Name: Ahmed Saad Ahmed Mahmoud Soliman

Current Title: Assistant professor in Mechanical Power Engineering, faculty of engineering, Mansoura university

Contact information

Address: Talkha / El-Dakahlia / Egypt

Email: asaad200@mans.edu.eg

Phone number: +201095267671 (Egypt)

FIELDS OF SPECIALIZATION

- PV solar cell system
- Thermal Energy Storage (TES)
- Phase Change Materials (PCMs), and Nanoparticles
- Heat Exchangers design, and Absorption systems

DEGREES

1- BSc degree

BSc in Mechanical Power Engineering - Faculty of Engineering - Mansoura University – Egypt - January 2012.

Final Grade: **Excellent with honor (88.75%)** and ranked as the **Fourth**

2- MSc degree

MSc in Mechanical Power Engineering - Faculty of Engineering - Mansoura University – Egypt - March 2016.

Thesis Title: "**Study of Heat Transfer in Energy Storage System Using Phase Change Materials"**

3- PhD degree

PhD in School of Environmental and Chemical Engineering - Shanghai University- China- June 2022.

Thesis Title: "**Theoretical and Experimental Studies of Efficient Waste Heat Recovery System for Diesel Engine Using Nano-Enhanced Phase Change Materials"**

ACADEMIC AND INDUSTRIAL POSITIONS

1-Demonstrator (Full Time) - March 2013: August 2016 - Mansoura University.

- Department: Mechanical Power Engineering Department

2-Assistant Lecturer (Full Time) - September 2016: September 2019 - Mansoura University.

- Department: Mechanical Power Engineering Department

3-Assistant Professor (Full Time) - July 2022: Present - Mansoura University.

- Department: Mechanical Power Engineering Department

AWARDS

• **Star-of-the-Year award for International Students 2020-2021 Academic Year, Shanghai University**

PROFESSIONAL RECOGNITION

Journal Papers

[1] **Soliman AS**, Zhu S, Xu L, Dong J, Cheng P. Numerical simulation and experimental verification of constrained melting of phase change material in cylindrical enclosure subjected to a constant heat flux. J Energy Storage 2021;35.

[2] **Soliman AS**, Zhu S, Xu L, Dong J, Cheng P. Melting enhancement of nano-phase change material in cylindrical enclosure using convex/concave dimples: Numerical simulation with experimental validation. J Energy Storage 2021;44:103470.

[3] **Soliman AS**, Radwan A, Xu L, Dong J, Cheng P. Energy harvesting in diesel engines to avoid cold start-up using phase change materials. Case Stud Therm Eng 2022;31:101807.

[4] **Soliman AS**, Zhu S, Xu L, Dong J, Cheng P. Efficient waste heat recovery system for diesel engines using nano-enhanced phase change materials. Case Stud Therm Eng 2021;28.

[5] **Soliman AS**, Zhu S, Xu L, Dong J, Cheng P. Design of an H_2O-LiBr absorption system using PCMs and powered by automotive exhaust gas. Appl Therm Eng 2021;191.

[6] **Soliman AS**, Xu L, Dong J, Cheng P. Numerical investigation of a photovoltaic module under different weather conditions. Energy Reports 2022;8.

[7] **Soliman AS**, Xu L, Dong J, Cheng P. A novel heat sink for cooling photovoltaic systems using conves/concave dimples and multiple PCMs. Appl Therm Eng 2022;215.

[8] **Soliman AS**, Xu L, Dong J, Cheng P. Numerical Investigation of the Ribs' Shape, Spacing, and Height on Heat Transfer Performance of Turbulent Flow in a Flat Plate Heat Exchanger. Sustainability 2022;14.

[9] **Soliman AS**, Sultan AA, Sultan MA. Effect of Mushy Zone Parameter on Phase Change Behavior of Different Configurations Storage Unit: Numerical Simulation and Experimental Validation. Sustainability 2022;14.