

# Curriculum Vitae



**Name** Mohamed Reda Aly Abd-Elhamid Salem  
**Gender** MALE  
**Date of Birth** February 20, 1982  
**Place of Birth** Qaha – Qalyubia (Egypt)  
**Nationality** EGYPTIAN  
**Address1** Mechanical Engineering Department, Faculty of Engineering at Shoubra, Benha University, 108 Shoubra Street, Cairo, EGYPT, P.C. 11629.  
**Address2** 40 Adam Street, Qaha, Qalyubia, EGYPT, P.C. 13743.  
**Website** <http://www.bu.edu.eg/staff/mohamedabelhamid3>

**Current Position** Associate Professor of Mechanical Power Engineering at Mechanical Engineering Department, Faculty of Engineering at Shoubra, Benha University  
**E-mail** [mohamed.abdelhamid@feng.bu.edu.eg](mailto:mohamed.abdelhamid@feng.bu.edu.eg) & [me\\_mohamedreda@yahoo.com](mailto:me_mohamedreda@yahoo.com)  
**Phone** Mobile: (002) 01207979002 & (002) 01221593208  
**Fax** +20222023336  
**Marital Status** Married, 3 Childs  
**Major Field** Mechanical Engineering  
**Fine Field** Mechanical Power Engineering  
**Languages** Arabic: Mother Tongue  
English, Very Good spoken and written  
**Qualifications**  
1) I got the BSc Degree from Benha University, Faculty of Engineering at Shoubra (2004).  
**General Grade:** Very Good with honor hierarchy.  
**Project Grade:** Excellent.  
2) I got the MSc degree in Mechanical Power Engineering from Faculty of Engineering at Shoubra, Benha University in 2011.  
3) I got the PhD degree in Mechanical Power Engineering from Faculty of Engineering at Shoubra, Benha University in 2014.  
**Graduation Project**  
▪ Calculation of Thermal Loads in Buildings  
▪ Experimental Study on Flow Boiling Heat Transfer in a Vertical Annulus  
**MSc Thesis** Thermal Control of Satellites (2011).  
**PhD Thesis** Experimental Study on Convective Heat Transfer and Pressure Drop of Water-Based Nanofluid inside Shell and Coil Heat Exchanger (2014).

**Research Assessment**

**Among the American Stanford University's list of the top 2% of researchers in the world, for the year 2023**

- <https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/6>
- <https://bu.edu.eg/BUNews/26710>

<b>Google Scholar:</b> Citations: 824 h-index: 17 i10-index: 20 <a href="https://scholar.google.com/citations?user=IA52Nq8AAAJ&amp;hl=en">https://scholar.google.com/citations?user=IA52Nq8AAAJ&amp;hl=en</a>	<b>Scopus:</b> Citations: 565 22 documents h-index: 13 <a href="https://www.scopus.com/authid/detail.uri?authorId=7202291842">https://www.scopus.com/authid/detail.uri?authorId=7202291842</a>	<b>ResearchGate:</b> Citations: 718 h-index: 15 Research Interest: 651.4 Recommendations: 295 Reads: > 150000 <a href="https://www.researchgate.net/profile/Mohamed-Salem-56">https://www.researchgate.net/profile/Mohamed-Salem-56</a>
<b>SciVal:</b> Citation Count: 554 Scholarly Output: 21 Cit./Publication: 26.4 Field-Weight Impact: 1.23 h-index: 13 h5-index: 7 <a href="https://www.scival.com/overview/summary?uri=Custom%2F104005%2FResearcher%2F5739706">https://www.scival.com/overview/summary?uri=Custom%2F104005%2FResearcher%2F5739706</a>	<b>WOS:</b> Citations: 472 Citing Articles: 422 Publications in WOS: 22 h-index: 12 Verified Reviews: 98 <a href="https://www.webofscience.com/wos/author/record/O-8015-2018">https://www.webofscience.com/wos/author/record/O-8015-2018</a>	<b>Official BU Account</b> Sum. of points: 599 No. of visitors: >24100 <a href="https://bu.edu.eg/portal/index.php?act=46&amp;username=mohamedabelhamid3">https://bu.edu.eg/portal/index.php?act=46&amp;username=mohamedabelhamid3</a>



		In Benha University (1,445)	In Egypt (19,515)	In Africa (94,881)	World (1,615,817)
	<b>Scores</b>	<b>Rankings</b>			
Total H	16	#105	#2,982	#11,251	#577,160
Last 6 year H	16	#75	#1,977	#7,677	#435,480
Last 6 year H / total H	1.000				
Total i10	20	#126	#3,449	#13,269	#614,268
Last 6 years i10	20	#92	#2,453	#9,538	#482,855
Last 6 years i10 / Total i10	1.000				
Total Citation	801	#144	#3,976	#15,192	#738,400
Last 6 years Citation	733	#96	#2,526	#10,177	#557,857
Last 6 years Citation / Total Citation	0.915				
Engineering & Technology *		#43 (343) *	#769 (4,571) *	#2,641 (20,349) *	#144,588 (373,579) *
Mechanical Engineering *		#9 (57) *	#71 (380) *	#195 (1,485) *	#10,128 (25,200) *

**Research  
Interests**

- Heat Transfer Augmentation Techniques
- Energy Savings and Storge
- Solar Energy Applications
- Water Desalination
- Design of Efficient Heat Exchangers
- Efficient Energy Production Systems
- Vapour Compression Ref. Systems
- Utilization of Waste Energy

**Qualification  
from AUC  
2019**

**Mastering Business Skills for Entrepreneurs at The American University in Cairo Rowad 2030 Project** under the umbrella of the Ministry of Planning, Monitoring and Administrative Reform announces the launch of the "Mastering work skills for businessmen" program which was held at the American University in Cairo to accelerate the growth of entrepreneurs and develop their skills. The program offered courses in the following areas:

- Projects Management.
- Risk Management.
- Marketing Management.
- Operations and Quality Manag.
- Encourages Innovation.
- Human Resources for Business.
- Funding for Non-Financial Institutions and Start-Ups.
- Financing and Evaluation of Emerging Companies.

**Work  
Experience**

- 1) Working as **Associate Professor** at Faculty of Engineering at Shoubra, Benha University from 30 November 2019 until now.
- 2) Working as **Assistant Professor** at Faculty of Engineering at Shoubra, Benha University from 27 October 2014 until 29 November 2019.
- 3) Working as a **Lecturer** at Faculty of Engineering at Shoubra, Benha University from 27 November 2011 until 26 October 2014.
- 4) Working as **Assistant Lecturer** at Faculty of Engineering at Shoubra, Benha University from 8 February 2005 until 26 November 2011.

**I have good experiences in teaching field, as I have taught several courses in:**

- Mechanical Engineering Department in Faculty of Engineering at Shoubra – Benha University (till now),
- Energy and Sustainable Energy Engineering Program in Faculty of Engineering at Shoubra – Benha University (from 2014 till now),

- Industrial Systems Engineering Program in Faculty of Engineering at Shoubra – Benha University (from 2014 till now),
- Electrical Engineering and Control Program in Faculty of Engineering at Shoubra – Benha University (from 2016 till now).

### List of Courses:

#### Undergraduate Level

#	Course Name	Code	Department/Academic Program
1.	Heat Transfer	MEC 220	Mechanical Engineering Department (2021 Bylaw) – Mainstream
2.	Theory of Measurements and Sensors	MEC 201	
3.	Heat Transfer (1)	MPE 221	Mechanical Power Engineering (2003 Bylaw) – Mainstream
4.	Heat and Mass Transfer (A)	MPE313	
5.	Heat and Mass Transfer (B)	MPE 321	
6.	Measurements and Measuring Instruments	MPE 315	
7.	Refrigeration and Air Conditioning	MPE 411	
8.	Water Desalination	MPE 448	
9.	Graduation Project	MPE 414	
10.	Heat Transfer and Industrial Furnaces	MPE 293	Mechanical Design and Production Engineering (2003 Bylaw) – Mainstream
11.	Measurements and Metrology	MPD 222	
12.	<b>History Of Engineering Sciences</b>		
13.	Thermodynamics	MPE 201	Energy and Sustainable Energy Engineering (2016 Bylaw) – Credit Hour System
14.	Fluid Mechanics	MPE 202	
15.	Heat and Mass Transfer	MPE 301	
16.	Measurements and Instrumentation Systems	MPE 303	
17.	Applied Thermodynamics	MPE 304	
18.	Numerical Methods for Engineers	MPE 305	
19.	Applied Heat and Mass Transfer	MPE 401	
20.	Air Cond., Refrigeration & Environmental Control	MPE 412	
21.	Graduation Project (1)	MPE 591	
22.	Graduation Project (2)	MPE 592	
23.	Heat and Mass Transfer (1)	MPE 231	
24.	Heat and Mass Transfer (2)	MPE 234	
25.	Measurements and Instrumentation Systems	MPE 271	
26.	Fluid Mechanics and Heat Transfer	MPE 209	Industrial Engineering (2016 Bylaw) – Credit Hour System
27.	Measurement Methods for Industrial Engineering	MDP 407	
28.	Fluids And Thermal Systems	MPE 101	Electrical Engineering and Control (2016 Bylaw) – Credit Hour System
29.	Thermal And Fluid Systems	MEC 100	Electrical Engineering and Control (2023 Bylaw) – Credit Hour System
30.	Engineering and Society	GEN 102	General Courses for all Programs (2016 Bylaw) – Credit Hour System
31.	Psychology and Organizational Behavior	GEN 202	
32.	Leadership and Management Skills	GEN 301	
33.	Legislation, Contracts & Procurement Manag.	GEN 401	
34.	Human Resource Management	GEN 402	
35.	Societal Issues		

#### Postgraduate Level

#	Course Name	Code	Level/Academic Program
1.	Selected Topics in Heat Transfer	MEP 701	PhD/Mechanical Power Engineering (2016 Bylaw)
2.	Advanced Heat and Mass Transfer	MEP 606	MSc/Mechanical Power Engineering (2016 Bylaw)
3.	Refrigeration and Air Conditioning	MEP 612	
4.	Theory of Precise Measurements	MEP 602	
5.	Advanced Numerical Analysis	MEP 601	
6.	Advanced Heat and Mass Transfer	MEP 606	
7.	Refrigeration and Air Conditioning	MEP 612	ME/Mechanical Power Engineering (2016 Bylaw)
8.	Theory of Precise Measurements	MEP 602	
9.	Advanced Numerical Analysis	MEP 601	
10.	Project		
11.	Theory of Precise Measurements	MEP 602	MSc/Mechanical Design (2016 Bylaw)
12.	Theory of Precise Measurements	MEP 602	ME/Mechanical Design (2016 Bylaw)
13.	Theory of Precise Measurements	MEP 602	MSc/Mechatronics (2016 Bylaw)
14.	Theory of Precise Measurements	MEP 602	ME/Mechatronics (2016 Bylaw)
15.	Heat and Mass Transfer	MEP 502	Preparatory Courses/Mechanical Power Engineering (2016 Bylaw)
16.	Engineering Computational Methods	ENG 502	
17.	Advanced Heat and Mass Transfer	MEC 630	Basic Courses for PhD/Mechanical Power Engineering (2023 Bylaw)
18.	Advanced Refrigeration and Cold Stores	MEC 633	
19.	Advanced Heat and Mass Transfer	MEC 630	Advanced Eng. Diploma/Mechanical Power Engineering (2023 Bylaw)
20.	Advanced Refrigeration and Cold Stores	MEC 633	
21.	Applied Heat and Mass Transfer	MEC 510	Basic Eng. Diploma/Mechanical Power Engineering (2023 Bylaw)
22.	Advanced Mechanical Measurements	MEC 545	
23.	Measurements & Instrumentation	MEC 501	Basic Eng. Diploma/ Mechanical Design (2023 Bylaw)

- 5) **Scientific researcher in the field of Mechanical Power Engineering - more than 50 research papers have been published in local and international scientific journals such as:**
1. [Mohamed R. Salem](#), Mohamed M. Ellaban, R.K. Ali, Ashraf E. Elmohlawy, Experimental investigation of the performance attributes of a double pipe heat exchanger equipped with baffles of conventional or flower layouts, **Applied Thermal Engineering**, 253, 15 September 2024, 123771.
  2. N.M. Almulla, M.A. Moawed, M.A. Abd Elrahman, [Mohamed R. Salem](#), Study of the thermal performance characteristics of shell and semi-circular tube heat exchanger using both baffles and nanofluid, **Engineering Research Journal (Shoubra)**, 53(2), April 2024, 68-81.
  3. [Mohamed R. Salem](#), R.Y. Sakr, G.M.R. Assassa, Omar.A. Aly, Augmentation of solar still distillation performance using waste heat energy and guiding vanes: A field study, **Desalination**, 572, 1 March 2024, 117150.
  4. N.M. Almulla, M.A. Moawed, M.A. Abd Elrahman, [Mohamed R. Salem](#), Effect of baffle configuration on the thermal performance attributes of shell and semi-circular tube heat exchangers, **Engineering Research Journal (Shoubra)**, 53(1), January 2024, 279-291.
  5. [Mohamed R. Salem](#), M.N. Owyed, R.K. Ali, Experimental investigation of the performance attributes of a thermal energy storage unit using different system configurations, **Applied Thermal Engineering**, 230 Part (A), 25 July 2023, 120678.
  6. [Mohamed R. Salem](#), M.H. Alnaggar, A.A. Abd El-Aziz, H.A. Refaey, Experimental investigation of membrane distillation using waste heat for sea water desalination, **Engineering Research Journal (Shoubra)**, 52(1), January 2023, 189-193.
  7. H.A. Etaïwe, R.Y. Sakr, [Mohamed R. Salem](#), H.E. Abdelrahman, Numerical simulation for seawater air precooler, **Journal of Al-Azhar University Engineering Sector**, 17(65), **October** 2022, 1241-1260.
  8. H.A. Etaïwe, R.Y. Sakr, [Mohamed R. Salem](#), H.E. Abdelrahman, Absorption air conditioning system using seawater for air precooling, **Journal of Al-Azhar University Engineering Sector**, 17(64), August 2022, 974-991.
  9. Andrey Colaço, Viviana C. Mariani, [Mohamed R. Salem](#), Leandro dos Santos Coelho, Maximizing the thermal performance index applying evolutionary multi-objective optimization approaches for double pipe heat exchanger, **Applied Thermal Engineering**, 211, 5 July 2022, 118504.
  10. A.A. Alghrubah, M.A. Abd Elrahman, M.F. Abd Rabbo, Y.A. Al-Mashad, [Mohamed R. Salem](#), Experimental study and thermal performance evaluation of staggered cross flow heat exchangers of semi-circular tubes: II- Effect of attack angle, **Engineering Research Journal (Shoubra)**, 50(1) October 2021, 77-85.
  11. A.A. Alghrubah, M.A. Abd Elrahman, M.F. Abd Rabbo, Y.A. Al-Mashad, [Mohamed R. Salem](#), Experimental study and thermal performance evaluation of staggered cross flow heat exchangers of semi-circular tubes: I- Effect of pitch ratio and space between bases, **Engineering Research Journal (Shoubra)**, 50(1) October 2021, 67-76.
  12. T.M. Almulla, M.W. Shawki, M.F. Abd Rabbo, Y.A. Al-Mashad, [Mohamed R. Salem](#), Effect of spaces between aligned tubes having a semicircular section on heat exchange attributes, **Engineering Research Journal (Shoubra)**, 50(1) October 2021, 57-66.
  13. T.M. Almulla, M.W. Shawki, M.F. Abd Rabbo, Y.A. Al-Mashad, [Mohamed R. Salem](#), Augmentation of thermal performance of air cooler having semi-circular tubes of an inline arrangement, **Engineering Research Journal (Shoubra)**, 50(1) October 2021, 48-56.
  14. Omar A Elfikey, Ramdan Y Sakr, Ghazy M Assassa, [Mohamed R. Salem](#), Productivity of Solar Still Unit Engaged with Waste Energy Source, **Engineering Research Journal (Shoubra)**, 50(1) October 2021, 14-22.
  15. H.A. Refaey, Mathkar A. Alharthi, [Mohamed R. Salem](#), Ali A. Abdel-Aziz, H. Abdelrahman, M.A. Karali, Numerical investigations of convective heat transfer for lattice settings in brick tunnel Kiln: CFD simulation with experimental validation, **Thermal Science and Engineering Progress** 24, August 2021, 100934.
  16. M. Mostafaa, M. Moawed, H.A. Refaey, [Mohamed R. Salem](#), Performance evaluation of a sea water reverse osmosis system at different operating scenarios, **Engineering Research Journal (Shoubra)**, 49(1) July 2021, 67-79.
  17. M.E. Zoreia, [Mohamed R. Salem](#), R.K. Ali, K.M. Elshazly, Augmentation of the performance of a photovoltaic cell: A field study, **Engineering Research Journal (Shoubra)**, 49(1), July 2021, 11-24.

18. [Mohamed R. Salem](#), Moataz R. Salem, M.G. Higazy, M.F. Abdraboo, Enhancement of the performance of a solar still desalination unit, **Engineering Research Journal (Shoubra)**, 49(1), July 2021, 1-10.
19. H. Refaey, [Mohamed R. Salem](#), M. Ahmed, M.F. Abdrabbo, Numerical investigations of the performance of water-based nanofluid flow in conically coiled tube-in-tube heat exchangers: CFD simulation with experimental validation, **14<sup>th</sup> International Conference of Fluid Dynamics 2-3 April 2021**, ICFD14-EG-7065, 1-17.
20. E.A. Abdel-Hadi, S.H. Taher, [Mohamed R. Salem](#), S.A. Eldewiny, Performance enhancement of a vapour compression refrigeration system using liquid-suction heat exchanger, **Engineering Research Journal (Shoubra)**, 47(1), January 2021, 14-27.
21. [Mohamed R. Salem](#), Performance enhancement of a vapor compression refrigeration system using R134a/MWCNT-oil mixture and liquid-suction heat exchanger equipped with twisted tape turbulator, **International Journal of Refrigeration** 120, December 2020, 357-369.
22. [Mohamed R. Salem](#), Experimental investigation on the hydrothermal attributes of MWCNT/water nanofluid in the shell-side of shell and semi-circular tubes heat exchanger, **Applied Thermal Engineering** 175, 25 July 2020, 115438.
23. [Mohamed R. Salem](#), Moataz R. Salem, M.G. Higazy, M.F. Abdraboo, Corrigendum to "Performance enhancement of a solar still distillation unit: A field investigation" [Solar Energy 202 (2020) 326-341], **Solar Energy**, 204, July 2020, p. 778.
24. [Mohamed R. Salem](#), Moataz R. Salem, M.G. Higazy, M.F. Abdraboo, Performance enhancement of a solar still distillation unit: A field investigation, **Solar Energy** 202, 15 May 2020, 326-341.
25. S.M. Elshamy, M.T. Abdelghany, [Mohamed R. Salem](#), O.E. Abdellatif, Energy and exergy analysis of shell and coil heat exchanger using water based Al<sub>2</sub>O<sub>3</sub> nanofluid including diverse coil geometries: An experimental study, **Journal of Nanofluids** 9(1), March 2020, 13-23.
26. M.A. Karali, E. Specht, J. Mellmann, H.A. Refaey, [Mohamed R. Salem](#), A.Y. Elbanhawy, Granular transport through flighted rotary drums operated at optimum-loading: Mathematical model, **Drying Technology** 38(4), January 2020, 495-505.
27. M.M. Metwally, [Mohamed R. Salem](#), A.A. Abdul-Aziz, K.M. Elshazly, Experimental investigation on the performance of a photovoltaic module, **Engineering Research Journal (Shoubra)**, 43(1), January 2020, 36-43.
28. M.T. Abdelghany, S.M. Elshamy, [Mohamed R. Salem](#), O.E. Abdellatif, Enhancement the thermal performance of a shell and coil heat exchanger with different coil geometries: Comparative experimental investigation, **Engineering Research Journal (Shoubra)**, 43(1), January 2020, 57-65.
29. M.T. Elazab, [Mohamed R. Salem](#), H.A. Refaey, A.A. Abd-Elaziz, Experimental study on the performance enhancement of a solar seawater desalination system, **Engineering Research Journal (Shoubra)**, 42(1), October 2019, 30-36.
30. [Mohamed R. Salem](#), M.M. Elsayed, A.A. Abd-Elaziz, K.M. Elshazly, Performance enhancement of the photovoltaic cells using Al<sub>2</sub>O<sub>3</sub>/PCM mixture and/or water cooling-techniques, **Renewable Energy**, 138, August 2019, 876-890.
31. H.A. El-Gammal, [Mohamed R. Salem](#), A.A. Abdulaziz, K.M. Elshazly, The performance enhancement of a water chiller of conically coiled tube evaporator, **Engineering Research Journal (Shoubra)**, 41(1), July 2019, 51-62.
32. A. Atta, [Mohamed R. Salem](#), H.A. Refaey, M.A. Moawed, Study of heat transfer and pressure drop inside helical cone tube, **Engineering Research Journal (Shoubra)**, 41(1), July 2019, 9-15.
33. [Mohamed R. Salem](#), H.A. El-Gammal, A.A. Abd-Elaziz, K.M. Elshazly, Study of the performance of a vapor compression refrigeration system using conically coiled tube-in-tube evaporator and condenser, **International Journal of Refrigeration** 99, March 2019, 393-407.
34. M.A. Radwan, [Mohamed R. Salem](#), H.A. Refaey, M.A. Moawed, Experimental study on convective heat transfer and pressure drop of water flow inside conically coiled tube-in-tube heat exchanger, **Engineering Research Journal (Shoubra)**, 39(1), January 2019, 86-93.
35. M.M. Ellaban, M.A. Abdelrahman, [Mohamed R. Salem](#), M.A. Moawed, K.M. Elshazly, Study of convective heat transfer and pressure drop characteristics inside shell and semi-

- circular tubes heat exchanger, **Engineering Research Journal (Shoubra)**, 39(1), January 2019, 39-45.
36. M.M. Alkhaja, [Mohamed R. Salem](#), K.M. Elshazly, M.F. Abdrabbo, Experimental study on the performance enhancement of a water chiller, **Scientific Journal of October 6 University**, 4, 2018.
  37. M.M. Alkhaja, [Mohamed R. Salem](#), K.M. Elshazly, M.F. Abdrabbo, Experimental study on the performance enhancement of a heat pump, **Scientific Journal of October 6 University**, 4, 2018.
  38. A.B. Colaço, F. Bernardo, M.B. Lopes, V.C. Mariani, L. Coelho, [Mohamed R. Salem](#), Optimization of double pipe-heat exchanger with single segmental perforated baffles, **17<sup>th</sup> Brazilian Congress of Thermal Sciences and Engineering**, November 25<sup>th</sup>-28<sup>th</sup>, 2018, Águas de Lindóia, SP, Brazil), 234, 0234.
  39. H.A. Refaey, A.A. Abdel-Aziz, [Mohamed R. Salem](#), H.E. Abdelrahman, M.W. Al-Dosoky, Thermal performance augmentation in the cooling zone of brick tunnel kiln with two types of guide vanes, **International Journal of Thermal Sciences** 130, August 2018, 264-277.
  40. M.S. Elsayed, [Mohamed R. Salem](#), A.A. Attia, R.Y. Sakr, Nanofluid flow boiling heat transfer enhancement in tube fitted with twisted tapes, **Engineering Research Journal (Shoubra)**, 37(1), July 2018, 26-37.
  41. M.S. Elsayed, [Mohamed R. Salem](#), A.A. Attia, R.Y. Sakr, Flow boiling transfer enhancement using twisted tapes, **Engineering Research Journal (Shoubra)**, 37(1), July 2018, 13-21.
  42. R.K. Ali, H.A. Refaey, [Mohamed R. Salem](#), Effect of package spacing on convective heat transfer from thermal sources mounted on a horizontal surface, **Applied Thermal Engineering** 132, March 2018, 676-685.
  43. [Mohamed R. Salem](#), M.B. Eltoukhy, R.K. Ali, K.M. Elshazly, Experimental investigation on the hydrothermal performance of a double-pipe heat exchanger using helical tape insert, **International Journal of Thermal Sciences** 124, February 2018, 496-507.
  44. H.A. Refaey, A.A. Abdel-Aziz, R.K. Ali, H.E. Abdelrahman, [Mohamed R. Salem](#), Augmentation of convective heat transfer in the cooling zone of brick tunnel kiln using guide vanes: an experimental study, **International Journal of Thermal Sciences** 122, December 2017, 172-185.
  45. [Mohamed R. Salem](#), M.K. Althafeeri, K.M. Elshazly, M.G. Higazy, M.F. Abdrabbo, Experimental investigation on the thermal performance of a double pipe heat exchanger with segmental perforated baffles, **International Journal of Thermal Sciences** 122, December 2017, 39-52.
  46. [Mohamed R. Salem](#), R.K. Ali, K.M. Elshazly, Experimental investigation of the performance of a hybrid photovoltaic/thermal solar system using aluminium cooling plate with straight and helical channels, **Solar Energy** 157, November 2017, 147-156.
  47. M.K. Althafeeri, [Mohamed R. Salem](#), K.M. Elshazly, M.G. Higazy, M.F. Abdrabbo, Study of the heat transfer enhancement in a double pipe heat exchanger using segmental perforated baffles, **Scientific Journal of October 6 University**, 3, 2017.
  48. M.B. Eltoukhey, [Mohamed R. Salem](#), R.K. Ali, K.M. Elshazly, The thermal performance enhancement of a concentric tube heat exchanger using helical fins on the internal tube, **Engineering Research Journal (Shoubra)**, 34(1), October 2017, 16-22.
  49. A.S. Morad, [Mohamed R. Salem](#), H.A. Refaey, K.M. Elshazly, Experimental investigations of convective heat transfer in cooling zone of perforated bricks tunnel kiln, **Scientific Journal of October 6 University**, 3, June 2017.
  50. K.M. Elshazly, R.Y. Sakr, R.K. Ali, [Mohamed R. Salem](#), Effect of  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>/water nanofluid on the thermal performance of shell and coil heat exchanger with different coil torsions, **Heat and Mass Transfer** 53(6), June 2017, 1893-1903.
  51. [Mohamed R. Salem](#), K.M. Elshazly, R.Y. Sakr, R.K. Ali, Effect of coil torsion on heat transfer and pressure drop characteristics of shell and coil heat exchanger, **Journal of Thermal Science and Engineering Applications** 8(1), March 2016, 011015, 7 Pages.
  52. [Mohamed R. Salem](#), R.K. Ali, R.Y. Sakr, K.M. Elshazly, Effect of  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>/water nanofluid on heat transfer and pressure drop characteristics of shell and coil heat exchanger with different coil curvatures, **Journal of Thermal Science and Engineering Applications** 7(4), December 2015, 041002, 9 Pages.

53. H.A. Refaey, E. Specht, [Mohamed R. Salem](#), Influence of fuel distribution and heat transfer on energy consumption in tunnel kilns, **International Journal of Advances in Engineering & Technology** 8(3), June 2015, 281-293.
54. [Mohamed R. Salem](#), K.M. Elshazly, R.Y. Sakr, R.K. Ali, Experimental investigation of coil curvature effect on heat transfer and pressure drop characteristics of shell and coil heat exchanger, **Journal of Thermal Science and Engineering Applications** 7(1), March 2015, 011005, 9 Pages.

**6) [Supervising many doctoral and master's theses, including: PhD Theses](#)**

1. **Researcher** / Yasser Mohamed Abdulhalim Wahba Safan  
Study and Implementation of Hybrid Photovoltaic/Thermal Solar Collector with Nanofluid Spectral Beam Splitting Filter
2. **Researcher** / Fatma Mohamed Abdo Ashour  
Convection Heat Transfer of LED Light Heat Sink with Various Fin Configuration
3. **Researcher** / Helal Anwar Helal El-Gammal  
The Use of Waste Heat to Improve the Productivity of a desalination Unit: Experimental and Analytical Study
4. **Researcher** / Mohamed Mohy Mohamed Abd Elhady Ellaban  
Study of the Performance Attributes of a Double Pipe Heat Exchanger Equipped with Baffles and a Nanofluid in the Annular Side
5. **Researcher** / Said Abdel-Kerem Mustafa  
Augmenting the Utilization of the Waste Heat Energy to Improve the Yield of a Solar Distillation Unit
6. **Researcher** / Shereen Aly Ebrahim Mohamed Eldewiny  
Experimental Study on The Use of Waste Heat Energy to Augment the Performance of a Solar Distillation Unit Having a Pyramid-Shaped Glass Cover
7. **Researcher** / Hussein Ali Atewi  
A Technical and Economic Study of the Use of Seawater in Air Conditioning Systems in the Northern Arabian Gulf
8. **Researcher** / Nawaf Mesaed Almolla  
Study of The Thermal Performance Characteristics of Water-Based Nanofluid Flow inside Shell and Semi-Circular Tubes Heat Exchanger
9. **Researcher** / Nasser Mohammad Abd-Elmohsen  
A Field Investigation on Enhancing the Water Desalination Yield from a Solar Distillation Unit
10. **Researcher** / Ahmed Shawky Mohamed Rosas  
Experimental Study of Forced Convection and Pressure Loss Through Finned Metal Foam Heat Sinks
11. **Researcher** / Talal Mesaed Almolla  
Study of the Thermal Performance Enhancement of a Heat Exchanger of Semi-Circular Tubes
12. **Researcher** / Mostafa Sabry Alsayed Hemedat  
Experimental Study of Heat Transfer Enhancement and Hydrodynamic Characteristics of Water-Based Nanofluid Flow Boiling in a Circular Tube Fitted with Twisted-Tapes
13. **Researcher** / Adel Abduallah Rashed  
Experimental Study on the Heat Transfer and Pressure Drop Characteristics Around Semi-Circular Tubes in Staggered Arrangement
14. **Researcher** / Mohamed Khalaf Dhaidan ALthafeeri  
The Use of Perforated Baffled Channels for Heat Transfer Enhancement
15. **Researcher** / Mahmoud Mohammed Alkhaja  
Heat Transfer Analysis with Artificial Neural Networks (ANNS)

**[MSc. Theses](#)**

16. **Researcher** / Riad Medhat Riad Metwally  
Enhanced Cooling for Thermal Control of Heat Source
17. **Researcher** / Ahmed M.A. Mohamed Fouad Altoukhy  
The Effect of Geometrical Attributes of a Solar Chimney on The Performance of a Solar Distiller
18. **Researcher** / Menna Mohamed Ahmed Reda Hamed  
Study the Effect of using Phase Change Material and Semicircular Tubular Fins on Thermal Regulation of Photovoltaic Modules Integrated in Buildings

19. **Researcher** / Abdul Rahman Abdullah Metwally  
An Experimental Study on the Performance Characteristics of Heat Exchangers with Air Bubble Injection
20. **Researcher** / Ahmed Atta Mohamed  
Study of Heat Transfer and Pressure Drop Inside a Helical Cone Tube
21. **Researcher** / Mohamed Moustafa Khaled  
Study of The Thermal Performance from Helical Cone Coils
22. **Researcher** / Mohamed Tawfik Abdelghany  
Performance Enhancement of Shell and Coil Heat Exchanger Using Nanofluid
23. **Researcher** / Mohamed Tarek Elsayed  
Experimental Study on the Performance Enhancement of a Solar Sea Water Desalination System
24. **Researcher** / Mohamed Helmy Elnagar  
Study of Membrane Distillation using Solar Energy or Waste Heat for Sea Water Desalination
25. **Researcher** / Mohamed Nasser Mohamed Owyed  
Experimental Study on the Performance Characteristics of a Thermal Energy Storage System
26. **Researcher** / Omar Abdul Motaleb Abdul Zaher Ali Elfieky  
Improvement of a Solar Still Productivity for Sea Water Desalination Using Waste Energy
27. **Researcher** / Muataz Rajab Salem Mohamed  
Performance Enhancement of a Solar Still for Sea Water Desalination: A Field Study
28. **Researcher** / Ahmed Salah Emam Morad  
Study of Convective Heat Transfer and Pressure Drop for Different settings of Perforated Bricks inside a Tunnel Kiln
29. **Researcher** / Mohamed Beshar Eltoukhey  
Study of Thermal Performance Enhancement of a Double-Pipe Heat Exchanger Using Helical Fin on the Inner Pipe
30. **Researcher** / Helal Anwr Helal Aljammal  
Study of the Performance of a Vapour Compression Refrigeration Cycle Using Conically Coiled Tube-in-Tube Evaporator and Condenser
31. **Researcher** / Mohamed Mohamed Metwally  
Study of Photovoltaic Cells Cooling Using Compound Enhancement Technique
32. **Researcher** / Mohamed Mohy Mohamed Ellaban  
Study of Convective Heat Transfer and Pressure Drop Characteristics inside Shell and Semi-Circular Cross-Sectional Tubes Heat Exchanger
33. **Researcher** / Mohamed Ali Ebrahim Elsayed  
Experimental Study on Convective Heat Transfer and Pressure Drop of Water-Based Nanofluid Flow Inside Conically Coiled Tube-In-Tube Heat Exchanger
34. **Researcher** / Mohamed Elsayed Mohamed Zoreia  
Study of Electrical and Thermal Performance Enhancement of Photovoltaic/Thermal Cells
35. **Researcher** / Sherein Aly Mohamed Eldweiny  
Heat Transfer Enhancement of Vapour Compression Refrigeration Systems Using Nanoparticles

#### **Administrative Positions**

- ✓ **Member of the Council of the Faculty of Engineering at Shoubra - Benha University 2023/2024.**
- ✓ **Chairman of Final Exams – Postgraduate Control Committee of "Mechanical Engineering Department" at Faculty of Engineering, Benha University, 2023 till now.**
- ✓ **General Supervisor of the Printing, Publishing and Distribution Center at Benha University from 31 August 2023 until now.**
- ✓ **Coordinator of the Mechanical Power Engineering Program - Department of Mechanical Engineering - Faculty of Engineering in Shubra - Benha University from February 2023 until now.**
- ✓ **Quality Coordinator in the Mechanical Power Engineering Program - Department of Mechanical Engineering - Faculty of Engineering in Shubra - Benha University in December 2022.**



- ✓ **Member of the Committee for Updating and Developing the Undergraduate Regulations for the Energy and Sustainable Energy Engineering Program in the Department of Mechanical Engineering - Faculty of Engineering in Shoubra - Benha University 2022.**
- ✓ **Chairman of Final Exams – Undergraduate Control Committee of "Mechanical Engineering Department" at Faculty of Engineering, Benha University, 2021 till 2023.**
- ✓ **Member of the Education and Student Affairs Committee - Faculty of Engineering in Shubra - Benha University 2021/2022.**
- ✓ **Member of the Committee for Updating and Developing the Postgraduate Stage Regulations for the Mechanical Power Engineering Program in the Department of Mechanical Engineering - Faculty of Engineering in Shubra - Banha University 2021-2022.**
- ✓ **Secretary of the Board of the Mechanical Engineering Department, Faculty of Engineering, Shoubra, Benha University, from 2021/2022 till now.**
- ✓ **Member of the Committee for Updating and Developing the Bachelor's Stage Regulations for the Mechanical Power Engineering Program in the Department of Mechanical Engineering - Faculty of Engineering in Shoubra - Banha University 2021.**
- ✓ **General Coordinator of Student' Activities at Faculty of Engineering, Benha University, September 2021/2022.**
- ✓ **Vice Director of the Quality Assurance and Academic Accreditation Unit at Faculty of Engineering at Shoubra - Benha University – from December 2020.**
- ✓ **Vice-Chairman of Final Exams Control Committee of "Mechanical Engineering Department" at Faculty of Engineering, Benha University, 2020/2021.**
- ✓ **Member of Laboratory Committee at Faculty of Engineering at Shoubra - Benha University 2020/2021.**
- ✓ **Member of the Board of Directors of Credit-Hour Programs - Faculty of Engineering in Shubra - Benha University 2020/2021.**
- ✓ **Member of the Board of Directors of Sustainable Energy & Energy Engineering Program - Faculty of Engineering in Shubra - Benha University 2020/2021.**
- ✓ **Member of Laboratory Committee at Faculty of Engineering at Shoubra - Benha University 2020/2021.**
- ✓ **Head of Final Exams Control Committee (Fourth Year) at "Mechanical Engineering Department" at Faculty of Engineering, Shoubra, Benha University, 2019/2020.**
- ✓ **Coordinator of Quality Committee at "Industrial Engineering Program" at Faculty of Engineering at Shoubra - Benha University" from 2019 till now.**
- ✓ **Member of Center of Innovation and Entrepreneurship - Benha University, in August 2019.**
- ✓ **Advisor to the Committee on Mobility and Public Service at Faculty of Engineering at Shoubra - Benha University 2018/2019.**
- ✓ **Member of the Study Schedules Committee at "Mechanical Engineering Department" at Faculty of Engineering, Shoubra, Benha University, from 2015 till now.**
- ✓ **Member of the Student Affairs Committee at "Mechanical Engineering Department" at Faculty of Engineering, Shoubra, Benha University, from 2015 till now.**

- ✓ Member of Quality Committee at "Industrial Engineering Program" at Faculty of Engineering at Shoubra - Benha University from 2016 till 2019 (Faculty has got the certificate of Quality Assurance and Accreditation of Education at 2016).
- ✓ Member of Quality Committee at "Sustainable Energy & Energy Engineering Program" at Faculty of Engineering at Shoubra - Benha University from 2015 till 2016 (Faculty has got the certificate of Quality Assurance and Accreditation of Education at 2016).
- ✓ Member of Quality Committee at "Mechanical Engineering Department" at Faculty of Engineering, Shoubra, Benha University, from 2014 till 2019.
- ✓ Member of Laboratory Committee at Faculty of Engineering at Shoubra - Benha University 2016/2017.
- ✓ Board Member of Research Projects Center at Faculty of Engineering at Shoubra - Benha University from 2015 till 2016.
- ✓ Board Member of Quality Unit at Faculty of Engineering at Shoubra - Benha University from 2015 till 2016 (Faculty has got the certificate of Quality Assurance and Accreditation of Education at 2016).
- ✓ Coordinator of schedules/control of Midterm Exam – Mechanical Engineering Department – Faculty of Engineering in Shoubra - Benha University from 2015.
- ✓ Member of Undergraduate Control Committee – Mechanical Engineering Department – Faculty of Engineering in Shoubra - Benha University from 2006 to 2019 from 2006 till 2019.

#### University Development Contributions in the Field of Specialization

- Member of the review committee for the college's strategic plan (2023-2030).
- Member of the Committee for Updating and Developing the Energy and Sustainable Energy Engineering Program Bylaw - Credit Hour System 2023.
- Member of the Committee for the Updating and Development of postgraduate Bylaw of Mechanical Power Engineering at Mechanical Engineering Department at Faculty of Engineering, Shoubra, Benha University, 2023.
- Participation in Updating and Development of undergraduate Bylaw of Mechanical Power Engineering at Mechanical Engineering Department at Faculty of Engineering, Shoubra, Benha University, 2021.
- Participation in preparing the curricula and bylaws for the bachelor's level in the programs of the Faculty of Engineering at Benha National University in Obour 2022.

#### Memberships & Academic Professional Societies

- Member of Egyptian Society of Engineers.
- Member of Innovation and Entrepreneurship Center - Benha University.
- **Peer Reviewer at International Scientific Journals (>114)**
  - ✓ Energy – Elsevier.
  - ✓ Solar Energy – Elsevier.
  - ✓ Renewable Energy – Elsevier.
  - ✓ Applied Thermal Engineering – Elsevier.
  - ✓ International Journal of Thermal Sciences – Elsevier.
  - ✓ International Journal of Heat and Mass Transfer – Elsevier.
  - ✓ International Journal of Refrigeration – Elsevier.
  - ✓ Chemical Engineering Research and Design – Elsevier.
  - ✓ Heat and Mass Transfer – Springer.
  - ✓ Journal of Thermal Science and Engineering Applications – ASME.
  - ✓ Renewable Energy Focus - Journal - Elsevier
  - ✓ International Journal of Green Energy - Taylor & Francis Online.
  - ✓ Drying Technology - Taylor & Francis Online.
  - ✓ Case Studies in Thermal Engineering – Elsevier.

**Passed  
Training  
Courses**

- A workshop on Utilizing Thingi Platform; 22/9/2023.
- A training course on "Training of Trainers TOT1" in the period from 19/8/2023 to 21/8/2023 at the Center for Capacity Development of Faculty and Leadership Members at Benha University
- A training course on "Financial and Legal Aspects in Universities" in the period from 9/8/2023 to 10/8/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "University Management" in the period from 27/7/2023 to 28/7/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "Total Quality Management" in the period from 24/7/2023 to 25/7/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "Research Team Management" in the period from 20/7/2023 to 11/7/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "Question Banks and Tests" in the period from 27/3/2023 to 28/3/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "Organizing Scientific Conferences" in the period from 23/3/2023 to 24/3/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "Strategic Planning" in the period from 20/3/2023 to 21/3/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "Website Management" in the period from 15/3/2023 to 16/3/2023 at the Center for Capacity Development of Faculty Members and Leadership at Benha University.
- A training course on "self-Evaluation and External Review" in the period from 13/3/2023 to 14/3/2023 at the Center for Developing the Capacities of Faculty Members and Leaders at Benha University.
- A training course for "Learning Management System and Self-Production of Electronic Courses" through the Supreme Council of Egyptian Universities on 20/6/2021.
- The "Self-Assessment of Educational Programs: Colleges and Institutes of Higher Education" course by the National Authority for Quality Assurance and Accreditation of Education, in the period from 1/2/2020 to 3/2/2020.
- Workshop on Project Management. The module is provided by DAAD Kairo Akademie in cooperation with Benha University (2/9/2019).
- A training course for "Skills of Preparing Program Reports and Courses, and Improvement Plans" in the period from 12/9/2018 to 13/9/2018 at the University of Benha.
- "Preparation of Leaders" course at the Leadership Development Institute in Helwan from 11/8/2018 to 15/8/2018.
- A training course for "Statistical Analysis using SPSS" on 3/1/2018 within the project of training in information and communication technology - Management of Development Projects at Benha University.
- A training course for "Quality Standards in Teaching" in the period from 20/12/2017 to 23/12/2017 at the Faculty and Leadership Development Center at Benha University.
- A training course for the program "Strategic Planning" in the period from 17/12/2017 to 19/12/2017 at the Faculty and Leadership Development Center at Benha University.
- A training course for "Time Management and Meetings" program from 17/12/2017 to 19/12/2017 at the Faculty and Leadership Development Center at Benha University.
- A training course for "Self-Assessment and External Audit" from 12/12/2017 to 14/12/2017 at the Faculty and Leadership Development Center at Benha University.

- Training course for the "**Management of Websites**" program from 12/12/2017 to 14/12/2017 at the Faculty and Leadership Development Center at Benha University.
- A training course for the "**Use of Technology in Teaching**" program in 2011 at the Faculty and Leadership Development Center at Benha University.
- A training course for the "**Quality Standards**" program in 2011 at the Faculty and Leadership Development Center at Benha University.
- A training course for "**Competitive Research Projects**" in 2011 at the Faculty and Leadership Development Center at Benha University.
- A training course for the "**Financial and Legal Aspects**" program in 2011 at the Faculty and Leadership Development Center at Benha University.
- A training course for the "**Effective Presentation**" program in 2011 at the Faculty and Leadership Development Center at Benha University.

## Awards

- A certificate of thanks and appreciation from the College of Engineering in Shubra on April 29, 2024, at the college's annual conference due to my contribution as the mechanical power engineering program coordinator in the program's accreditation from the National Authority for Educational Quality Assurance and Accreditation.
- A certificate of thanks and appreciation from the Mechanical Engineering Department at the department's scientific conference 2024 due to my contribution as the Mechanical Power Engineering Program Coordinator in the program's accreditation from the National Authority for Quality Assurance of Education and Accreditation.
- **60 Awards** from **Applied Thermal Engineering – Elsevier**: Certificates of Reviewing. In recognition of the review made of the journal.
- **14 Awards** from **Energy – Elsevier**; Certificates of Reviewing. In recognition of the review made of the journal.
- **8 Awards** from **International Journal of Heat and Mass Transfer – Elsevier**; Certificates of Reviewing. In recognition of the review made of the journal.
- **5 Awards** from **International Journal of Refrigeration – Elsevier**, Certificate of Reviewing. In recognition of the review made of the journal.
- **4 Awards** from **Chemical Engineering Research and Design – Elsevier**, Certificate of Reviewing. In recognition of the review made of the journal.
- **3 Awards** from **Journal of Cleaner Production – Elsevier**; Certificates of Reviewing. In recognition of the review made of the journal.
- **3 Awards** from **Case Studies in Thermal Engineering – Elsevier**, Certificates of Reviewing. In recognition of the review made of the journal.
- **2 Awards** from **Chemical Papers – Springer**, Certificate of Reviewing. In recognition of the review made of the journal.
- **Award** from **International Journal of Ambient Energy – Taylor & Francis Online**, Certificate of Reviewing. In recognition of the review made of the journal.
- **Award** from **Renewable Energy Focus – Elsevier**, Certificate of Reviewing. In recognition of the review made of the journal.
- January 2017: Outstanding Reviewer: In recognition of the contributions made to the quality of the Journal (**Applied Thermal Engineering – Elsevier**): You have been awarded this recognition as you are within the top **10<sup>th</sup> percentile** of reviewers for the Journal.
- December 2017: Third Scientific Excellence Day (2017) - **Benha University – Egypt**. Certificate of excellent performance in scientific research and international publication.
- December 2017: Third Scientific Excellence Day (2017) - **Benha University – Egypt**. Certificate of excellent performance; This is due to the efforts made to obtain accreditation for Faculty of Engineering at Shoubra.
- July 2018: Fourth Scientific Excellence Day (2018) - **Benha University – Egypt**. Certificate of excellent performance in scientific research and international publication.
- July 2019: Fifth Scientific Excellence Day (2019) - **Benha University – Egypt**. Certificate of excellent performance in scientific research and international publication.

- **December 2020: Sixth Scientific Excellence Day (2020) - Benha University – Egypt.** Certificate of excellent performance in scientific research and international publication.
- **January 2021 - A letter of thanks and appreciation, from Elsevier International Publishing Foundation,** for being a reviewer and referee of several scientific papers which were published in that institution’s journals during 2020.
- **October 2021: Seventh Scientific Excellence Day (2021) - Benha University – Egypt.** Certificate of excellent performance in scientific research and international publication.
- **September 2022: Eighth Scientific Excellence Day (2022) - Benha University – Egypt.** Certificate of excellent performance in scientific research and international publication.
- **October 2023: Ninth Scientific Excellence Day (2023) - Benha University – Egypt.** Certificate of excellent performance in scientific research and international publication.

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