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### **EDUCATION**

- Ph.D. Mechanical Engineering, Georgia Institute of Technology, 2004.
- M.Sc. Mechanical Engineering, Georgia Institute of Technology, 1997.
- B.Sc. Mechanical Engineering, King Saud University, Riyadh, Saudi Arabia, 1993.

### **EMPLOYMENT HISTORY**

- Professor, Mechanical Engineering Department, King Saud University, 2017-present.
- Associate Professor, Mechanical Engineering Department, King Saud University, 2012-2017.
- Chair, Mechanical Engineering Department, King Saud University, 2011-2013.
- Assistant Professor, Mechanical Engineering Department, King Saud University, 2004-2012.
- Student Intern, General Electric Company, Atlanta, Georgia, 2000-2002.
- Graduate Research Assistant, GWW School of Mechanical Engineering, Georgia Institute of Technology, 1997.
- Teaching Assistant, Mechanical Engineering Department, King Saud University, 1993-1994.
- Student Intern, Vice Rectorate for Project, King Saud University, 1993.
- Student Intern, Saudi Aramco, 1992

### **RESEARCH INTERESTS**

- Solar thermal energy conversion
- Energy conservation
- Refrigeration and air conditioning
- Desalination technologies

### **PROFESSIONAL ACTIVITIES**

- Member of the ESCO licensing and accreditation committee, Saudi Energy Efficiency Center, 2017-present
- Member of the Investment Committee, Riyadh Valley Company, 2016-present.
- Consultant for the Saline Water Conversion Corporation, 2018-2019.
- Consultant for National Air Conditioning Center at King Abdulaziz City for Science and Technology, 2016-2018 (participated in drafting the national HVAC research road map)
- Member of the Board of Directors, Chemical Development Company, 2017-2018.
- Consultant for the Ministry of Higher Education (reviewed HVAC designs for new university campuses in Saudi Arabia), 2006-2010.
- Consultant for Ministry of Higher Education (reviewed HVAC design for the Holy Mosque), 2008-2010.
- Director of the Intellectual Property and Technology Licensing Program at King Saud University, 2007-2008.
- Member of the board of directors of the Center of Research Excellence in Renewable Energy, 2007-2011.

## RESEARCH LEADERSHIP

- Member of the ESCO licensing and accreditation committee, Saudi Energy Efficiency Center, 2017-present
- Member of the Investment Committee, Riyadh Valley Company, 2016-present.
- Consultant for the Saline Water Conversion Corporation, 2018-2019.
- Consultant for National Air Conditioning Center at King Abdulaziz City for Science and Technology, 2016-2018 (participated in drafting the national HVAC research road map)
- Member of the Board of Directors, Chemical Development Company, 2017-2018.
- Consultant for the Ministry of Higher Education (reviewed HVAC designs for new university campuses in Saudi Arabia), 2006-2010.
- Consultant for Ministry of Higher Education (reviewed HVAC design for the Holy Mosque), 2008-2010.
- Director of the Intellectual Property and Technology Licensing Program at King Saud University, 2007-2008.
- Member of the board of directors of the Center of Research Excellence in Renewable Energy, 2007-2011.

## HONORS AND AWARDS

- King Saud University Award for Scientific Excellence (Obtaining External Funding), 2017
- King Saud University Award for Scientific Excellence (Innovation and Technology Licensing), 2015
- Bronze medal, Malaysia Technology Expo, Kuala Lumpur, 2011.
- Best invention in desalination award at Ibtikar 2010, Jeddah, Saudi Arabia, 2010.
- ME Department's best teacher award, King Saud University, 2009.
- ASHRAE grant-in-aid research fellowship, 2001.
- College of Engineering student of the year award, King Saud University, 1993.
- ME Department student of the year award, King Saud University, 1992-1993.

## GRANTED PATENTS

1. "Skip Hoist System for a Particle-Based High-Temperature Power Tower Plant", US Patent No. 12,234,133, granted on February 25, 2025.
2. "System for Measuring Angle of Repose of High Temperature Granular Material", US Patent No. 12,215,970, granted on February 4, 2025.
3. "Thermal Energy Storage Bin for a High-Temperature, Particle-Based Solar Power Plant", US Patent No. 12,196,455, granted on January 14, 2025.
4. "Expanded Bed Direct-Contact System and Heat Exchanger and Chemical Reactor Using the Same", US Patent No. 12,097,489, granted on September 24, 2024.
5. "Solid Particle Receiver with Porous Structure for Flow Regulation and Enhancement of Heat Transfer", US Patent No. 11,971,197, granted on April 30, 2024.
6. "Solar Heating Apparatus", US Patent No. 10,955,171, granted on March 23, 2021.
7. "Particle-to-Working Fluid Heat Exchanger and Solar Power Generator Using the Same", US Patent No. 10,788,021, granted on September 29, 2020
8. "Solar Heating Apparatus", US Patent No. 10,190,802, granted on January 29, 2019.
9. "Solar Heating Apparatus", US Patent No. 10,190,801, granted on January 29, 2019
10. "Solar Heating Apparatus", US Patent No. 10,151,512, granted on December 11, 2018.
11. "Multi-Effects Desalination System", US Patent No. 10,099,154, granted on October 16, 2018
12. "Solar Cooling and Water Salination System", US Patent No. 10,022,646, granted on July 17, 2018.
13. "Solid Particle Receiver with Porous Structure for Flow Regulation and Enhancement of Heat Transfer", US Patent No. 9,732,986, granted on August 15, 2017.
14. "Two Axis Solar Tracking System", US Patent No. 9,732,987, granted on August 15, 2017
15. "Nozzle Apparatus and Method", US Patent No. 9,579,669, granted on February 28, 2017
16. "Solar Heating Apparatus and Methods", US Patent No. 9,441,858, granted on September 13, 2016
17. "Desalination System", US Patent No. 9,393,502, granted on July 19, 2016
18. "High Temperature Solar Thermal Systems and Methods", US Patent No. 9,377,246, granted on June 28, 2016
19. "Electric linear generators/motors and energy converting systems with the same", European Patent No. 2,854,265, granted on May 4, 2016
20. "Multi-Effects Desalination System", US Patent No. 9,309,129, granted on April 12, 2016

21. "Method for Conversion of Carbon Dioxide into Hydrocarbons", US Patent No. 9,174,890, granted on November 3, 2015.
22. "Solar Steam Generation", US Patent No. 8,877,016, granted on November 6, 2014
23. "Solar Steam Generator", US Patent No. 8,863,517, granted on October 21, 2014.
24. "Heat Exchanger Steam Condenser Water Distillation", US Patent No. 8,834,683, granted on September 16, 2014.
25. "Vortex Generating Nozzle-End Ring", US Patent No. 8,807,458, granted on August 19, 2014.
26. "Glass Receiver with Bifurcated Annulus Responsive to Thermal Dimensional Changes", US Patent No. 8,800,548, granted on August 12, 2014.
27. "Method and System for Purifying Liquid Using Waste Heat", US Patent No. 8,709,257, granted on April 29, 2014
28. "Method and System for Utilizing Waste Energy from a Fluid Purification System", US Patent No. 8,551,343, granted on October 8, 2013.
29. "Systems and Methods for Solar Water Purification", US Patent No. 8,419,904, granted on April 16, 2013.

## TRANSLATED BOOKS

"Alternative Energy Resources: The Quest for Sustainable Energy", By Paul Kruger, Wiley, 2006. Translated from English to Arabic

## PUBLICATIONS

1. Rageh, S., Alaqel, S., Djajadiwinata, E., Saleh, N., Alswaiyd, A., **Al-Ansary, H.**, Danish, S., El-Leathy, A., Al-Suhaibani, Z., Jeter, S., Almuzaqer, R., Almutairi, Z., 2025, "Experimental analysis of micro-cavity influence on the effective solar absorptance of white sand curtain on porous obstructions of particle heating receivers", *Case Studies in Thermal Engineering*, Vol. 66, p. 105769.
2. Danish, S., Badawi, K., **Al-Ansary, H.**, El-Leathy, A., Alswaiyd, A., Saeed, R., Saleh, N., Djajadiwinata, E., Alaqel, S., Al-Suhaibani, Z., Almutairi, Z., 2024, "Techno-economic analysis of the integration of an innovative particle-based concentrating solar power system with a thermally driven cooling system", *Energy Conversion and Management*, Vol. 320, p. 118968.
3. Ali, E., Orfi, J., **Al-Ansary, H.**, Alsaadi, A., Ghaffour, N., 2024, "Hybrid reverse multi-stage flash and multi-effect evaporator systems powered by low grade energy for water desalination", *Desalination and Water Treatment*, Vol. 319, p. 100501.
4. Saeed, R., Alswaiyd, A., Saleh, N., Alaqel, S., Djajadiwinata, E., **Al-Ansary, H.**, Danish, S., El-Leathy, A., Al-Suhaibani, Z., Almutairi, Z., 2024, "An experimental investigation of chevron-shaped discrete structure configuration on the particle flow behavior of particle heating receivers", *Results in Engineering*, Vol. 21, p. 101786.
5. Al-Suhaibani, Z., Saleh, N., Alael, S., Saeed, R., Djajadiwinata, E., Danish, S., **Al-Ansary, H.**, El-Leathy, A., Jeter, S., 2024, "Vulnerability of thermal energy storage lining material to erosion induced by particulate flow in concentrated solar power tower systems", *Materials*, Vol. 17, No. 7, Article 1480, pp. 1-15.
6. Najib, A., Mana, T., Ali, E., **Al-Ansary, H.**, Almeahmadi, F., Alhoshan, M., 2024, "Experimental investigation on the energy and exergy efficiency of the vacuum membrane distillation system with its various configurations", *Membranes*, Vol. 14, No. 2, Article 54, pp. 1-19.
7. Almeahmadi, F., Najib, A., Ali, E., Alqaed, S., Mustafa, J., **Al-Ansary, H.**, 2023, "Thermodynamic optimization of hybrid solar-geothermal power plant coupled with DCMD for water and electricity production - A Case study at Ain Khulab, Saudi Arabia", *Energy Reports*, Vol. 10, pp. 3240-3251.
8. Zeitoun, O., Orfi, J., Khan, S., **Al-Ansary, H.**, 2023, "Desalinated water costs from steam, combined, and nuclear cogeneration plants using power and heat", *Energies*, Vol. 16, No. 6, Article 2752, pp. 1-28.
9. Sumayli, H., El-Leathy, A., Danish, S., **Al-Ansary, H.**, Almutairi, Z., Al-Suhaibani, Z., Saleh, N., Saeed, R., Alswaiyd, A., Djajadiwinata, E., Alaqel, S., 2023, "Integrated CSP-PV hybrid solar power plant for two cities in Saudi Arabia", *Case Studies in Thermal Engineering*, Vol. 44, p. 102835.
10. Elshiniti, M., AlRabiah, A., **Al-Ansary, H.**, Almutairi, Z., Orfi, J., El-Leathy, A., 2023, "Performance assessment of an ice-production hybrid solar CPV/T system combining both adsorption and vapor-compression refrigeration systems", *Sustainability*, Vol. 15, No. 4, Article 3711, pp. 1-25.
11. Alaqel, S., Saleh, N., Saeed, R., Djajadiwinata, E., Sarfraz, M., Alswaiyd, A., **Al-Ansary, H.**, Zeitoun, O., Danish, S., Al-Suhaibani, Z., El-Leathy, A., Jeter, S., Khayyat, A., 2022, "Particle-to-fluid direct-contact counter-flow heat exchanger: Simple-models validation and integration with a particle-based central tower system", *Case Studies in Thermal Engineering*, Vol. 33, p. 101994.
12. Alaqel, S., Djajadiwinata, E., Saeed, R., Saleh, N., **Al-Ansary, H.**, El-Leathy, A., Danish, S., Al-Suhaibani, Z., Shafiq, T., Golob, M., Nguyen, C., Jeter, S., Abdel-Khalik, S., Sarfraz, M., Al-Balawi, A., Al-Harathi, F., Bashraheel,

- S., Gandayh, H., 2022, "Performance of the world's first integrated gas turbine-solar particle heating and energy storage system", *Applied Thermal Engineering*, Vol. 215, p. 119049.
13. Saeed, R., Alswaiyd, A., **Al-Ansary, H.**, El-Leathy, A., Jeter, S., Alaqel, S., Saleh, N., Djajadiwinata, E., Al-Suhaibani, Z., Danish, S., Almutairi, Z., 2022, "Effect of the cyclic heating (aging) on the solar absorptance and specific heat of particulate materials", *AIP Conference Proceedings*, Vol. 2445, p. 020012.
  14. Djajadiwinata, E., Sarfraz, M., Alaqel, El-Leathy, A., S., Saleh, N., Saeed, R., Alswaiyd, A., **Al-Ansary, H.**, Jeter, S., Danish, S., Al-Suhaibani, Z., "The selection of expansion joint material for high-temperature multi-layered thermal energy storage bins", *AIP Conference Proceedings*, Vol. 2445, p. 160005.
  15. Alaqel, S., Djajadiwinata, E., Saleh, N., Saeed, R., , Alswaiyd, **Al-Ansary, H.**, M., El-Leathy, A., Jeter, S., Danish, S., Al-Suhaibani, Z., Abdel-Khalik, S., 2022, "On-sun experiments on the world's first deployed gas-turbine particle-based power tower facility at King Saud University", *AIP Conference Proceedings*, Vol. 2445, p. 060001.
  16. Alaqel, S., Saleh, N., Saeed, R., Djajadiwinata, E., Alswaiyd, A., Sarfraz, M., **Al-Ansary, H.**, El-Leathy, A., Al-Suhaibani, Z., Danish, S., Jeter, S., Almutairi, Z., 2022, "An Experimental Demonstration of the Effective Application of Thermal Energy Storage in a Particle-Based CSP System", *Sustainability*, Vol. 14, No. 9, Article 5316, pp. 1-15.
  17. Saeed, R., Alswaiyd, A., Saleh, N., Alaqel, S., Djajadiwinata, E., El-Leathy, A., Danish, S., **Al-Ansary, H.**, Jeter, S., Al-Suhaibani, Z., Almutairi, Z., 2022, "Characterization of Low-Cost Particulates Used as Energy Storage and Heat-Transfer Medium in Concentrated Solar Power Systems", *Materials*, Vol. 15, No. 8, Article 2946, pp. 1-20.
  18. Elsheniti, M., Eissa, M., **Al-Ansary, H.**, Orfi, J., Elsamni, O., El-Leathy, A., 2022, "Examination of Using Aluminum-Foam/Finned-Tube Beds Packed with Maxsorb III for Adsorption Ice Production System", *Energies*, Vol. 15, No. 8, Article 2757, pp. 1-21.
  19. Najib, A., Orfi, J., **Al-Ansary, H.**, Ali, E., 2022, "Application of the Buckingham II Theorem to Model the Multiple Effect Vacuum Membrane Distillation", *Journal of Thermal Science and Engineering Applications*, Vol. 14, No. 3: 031003.
  20. Elsheniti, M., Eissa, M., **Al-Ansary, H.**, Orfi, J., El-Leathy, A., Elsamni, O., 2022, "Using a Combination of Activated Carbon and Graphene Nanoparticles in a Consolidated Form for Adsorption Ice Maker: A System-Level Modeling", *Applied Sciences*, Vol. 12, No. 15, Article 7602, pp. 1-19.
  21. Saleh, N., Alaqel, S., Djajadiwinata, E., Saeed, R., Al-Suhaibani, Z., Zeitoun, O., **Al-Ansary, H.**, Alswaiyd, A., El-Leathy, A., Danish, S., Jeter, S., Byman, A., Jordison, N., Moon, D., 2022, "Experimental Investigation of a Moving Packed-Bed Heat Exchanger Suitable for Concentrating Solar Power Applications", *Applied Sciences*, Vol. 12, No. 8, Article 4055, pp. 1-18
  22. El-Leathy, A., **Al-Ansary, H.**, Danish, S., Alsuhaibani, A., Alswaiyd, A., 2022, "An Investigation of the Optimum Solar Flux Distribution on a Large-Scale Particle Heating Receiver", *Frontiers in Energy Research*, Vol. 10, Article 823448, p. 1-11.
  23. Haidar, Z., Al-Saud, M., Orfi, J., **Al-Ansary, H.**, 2021, "Reverse Osmosis Desalination Plants Energy Consumption Management and Optimization for Improving Power Systems Voltage Stability with PV Generation Resources", *Energies*, Vol. 14, No. 12, Article No. 7739, p. 1-21.
  24. El-Leathy, A., **Al-Ansary, H.**, Ba-abbad, M., Danish, S., AlShehri, Y., Rizvi, A., 2021, "Theoretical and experimental investigation of a novel point-focus Fresnel collector system with a novel receiver", *IET Renewable Power Generation*, DOI: 10.1049/rpg2.12256
  25. Ali, E., Orfi, J., **Al-Ansary, H.**, Soukane, S., Elcik, H., Alpatova, A., Ghaffour, N., 2021, "Cost analysis of multiple effect evaporation and membrane distillation hybrid desalination system", *Desalination*, Vol. 517, p. 115258
  26. Najib, A., Orfi, J., **Al-Ansary, H.**, and Ali, E., 2021, "Assessing the impact of Operating conditions on the energy and exergy efficiency for multi-effect vacuum membrane distillation systems", *Water*, Vol. 13, No. 11, Article No. 1500, pp. 1-28
  27. Danish, S., Almutairi, Z., El-Leathy, A., **Al-Ansary, H.**, Jordan, Y., Alaqel, S., 2021, "Modeling and performance simulation of an innovative concept of linear Fresnel reflector based CSP system", *Journal of Thermal Science*, Vol. 30, No. 4, pp. 1-11
  28. Djajadiwinata, E., Sadek, S., Alaqel, S., Orfi, J., **Al-Ansary, H.**, 2021, "Numerical and one-dimensional studies of supersonic ejectors for refrigeration application: The significance of wall pressure variation in the converging mixing section", *Applied Sciences*, Vol. 11, No. 7, Article No. 3245, pp. 1-27.
  29. Rizvi, A., Danish, S., El-Leathy, A., **Al-Ansary, H.**, Yang, D., 2021, "A review and classification of layouts and optimization techniques used in design of heliostat fields in solar central receiver systems", *Solar Energy*, Vol. 218, pp. 296-311.
  30. Alaqel, S., Saleh, N., Djajadiwinata, E., Saeed, R. Alswaiyd, A., **Al-Ansary, H.**, El-Leathy, A., Zeitoun, O., Jeter, S., Abdel-Khalik, S., Khayyat, A., Danish, S., Al-Suhaibani, Z., 2021, "A novel particle-to-fluid direct-contact counter-flow heat exchanger for CSP power generation applications: Design features and experimental testing", *Renewable Energy*, Vol. 170, pp. 905-926.
  31. Soukane, S., Elcik, H., Alpatova, A., Orfi, J., Ali, E., **Al-Ansary, H.**, Ghaffour, N., 2021, "Scaling sets the limits of large scale membrane distillation modules for the treatment of high salinity feeds", *Journal of Cleaner Production*, Vol. 287, p. 125555.

32. Ali, E., Orfi, J., **Al-Ansary, H.**, Lee, J., Alpatova, A., Ghaffour, N., 2020, "Integration of multi effect evaporation and membrane distillation desalination processes for enhanced performance and recovery ratios", *Desalination*, Vol. 493, p. 114619.
33. Najib, A., Orfi, J., **Al-Ansary, H.**, Ali, E., Abdulwahed, Z., Alzahrani, S., Chafidz, A., 2020, "An experimental investigation of a solar-driven desalination system based on multiple effect membrane distillation", *Desalination and Water Treatment*, Vol. 198, pp. 1-18
34. Elcik, H., Fortunato, L., Alpatova, A., Soukane, S., Orfi, J., Ali, E., **Al-Ansary, H.**, Leiknes, T., Ghaffour, N., 2020, "Multi-effect distillation brine treatment by membrane distillation: Effect of antiscalant and antifoaming agents on membrane performance and scaling control", *Desalination*, Vol. 493, p. 114653.
35. Alaqel, S., El-Leathy, A., **Al-Ansary, H.**, Djajadiwinata, E., Saleh, N., Danish, S., Saeed, R., Alswaiyd, A., Al-Suhaibani, Z., Jeter, S., Al-Balawi, A., Al-Harhi, F., 2020, "Experimental investigation of the performance of a shell-and-tube particle-to-air heat exchanger", *Solar Energy*, Vol. 204, pp. 561-568.
36. Peters, G., Golob, M., Nguyen, C., Jeter, S., Danish, S., Elleathy, A., **Al-Ansary, H.**, 2020, "Preliminary design of an all-ceramic discrete-structure particle heating receiver", *Journal of Energy Resources Technology*, Vol. 142, No. 5.
37. Haidar, A., Al-Saud, M., Orfi, J., **Al-Ansary, H.**, 2020, "Role of RO desalination plants in renewable energy integration in electric systems", Proceedings of IEEE's 11th International Renewable Energy Congress (IREC), pp. 1-4.
38. **Al-Ansary, H.**, El-Leathy, A., Alswaiyd, A., Alaqel, S., Saleh, N., Saeed, R., Al-Suhaibani, Z., Danish, S., Djajadiwinata, E., Jeter, S., 2020, "Study of the optimum discrete structure configuration in obstructed flow particle heating receivers", AIP Conference Proceedings, Vol. 2303, p. 030001.
39. **Al-Ansary, H.**, El-Leathy, A., Jeter, S., Golob, M., Nguyen, C., Djajadiwinata, E., Alaqel, S., Saeed, R., Abdel-Khalik, S., Al-Suhaibani, Z. and Danish, S., 2019, "Design features of the world's first commercial concentrating solar power plant using the particle heating receiver concept", Proceedings of the 13th International Conference on Energy Sustainability, Paper No. ES2019-3856, Bellevue, WA, USA.
40. Danish, S., El-Leathy, A., Alata, M., **Al-Ansary, H.**, , 2019, "Enhancing solar still performance using vacuum pump and geothermal energy", *Energies*, Vol. 12, No. 3, pp. 539-551.
41. El-Leathy, A., Jeter, S., **Al-Ansary, H.**, Danish, S., Saeed, R., Abdel-Khalik, S., Golob, M., Djajadiwinata, E., Al-Suhaibani, Z., 2019, "Thermal performance evaluation of lining materials used in thermal energy storage for a falling particle receiver based CSP system", *Solar Energy*, Vol. 178, pp. 268-277
42. Baakeem, S., Orfi, J., **Al-Ansary, H.**, 2018, "Performance improvement of gas turbine power plants by utilizing turbine inlet air-cooling (TIAC) technologies in Riyadh, Saudi Arabia", *Applied Thermal Engineering*, Vol. 138, pp. 417-432.
43. **Al-Ansary, H.**, El-Leathy, A., Jeter, S., Djajadiwinata, E., Alaqel, S., Golob, M., Nguyen, C., Saad, R., Shafiq, T., Danish, S., Al-Suhaibani, Z., Abu-Shikhah, N., Al-Balawi, A., Haq, M., Al-Harhi, F., 2017, "On-Sun Experiments on a Particle Heating Receiver with Red Sand as the Working Medium", AIP Conference Proceedings, Vol. 2033, p. 040002.
44. El-Leathy, A., **Al-Ansary, H.**, Jeter, S., Djajadiwinata, E., Alaqel, S., Golob, M., Nguyen, C., Saad, R., Shafiq, T., Danish, S., Abdel-Khalik, S., Al-Suhaibani, Z., Abu-Shikhah, N., Al-Balawi, A., Haq, M., Al-Harhi, F., 2017, "Preliminary Tests of an Integrated Gas Turbine-Solar Particle Heating and Energy Storage System", AIP Conference Proceedings, Vol. 2033, p. 040013.
45. Baakeem, S., Orfi, J., Alaqel, S., and **Al-Ansary, H.**, 2017, "Impact of ambient conditions of Arab Gulf countries on the performance of gas turbines using energy and exergy analysis", *Entropy*, Vol. 19, pp. 1-18.
46. Ho, C., Christian, J., Yellowhair, J., Siegel, N., Jeter, S., Golob, M., Abdel-Khalik, S., Nguyen, C., and **Al-Ansary, H.**, 2016, "On-Sun Testing of an Advanced Falling Particle Receiver System", AIP Conference Proceedings, Vol. 1734, No. 1, p. 030022.
47. Miller, J., Ambrosini, A., Babiniec, S., Coker, E., Ho, C., **Al-Ansary, H.**, Jeter, S., Loutzenhiser, P., Johnson, N., Stechel, E., 2016, "High performance reduction/oxidation metal oxides for thermochemical energy storage (promotes)", Proceedings of the 2016 ASME Power and Energy Conference, Charlotte, North Carolina, USA.
48. **Al-Ansary, H.**, El-Leathy, A., Shafiq, T., Rizvi, A., 2016, "Measurement of Circumsolar Ratio in High Dust Loading Regions Using a Photographic Method", 22<sup>nd</sup> International Conference on Concentrating Solar Power and Chemical Energy Systems (SolarPACES), Abu Dhabi, UAE, AIP Conference Proceedings, Vol. 1850, No. 1, p. 140003.
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50. Danish, S., Qureshi, S., Imran, M., Khan, S., Sarfraz, M., El-Leathy, A., **Al-Ansary, H.**, and Wei, M., 2016, "Effect of tip clearance and rotor-stator axial gap on the efficiency of a multistage compressor", *Applied Thermal Engineering*, Vol. 99, pp. 988-995.
51. Ali, M., Zeitoun, O., **Al-Ansary, H.**, and Nuhait, A., 2015, "Experimental study of air cooling using a membrane-covered tray", *Journal of Porous Media*, Vol. 18, pp. 835-842.

52. Hassan H., Mohamad, A., Alyousef, Y., and **Al-Ansary, H.**, 2015, "A review on the equations of state for the working pairs used in adsorption cooling systems", *Renewable and Sustainable Energy Reviews*, Vol. 45, pp. 600-609.
53. Mohamad, A., Orfi, J., and **Al-Ansary, H.**, 2015, "Non-Darcy fluid flow and heat transfer in conduits fitted with porous media", *Journal of Porous Media*, Vol. 18, pp. 449-453.
54. **Al-Ansary, H.**, Alaqel, S., Djajadiwinata, E., and Mohamed, A., 2015, "Optical Analysis of a New Point Focus Fresnel Concentrator", Proceedings of ASME 9<sup>th</sup> International Conference on Energy Sustainability, San Diego, California, USA.
55. Lee, T., Lim, S., Shin, S., Sadowski, D. L., Abdel-Khalik, S. I., Jeter, S. M., and **Al-Ansary, H.**, 2015, "Numerical simulation of particulate flow in interconnected porous media for central particle-heating receiver applications", *Solar Energy*, Vol. 113, pp. 14-24.
56. El-Leathy, A., Danish, S., **Al-Ansary, H.**, Jeter, S., and Al-Suhaibani, Z., 2015, "Experimental study of compatibility of reduced metal oxides with thermal energy storage lining materials", 21st International Conference on Concentrating Solar Power and Chemical Energy Systems (SolarPACES), Cape Town, South Africa
57. El-Leathy, A., Jeter, S., **Al-Ansary, H.**, Abdel-Khalik, S., Golob, M., Danish, S., Saeed, R., Djajadiwinata, E., and Al-Suhaibani, Z., 2015, "Experimental measurements of thermal properties of high-temperature refractory materials used for thermal energy storage", 21st International Conference on Concentrating Solar Power and Chemical Energy Systems (SolarPACES), Cape Town, South Africa
58. Ho, C., Christian, J., Yellowhair, J., Siegel, N., Jeter, S., Golob, M., Abdel-Khalik, S., Nguyen, C., and **Al-Ansary, H.**, 2015, "On-sun testing of an advanced falling particle receiver system", 21st International Conference on Concentrating Solar Power and Chemical Energy Systems (SolarPACES), Cape Town, South Africa
59. **Al-Ansary, H.**, Djajadiwinata, E., El-Leathy, A., Danish, S., and Al-Suhaibani, Z., 2014, "Modeling of transient cyclic behavior of a solid particle thermal energy storage bin for central receiver applications", *Energy Procedia*, Vol. 69, pp. 716-725.
60. **Al-Ansary, H.** 2014, "Prospects for Use of Solar Thermal Energy in High-Temperature Process Heat Applications", The 7th International Meeting on Advances in Thermofluids, Kuala Lumpur, Malaysia.
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## PROFESSIONAL MEMBERSHIPS AND CERTIFICATION

- Certified Energy Manager®, Association of Energy Engineers®
- Associate member of the American Society of Heating, Refrigerating, and Air Conditioning Engineers
- Member of the American Society of Mechanical Engineers
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## LANGUAGES

- Arabic (Native)
- English (Fluent)
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