

Curriculum Vitae

PERSONAL INFORMATION:

Name: Bahaa Mostafa Kamel Mehany

Date of birth: October 1, 1984

Citizenship: Egyptian

Marital Status: Married with two children

Work Address : National Research Center “NRC” Mechanical Engineering
Department El Buhouth Street, Dokki, P.O.#12622 Cairo, Egypt.

E-mail address: bahaa2004eg@yahoo.com

Telephone: +201227004606,

Languages English and Arabic.

Research gate website: https://www.researchgate.net/profile/Bahaa_Mostafa6 .

URL : <http://www.nrc.sci.eg/nrc/>



EDUCATION:

Ph.D. In Mechanical Design and Production Engineering “Tribological And Rheological Characteristics of Modified Calcium Grease with Carbon Nanotubes and Graphene Nanosheets”. Cairo University, Giza, Egypt (2016).

M.Sc. In Mechanical Design and Production Engineering “Modeling and Simulation of hydrogen storage tank fabricated from Composite Materials”. Cairo University, Giza, Egypt (2012).

B.Sc. In Mechanical Design and Production Engineering, (2006).

➤ **CERTIFICATES and AWARDS .**

1. Scholarship from the Academy of Scientific Research and Technology to obtain the master’s degree from the National Research Center.2007.

2. The best Ph.D. thesis from the Department of Mechanical Engineering, Cairo University 2017.

➤ **TEACHING EXPERIENCES..**

- Researcher at Mechanical Engineering Department National Research Centre (NRC-Egypt) from 2007 until now.
- Assistant Researcher at Mechanical Engineering Department from. 2012 to 2017.
- Researcher Assistant at Mechanical Engineering Department from 2007 to 2011.
- Lecturer at Misr University for Science & Technology(Academic years 2011-214)
- El-Obour High Institute for Engineering and Technology (Academic years 2012-2015)
- Thebes Academy for Science – Maadi – Cairo (Academic years 2008-214)
- Akhbar El-Yom Academy- Sixth of October City (Academic years 2007).

➤ **RESEARCH PROJECTS.**

- Hydrogen storage, Design and manufacturing composite pressure vessels (2008).
- Seawater desalination, Hollow fiber membrane manufacturing (2010).
- Manufacturing, Evaluation and testing of cascaded VAWT design equipped with Savonius VAWT9(2020)
- Mini car run by alternative renewable fuel for 4 persons(2020)

➤ **TEACHING COURSES FOR AN UNDERGRADUATE.**

- Engineering Mechanics
- Engineering Drawing
- Production Engineering
- Fluid Mechanics
- Material science

➤ **PROFESSIONAL MEMBERSHIP.**

- Member of Egyptian Syndicate of Engineers (ESE) since August 2006
- Founder member of international society of science and technology2019.

➤ **SUPERVISION OF M.SC.**

1-Esraa Mohamed Afifi, “Investigation of gear performance of MLNGPs as an additive on polyamid. Spur gear”, M.Sc. Thesis, Department of Mechanical Engineering, Cairo University, Jan.2018.

2-Ahmed Shaban zayed, “Experimental study of tribological and mechanical properties of aluminum matrix reinforced by Al₂O₃/CNTs M.Sc”, Thesis, Department of Mechanical Engineering, Cairo University, Oct. 2019.

PUBLICATIONS

- 1-[Bahaa M. Kamel](#), Mohamed El-Anwar and Nihad M. El-Chazly " Design of Hydrogen Storage Tanks Fabricated from Composite Materials ",16th International Conference on Applied Mechanics and Mechanical Engineering, Military Technical College ,Kobry El-Kobbah, Cairo, Egypt, , 27-29 May, 2014.
- 2-[Bahaa M. Kamel](#), Alaa Mohamed, M. El Sherbiny and k.A.Abed,2016,“Rheology and Thermal Conductivity of Calcium Grease Containing Multi-Walled Carbon NanoTubes”,journal of Fullerenes, Nanotubes and Carbon Nanostructures , Fullerenes, Nanotubes and Carbon Nanostructures, Vol.24,No.4,pp.260-265.
- 3-[Bahaa M. Kamel](#), Alaa Mohamed, M. El Sherbiny and k.A.Abed,2016 ,“ Tribological behaviour of calcium grease containing carbon nanotubes additives ”, journal of Industrial Lubrication and Tribology, Vol.68,No.6.
- 4-[Bahaa M. Kamel](#), Alaa Mohamed, M. El Sherbiny, M. Abd-Rabou and k.A.Abed, 2017,“Tribological Properties of Synthesis Graphene Nanosheets as an Additive in Calcium Grease”, Journal of Dispersion Science and Technology, Vol. 38, No. 10, pp. 1495–1500.
- 5-[Bahaa M. Kamel](#), Alaa Mohamed, M. El Sherbiny, M. Abd-Rabou and k.A.Abed,2017 ,“ Rheological Characteristics Of Modified Calcium Grease With Graphene Nanosheets”, Fullerenes, Nanotubes and Carbon Nanostructures, Vol. 25, No. 7, pp.429–434.
- 6- Esraa M.Afifi, Abou Bakr Elshalakny, T. A. Osman, [Bahaa M.Kamel](#) and H. Zian, “Investigation of Gear Performance of MLNGPs as an additive on Polyamide 6 spur gear”, Vol. 25, No. 7, Pages 351-359.
- 7- Abou Bakr El shalakany , [Bahaa M.Kamel](#) , A. Khattab , T.A. Osman, B. Azzam, M. Zaki, “ Improved Mechanical and Tribological Properties of A356 Reinforced by MWCNTs”, Fullerenes, Nanotubes and Carbon Nanostructures, Vol. 26, No. 4, pp. 185-194.
- 8 -Alaa Mohamed, Walaa S. Nasserd, [Bahaa M. Kamel](#), Tawheed Hashemc, 2019,“Photodegradation of phenol using composite nanofibers under visible lightirradiation”· European Polymer Journal, Vol.113,pp.192–196.
- 9- Ahmed Sh.Zayed , [Bahaa M. Kamel](#) , T.A. Osman , Omayma A. Elkady , Shady Ali,2019“Experimental Study of Tribological and Mechanical Properties of Aluminum Matrix Reinforced by Al2O3 / CNTs”, Fullerenes, Nanotubes and Carbon Nanostructures”, Fullerenes, Nanotubes and Carbon Nanostructures, Vol. 27, No. 7, pp. 124-127.

10. Alaa Mohamed, Shady Ali, Bahaa M. Kamel, 2020, "Development and manufacturing an automated lubrication machine test for nano grease", Journal of Materials Research and Technology, Vol. 9, No. 2, pp. 2054-2062.
11. Alaa Mohamed, Vineet Tirth, Bahaa M. Kamel, 2020, "Tribological characterization and rheology of hybrid calcium grease with graphene nanosheets and multi-walled carbon nanotubes as additives", Journal of Materials Research and Technology, Vol. 9, No. 3, pp. 6178-6185.
12. Sameh and Bahaa M. Kamel et al, 2020, "Experimental design of Al₂O₃/MWCNT/HDPE hybrid Nanocomposites for Hip Joint Replacement", Journal of Bioengineering, Vol. 11, No. 1, pp. 679-692.
13. Bahaa M. Kamel 2020, "Theoretical and experimental analysis of a night sky radiation cooling system", KASERA Journal
14. Bahaa et al, 2020, "The Effect of MWCNTs/GNs Hybrid Addition on the Tribological and Rheological Properties of lubricating Engine Oil", Journal of Dispersion Science and Technology.
15. M. S. Gad, Irfan Anjum Badruddin and Bahaa M. Kamel, "Improving the diesel engine performance, emissions and combustion characteristics using biodiesel with carbon nanomaterials", Fuel journal, Accepted
16. Vineet Tirth and Bahaa M. Kamel, et al 2020 "Effect of Pressure on Ageing Response of (SiC+Al₂O₃)/6063 Composites", Journal of Materials Research and Technology, 9(5).pp11834–11848.
17. Sameh and Bahaa M. Kamel, et al, 2020 "Carbon Nanotubes and Aluminum Oxide as Nanofillers for Enhancing Tribological Properties of High-Density Polyethylene", under review.
18. Bahaa M. Kamel, Book, 2020, "Tribological and Rheological Characteristics of Nano Lubricant", LAP LAMBERT Academic Publishing.
<https://www.morebooks.shop/store/gb/book/tribological-and-rheological-characteristics-of-nano-lubricant/isbn/978-620-2-80141-6>