



Ahmed Hasan Ahmed Badran
(Associate Professor)
Associate Professor, Mechanical Design and Production
Engineering Department, Faculty of Engineering, Minia
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Personal Information:

Date of Birth: 2 August 1986

Nationality: Egyptian

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Research Interest:

- Metal casting and Welding Technology.
- Metal Forming and Powder Metallurgy.
- Green Polymer Composites (Cellulose Nanocomposite).
- Nano-Composite Materials Applications.
- Mechanical and Tribological Properties of Composite Materials.

Education:

- **[2014–2017] Ph.D.**, Production Engineering and Mechanical design department, Faculty of Engineering, Minia University.

Thesis title:*(Development of Polymeric Materials Reinforced by Nano Carbon Tubes).*

- **[2009–2014] M.Sc.**, Production Engineering and Mechanical design department, Faculty of Engineering, Minia University.

Thesis title:*(Study of the Effect of Steel Wire Reinforcement On the Behavior of Aluminum Metal Matrix Composites Produced by Compo-Casting Process).*

- **[2003–2008] B.Sc.**, Faculty of Engineering, Minia University, Egypt, Distinction with honours. **Graduation Project:***(Effect of magnetic field on tribological behavior of Composite materials).* Grade: Excellent.

Current Occupation:

Associate Professor, Production Engineering and Mechanical design department, Faculty of Engineering, Minia University, Egypt.

Teaching:

- Material Science and Strength of Materials.
- Composite Materials Processing and Applications.
- Metal Forming (Bulk and sheet forming process).
- Welding Technology and Metallurgy.
- Metal Casting Processes.
- Mechanical Drawing.
- Engineering Drawing.
- Production Engineering.
- CAD / CAM Applications.
- Design of Machine Elements.

Certifications

- **FLDP** (Research Team Management - Scientific publishing - Communication skills in different Education methods - Certificates in Communication skills in Education methods - Certificates in Quality standards in the teaching process).
- **SPSS** Statistics and Web Designing Certificates
- **ICTP** Certificate (Information & Communication Technology Project).
- **ICDL** Certificate (International Computer Driving License).

Publications

- 1- Ahmed Fouly, Nabhan A., Badran A.H., “**Mechanical and Tribological Characteristics of PMMA Reinforced by Natural Materials**”, Egyptian Journal of Chemistry, Article in Press, Available Online from 13 October 2021, (2022).
- 2- Ahmed Ali Gad El-Mawla, S. Z. El-Abden, Badran A. H., “**Wear Behavior of Al6061/TiO₂ Composites Synthesized by Stir Casting Process**”, Journal of Journal of Advanced Engineering Trends, Vol. 41, No. 2, pp. 113 - 125, (2022).
- 3- Atia A. M., Ali W. Y. and Badran A. H., “**Electrostatic Charge Generated From Fabrics Sliding On Polymeric Materials**”, Journal of the Egyptian Society of Tribology, Vol. 18, No. 3, pp. 59 - 66, (2021).
- 4- Badran A. H., Ali W. Y. and Atia K. M., “**Tribological Performance Of Lithium Grease Dispersed By Silica Nano Particles And Carbon Nanotubes**”, Journal of the Egyptian Society of Tribology, Vol. 18, No. 3, pp. 23 - 34, (2021).
- 5- Badran A. H., Fouly A., Ali W. Y. and Ameer A. K., “**Electrostatic Charges Generated On The Medical Clothes**”, Journal of the Egyptian Society of Tribology, Vol. 18, No. 2, pp. 15 - 26, (2021).
- 6- Ahmed Fouly, Ahmed Mohamed Mahmoud Ibrahim, El-Sayed M. Sherif ,Ahmed M.R. FathEl-Bab and A.H. Badran, “**Effect of Low Hydroxyapatite Loading Fraction on the Mechanical and Tribological Characteristics of Poly(Methyl Methacrylate) Nanocomposites for Dentures**”, Polymers, 13, 857, (2021).
- 7- Ali A. S., Al-Kabbany A. M., Ali W. Y. and Badran A. H., “**Triboelectrified Materials Of Facemask To Resist COVID-19**”, Journal of the Egyptian Society of Tribology, Vol. 18, No. 1, pp. 52 - 62, (2021).
- 8- Bakry M., Ameer A. K. and Badran A. H., “**Tribological Properties Of Polyester Composites Filled By Recycled Thermoplastic Polymers**”, Journal of the Egyptian Society of Tribology, Vol.18, No. 1, pp. 18 - 28, (2021).
- 9- Badran A. H., EL-Abden S. Z., Ali W. Y. and Elzayady N., “**Effect Of Dispersing Lithium Grease By Aluminum Oxide Nanoparticles And Carbon Nanotubes**”, Journal of the Egyptian Society of Tribology, Vol. 17, No. 4, pp. 34 - 43, (2020).
- 10- Badran A. H., “**Wear and Mechanical Strength of Epoxy Filled by Aluminium Oxide Nanoparticles**”, Journal of the Egyptian Society of Tribology, Vol. 15, No. 4, October 2018, pp. 37 - 50, (2018).
- 11- Ahmed Fouly, Badran A. H. and Ali W. Y., “**A Study on the Electrostatic Charge Generated From the Friction of Wig Cap Textiles against Human Skin and Hair**”, International Journal of Engineering and Information Systems (IJEAIS), Vol. 2, No.7, July 2018, pp. 25 - 33, (2018).
- 12- Ali A. S., Badran A. H. and Ali W. Y., “**Friction Behavior of Epoxy Floor Tiles Filled by Carbon Nanoparticles**”, Journal of the Egyptian Society of Tribology, Vol. 15, No. 3, January 2018, pp. 1 - 10, (2018).

- 13- Ali A. S., Badran A. H. and Ali W. Y., “ **Friction Behaviour of Epoxy Floor Tiles Filled by Carbon and Sand Nanoparticles**”, Journal of the Egyptian Society of Tribology, Vol. 15, No. 3, January 2018, pp. 11 - 23, (2018).
- 14- Badran A. H., Hasan M. K., Ali W.Y., “ **Tribological Behavior of Epoxy Reinforced with Carbon Nanotubes and filled by Vegetables Oils**”, Kautschuk Gummi Kunststoffe (KGK), Vol.70, No.11/12, pp.38 – 42, (2017) .
- 15- Badran A. H., Hasan M. K., Ali W.Y., “**Tribological Properties Of Epoxy Composites**”, Journal of the Egyptian Society of Tribology, Vol. 13, No. 1, January 2016, pp. 53 - 62, (2016).
- 16- Ahmed H. Badran, Yehia M. Ismail, M. Abdel Rahman, Ashraf T. Mohamed, “**Effect of Steel Wires Reinforcement On the Mechanical Properties of Aluminum Metal Matrix Composites Produced by Compo-Casting Process**”, Minia Journal of Engineering and Technology (MJET), Vol.33, No.2, july 2014, pp.36-48, (2014).