

**Mohamed Sharaf, M.Sc.**  
**Curriculum Vitae**

**Personal Information**

**Name:** Mohamed Abdel Razek Maghawery Sharaf

**Title or Job:** Asst. Lecturer – Mechanical Engineering

**Date of Birth:** August 15, 1995

**Place of Birth:** Benha – Egypt

**Nationality:** Egyptian

**Gender:** Male

**Marital Status:** Single

**Job Address:** Mechanical Engineering Department - Benha Faculty of Engineering- Benha University, Benha, Egypt.

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**Google Scholar Profile:**

<https://scholar.google.com/citations?user=Do2C40gAAAAJ&hl=en>

**Scopus Profile:**

[https://id.elsevier.com/settings/redirect?code=C12F6vo8EIVzxiAyfK9JBRZLVnTxcN\\_cAUQFv-kK](https://id.elsevier.com/settings/redirect?code=C12F6vo8EIVzxiAyfK9JBRZLVnTxcN_cAUQFv-kK)

**Education**

- M.Sc., Energy Recourses Engineering, 2021, Benha Faculty of Engineering, Benha University, Benha, Egypt.
- B.S., Mechanical Power Engineering, 2018, Benha Faculty of Engineering, Benha University, Benha, Egypt. (With an excellent grade and an honors degree)

**Current Occupation**

Asst.Lecturer of Mechanical Engineering, Mechanical Power Engineering Department, Benha Faculty of Engineering- Benha University, Benha, Egypt. (November. 2018 – present).

**Research Interest Areas**

- Renewable energy applications and management
- Solar energy applications
- Photovoltaic systems
- Solar desalination systems
- Energy storage systems
- Exergy evaluation of energy systems

**Professional experience**

- Teaching Assistant (teaching and research assistant), Mechanical Engineering Department, Benha Faculty of Engineering, Benha University, Egypt (November 2018 - Present).

## **Taught Courses**

1. Thermodynamics (I)
2. Thermodynamics (II)
3. Heat Transfer
4. Power plants Technology
5. Fluid Mechanics
6. Thermo Fluid
7. Engineering drawing
8. AutoCAD software

## **Journal Publications**

### **-Accepted**

1. **M. Sharaf**, A. S. Huzayyin, and M. S. Yousef, “Performance enhancement of photovoltaic cells using phase change material (PCM) in winter,” *Alexandria Eng. J.*, 2021, doi: <https://doi.org/10.1016/j.aej.2021.09.044>. (**Impact Factor: 3.732**)
2. M. S. Yousef, **M. Sharaf**, and A.S. Huzayyin, “Energy, exergy, economic, and enviroeconomic assessment of a photovoltaic module incorporated with a paraffin-metal foam composite: An experimental study,” *Energy*, vol. 238, p. 121807, 2022, doi: <https://doi.org/10.1016/j.energy.2021.121807>. (**Impact Factor: 7.147**)
3. **M. Sharaf**, M. S. Yousef, and A. S. Huzayyin, “Review of cooling techniques used to enhance the efficiency of photovoltaic power systems,” *Environ. Sci. Pollut. Res.*, no. 0123456789, 2022, doi: 10.1007/s11356-022-18719-9. (**Impact Factor: 4.223**)
4. **M. Sharaf**, M. S. Yousef, and A.S. Huzayyin, “Year-round energy and exergy performance investigation of a photovoltaic panel coupled with metal foam/phase change material composite,” *Renew. Energy*, vol. 189, pp. 777–789, 2022, doi: 10.1016/j.renene.2022.03.071 (**Impact Factor: 8.001**)

### **-Under Review**

1. **M. Sharaf**, M. S. Yousef, and A.S. Huzayyin, “Efficiency enhancement of photovoltaic module using an aluminum foam matrix filled with phase change material (PCM) under hot climate conditions,” **submitted to Environmental Science and Pollution Research.**

## **Theses**

1. **M. Sharaf**, “Performance Enhancement of Photovoltaic Cells Using Phase Change Material (PCM)” MSc. Thesis, Mechanical Engineering Department, Benha Faculty of Engineering, Benha University, Egypt, (December 2021).

### **Reference Professors**

1. **Professor. Ahmed Soliman Huzayyin**, Ph.D. Mechanical Engineering Department, Benha Faculty of Engineering, Benha University, Egypt. Tel: +201223334580, E-mail: [ahmed.hozain@bhit.bu.edu.eg](mailto:ahmed.hozain@bhit.bu.edu.eg)
2. **Assistant Professor. Mohamed S. Yousef**, Ph.D. Marie Skłodowska-Curie Postdoctoral Fellow - University Carlos III de Madrid, Spain. Tel: +34 603 01 12 22, E-mail: [mohamed.mohamed@ejust.edu.eg](mailto:mohamed.mohamed@ejust.edu.eg)
3. **Assistant Professor. Sherif Araby Gouda**, Ph.D. Department of Mechanical and Aerospace Engineering, School of Engineering and Digital Sciences, Nazarbayev University, Kazakhstan. Tel: +7 7714134030, E-mail: [Sherif.Gouda@nu.edu.kz](mailto:Sherif.Gouda@nu.edu.kz)
4. **Associate Prof. Mohamed Ahmed Abdelrahman**, Ph.D. Mechanical Engineering Department, Shobra Faculty of Engineering, Benha University, Egypt. Tel: +201146474882, E-mail: [mohamed.abdelrahman@feng.bu.edu.eg](mailto:mohamed.abdelrahman@feng.bu.edu.eg)