

ZAFAR SAID BE, Ph.D.

W9-112, University of Sharjah, Sharjah, UAE. Phone: (971) 55 821 7959; Office: (971) 06 505 3925 E-mail: <u>zaffar.ks@gmail.com; zsaid@sharjah.ac.ae</u> ResearcherID number: C-4086-2016, ORCID ID: 0000-0003-2376-9309

PERSONAL INFORMATION

Date of Birth: 26-02-1986

Nationality: Pakistani

Permeant Residency: Australian (Global Talent Visa (Subclass 858), PR); UAE (PERSONS WHO ARE

TALENTED, Golden Visa)

EDUCATION

 Ph.D. in Mechanical Engineering, Universiti Malaya, Malaysia (Ranked 70th in World University Rankings 2023) (2011–2014) (MOHE, UAE Equivalency: 70257)

<u>Ph.D. thesis</u>: Effect of thermophysical properties on the energy & exergy efficiencies of flat plate solar collector using metal oxides and SWCNTs based nanofluids

* B.E. in Mechanical Engineering (Hons.), Universiti Tenaga Nasional, Malaysia (06.2008–09.2011)

Bachelor thesis: (SPT), Parametric Study of mixed convection heat transfer in a lid-driven square cavity filled with nanofluids

* Diploma in AI for Engineering, University of Sharjah, (March 2021 - May 2021).

ACADEMIC PROFILES

Top 2% Scientist I Google Scholar I ResearchGate I ORCID I Publons I Scopus I Sci Profile I Web of Science I Linkedin I Research Group 1 I Research Center 1

RESEARCH INTEREST

Renewable Energy, Energy and Exergy Analysis, Solar Energy (Solar Collectors, Energy Efficiency, Efficiency Improvement), Heat Transfer (Heat Transfer, Cooling, and Heating), Nanofluids (Thermophysical properties, optical properties, Application of nanofluids), Nano enhanced PCM, Nanolubricants, Nanorefrigerants, Polygeneration, Energy Storage, Artificial Intelligence, Machine learning, and Optimization.

EMPLOYMENT

- Associate Professor, Sustainable and Renewable Energy Engineering (SREE) Department, University of Sharjah (18.01.2022- present)
- Adjunct Faculty, U.S.-Pakistan Center for Advanced Studies in Energy (USPCAS-E), National University of Sciences and Technology (NUST), Islamabad, Pakistan (04.2021 – present) (Ranked 334th QS World University Rankings 2023, Top 50 under 50 University Rankings)
- Visiting Fellow (Honorary Academic Appointment), School of Engineering, Design & Built Environment, Western Sydney University (WSU), Penrith NSW 2751, Australia (10.2022 – present) (Ranked #501-510 in QS World University Rankings 2023, Ranked 34th in the world in the Times Higher Education 2021 Young University Rankings)
- Assistant Professor, Sustainable and Renewable Energy Engineering (SREE) Department, University of Sharjah (01.09.2016 18.01.2022)
- Coordinator, Nanomaterial synthesis lab, Research Institute of Sciences and Engineering (RISE), University of Sharjah (09.2018 – present)

- Post-Doctoral Research Fellow, Engineering Systems and Management (ESM) Department, Masdar Institute (04.2014 – 08.2016)
- ✤ Project Lead, Line Scan Thermography, 09. 2015 09.2016. Strata, UAE.
- Project Lead, Optimizing the thermal heat signature of vehicles operating in the UAE, Tawazun & Nimr 04. 2014 08.2016. Tawazun & Nimr, UAE.
- Ph.D. Research Fellow, Universiti Malaya (02.2012–04.2014)
- Research Engineer, Universiti Malaya (11.2011–02.2012)
- Trainee Engineer (QC), Al Anwar Ceramics Tiles Company SAOG, Oman (04.2010–06.2010)
- Freelancer, SIMPA Marketing Research, Oman (12.2003–08.2010)
- Consultant, Incubix, Oman (12.2010–01.2013)
- Founder & CEO, MyFoxLab (freelance), UAE (09.2014–present)
- ✤ Founder, Royal Medical Complex, Swabi, Pakistan. (January 2021-present) <u>http://www.royalmed.com.pk/</u>

TEACHING EXPERIENCE

- Instructor, Engineering Management (2020 Spring)
- Instructor, Design for Energy Efficiency (2018 Fall, Spring 2019)
- * Instructor, Fluid Mechanics, University of Sharjah (2016 Fall)
- Instructor, Fluid Mechanics Lab, University of Sharjah (2016 Fall, 2017 Fall)
- * Instructor, Engineering Materials, University of Sharjah (2016 Fall-present)
- * Instructor, Heat Transfer Lab, University of Sharjah (2017 Spring, 2017 Summer)
- Science and Technology, University of Sharjah (2017 Fall-Present)
- * Instructor, Senior Design Project (SDP), University of Sharjah (2016 Fall)
- Teaching assistant, Microeconomics (FDN 451), Postgraduate level, Masdar Institute (2015 spring)
- In charge & Instructor, iSmart Lab, Masdar Institute (2014 2016)
- Instructor, Nanofluids Lab. Universiti Malaya (2012-2014)
- Demonstrator, Mechanical Lab, Universiti Malaya (SEM 1-2013/2014)
- Teaching Assistant, Statistics, Universiti Malaya, (2012-2013)
- Instructor, Advance Math, Kumon, Malaysia (2008-2009)

AWARDS

- Ranked 522 in the world and 3 in United Arab Emirates in our ranking, and awarded with 2022 Rising Star of Science Award by Research.com. <u>https://research.com/u/zafar-said</u>
- I am ranked #1 in Mechanical Engineering in University of Sharjah and in UAE as per AD Scientific Index - World Scientist Rankings - 2023. I am also ranked #1 in Engineering & Technology at University of Shajrah and #4 in UAE. (https://www.adscientificindex.com/scientist/zafarsaid/2040051)
- World's Top 2% Scientists 2021 (jointly by Elsevier BV and Stanford University) with a Global Rank #270 out of #229150 researchers (excluding self-citations) in the field of Energy <u>https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4</u>.
- ★ World's Top 2% Scientists 2020 (jointly by Elsevier BV and Stanford University) with a Global Rank #270 out of #229150 researchers (excluding self-citations) in the field of Energy <u>https://lnkd.in/gYanPs75</u> (Source: Table 1 Authors singleyr 2020 wopp extracted 202108).
- World's Top 2% Scientists 2019 (by Stanford University) with a Global Rank #1578 out of #186014 researchers (excluding self-citations) in the field of Energy. <u>https://lnkd.in/gPbqAPi</u> (Table s7 and Table s9)
- ✤ Faculty Annual Incentive Research Award for University and Community Service (2020-2021) (10000 AED).
- Annual Faculty Incentive Award for Distinguished Researchers (2018-2019) (15000 AED)
- Sharjah Islamic Bank Award for Distinguished Researchers (2017-2018) (6000 AED)
- Ph.D. Fellowship (2500 RM monthly scholarship for full Ph.D. study plus tuition fee), Higher Impact Research (HIR), Universiti Malaya (2011-2014)

Included in Who's Who in the World 2016-33rd Edition, (2016)

- Fast track leading to Ph.D., Universiti Malaya (2011-2012)
- Best Final Year Project, Universiti Tenaga Nasional (2010-2011)
- Dean List, Universiti Tenaga Nasional (2008-2011)

ACADEMIC DUTIES

- Coordinator for "Introduction to Sustainability" as a university elective course (2022-present)
- ***** Accreditation Committee Chair for ABET and CAA for the department (2021-present)
- ***** Accreditation Committee member for ABET and CAA for College (2021-present)
- Judge for "2nd International Forum on Sustainable Development and Sustainable Innovations", 2022.
 University of Sharjah.
- Drug Delivery Research Group (Associate Member, October 2019-present)
- Center for Advanced Materials Research (Member, October 2017- present)
- SREE Club supervisor (Academic Year 2019/2020)
- * Representative of SREE in College Council (Academic Year 2019/2020)
- Coordinator of Functional Nanomaterials Synthesis Lab (September 2018-present)
- * Member of Ph.D. Program and Accreditation committee (SREE Program)
- ✤ ABET accreditation (SREE Program)
- * MOHSER Accreditation Committee (To prepare self-study report for MOHSER)
- Course Coordinator (Fluid Mechanics, Fluid Mechanics Lab, Engineering Materials, Heat Transfer Lab, Intro. to Renewable Energy Engineering, September 2017-present)
- Sustainable Energy Development Research Group (Member, August 2016-present)
- * Functional Materials Research Group (Member, October 2017-present)
- ◆ UAE Innovation Month (Representative for SREE Department, August 2017-present)
- Lab Engineering Hiring Committee (Member)
- Research Seminar (SREE department, UoS, 17th April 2016)
- * 6th Annual Sharjah Award for Sustainability (Member)
- ◆ Judging committee (SREE Club, Renewable Challenge, May 2017)

Community Service

- World Society of Sustainable Energy Technologies (WSSET) (Membership Number: 2721) Since June, 2022-present.
- Member, Climate Change & Food & Water Security at the UAE climate Change Research Network for the Ministry of Climate Change and Environment, UAE. (2022-present)
- Member, Climate Change & Infrastructure at the UAE climate Change Research Network for the Ministry of Climate Change and Environment, UAE. (2022-present)
- Mentor as Global Talent Mentoring by World Giftedness Center. Global Talent Mentoring is an online mentoring program for developing talents in science, technology, engineering, mathematics, and medical sciences (STEMM). (2020-present)
- An assessor for the Australian Research Council (ARC), (26th July 2021-present).
- Reviewer for European Research Council (ERC) (ERC Starting Grant 2019 Call)
 <u>Funded Projects</u>

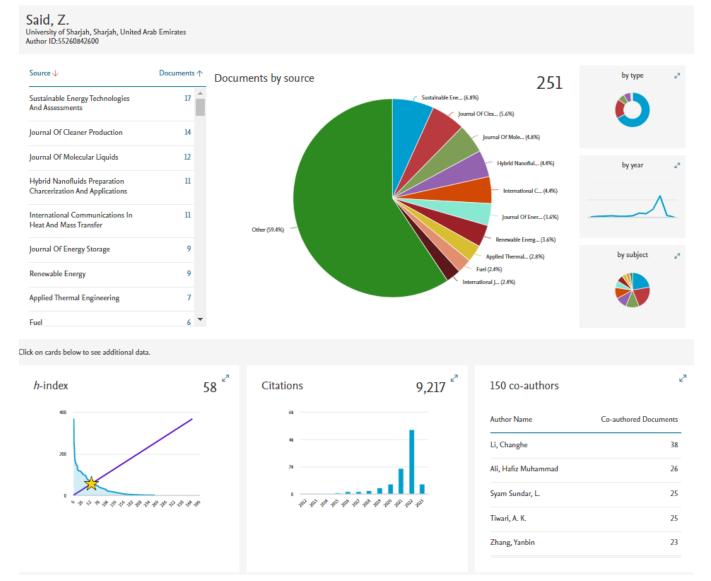
- 1. Network Member. SUNWAY UNIVERSITY INTERNATIONAL RESEARCH NETWORKS GRANT SCHEME 2.0 (IRNGS 2.0) 2022. Grant (71,500 RM)
- 2. PI. High power conversion efficiency in ferroelectric hot carrier solar cells via plasmonic assisted carrier injection. (4-2022-ongoing) Grant (200,000 AED)
- 3. **PI.** Nanorefrigerants and nanolubricants for district cooling. Collaborative **external project** with Tabreed. (2021-ongoing) Phase 1, Grant **(63,000 AED)**
- 4. PI. Performance enhancement of Parabolic Trough Solar Collector with different inserts, designs and nanofluids. (2021-ongoing) Grant (196,000 AED)
- 5. PI. Performance enhancement of evacuated tube solar collector using different nanomaterials-based fluid. (2018-ongoing) Grant (80,000 AED)
- 6. Co-PI. Numerical and experimental investigations of Dust effect on Solar systems under United Arab Emirates Weather Conditions and Dust Mitigation Methods. (2020-ongoing) Grant (80,000 AED)
- 7. Co-PI. Numerical and experimental study of an innovative solar absorber parabolic trough collectors' case. (2018-ongoing) Grant (165,000 AED)
- 8. PI. Stability and thermophysical properties of Hybrid nanofluids for heat transfer enhancement and energy efficiency. (2017-2019) Grant (40,000 AED) Complete.
- 9. Co-PI. Energy Efficiency enhancement of PV/T using nanofluids. (2017-2020) Grant (97,600 AED). Complete.
- 10. Faculty member and advisor. Solar Decathlon Middle East 2018 Dubai. (2016-2018). Complete
- 11. Thermography Inspection for Composite Parts. Collaborative research between Masdar Institute, Mubadala and Strata Manufacturing, U.A.E. Grant USD \$ 220 K On going. (2017-2019). Complete.
- 12. "Optimizing the thermal heat signature of vehicles operating in the UAE". From May 2014- to September 2015. Complete.
- 13. "Thermography Inspection for Composite Parts". From September 2015- Current.
- 14. "NDT&E of Composites C/GFRP, Manufacturing and Usage related defects", Collaborative research between Masdar Institute, Mubadala and Strata Manufacturing, U.A.E. (2014-2015). Complete.
- 15. Solar Energy Group Leader "Nano-fluids in Enhancing the performances of Heat Exchangers", University Malaya, Fund (HIR), Solar group Leader under supervision of Prof. Dr. Saidur Rahman. (2012-2015). Complete.
- 16. "Investigation on fundamental optical properties of nanofluids", University Malaya funded by Ministry of Higher Education, Malaysia. (2011-2012) **Complete.**

Guest Editor Special Issues

- (2022). Sustainable and Renewable Energy: Biodiesel Production. Sustainability. <u>https://www.mdpi.com/si/136563</u>. Impact Factor: 3.889 (2021); 5-Year Impact Factor: 4.089.
- (2022). Special Issue in International Journal of Advanced Manufacturing Technology (IJAMT, Q2, IF 3.563) on "Enhanced manufacture technology for reducing carbon emissions in cutting and grinding".
- (2022). Special Issue in Energies on "Optimization Strategies and Cost-Effective Technology Options for Low-Emission Internal Combustion Engines". (MDPI, Impact Factor: 2.702 (2019); 5-Year Impact Factor: 3.252 (2020)). <u>https://www.mdpi.com/si/117754</u>
- (2022). Special Issue, The sustainable/green machining/forming technologies. Frontiers of Mechanical Engineering. (Springer, IF 4.528, Q1).
- (2022). Special Issue, Hybrid Nanofluids for Heat Transfer and Energy Applications. Journal of Nanomaterials (MDPI, IF: 2.986)
- (2022). Special Issue, Experimental, modeling and life cycle assessment of sustainable energy systems.
 Sustainable Energy Technologies and Assessments (Elsevier, IF: 5.353)
- (2021-2022). Lead Guest Editor Special Issue, The challenge-led special issue series: Enhancement of heat transfer processes and energy applications with nanofluids, turbulators, and novel working fluids.
 Applied Thermal Engineering (Elsevier, IF: 5.295)
- (2021-2022). Guest Editor Special Issue in Energies on "Advances in Nanofluids and Turbulators for Heat Transfer Enhancement". (MDPI, Impact Factor: 2.702 (2019); 5-Year Impact Factor: 3.252 (2020))

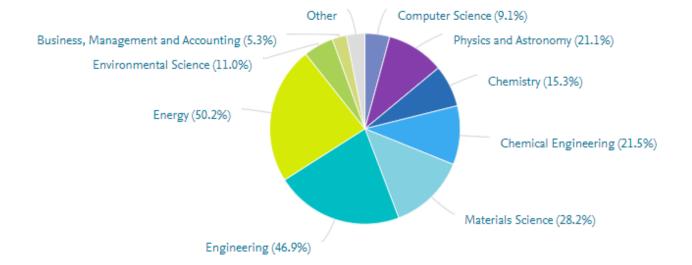
- (2021) Special Issue, AHP, Fuzzy AHP and their Applications on Energy, Environment and Sustainability. Frontiers in Sustainability. https://www.frontiersin.org/research-topics/17558/ahpfuzzy-ahp-and-their-applications-on-energy-environment-and-sustainability
- (2021) Special Issue, New Enhancement Techniques for Solar Thermal Collectors. Frontiers in Energy Research. (Frontiers, IF:4.008). New Enhancement Techniques for Solar Thermal Collectors | Frontiers Research Topic (frontiersin.org)
- (2020-2021). Special Issue, Renewable Energy Sources in trigeneration and polygeneration systems.
 Sustainable Energy Technologies and Assessments (Elsevier, IF: 5.353)
- * (2020) Special Issue, Solid Oxide Fuel Cells: From Fundamentals to Applications, (Muhammad AR, Z. Said, Yanjie R.). Frontiers in Energy Research. (Frontiers, IF:4.008).
- (2020) Special Issue, Design of Carbon-Based Nanohybrids for Secondary Energy Device-Based Technology. Frontiers in Chemistry (IF 5.221), and Frontiers in Energy Research. (Frontiers, IF:4.008).
- * (2020) Special Issue on "Thermal Management and Efficiency Enhancement of Solar Systems" in International Journal of Photoenergy (Impact Factor 1.88)

AUTHOR OUTPUT (as Per SCOPUS)



Publication share by Subject Area

ZAFAR SAID



Top Papers: 42, Hot Papers: 41, and Highly Cited Papers: 18, as Per Web of Science

Raw	2012-2016	2013-2017	2014-2018	2015-2019	2016-2020	2017-2021	2018-2022
Total Papers	24	29	34	51	71	121	185
Total Citations	242	317	391	587	1,462	3,276	5,610
Total Citations per Paper	10.08	10.93	11.50	11.51	20.59	27.07	30.32
Top Papers	1	1	1	1	3	20	42
Citations to Top	197	264	264	264	1,381	2,826	3,323
Citations per Top	197.00	264.00	264.00	264.00	460.33	141.30	79.12
Raw	2012-2016	2013-2017	2014-2018	2015-2019	2016-2020	2017-2021	2018-2022
Raw Total Papers	2012-2016 24	2013-2017 29	2014-2018 34	2015-2019 51	2016-2020 71	2017-2021 121	2018-2022 185
Total Papers	24	29	34	51	71	121	185
Total Papers Total Citations Total Citations	24 242 10.08	29 317	34 391	51 587	71 1,462	121 3,276	185 5,610
Total Papers Total Citations Total Citations per Paper	24 242 10.08	29 317 10.93	34 391 11.50	51 587 11.51	71 1,462 20.59	121 3,276 27.07	185 5,610 30.32

Curriculum Vitae ZAFA								
Raw	2012-2016	2013-2017	2014-2018	2015-2019	2016-2020	2017-2021	2018-2022	
Total Papers	24	29	34	51	71	121	185	
Total Citations	242	317	391	587	1,462	3,276	5,610	
Total Citations per Paper	10.08	10.93	11.50	11.51	20.59	27.07	30.32	
Hot Papers	0	0	0	0	0	5	18	
Citations to Hot	0	0	0	0	0	404	919	
Citations per Hot	0.00	0.00	0.00	0.00	0.00	80.80	51.06	

PUBLICATIONS (Total Citations >10,691)

(h-index: 60 as per Google Scholar, h-index: 58 as per Scopus)

Refereed Journal Publications

Total Impact >1300+:

- Zafar Said et al. "Recent advances on the fundamental physical phenomena behind stability, dynamic motion, thermophysical properties, heat transport, applications, and challenges of nanofluids." Physics Reports. Volume 946, 2 February 2022, Pages 1-94. https://doi.org/10.1016/j.physrep.2021.07.002 (IF: 30.150).
- Thakur, Amrit Kumar, Mohammad Shamsuddin Ahmed, Hyokyeong Kang, Rajendran Prabakaran, Zafar Said, Saidur Rahman, Ravishankar Sathyamurthy, Jaekook Kim, and Jang-Yeon Hwang. "Critical Review on Internal and External Battery Thermal Management Systems for Fast Charging Applications." *Advanced Energy Materials* (2022): 2202944. (IF: 29.698).
- 1. Said, Zafar, Prabhakar Sharma, Rajvikram M. Elavarasan, Arun Kumar Tiwari, and Manish K. Rathod. "Exploring the specific heat capacity of water-based hybrid nanofluids for solar energy applications: A comparative evaluation of modern ensemble machine learning techniques." Journal of Energy Storage 54 (2022): 105230. (IF: 8.907).
- 2. Said, Zafar, Prabhakar Sharma, L. Syam Sundar, and Viet Dung Tran. "Using Bayesian optimization and ensemble boosted regression trees for optimizing thermal performance of solar flat plate collector under thermosyphon condition employing MWCNT-Fe3O4/water hybrid nanofluids." Sustainable Energy Technologies and Assessments 53 (2022): 102708. (IF: 7.632).
- 3. Tiwari, Arun Kumar, **Zafar Said**, Naimish S. Pandya, and Harshang Shah. "Effect of plate spacing and inclination angle over the thermal performance of plate heat exchanger working with novel stabilized polar solvent-based silicon carbide nanofluid." *Journal of Energy Storage* 60 (2023): 106615. (IF: 8.907).
- 4. Allouhi, Amine, Shafiqur Rehman, Mahmut Sami Buker, and Zafar Said. "Recent technical approaches for improving energy efficiency and sustainability of PV and PV-T systems: A comprehensive review." *Sustainable Energy Technologies and Assessments* 56 (2023): 103026. (IF: 7.632).
- 5. Hoang, Anh Tuan, Ashok Pandey, Wei-Hsin Chen, Shams Forruque Ahmed, Sandro Nižetić, Kim Hoong Ng, Zafar Said et al. "Hydrogen Production by Water Splitting with Support of Metal and Carbon-Based Photocatalysts." *ACS Sustainable Chemistry & Engineering* (2023). (IF: 9.224).
- 6. Sundar, S. Padmanaba, P. Vijayabalan, Ravishankar Sathyamurthy, **Zafar Said**, and Amrit Kumar Thakur. "Experimental and feasibility study on nano blended waste plastic oil based diesel engine at various injection pressure: A value addition for disposed plastic food containers." Fuel Processing Technology 242 (2023): 107627. (IF: 8.129).
- 7. Angappan, Ganesh, Selvakumar Pandiaraj, Ali Jawad Alruabie, Suresh Muthusamy, Zafar Said, Hitesh Panchal, Vikrant P. Katekar, Shahin Shoeibi, and A. E. Kabeel. "Investigation on solar still with integration of solar cooker to enhance productivity: Experimental, exergy, and economic analysis." Journal of Water Process Engineering 51 (2023): 103470. (IF: 7.34).
- Wang, X., Song, Y., Li, C., Zhang, Y., Ali, H. M., Sharma, S., ... & Zhou, Z. (2023). Nanofluids application in machining: a comprehensive review. The International Journal of Advanced Manufacturing Technology, 1-52. (IF: 3.226).

- Liu, M., Li, C., Zhang, Y., Yang, M., Gao, T., Cui, X., Wang, X., Li, H., Said, Z., Li, R. and Sharma, S., 2022. Analysis of grain tribology and improved grinding temperature model based on discrete heat source. Tribology International, p.108196. (IF: 4.872).
- 10. Sun, Wenjie, Qingyi Liu, Jiateng Zhao, Hafiz Muhammad Ali, Zafar Said, and Changhui Liu. "Experimental study on sodium acetate trihydrate/glycerol deep eutectic solvent nanofluids for thermal energy storage." Journal of Molecular Liquids (2022): 121164. (IF: 6.633).
- 11. Mouli, Kotturu VV Chnadra, L. Syam Sundar, A. M. Alklaibi, **Zafar Said**, K. V. Sharma, V. Punnaiah, and Antonio CM Sousa. "Exergy efficiency and entropy analysis of MWCNT/Water nanofluid in a thermosyphon flat plate collector." Sustainable Energy Technologies and Assessments 55 (2023): 102911. (IF: 7.632).
- Cui, X., Li, C., Zhang, Y., Ding, W., An, Q., Liu, B., Li, H.N., Said, Z., Sharma, S., Li, R. and Debnath, S., 2023. Comparative assessment of force, temperature, and wheel wear in sustainable grinding aerospace alloy using biolubricant. Frontiers of Mechanical Engineering, 18(1), pp.1-33. (IF: 4.528).
- Marulasiddeshi, Hallera Basavarajappa, Praveen Kumar Kanti, Mehdi Jamei, Sajjal Basanna Prakash, Somalapura Nagappa Sridhara, and (IF: 4.528).. "Experimental study on the thermal properties of Al2O3-CuO/water hybrid nanofluids: Development of an artificial intelligence model." International Journal of Energy Research (2022). (IF: 5.164).
- 14. Khademi, Alireza, Kyle Shank, Seyed Ali Abtahi Mehrjardi, Saeed Tiari, Giancarlo Sorrentino, Zafar Said, Ali J. Chamkha, and Svetlana Ushak. "A brief review on different hybrid methods of enhancement within latent heat storage systems." Journal of Energy Storage 54 (2022): 105362. (IF: 8.907).
- Rao, V. Tirupati, Y. Raja Sekhar, A. K. Pandey, Zafar Said, DM Reddy Prasad, M. S. Hossain, and Jeyraj Selvaraj. "Thermal analysis of hybrid photovoltaic-thermal water collector modified with latent heat thermal energy storage and two side serpentine absorber design." *Journal of Energy Storage* 56 (2022): 105968. (IF: 8.907).
- Abo-Zahhad, Essam M., Ahmed Amine Hachicha, Zafar Said, Chaouki Ghenai, and Shinichi Ookawara. "Thermal management system for high, dense, and compact power electronics." Energy Conversion and Management 268 (2022): 115975. (IF: 11.553).
- 17. Farooq, Sajid, Diego Rativa, **Zafar Said**, and Renato E. de Araujo. "High performance blended nanofluid based on gold nanorods chain for harvesting solar radiation." Applied Thermal Engineering (2022): 119212. (IF: 6.465).
- Kanti, Praveen Kumar, K. V. Sharma, Anil Rao HN, Masoud Karbasi, and Zafar Said. "Experimental investigation of synthesized Al2O3 Ionanofluid's energy storage properties: Model-prediction using gene expression programming." Journal of Energy Storage 55 (2022): 105718. (IF: 8.907).
- 19. Jafaryar, M., Zafar Said, and M. Sheikholeslami. "Hybrid nanofluid turbulent transportation through a tube with an innovative twisted tape combined with helical fins heat sink." Sustainable Energy Technologies and Assessments 53 (2022): 102702. (IF: 7.632).
- Xu, W., LI, C., Zhang, Y., Ali, H.M., Sharma, S., Li, R., Yang, M., Gao, T., Liu, M., Wang, X. and Said, Z., 2022. Electrostatic atomization minimum quantity lubrication machining: from mechanism to application. International Journal of Extreme Manufacturing. (IF: 10.04)
- 21. Said, Zafar, Prabhakar Sharma, L. Syam Sundar, Changhe Li, Duy Cuong Tran, Nguyen Dang Khoa Pham, and Xuan Phuong Nguyen. "Improving the thermal efficiency of a solar flat plate collector using MWCNT-Fe3O4/water hybrid nanofluids and ensemble machine learning." Case Studies in Thermal Engineering (2022): 102448. (IF: 6.268)
- 22. Kumar, Krishan, Rajan Kumar, Rabinder Singh Bharj, and **Zafar Said**. "Effect of arc corrugation initiation on the thermo-hydraulic performance and entropy generation of the corrugated tube." International Communications in Heat and Mass Transfer 138 (2022): 106335. (IF: 6.782).
- Liu, M., Li, C., Zhang, Y., Yang, M., Gao, T., Cui, X., Wang, X., Xu, W., Zhou, Z., Liu, B. and Said, Z., 2022. Analysis of grinding mechanics and improved grinding force model based on randomized grain geometric characteristics. Chinese Journal of Aeronautics. (IF: 4.061).
- Pandey, A. K., B. Kalidasan, R. Reji Kumar, Saidur Rahman, V. V. Tyagi, Zafar Said, P. Abdul Salam et al. "Solar Energy Utilization Techniques, Policies, Potentials, Progresses, Challenges and Recommendations in ASEAN Countries." Sustainability 14, no. 18 (2022): 11193. (IF: 3.251).
- 25. Hoang, A.T., Goldfarb, J.L., Foley, A.M., Lichtfouse, E., Kumar, M., Xiao, L., Ahmed, S.F., **Said, Z.**, Luque, R., Bui, V.G. and Nguyen, X.P., 2022. Production of biochar from crop residues and its application for anaerobic digestion. Bioresource Technology, p.127970. (IF: 11.88).
- 26. Le, Huu Son, Wei-Hsin Chen, Shams Forruque Ahmed, **Zafar Said**, Nazifa Rafa, Anh Tuan Le, Ümit Ağbulut et al. "Hydrothermal carbonization of food waste as sustainable energy conversion path." Bioresource Technology (2022): 127958. (IF: 11.88).

- 27. Abderrahmane, Aissa, Naef AA Qasem, Abed Mourad, Mohammad Al-Khaleel, Zafar Said, Kamel Guedri, Obai Younis, and Riadh Marzouki. "Enhancing the Melting Process of Shell-and-Tube PCM Thermal Energy Storage Unit Using Modified Tube Design." Nanomaterials 12, no. 17 (2022): 3078. (IF: 5.346).
- Anand, R. S., C. P. Jawahar, A. Brusly Solomon, Shibin David, Evangelos Bellos, and Zafar Said. "Experimental investigations on modified thermosyphons using R134a/Al2O3 and comparative machine learning analysis." Applied Thermal Engineering 212 (2022): 118554. (IF: 6.465).
- 29. Sofiah, A. G. N., M. Samykano, S. Shahabuddin, A. K. Pandey, K. Kadirgama, Zafar Said, and K. Sudhakar. "Copper (II) Oxide Nanoparticles as Additives in RBD Palm Olein: Experimental Analysis and Mathematical Modelling." Journal of Molecular Liquids (2022): 119892. (IF: 6.633).
- 30. Leang, Teh Jia, Rashmi Walvekar, Thachnatharen Nagarajan, **Zafar Said**, Mohammad Khalid, and Nabisab Mujawar Mubarak. "A Review on the Properties and Tribological Performance of Recent Non-Aqueous Miscible Lubricants." Journal of Molecular Liquids (2022): 120274. (IF: 6.633).
- Liu, Changhui, Wenjie Sun, Yixuan Huo, Jiateng Zhao, and Zafar Said. "Thermophysical study of glycerol/choline chloride deep eutectic solvent based nanofluids." Journal of Molecular Liquids (2022): 119862. (IF: 6.633).
- 32. Khademi, Alireza, Seyed Ali Abtahi Mehrjardi, Zafar Said, and Ali J. Chamkha. "Heat Transfer Improvement in a Thermal Energy Storage System using Auxiliary Fluid Instead of Nano-PCM in an Inclined Enclosure: A Comparative Study." Journal of Applied and Computational Mechanics (2022). (IF: 5.237).
- 33. Mehta, Bhavin, Dattatraya Subhedar, Hitesh Panchal, and **Zafar Said**. "Synthesis, stability, thermophysical properties and heat transfer applications of nanofluid–a review." Journal of Molecular Liquids (2022): 120034. (IF: 6.633).
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Under Review/Preparation

- 1. ADVANCES IN THERMAL ENERGY STORAGE: FUNDAMENTALS AND APPLICATIONS. (Progress in Energy and Combustion Science, IF: 35.34, Revision)
- Energy Storage System Policies: An Integrated Survey of Global Trends, Net-Zero Emission Targets, COVID-19 Impact, Climatic Effects, and Recommendations. (Energy & Environmental Science, Impact factor: 39.714. Under Review)

Refereed International Conferences

- 1. Zafar Said, Maham Sohail, Fahad Hassan. The effect of surfactant on stability and thermophysical properties of aluminium doped zinc oxide-based hybrid nanofluid. ASTFE TFEC2022 May 16-18th, 2022, UNLV Las Vegas, NV, USA.
- D. -T. Vo, D. -N. Nguyen, M. -T. Sai, Z. Said, X. -P. Nguyen and D. -T. Nguyen, "A study of microstructure and properties of Cu-Ni-Sn alloy when deformation and aging," 2022 Advances in Science and Engineering Technology International Conferences (ASET), 2022, pp. 1-6, doi: 10.1109/ASET53988.2022.9734930.
- D. T. Vo, D. -N. Nguyen, T. -D. Nguyen, X. -P. Nguyen, Z. Said and D. -T. Nguyen, "Influence of diffusion mode on microstructure and mechanical properties of carbonitriding layer," 2022 Advances in Science and Engineering Technology International Conferences (ASET), 2022, pp. 1-7, doi: 10.1109/ASET53988.2022.9734917.
- M. N. AlMallahi, A. Mohamed Faroukh, H. H. Alketbi, A. Inayat, L. Rocha-Meneses and Z. Said, "Fast Pyrolysis Process for Bio-oil Production from Coffee Waste in the UAE," 2022 Advances in Science and Engineering Technology International Conferences (ASET), 2022, pp. 1-4, doi: 10.1109/ASET53988.2022.9734835.
- I. A. Laghari, M. Samykano, A. K. Pandey, Z. Said, K. Kadirgma and V. V. Tyagi, "Thermal conductivity and Thermal properties enhancement of Paraffin/ Titanium Oxide based Nano enhanced Phase change materials for Energy storage," 2022 Advances in Science and Engineering Technology International Conferences (ASET), 2022, pp. 1-5, doi: 10.1109/ASET53988.2022.9735037.
- R. R. Kumar, M. Samykano, A. K. Pandey, Z. Said, K. Kadirgama and V. V. Tyagi, "Experimental Investigations on Thermal Properties of Copper (II) Oxide Nanoparticles Enhanced Inorganic Phase Change Materials for Solar Thermal Energy Storage Applications," 2022 Advances in Science and Engineering Technology International Conferences (ASET), 2022, pp. 1-6, doi: 10.1109/ASET53988.2022.9734898.
- 7. Zafar Said *, Maham Sohail. Impact of sonication time on stability and thermophysical properties of f-MWCNTs nanofluids. 7th Nano Today Conference. 15 -18 November 2021 | Guangzhou, China.
- 8. Zafar Said *, Maham Sohail. The effect of surfactant on stability and thermophysical properties of aluminium doped zinc oxide-based hybrid nanofluid. 7th Thermal and Fluids Engineering Conference (TFEC2022). Las Vegas, USA.

- Zafar Said, Shek Rahman, Salah Issa. Performance Evaluation of an Evacuated Tube Solar Collector Using Al2O3 Based Nanofluids. Z22nd Conference on Process Integration for Energy Saving and Pollution Reduction - PRES'19, 20–23 October, Agios Nikolaos, Crete, Greece
- 10. Shek Rahman, Salah Issa, Zafar Said, Yazan Barani and Rashed Zadeh. Performance enhancement of a solar-powered air conditioning system using passive techniques and SWCNT /R-407c nano refrigerant. 6th International Conference on Power and Energy Systems Engineering (CPESE 2019). September 20-23, 2019 | Okinawa, Japan
- 11. Mamdouh El Haj Assad; **Zafar Said**; Ali Khosravi; Tareq Salameh; Mona Albawab. Parametric study of geothermal parallel flow double-effect water-LiBr absorption chiller. 2019 Advances in Science and Engineering Technology International Conferences (ASET). DOI: 10.1109/ICASET.2019.8714434
- 12. Shekh Rahman, **Zafar Said**, Salah Issa. Performance enhancement and Life Cycle analysis of a novel HVAC system using underground water and energy recovery technique assisted by solar energy. International Conference on Innovative Applied Energy (IAPE'19), Venue: Oxford city, United Kingdom.
- Abrar Inayat, Mohsin Raza, Chaouki Ghenai, Zafar Said, Sari Samman, Ali Al Mansori and Ahmed Lazkani. Simulation of Anaerobic Co-Digestion Process for the Biogas Production using ASPEN PLUS. 2019 Advances in Science and Engineering Technology International Conferences (ASET) 26th - 28th March 2019. Higher Colleges of Technology, Dubai- UAE. DOI: 10.1109/ICASET.2019.8714403
- Mamdouh El Haj Assad; Ali Khosravi; Zafar Said; Mona Albawab; Tareq Salameh. Thermodynamic analysis of geothermal series flow double-effect water/LiBr absorption chiller. 2019 Advances in Science and Engineering Technology International Conferences (ASET) 26th - 28th March 2019. Higher Colleges of Technology, Dubai- UAE. DOI: 10.1109/ICASET.2019.8714468
- Z. Said, Hanin Zeyad, Tasnim Eisa and Mamdouh Assad. Nano-enhanced PCM for energy storage. 2019 Advances in Science and Engineering Technology International Conferences (ASET) 26th - 28th March 2019. Higher Colleges of Technology, Dubai- UAE. DOI: 10.1109/ICASET.2019.8714218
- 16. Zafar Said, Duha Alazaizeh. Performance enhancement of an automotive radiator using metal oxide based nanofluids. 11th International Conference on Computational Heat, Mass and Momentum Transfer (ICCHMT2018). 28-30 October 2018, in Sousse, Tunisia.
- 17. Hasim Altan, Zahraa Al Shikh, Vittorino Belpoliti, Young Ki Kim, **Zafar Said**, and Monadhel Alchadirchy. The Impact of Cool Roof on the Solar PV Applications on Building Rooftops. SET 2018 will be hosted by the Hubei University of Technology, in collaboration with the World Society of Sustainable Energy Technologies (WSSET), 2018.
- Allagui A., Said Z., Abdelkareem M. A., Elwakil A.S., Yang M. Alawadhi H, DC Energy Storage and AC Line Filtering of Graphene Micro-Sheets Prepared with Plasma Micro-discharges. International Conference on Advances in Functional Materials (AFM) in the University of California, Los Angeles, USA, Aug 14– 17, 2017.
- 19. Aamir Mehmood, **Zafar Said**. Theoretical Energy Conserved Heating Cooling Load Calculations for an Academic Hall. ICAF 2-4th December 2016. Turkey.
- 20. Mehmood, A., **Said, Z.**, Waqas, A., & Arshad, W. Techno-economic Performance Assessment of Centralgrid Wind Turbines at Major Geographical Locations of Pakistan. IV. European Conference on Renewable Energy Systems (ECRES), 2016.
- Said, Z., Alim, M. A., & Janajreh, I. (2015). Exergy efficiency analysis of a flat plate solar collector using graphene-based nanofluid. In *IOP conference series: materials science and engineering* (Vol. 92, No. 1, p. 012015). IOP Publishing.
- 22. **Said, Z**., A. Kamyar, and R. Saidur. Experimental investigation on the stability and density of TiO₂, Al₂O₃, SiO₂, and TiSiO₄. In IOP Conference Series: Earth and Environmental Science. 2013: IOP Publishing.
- 23. Said Z, Sajid M, Alim M, Saidur R, Rahim N.A. Efficiency Analysis of A Flat Plate Solar Collector Using Water-Based Titanium Oxide (TiO₂) Nanofluid. ICHT, 2-3rd Dec'13, Muscat, Oman.
- 24. Z. Said, M. A. Alim, R. Saidur, N.A. Rahim. Thermophysical properties and exergy analysis of Al2O3 nanofluid and its effect on A Flat Plate Solar Collector. UM RESEARCHERS' CONFERENCE 2013: HIR PROJECTS 19 & 20 November 2013.
- 25. M.H. Sajid, **Z. Said**, R. Saidur, MFM Sabri, Applicability of alumina nanofluid for DASC, ICE- SEAM (2013), 30-31st Oct'13, Melaka, Malaysia.
- Z. Said, M.H. Sajid, M. A. Alim, R. Saidur, M.H.U. Bhuiyan. Viscosity Data of Al2O3/Water and Al2O3/ (Eg/Water) Mixture Nanofluids and the Hysteresis Phenomenon. International Conference on the Science and Engineering of Materials 2013 (ICoSEM2013).

Patent

1. FUEL LEVEL MEASURING DEVICE. 1.Dr. Hitesh Panchal 2. Mr. Sahaj Navinbhai, Patel 3.Mr. Neel Shrimali 4.Mr. Raval Dev Mehulbhai 5.Mr. Gunvant Amthabhai Patel 6. Dr. Zafar Said. Intellectual

property of India patent designs. 08/09/2022. Design No.: 370562-001

- 2. Said, Zafar, and Ahmed Amine Hachicha. "Solar Photovoltaic Panel Fog/Mist Cooling System." U.S. Patent Application No. 16/725,552. FIRST Engineering Patent at UoS. Said, Zafar, and Ahmed Amine Hachicha. "Solar Photovoltaic Panel Fog/Mist Cooling System." U.S. Patent Application 16/725,552 filed June 24, 2021.
- 3. FIXTURE FOR AUTOMATIC ASSEMBLY, OVERTURNING AND WELDING OF SIDEWALL ALUMINUM PROFILES OF RAIL VEHICLE. U.S. Patent Application 17/829,602. Filling Date:06/01/2022.
- 4. EQUIPMENT FOR SELF-POSITIONING HANDLING OF ALUMINUM PROFILES FOR RAIL VEHICLE. U.S. Patent Application 17/829,659. Filling Date:06/01/2022.
- 5. FULL-AUTOMATIC WHEEL HUB THREE-DIMENSIONAL SCANNING SYSTEM FOR INTELLIGENT PRODUCTION LINES OF AUTOMOTIVE WHEEL HUB. U.S. Patent Application 17/829,666. Filling Date:06/01/2022.
- 6. Docket 32989.18 (UOS-018/2019) (Inventors: Dr. Zafar Said & Dr. Yarjan Abdul Samad). Biomass-Extracted Carbon Foam-Based Heat Pipe Wick.
- 7. Zafar Said, Ahmed Hachicha. Combination of a wavy tube (heat pipe) with turbulators and nanofluids for heat transfer enhancement. (Submitted, 2019)
- 8. Ahmed Hachicha Zafar Said. Performance enhancement of solar thermal collector using wavy tube and inserts with transparent insulation materials. (Submitted 2020)

Book/Book chapters

- 1. Nanorefrigerants and Nanolubricants: Fundamentals and Applications. Edited by Zafar Said and Arun Kumar Tiwari. 2023. Springer.
- 2. Bhanvase, Barai, Zyła, Said: TOWARDS NANOFLUIDS FOR LARGE-SCALE INDUSTRIAL APPLICATIONS, Elsevier. Publication date: July 1, 2023
- 3. **Zafar Said.** HYBRID NANOFLUIDS: Preparation, Characterization and Applications. ISBN: 978-0-323-85836-6. Elsevier. 2021. <u>https://doi.org/10.1016/C2020-0-02159-6</u>. <u>https://www.sciencedirect.com/book/9780323858366/hybrid-nanofluids</u>
- 4. Tiwari, Arun Kumar, Amit Kumar, and **Zafar Said**. "Synthesis, characterization, and measurement techniques for the thermophysical properties of nanofluids." In Advances in Nanofluid Heat Transfer, pp. 59-93. Elsevier, 2022.
- 5. Said, Zafar, Maham Sohail, and Arun Kumar Tiwari. "Recent advances in machine learning research for nanofluid heat transfer in renewable energy." Advances in Nanofluid Heat Transfer (2022): 203-228.
- 6. **Said, Zafar**, and Maham Aslam Sohail. "Introduction to hybrid nanofluids." In Hybrid Nanofluids, pp. 1-32. Elsevier, 2022.
- 7. Sheikholeslami, M., Elham Abohamzeh, Z. Ebrahimpour, and **Zafar Said**. "Brief overview of the applications of hybrid nanofluids." In Hybrid Nanofluids, pp. 171-202. Elsevier, 2022.
- 8. Arora, Neeti, Munish Gupta, and **Zafar Said**. "Preparation and stability of hybrid nanofluids." In Hybrid Nanofluids, pp. 33-64. Elsevier, 2022.
- 9. Ramana, E. Venkata, L. Syam Sundar, **Zafar Said**, and Antonio CM Sousa. "Thermophysical, electrical, magnetic, and dielectric properties of hybrid nanofluids." In Hybrid Nanofluids, pp. 65-92. Elsevier, 2022.
- 10. Sundar, L. Syam, E. Venkata Ramana, **Zafar Said**, and Antonio CM Sousa. "Hydrothermal properties of hybrid nanofluids." In Hybrid Nanofluids, pp. 93-109. Elsevier, 2022.
- 11. Alshehhi, Abdulla Ahmad, **Zafar Said**, and Maham Aslam Sohail. "Rheological behavior of hybrid nanofluids." In Hybrid Nanofluids, pp. 111-129. Elsevier, 2022.
- 12. Tiwari, Arun Kumar, Amit Kumar, and **Zafar Said**. "Radiative transport of hybrid nanofluid." In Hybrid Nanofluids, pp. 131-147. Elsevier, 2022.
- 13. Tiwari, Arun Kumar, Amit Kumar, and **Zafar Said**. "Theoretical analysis and correlations for predicting properties of hybrid nanofluids." Hybrid Nanofluids (2022): 149-170.
- 14. Jamei, Mehdi, and **Zafar Said**. "Recent advances in the prediction of thermophysical properties of nanofluids using artificial intelligence." Hybrid Nanofluids (2022): 203-232.
- 15. Said, Zafar, and Maham Aslam Sohail. "Challenges and difficulties in developing hybrid nanofluids and way forward." In Hybrid Nanofluids, pp. 233-259. Elsevier, 2022.
- 16. **Z. Said**. "Nanofluid Heat and Mass Transfer in Engineering Problems" Chapter title: "Thermophysical properties of metal oxides nanofluids"

- Said, Z., H. A. Mohammed, and R. Saidur. Mixed Convection Heat Transfer in lid-driven square cavity: Nanofluids. LAP Lambert Academic Publishing. Category: Mechanical engineering, manufacturing technology. ISBN-13: 978-3-659-48015-7.
- 18. Said, Zafar, Maham Sohail, and Arun Kumar Tiwari. "Nanofluids as coolants." Nanotechnology in the Automotive Industry. Elsevier, 2022. 713-735.
- 19. Tiwari, Arun Kumar, Amit Kumar, and **Zafar Said**. "Nanomaterials in automotive fuels." Nanotechnology in the Automotive Industry. Elsevier, 2022. 737-748.
- 20. Tiwari, Arun Kumar, Amit Kumar, and **Zafar Said**. "Nanomaterials for electromagnetic interference shielding application." Nanotechnology in the Automotive Industry. Elsevier, 2022. 749-772.
- 21. Said, Zafar, Maham Sohail, and Arun Kumar Tiwari. "Automotive coolants." Nanotechnology in the Automotive Industry. Elsevier, 2022. 773-792.

European Commission

 Z. Said et al. Titanium dioxide-water nanofluids enhance the performance of solar collectors. Science for Environment Policy. 29th October 2015. Issue 433. <u>http://ec.europa.eu/environment/integration/research/newsalert/pdf/titanium_dioxide_water_nanofluids_enhance_the_performanc_ e_of_solar_collectors_433na4_en.pdf</u>

Invited Talk/Speaker

- 1. Plenary talk Second (online and offline mode) International Conference on Functional Materials and Applied Physics (FMAP-2022) on 14 October 2022 organized by the Department of Physics, S. V. National Institute of Technology (SVNIT), Surat to be held during 14-15 October 2022
- 2. Keynote Speaker and International Committee Members. 2022 2nd International Conference on Fluid and Chemical Engineering (ICFCE 2022) will be held on June 17-18, 2022, in Wuhan, China. https://www.icfce-conf.org/speakers
- Keynote Speaker and Pannelist. BITS, the Online Tech Transformation Conference. Day.2. Panel.4. April 21st, 2022. 8.35 GMT. <u>https://lnkd.in/q4DTzjQq</u>



- 4. Chair and Chair Prospective, Session-2: Research & Publications to sustainability in the "Third International Conference on Entrepreneurship, Research and Innovations for Environmental Sustainability and Planetary Health) Organized by Research Cell, Bhagini Nivedita College, University of Delhi, 07-08 APRIL, 2022, (10:30 am 07:00 pm IST daily)
- 5. Invited talk, at Mads Clausen Institute, in SDU Sønderborg University of Southern Denmark. Feb 9th 2022 @15.00 PM on "Stability and thermophysical properties of nanofluids".
- 6. Invited talk as a keynote speaker, in the International Online Conference on Energy Sciences (ICES 2021) to be held from 10, 11 and 12 December 2021 at Mahatma Gandhi University, Kottayam, Kerala, India.
- Polymer Electrolytes, session chair, in the International Online Conference on Energy Sciences (ICES 2021) to be held from 10, 11 and 12 December 2021 at Mahatma Gandhi University, Kottayam, Kerala, India.
- 8. Panel Discussion Member for closing ceremony in the International Online Conference on Energy Sciences (ICES 2021) to be held from 10, 11 and 12 December 2021 at Mahatma Gandhi University, Kottayam, Kerala, India.
- 9. Invited Speaker and Chair for ICAFFTS: Track 7: Mini/Micro/Nanoscale Flow and Heat Transfer (MMN): Time 3:00 PM to 5:30 PM. 2nd National and 1st International Conference on Advances in Fluid Flow and Thermal Sciences (ICAFFTS-2021) being organized by Department of Mechanical Engineering during 24th to 25th September 2021, under Diamond Jubilee Celebration of SVNIT Surat.

- Invited keynote Speaker at Seminar on Nanomaterials and Energy Storage organized by Research Centre for Nano-Materials and Energy Technology (RCNMET), School of Engineering & Technology, Sunway University happening from the 22nd – 23rd September 2021.
- 11. Invited Speaker, 3rd Edition of Applied Science, Engineering and Technology Webinar" held during March 27-28, 2021. V-Applied-2021.
- 12. Keynote Speaker at Virtual Conference on "Advances in Renewable and Sustainable Energy Systems 2020" organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai, India, during December 03 05, 2020.
- Keynote Speaker at 1st Virtual International Conference on Advances in Colloidal and Polymeric Systems (ACAPS-2020)" will be held on August 22, 2020. Organized by Colloids and Polymer Research Group School of Chemical Engineering (SCHEME) Vellore Institute of Technology, Vellore, Tamil Nadu - 632014, India

Committee member for international Conferences

- 1. Local Chair, 4th International Conference on Advances in Energy Research and Applications (ICAERA 2023). <u>https://icaera.com/</u>
- 2. Technical Program Committee, 2023 5th International Conference on Energy, Power and Grid (ICEPG 2023) will be held in Guangzhou, China on September 22-24, 2023. http://www.icepsg.net/committeeSpeaker
- 3. Scientific Committee. 1st International conference on Industrial, Manufacturing, and Process Engineering in Regina, Saskatchewan, Canada during June 27-29, 2024. <u>https://www.icimp-ise.com/</u>
- TPC members. 10th Annual International Conference on Material Science and Environmental Engineering [MSEE2022]. 2022
- 5. November 25th-27th, 2022
- 6. Technical Committee. 2022 International Conference on Green Building (ICoGB 2022) will be held in Stockholm, Sweden during June 24-26, 2022. <u>https://www.icogb.org/commit</u>
- 7. Program Committee. 1st International Conference on General and Multidisciplinary Engineering Applications (EnginApps 2022),1-3 November 2022, FoE-JUST, Irbid, Jordan
- 8. **Co-Editor** and International Technical Program Committee, 4th Annual International Conference on Energy Development and Environmental Protection, July 23-25, 2021, Guiyang, Guizhou, China
- 9. Technical Program Committee, 9th Annual International Conference on Material Science and Engineering (ICMSE 2021), July 23-25, Guiyang, Guizhou, China. <u>9th Annual International Conference on Material Science and Engineering (icmseei.org)</u>
- Technical Committee Member. 2021 3rd International Conference on Environment, Resources and Energy Engineering (EREE 2021) will be held July 15-17, 2021 in Singapore. EREE 2021 co-located with ICGES 2021 (2021 2nd International Conference on Geology and Earth Sciences - www.icges.org)
- 11. Advisory board member in the 'First Virtual International Conference on Advances in Renewable and Sustainable Energy Systems (ICARSES 2020)', during December 3rd-5th2020" to be organized by the Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur, Chennai.
- 12. Organizing Committee Member and Invited Speaker at our upcoming meeting "Global Summit and Expo on Magnetism and Magnetic Materials (GSEMMM-2021)" will be held during June 17-19, 2021 in Paris, France. <u>https://www.thescientistt.com/magnetism-magnetic-materials/organizing-committee.php</u>
- 13. Sharjah International Conference on Physics of Advanced Materials (SICPAM). Physics Department and Center of Advance Materials Research (CAMR), University of Sharjah. 23–25 March 2020, Sharjah, UAE
- 14. 12th International Conference on Sustainable Energy & Environmental Protection "SEEP 2019", Organizing committee.
- 15. 6th International Conference on Material Science & Smart Materials "MSSM 2019" Organizing committee.
- 16. The World Congress on Petrochemistry and Chemical Engineering (Petrochemistry-2018), June 28-30, 2018, Dubai, UAE.

https://biocoreconferences.com/petrochemistry2018/organizing_committee.php

- 17. International Conference on Alternative Fuels & Energy ICAFE 2017, October 23-25, Daegu, South Korea. <u>http://icaf-e.com/organsing-committee.php</u>
- 18. The 9th Asia-Pacific Power and Energy Engineering Conference (APPEEC 2017) will be held from April 15 to 17, 2017 in Chengdu, China.
 - http://www.engii.org/conference/APPEEC/19s2201.html
- 19. 1st International Conference on Alternative Fuels and Energy- ICAFE 2016. Kayseri, Turkey.
- 20. PEOCO 2016. 10th International Power Engineering and Optimization Conference. Shah Alam, Malaysia. 26-27 March 2016.

 International Conference on New Energy and Future Energy System (NEFES 2016). August 19-22, Beijing, China

Editor

1. Cogent Engineering (2017-present) https://www.cogentoa.com/

Editorial Board

- 1. Youth Editor: International Journal of Extreme Manufacturing (IJEM), IF: 10.032. IOP Science. https://iopscience.iop.org/journal/2631-7990
- 2. Sustainable Energy Research. Springer. https://sustainenergyres.springeropen.com/about/editorial-board
- 3. International Advisory Board: International Journal of Renewable Energy Development (p-ISSN: 2252-4940; e-ISSN:2716-4519, CODEN: IJREAC, OCLC: 828722266). CiteScore (2020): 1.9, SCImago Journal Rank (SJR) (2020): 0.331

https://ejournal.undip.ac.id/index.php/ijred/about/editorialTeam

- 4. Associate Editor: International Journal of Solar Thermal Vacuum Engineering Editorial Team | International Journal of Solar Thermal Vacuum Engineering (akademiabaru.com)
- 5. Colloid and Surface Science (ISSN: 2578-9236) http://www.cssjournal.org/editorialboard
- 6. Smart Grid and Renewable Energy. https://www.scirp.org/journal/editorialboard.aspx?journalid=135
- 7. Current Applied Polymer Science (ISSN: 2452-2724) https://benthamscience.com/journals/current-applied-polymer-science/editorial-board/
- 8. JOURNAL OF ENERGY RESOURCES http://www.annexpublishers.co/editorial-board/member/1214/Zafar-Said-Journal-of-Energy-Resources-and-Conversion/
- 9. Mosharaka International Conferences http://www.mosharaka.net/?Area=Users&Page=UserInfo&Sec=Summary&UserID=3554
- 10. Current Nanomaterials (ISSN: 2405-4623) https://benthamscience.com/journals/current-nanomaterials/editorial-board/
- 11. INTERNATIONAL JOURNAL OF ALTERNATIVE FUELS AND ENERGY https://journals.psmpublishers.org/index.php/ijafe/about/editorialTeam

PhD Examiner/Thesis Evaluation

- 1. **Suneetha Racharla**, Study on The Efficiency Enhancement Of The Solar Panels With Parabolic Tracking An Innovative Approach, St. Peter's Institute Of Higher Education And Research, January 2021.
- 2. Janki Nimishbhai Shah, Morphological and Thermophysical Properties Of Metal-Oxide Nanofluids, Department Of Applied Physics, Sardar Vallabhbhai National Institute Of Technology, Surat, Gujarat-395007, India, January 2020

Supervision

Post Graduate Level

(Name of Degree), (Name of Candidates), (Title of Thesis), (Academic Session)

Ongoing

- 1. Master's degree, Mariam Khaled Galal Ahmed Zaghloul, Master Student, UAE University, Co-Supervisor. 9-1-2022 to present.
- 2. PhD Student, Humaid Ali Hassan Alwali Alkindi, University of Sharjah, Co-Supervisor. 9-29-2022-present.
- 3. PhD Student, Khalil Abdelrazek Khalil Abdelmawgoud University of Sharjah, Co-Supervisor. 9-29-2022-present.

Completed

- 4. Master's degree, Ammar Alrasisi, Calibration aspects of a thermographic self-referencing routine applied to polymer composites inspection. 2014/2015
- 5. Master's degree, Abdullah Al Ali, Thermal study of the heat exchanger within heavy-duty vehicles using Finite Difference Approach, under idle conditions, 2014/2015

- 6. Master's degree, Noora Abdulrahman, Improving the Quality of 3D Printing Using Data Mining, 2014/2015.
- 7. Master's degree, Jasem Ali Al Shehhi, Network Architecture and Safety Issues for a Connected 3D Printer Platform, a Vulnerability Assessment, 2013/2014.
- 8. Master's degree, Abdulla Alshehhi, Plume Effect Analysis Applied to Thermal Camouflage Studies, 2014/2015.
- 9. Master's Degree, Sultan Al Ali, Thermal modeling of heavy-duty vehicle exhaust system using finite differencing approach, under idle conditions, 2014/2015
- 10. Master's degree, Yusra Abdulrahman, A Taguchi-based Design of Experiment Applied to Pulse and Lock in Thermography Routines when Applied to Polymer-based Composites, 2014/2015
- 11. Master's Degree, Fatima Al Obeidli, Using lock in Thermography for inspection of composites structures, 2015/2016
- 12. Master's degree, Abdullah Al Ali, Thermal study of the heat exchanger within heavy-duty vehicles using Finite Difference Approach, 2014/2015

Undergraduate

- 1. Portable Solar-Powered Cooling System with Motion Detectors for Vehicle Cabins. Spring Semester 2021/2022
- 2. Mist/fog cooling technique for Bifacial PV system. Fall Semester 2021 / 2022
- 3. Hybrid nanofluids for automotive car radiator. Fall Semester 2021 / 2022
- 4. Star Flow Insert in a Parabolic Trough Solar Collector. Fall Semester 2020/2021
- 5. Mist cooling for Photovoltaic Solar Collector using advanced techniques. Fall Semester 2020/2021
- 6. Mist cooling for Photovoltaic Solar Collector. Fall 2019 / 2020 (Complete)
- 7. Bifiacial PVT sytem. Spring 2019 / 2020 (Complete)
- 8. Nanomaterials Based LiBr (Lithium Bromide) solution for a cooling system. Spring 2019 / 2020 (Complete).
- 9. Solar PV/PVT Mist cooling techniques. Fall 2018/2019 (Complete).
- 10. Nanofluid Based PVT System. Spring 2018/2019 (Complete).
- 11. Magnetic Flywheel. Spring 2018/2019 (Complete).
- 12. Star Flow Insert in a Parabolic Trough Solar Collector. Fall 2019 / 2020 (Ongoing)
- 13. Heat transfer enhancement of heat exchanger using nanofluids. Fall 2015/2016 (Complete)
- 14. Thermophysical properties of nanofluids and its effect on a car radiator. Spring 2015/2016 (Complete)
- 15. Increasing efficiency of district cooling using encapsulated PCM as TEST. Spring 2015/2016 (Complete)
- 16. Solar Decathlon. Spring 2015/2016 (Complete)
- 17. Design and performance analysis of an energy efficient evacuated tube solar collector for heating applications using nanofluids. Spring 2015/2016 (Complete)

NEWSPAPER ARTICLES/ MEDIA

- 1. News on the patent: <u>https://go.gale.com/ps/i.do?id=GALE%7CA668131477&sid=sitemap&v=2.1&it=r&p=AONE&sw=w</u> <u>&userGroupName=anon%7E445c17c8</u>
- 2. A link to a group of my SDP students working on enhancing the efficiency of PVT systems using novel cooling techniques, which are patented.3-6-2021. <u>https://lnkd.in/gkzQzAr</u>
- 3. 1st June 2015: "Defect detection made easier." Gulf Industry in cooperating exporters\Importers Link: <u>http://www.gulfindustryonline.com/news/12944_Defect-detection-made-easier.html</u>
- 4. 19th May 2015: "Abu Dhabi's Strata, Masdar Institute showcase breakthrough prototype to rapidly test aerospace structures." Emirates News Agency.
- 19th May 2015: "Strata & Masdar Institute showcase breakthrough prototype to rapidly test aerospace structures", Masdar Institute
 Link: https://www.zawwa.com/story/Strata_Masdar_Institute_prototype_to_test_aerospace_structures

Link: <u>https://www.zawya.com/story/Strata_Masdar_Institute_prototype_to_test_aerospace_structures-</u> ZAWYA20150519112740/

 26th February 2015: "Collaborative research at Masdar Institute has enhanced the performance of Tawazun vehicles displayed at IDEX2015", Masdar Institue News Link:<u>https://www.facebook.com/MasdarInst/photos/pb.199481122226.-</u> 2207520000.1438604503./10152685876947227/?type=3&theater

Reviewer

- 1. Progress in Energy and Combustion Science
- 2. International Journal of Heat and Mass Transfer,
- 3. Applied Energy,
- 4. Renewable & Sustainable Energy Reviews,
- 5. Desalination
- 6. International Journal of Green Energy
- 7. International J. of Mech. and Materials Engineering,
- 8. Chemical Engineering Journal,
- 9. African Journal of Agricultural Research,
- 10. Journal of Renewable and Sustainable Energy,
- 11. Renewable Energy,
- 12. Ain Shams Engineering Journal
- 13. Powder Technology
- 14. Sustainable Renewable Energy Technologies
- 15. Renewable Energy
- 16. Applied Nanoscience,
- 17. Sustainable Energy Technologies and Assessments
- 18. Journal of Molecular liquids
- 19. RSC Advances
- 20. International Journal of Ambient Energy
- 21. International Journal of Energy Research
- 22. Journal of Thermal Analysis and Calorimetry
- 23. Energy Conversion and Management
- 24. Scientific Reports
- 25. Materials (MDPI)
- 26. Coatings (MDPI)
- 27. Applied Thermal Engineering
- 28. Solar Energy
- 29. Solar Energy Materials and Solar Cells
- 30. Materials Chemistry and Physics
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http://www.sharjah.ac.ae/en/academics/Colleges/eng/dept/sre/Pages/ppl_detail.aspx?mcid=21&clt=en

Research Gate: <u>https://www.researchgate.net/profile/Zafar_Said2</u>

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