. R. Saidur, H.H. Masjuki, **M. Hasanuzzaman,** T.M.I. Mahlia, C.Y. Tan, J.K. Ooi and P.H. Yoon (2008) Performance investigation of a solar powered thermoelectric refrigerator, International Journal of Mechanical and Materials Engineering 3(1): 7-16 (SCOPUS Cited Publication)

6. **M. Hasanuzzaman,** R. Saidur and H.H. Masjuki (2008) Investigation of energy consumption and energy savings of refrigerator-freezer during open and closed door condition, Journal of Applied Sciences 8(10): 1822-1831, DOI: 10.3923/jas.2008.1822.1831 (SCOPUS Cited Publication)

5. **M. Hasanuzzaman,** R. Saidur, M. Ali, H.H. Masjuki (2007) Effects of variables on natural convective heat transfer through V-corrugated vertical plates, International Journal of Mechanical and Materials Engineering 2(2): 109-117 (SCOPUS Cited Publication)

4. M.I. Jahirul, R. Saidur, **M. Hasanuzzaman**, H.H. Masjuki, M.A. Kalam (2007) A comparison of the air pollution of gasoline and CNG driven car for Malaysia, International Journal of Mechanical and Materials Engineering 2(2): 130-138 (SCOPUS Cited Publication)

3. Saidur R, Sattar M.A, **Hasanuzzaman M,** Cheng C.F. and Masjuki H.H. (2007) Open and closed door moisture transport and corresponding energy consumption in household refrigerator/freezer. Journal of Energy & Environment, 6 (May): 18-27 (Non-ISI/Non-SCOPUS Cited Publication)

2. R. Saidur, **M. Hasanuzzaman,** M.A. Sattar, H.H. Masjuki, M. Irfan Anjum and A.K.M. Mohiuddin (2007) An analysis of energy use, energy intensity and emissions at the industrial sector of Malaysia, International Journal of Mechanical and Materials Engineering 2 (1): 84 – 92 (SCOPUS Cited Publication)

1. Mohammad Ali and **M. Hasanuzzaman** (2006) Heat transfer by natural convection through v-corrugated plates, Journal of Mechanical Engineering (Transaction of the Mech. Eng. Div., The Institution of Engineers, Bangladesh), ME 36, December, 2006, 1-5 (Non-ISI/Non-SCOPUS Cited Publication)

15.3 Conference

58. Muhammad Firdaus Mohd Zublie, **M. Hasanuzzaman**, N.A. Rahim (2023) Modeling and analysis of rooftop solar photovoltaic system for educational institution in Malaysia, 6th International Conference Clean Energy and Technology 2023 (CEAT 2023), 7-8 June 2023, Bayview Hotel Georgetown, Penang, Malaysia.

57 Siti Birkha Mohd Ali, Wan Nazirah Wan Md Adnan, Anis Sabirin Baharom, **M. Hasanuzzaman** and Nasrudin Abd Rahim (2023) How Many Trees Are Required to Offset the CO2 EmissionsFrom Building Operations? A Case Study of Energy Efficiency Initiatives in Wisma R&D, Universiti Malaya Building, 6th International Conference Clean Energy and Technology 2023 (CEAT 2023), 7-8 June 2023, Bayview Hotel Georgetown, Penang, Malaysia.

56 Umam, M. F., Hasanuzzaman, M., & Rahim, N. A. (2023). Experimental investigation on photovoltaic thermal system performance with different thermal collectors, 6th International Conference Clean Energy and Technology 2023 (CEAT 2023), 7-8 June 2023, Bayview Hotel Georgetown, Penang, Malaysia.

55 Fadzlin, W. A., **Hasanuzzaman, M**., & Rahim, N. A. (2023). PCM-based domestic solar water heating in Malaysia: Setbacks and countermeasures. IOP Conference Series: Earth and Environmental Science, 1261(1), 012014. doi:10.1088/1755-1315/1261/1/012014

54 Hui Fang Yu**, Hasanuzzaman, M.,** & Rahim, N. A. (2023). Recycling End-of-Life Photovoltaic Modules in Malaysia: Challenges and Potential Solutions. IOP Conference Series: Earth and Environmental Science, 1261(1), 012017. doi:10.1088/1755-1315/1261/1/012017

53 Umam, M. F., **Hasanuzzaman**, M., & Rahim, N. A. (2023). The Influence of Nanofluid Characteristics on the Thermal Performance of Photovoltaic Thermal System. IOP Conference Series: Earth and Environmental Science, 1261(1), 012013. doi:10.1088/1755-1315/1261/1/012013

52 Siti Birkha Mohd Ali, Wan Nazirah Wan Md Adnan, Anis Sabirin Baharom, **M. Hasanuzzaman** and Nasrudin Abd Rahim, Overview of Green Technology Evolvement in Malaysia, International Postgraduate Conference for Energy Research 2022 (IPCER 2022), 19 December 2022, Pullman Hotel Kuala Lumpur Bangsar, Kuala Lumpur, Malaysia.

51 Muhammad Firdaus Mohd Zublie, **M. Hasanuzzaman**, N.A. Rahim (2019) Feasibility Analysis of Solar Power Generation System for Office Building in Academic Institution, The International Scientific Forum 2019 (ISF2019), 16-17 December 2019, Mudzaffar Hotel, Melaka, Malaysia

50. Laveet Kumar, **M. Hasanuzzaman**, N.A. Rahim (2019) Modelling and performance analysis of a solar-assisted process heating for Textile industry, The International Scientific Forum 2019 (ISF2019), 16-17 December 2019, Mudzaffar Hotel, Melaka, Malaysia

49. M. Hosenuzzaman, N.A. Rahim, J. Selvaraj, **M. Hasanuzzaman**, Laveet Kumar, Power generation and Cost-benefit analysis of 30 MW PV power plant in Malaysia, The International Scientific Forum 2019 (ISF2019), 16-17 December 2019, Mudzaffar Hotel, Melaka, Malaysia

48. Nardia Zubir, **M. Hasanuzzaman** and N.A. Rahim (2019) Experimental Investigation the Effect of Cleaning On the Optical and Mechanical Properties of PV Module Glasses, The 4th International Conference on Materials Technology and Applications (ICMTA2019), October 11 - 14, 2019, Kyoto, Japan (**Excellent Oral Presentation Award**)

47. Afroza Nahar, **M. Hasanuzzaman,** N. A. Rahim, Effects of The Flow Channel Materials on the Performance of the Photovoltaic Thermal System (Paper Id: 357), International Conference on Applied Energy (ICAE 2019), August 12-15, 2019, Västerås, Sweden.

46. Siti Birkha Mohd Ali, **M. Hasanuzzaman**, Nasrudin Abdul Rahim, Investigation on the load factor, performance at Wisma R&D Universiti Malaya building (Paper Id: 1570448914), 5th IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel Bangsar, Kuala Lumpur, Malaysia.

45. Mohammad Abdullah Al Mamun, **M. Hasanuzzaman**, Jeyraj Selvaraj, Rehena Nasrin, Numerical and Experimental Investigation of the Effect of Tilt Angle on the Performance of PV Systems (Paper ID: 1570452404), 5th IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel Bangsar, Kuala Lumpur, Malaysia (**Best Oral Presentation Certificate**).

44. Yudai Tanaka, M. Hasanuzzaman, A review of global current techniques and evaluation methods of photocatalytic CO_2 reduction (Paper ID: 1570458950), 5th IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia.

43. Fayaz Hussain, **M. Hasanuzzaman**, Nasrudin Abdul Rahim, Solar energy transition in Malaysia through implementation of PV and PVT technologies (Paper ID: 1570473263), 5th IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia.

42. Muhammad Firdaus Mohd Zublie, **M. Hasanuzzaman**, Nasrudin Abdul Rahim, Energy saving potential through energy conservation of office equipment in Malaysia Polytechnic (Paper ID: 1570449989), 5th IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia.

41. Mohammed Moinul Islam, Ak Pandey, **M. Hasanuzzaman**, Nasrudin Abdul Rahim, Mohammed Razaul Karim, Investigation on the Effect of MWCNT On Microstructural and Thermal Properties of Paraffin based PCM (Paper ID: 1570449981), 5th IET International Conference on Clean Energy and Technology (CEAT 2018), 5-6 September 2018, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia.

40. M. A. Islam, **M. Hasanuzzaman**, N. A. Rahim (2018) Design and analysis of PV power plant at different location in Malaysia, IOP Conf. Series: Materials Science and Engineering 358: 012019 doi:10.1088/1757-899X/358/1/012019.

39. H. Fayaz, N. A. Rahim, R. Saidur**, M. Hasanuzzaman**, 2018 Techno-Economıc Analysıs Of Evacuated Tube Solar Water Heater Usıng F-Chart, IOP Conf. Series: Materials Science and Engineering 358: 012016 doi:10.1088/1757-899X/358/1/012016).

38. **M. Hasanuzzaman**, F.M. Hossain, N.A. Rahim, M. I. Jahirul. 2016. Pretreatment of Biomass for Power Generation, 4th IET International Conference on Clean Energy and Technology, 14-15 November 2016, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia.

37. M.A.A. Mamun, **M. Hasanuzzaman,** J. Selvaraj. 2016. Impact of Tilt Angle on the Performance of Photovoltaic Modules in Malaysia: A review, 4th IET International Conference on Clean Energy and Technology, 14-15 November 2016, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia.

36. R. Nasrin, **M. Hasanuzzaman,** N. A Rahim. 2016. 3D Numerical Study in a Solar Collector: Effect of Prandtl Number, 4th IET International Conference on Clean Energy and Technology, 14-15 November 2016, Pullman Hotel, Bangsar, Kuala Lumpur, Malaysia.

35. Afroza Nahar, **M. Hasanuzzaman**, N. A. Rahim, S. Parvin, Numerical Investigation of the Performance of Photovoltaic Thermal System using Nanofluid, International Conference on Power, Energy, and Communication Systems 2015.

34. Hew Wooi Ping, **M. Hasanuzzaman,** Che Hang Seng, Nasrudin Abd Rahim, Chang Yew Cheong and Chiam Soon Hong, Saving energy through energy audit and implementing solar system, International Conference on Knowledge Transfer, 1 – 3 December 2015, Putrajaya Marriot Hotel, Malaysia.

33. S. A. A. Tarusan, **M. Hasanuzzaman**, M. Azri, M. Hosenuzzaman, N. A. Rahim, Present Status of Solar Photovoltaic Cells in Asia, International Conference on Power, Energy, and Communication Systems 2015.

32. M M Rahma, **M Hasanuzzaman**, NA Rahim, Temperature effect of photovoltaic module under partial shading operation condition. The 3rd international conference of Clean Energy and Technology 2014, Kuching, Sarawak, Malaysia, 24-26 November 2014.

31. Hashim A. Hussien, **M. Hasanuzzaman,** Ali H. Noman, Abdulmunem R. Abdulmunem, Enhance photovoltaic/thermal system performance by using nanofluid, The 3rd international conference of Clean Energy and Technology 2014, Kuching, Sarawak, Malaysia, 24-26 November 2014, ISBN: 978-1-78561-069-1, DOI: 10.1049/cp.2014.1515.

30. M Farhad Hossain, **M. Hasanuzzman,** N.A. Rahim, Bio-ethanol as an alternative fuel from palm empty fruit bunches and environmental benefits. The 3rd international conference of Clean Energy and Technology 2014, Kuching, Sarawak, Malaysia, 24-26 November 2014.

29. M. Hosenuzzaman, N. A. Rahim, J. Selvaraj, **M. Hasanuzzaman,** Factors affecting the PV based power generation. The 3rd international conference of Clean Energy and Technology 2014, Kuching, Sarawak, Malaysia, 24-26 November 2014.

28. A.B.M. Abdul Malek, **M. Hasanuzzaman,** Nasrudin Abd Rahim, Md. Hosenuzzaman, Review on biomass based power generation technologies in Malaysia, 2014, the Proceeding of the 2nd Power and Energy Conversion Symposium (PECS,2014), University Technical Malaysia, Melaka, Malaysia, 12 May 2014, pp. 83-88.

27. M. Hosenuzzaman, N.A. Rahim, J. Selveraj, **M. Hasanuzzaman** and A.B.M. Abdul Malek, Photovoltaic Prospect and Policies in Malaysia, the Proceeding of the 2nd Power and Energy Conversion Symposium (PECS,2014), University Technical Malaysia, Melaka, Malaysia, 12 May 2014, pp.105-109.

26. Afroza Nahar, **M. Hasanuzzaman**, N. A. Rahim, Concentrated Solar Thermal Based Power Generation, the Proceeding of the 2nd Power and Energy Conversion Symposium (PECS,2014), University Technical Malaysia, Melaka, Malaysia, 12 May 2014, pp.135-140.

25. M.H. Farhad, A.B.M. Abdul Malek, **M. Hasanuzzman**, N.A. Rahim, Technical review on biomass conversion processes into required energy form, 2013 IEEE Conference on Clean Energy and Technology (CEAT), Langkawi, Bayview Hotel, Malaysia, 18 - 20 November 2013, pp 200-205.

24. M.K. Islam, M. Hosenuzzaman, M.M. Rahman, **M. Hasanuzzaman** and N.A. Rahim, Thermal performance improvement of solar thermal power generation, the proceeding of 2013 IEEE Conference on Clean energy and Technology (CEAT), Bay view hotel, Langkawi, Malaysia, 18-21 November 2013, pp 157-161.

23. Mohd Fayzul Mohammed, Nasrudin Abd Rahim, **M. Hasanuzzaman**, Ahmad Rivai, Effect on Insulation of Photovoltaic Thermal Water Collector (PVTw), the proceeding of 2013 IEEE Conference on Clean energy and Technology (CEAT), Bay view hotel, Langkawi, Malaysia, 18-21 November 2013, pp 293-297.

22. S.A.A. Tarusan, N.A. Rahim, **M. Hasanuzzaman**, A review on pewrformance improvement of crystalline silicon cells, power and Energy Symposium (PECS 2012), Melaka, Malaysia, 17 Dec 2012, pp. 283-290.

21. **M. Hasanuzzaman,** R. Saidur and N.A. Rahim, Effectiveness enhancement of heat exchanger by using nanofluids, *The proceeding of the 2011 IEEE first Conference on Clean Energy and Technology (CET 2011)*, Legend Hotel, Kuala Lumpur, Malaysia, 27 June- June 29, 2011 [ISBN:978-1-4577-1352-1] pp. 98-103.

20. **M. Hasanuzzaman,** N.A. Rahim and R. Saidur, Analysis of energy, exergy and energy savings of a fire tube boiler, *The proceeding of the 2011 IEEE first Conference on Clean Energy and Technology (CET 2011)*, Legend Hotel, Kuala Lumpur, Malaysia, 27 June- June 29, 2011 [ISBN:978-1-4577-1352-1] pp. 291-296.

19. **M. Hasanuzzaman,** R. Saidur and N.A. Rahim, Analyses of energy, exergy and environmental impact of Malaysian industrial boilers, furnaces and electric motors, *the Proceeding of 2nd UMPEDAC Postgraduate Students Renewable Energy Symposium, Malacca*, Malaysia, 28 May 2011[ISBN:978-967-10842-0-5] pp 33-42.

18. **M. Hasanuzzaman,** N.A. Rahim and R. Saidur, Analysis of energy savings for rewinding and replacement of industrial motor, *the Proceeding of 2010 IEEE International Conference on Power and Energy (PECon 2010)*, Sunway Resort Hotel and Spa, Kuala Lumpur, Malaysia, 29 November-1 December 2010, pp 212-217 *(ISI/SCOPUS Cited Publication*).

17. R. Saidur, N.A. Rahim and **M. Hasanuzzaman,** Energy and environmental analysis in industrial boilers and compressors, *Proceedings of the International Engineering Conference on Hot Arid Regions (IECHAR 2010*), Al-Ahsa, Kingdom of Saudi Arabia, March 1-2, 2010 [ISBN:978-603-08-0083-4]. Pp. 161-166.

16. R. Saidur, **M. Hasanuzzaman** and N.A. Rahim, Energy consumption, energy savings and emission analysis for industrial motors, *Proceedings of the International Conference on Industrial Engineering and Operations Management (IEOM2010)*, Paper ID: 224, Dhaka Bangladesh, 9-10 January, 2010, ISBN No**.** 978-984-33-0988-4.

15. R. Saidur and **M. Hasanuzzaman***, Energy and environmental analysis of electrical motor in industrial boilers, *Proceedings of the International Conference on Energy and Environment 2009 (lCEE2009)*, Hotel Equatorial Malacca, Malaysia, 7-8 December 2009, pp 492-500 (*SCOPUS Cited Publication*).

14. R. Saidur, **M. Hasanuzzaman** and N.A. Rahim, Energy and environmental analysis of electrical motor in Malaysian office buildings, *Proceedings of the International Conference on Electrical Energy and Industrial Electronic Systems (EEIES 2009)*, Parkroyal, Penang, Malaysia, 7-8 December 2009, pp 541-545.

13. **Hasanuzzaman M.,** Saidur, R. and Masjuki, H.H., Analysis of heat transfer of the refrigerator-freezer, *Proceedings of the 4th BSME-ASME International Conference on Thermal Engineering*, 27 – 29 December, 2008, Dhaka, Bangladesh, Technical Session-I (02:00 - 03:30 PM, 27th December 2008, Saturday), Heat Transfer-I, Paper-002. pp 36-41.

12. R. Saidur, **M. Hasanuzzaman**, M.A. Sattar and H.H. Masjuki, Investigation of refrigerator-freezer performance using LPG as alternative to R-134a, *Proceedings of the International Conference on Environment 2008 (ICENV 2008)*, Oral Presentations, Renewable Resource & Clean Technology, Parallel Session E-4, 15-17 December 2008, G-Hotel, Penang, Malaysia.

11. R. Saidur, M.M. Hasan, **M. Hasanuzzaman** and H.H. Masjuki, "Energy performance of windows for residential building in Malaysia" *Proceedings of the 2nd International Conference on Science & Technology (ICSTIE 2008)*, Part 1-Engineering, 12-13 December 2008, University Teknologi Mara, Pulau Pinang, Malaysia, [ISBN 978-983-42204-1-9] pp. 805-810.

10. Saidur, R. **Hasanuzzaman M.** and Masjuki H. H., Photovoltaic solar energy system to operate refrigerator, *Proceedings of the Seminar on Progress of Solar Energy Research & Development*, 2008, 21 & 22 October, Pusat Tenaga Malaysia, Bangi, Selangor, Malaysia, [ISBN 978-967-5048-31-9] pp. 131-136.

9. **Hasanuzzaman M**., Saidur, R. and Masjuki, H.H., Effects of variables on energy consumption of household refrigerator-freezer during the open door condition, *Proceedings of the International Conference of Mechanical and Manufacturing Engineering 2008 (ICME 2008)*, *Heat and Fluid Technology*, 21-23 May, Puteri Pacific Johor Bharu Hotel, Johor Bahru, Malaysia [ISBN: 97-98-2963-59-2], Paper No. HFT-ID-0132.

8. **Hasanuzzaman, M**., Saidur, R. and Masjuki, H.H., Effects of variables on moisture transfer of household refrigerator-freezer during open door condition, *Proceedings of the International Conference of Mechanical and Manufacturing Engineering 2008 (ICME 2008), Heat and Fluid Technology*, 21-23 May, Puteri Pacific Johor Bharu Hotel, Johor Bahru, Malaysia [ISBN: 97-98-2963-59-2], Paper No. HFT-ID-0178.

7. **M. Hasanuzzaman,** R. Saidur, H.H. Masjuki, M.M. Hasan, Environmental effect due to the energy consumption of refrigerator-freezer, *Proceedings of the 1st Engineering Conference on Energy & Environment (EnCon2007)*, 27-28 December, 2007, Kuching, Sarawak, Malaysia, pp 343-347.

6. Saidur. R, **Hasanuzzaman M.,** Masjuki H.H., Moisture transfer of household refrigerator-freezer during the closed door condition, *Proceedings of the Conference on Applications and Design in Mechanical Engineering (CADME07)*, Paper No. 24-82-24, Parallel Session 3-B (0830-1030), Brasmana Hall B, 25-26 October 2007, Putra Brasmana Hotel, Kuala Perlis, Malaysia [ISBN: 978-983-42358-3-3]

5. Saidur. R, **Hasanuzzaman M.** and Masjuki H.H, Energy consumption of household refrigerator-freezer during the closed-door condition, *Proceedings of the Conference on Applications and Design in Mechanical Engineering (CADME07)*, Paper No. 25-81-25, Parallel Session 3-B (0830-1030), Brasmana Hall B, 25-26 October 2007, Putra Brasmana Hotel, Kuala Perlis, Malaysia [ISBN: 978-983-42358-3-3]

4. Saidur. R, **Hasanuzzaman M**, Hasan. M.M. and Masjuki H.H, Energy usage and intensity of commercial building in Malaysia, *Proceedings of the Conference on Applications and Design in Mechanical Engineering (CADME07)*, Paper No. 23-82-23, Parallel Session 1-A (1400-1600), Brasmana Hall B, 25-26 October 2007, Putra Brasmana Hotel, Kuala Perlis, Malaysia [ISBN: 978-983-42358-3-3]

3. **Hasanuzzaman M.,** Saidur. R and Masjuki H.H, Heat transfer of household refrigerator-freezer during the closed door condition, *Malaysian Science and Technology Congress 2007 (MSTC07)*, 4-6 September 2007, Holiday Villa, Subang, Selangor Darul Ehsan, Malaysia, pp 46-53.

2. Saidur R, **Hasanuzzaman M**, Hasan. M.M. and Masjuki H.H., Overall thermal transfer value (OTTV) and electricity use of residential building in Malaysia, *Proceedings of the Mechanical and Aerospace Engineering Conference, World Engineering Congress 2007 (WEC07)*, 5-9 August 2007, Penang, Malaysia, [ISBN 978-983-43571-1-5] pp 27-35.

1. Mohammad Ali, **Md. Hasanuzzaman**, S.M.Yead Morshed Jewel and Mohammad Faridul Alam, An experiment on natural convection heat transfer through v-corrugated vertical walls, Proceedings of the *5th International Mechanical Engineering Conference & 10th Annual Paper Meet*, 30 Sept- 2 Oct 2005, Dhaka, Bangladesh, pp 235-240.