Dr. Waleed Gaber Ibrahim Alshaer
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International Rankings (Nov. 16, 2016; http://scholar.google.com),

RG Score in Research gate = **16.39**.

https://scholar.google.com/citations?hl=en&user=6dhXXZoAAAAJ

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1 Interests

Teaching and conducting research in the fields of Heat and Mass Transfer, Refrigeration and air conditioning, Experimental Investigations on PCM/Nano-composites for Increasing Heat Transfer, Experimental studies of using Carbon Foam structure/PCMs in thermal management applications.

2 Education

Ph.D., Benha University (**2014**) Thesis: "*Heat transfer enhancement in thermal energy storage systems using advanced composite phase change materials*".

M.Sc., Benha University (**2009**) Thesis: "*Heat Transfer and Pressure Drop Characteristics of Multi Tubes in Tube Helically Coiled Heat Exchanger*".

B.Sc., Benha University (**2001**) Thesis: "*Air Conditioning Load Calculation and system design for a shopping center*".

3 Experience

- Jun. **2014**-present: Assistant Professor at Benha University.
- Sep. **2014** (for two months) Post-Doctoral Researcher at Institut de Mécanique et d'Ingénierie – Bordeaux University - France.
- Sep. **2013 (**for three months): Resurcher at Institut de Mécanique et d'Ingénierie – Bordeaux University – France.
- Aug. **2009**-Sep. **2014**: Assistant Lecturer at Benha Faculty of Engineering – Benha University - Egypt.
- Sep. **2002**–**2009**: Demonstrator in the Department of Mechanical Engineering at Benha Faculty of Engineering – Benha University - Egypt.

- Sep. **2006**– present: Consultant and Researcher at an Egyptian Company, and I haven't been allowed to publish my research results.

4 Course Taught

4.1. At UG Graduate Level (at Benha University)

1- Thermodynamics.
2- Heat Transfer.
3- Refrigeration and air conditioning.

5 Award

1- I awarded a short scholarship for three months during Ph.D. (Sep. 2013), funded by the cultural section of the French embassy in Egypt.

2- I awarded a short scholarship for two months (Sep. 2014), funded by the cultural section of the French embassy in Egypt.

3- I awarded a funded research project "Investigation of Using Phase Change Materials in Buildings Free Cooling to Reduce Power Consumption in Air Conditioning" for two years starting on Sep. 2016, funded by the scientific research fund section in Benha university, Egypt. The fund value is 100000 LE.

6 Publications

1- **W. G. Alshaer**, E. Palomo del Barrio, M. A. Rady, O. E. Abdellatif, S. A. Nada " Analysis of the anomalous thermal properties of phase change materials based on paraffin wax and multi walls carbon nanotubes" International Journal on Heat and Mass Transfer - Theory and Applications (IREHEAT) 1(5) (2013) PP. 297-307.

2- S.A. Nada, **W.G. Alshaer**, A.S. Huzayyin "Heat transfer and pressure drop characteristics of multi tubes in tube helically coiled heat exchanger", JP Journal of Heat and Mass Transfer, Vol. 9, No. 2, 2014, PP. 172-202.

3- S.A. Nada, **W.G. Alshaer**, A.S. Huzayyin "Performance of multi tubes in tube helically coiled as a compact heat exchanger" heat and Mass Transfer, December 2014.

4- **W.G. Alshaer**, S. A. Nada, M.A. Rady, Elena PALOMO DEL BARRIO, Alain SOMMIER "Thermal management of electronic devices using carbon foam and PCM/nano-composite" International Journal of Thermal Sciences 89 (2015), PP. 79-86.

5- **W.G. Alshaer**, S. A. Nada, M.A. Rady, Cedric Le Bot, Elena PALOMO DEL BARRIO

"Numerical investigations of using carbon foam/PCM/Nano carbon tubes composites in thermal management of electronic equipment" Energy Conversion and Management, Volume 89, 1 January 2015, Pages 873–884.

6- S.A. Nada, K. E. Elfeky, Ali M.A. Attia, **W.G. Alshaer**, "Thermal Management of Electronic Servers under Different Power Conditions" International Journal of Emerging Trends in Electrical and Electronics, Volume 11, Issue. 4, Aug 2015.

7- S.A. Nada, **W.G. Alshaer**, "Comprehensive parametric study of using carbon foam structures saturated with PCMs in thermal management of electronic systems" Energy Conversion and Management, 105 (2015) 93–102.

8- **W. G. Alshaer**, M. A. Rady, S. A. Nada, Elena Palomo Del Barrio, Alain Sommier, "An experimental investigation of using carbon foam–PCM–MWCNTs composite materials for thermal management of electronic devices under pulsed power modes" Heat and Mass Transfer, 016-1815-4 (2016).

9- E. Palomo del Barrioa, A. Godin, M. Duquesnec, J. Daranlotd, J. Jollyd, **W. Alshaere**, T. Kouadiob, A. Sommier "Characterization of different sugar alcohols as phase change materials for thermal energy storage applications" Solar Energy Materials & Solar Cells 159 (2017) 560–569.

10- S.A. Nada, K. E. Elfeky, Ali M.A. Attia, **W.G. Alshaer**, " Experimental parametric study of servers cooling management in data centers buildings" Heat and Mass Transfer, 1-15 (2017).

11- S.A. Nada, **W.G. Alshaer**, Experimental Investigation of Thermal Conductivity Enhancement of Carbon Foam Saturated with PCM and PCM/MWCNTs Composite for Energy Storage Systems, Heat and Mass Transfer, 55 (1) (2019).

12- S.A. Nada, **W.G. Alshaer**, R.M. Saleh, "Thermal characteristics and energy saving of charging/discharging processes of PCM in air free cooling with minimal temperature differences" Alexandria Engineering Journal, 58 (4), 1175-1190 (2019).

13- S.A. Nada, **W.G. Alshaer**, R.M. Saleh, "Experimental investigation of PCM transient performance in free cooling of the fresh air of air conditioning systems" Journal of Building Engineering, 101153 (2020)