Dr. Metwally Abd ElghaffarMetwally

Name: Metwally Abd ElghaffarMetwally

Education:

PhD **Specialization:** Composite Materials
"Study of Development of Functionally Graded Polymeric Matrix Composites for Components Containing Holes"
Awarded by: Faculty of Engineering, Ain Shams University, Cairo, Egypt, 2011.

MSc **Specialization:** Mechanical Engineering
Awarded by: Faculty of Engineering, Ain Shams University, Cairo, Egypt, 2004.

BSc **Specialization:** Mechanical Engineering
Awarded by: Military Technical College, Cairo, Egypt, July, 1990

Positions Occupied and work experience.

- Lecturer – Department of Manufacturing Engineering and Production Technology, Modern Academy for Engineering and Technology, Cairo, Egypt(2018 - 2021)
- Head of Control Department of Manufacturing Engineering and Production TechnologyLevel 2, Modern Academy for Engineering and Technology, Cairo, Egypt (2018 - 2020)
- Head of Control Department of Manufacturing Engineering and Production Technology, Modern Academy for Engineering and Technology, Cairo, Egypt (2021-)
- Visitinglecturer, Mech. Eng. Dept. (ME Dept), MilitaryTechnicalCollege (MTC).(2016-2018)
- Assistant director of Research and Developmentdepartment. (2016-2017)
- Chief of Research and Development Branch for A&A department, EgyptianArmed Forces. (2013 - 2016)
- Manager of Depot programs (Egyptian and American Project), EgyptianArmed Forces. (2009-2013)

ctions of Depot, Programs. (1990 - 2002)

Lectured Courses:

- Project Management, Modern Academy for Engineering & Technology
- Advanced Composite Materials, Modern Academy for Engineering & Technology in Maadi
- Engineering Drawing 1 ,Modern Academy for Engineering & Technology in Maadi
- Engineering Drawing2 , Modern Academy for Engineering &Technology in Maadi
- MechanicsIV, MilitaryTechnicalCollege.
- Mechanical and HydraulicSystems, EgyptianArmed Forces.
- Assemply/Disassembly and Test of Complexmechanicalsystems, EgyptianArmed Forces.

Authored Books:

Project Management

Published Papers

The following are the papers published in refereed conferences, journals and scientific bulletins.

- **Ibrahim Sabry, M. Abdel Ghafaar, Abdel-Hamid I. Moura and Amir Hussain Idrisi,**

"StircastedSiC Gr/Al6061 hybrid composite tribological and mechanicalproperties", SN Applied Sciences, 2(5),2020.

- **Ibrahim Sabry, Nabil Gadallah, M Abdel Ghafaar and MM Abdel-Mottaleb,**

"Optimization of Process Parameters to MaximizeUltimateTensileStrength and Hardness of Underwater Friction StirWelded Aluminium AlloysusingFuzzy Logic", Modern Concepts in Material Science, 3(1)2020, 73–78.

- **Ibrahim Sabry and M.AbdelGhafaar Nabil Gadallah,**

"A SummarizedReview on Friction StirWelding for AluminumAlloys", International Journal on: The Academic Research Community Publication,2020 DOI: 10.21625/archive.v4i1.695

- **Ibrahim Sabry and M.AbdelGhafaar Nabil Gadallah,**

"A SummarizedReview on Friction StirWelding for AluminumAlloys", 3th International Conférence Architceure,Engineering and technology (AET), 30-31 March 2019,Cairo, Egypt.

- **M. Abdel Ghafaar, A.A. Mazen, N.A. El-Mahallawy,**

"Mechanicalbehavior of woven glass–epoxy composites reinforcedwithwovenfibersaround a pin-loadedhole," 8 th International Conference On Production Engineering & Design For Development, PEDD8, Cairo, Egypt, pp.89-98, 2010.

- **A.A. Mazen, M. Abdel Ghafaar, N.M. El-Mahallawy,**

"Analysis of the Fracture Process of Epoxy Composites underDifferentLoading Conditions," Materials Science &Technology 2008 Conference and Exhibition (MS&T Partner Societies), Pittsburgh, Pennsylvania, pp.2675-2687, 2008.

- **A.A. Mazen, M. Abdel Ghafaar, N.M. El-Mahallawy,**

"TensileDeformationBehavior of Epoxy Composites ReinforcedwithThreeDifferentWovenFabrics," Materials Science &Technology 2007 Conference and Exhibition (MS&T Partner Societies), Detroit, Michigan, pp.1480-1496, 2007.

- **M. Abdel Ghafaar, A. A. Mazen, N. A. El-Mahallawy,**

"Application of The Rule of Mixture and Halpin-Tsai Equations to WovenFabricReinforced Epoxy Composites," Journal of Engineering Sciences, AssiutUniversity, Vol. 34, No. 1, pp. 227-236, January 2006.

- **M. Abdel Ghafaar, A. A. Mazen, N. A. El-Mahallawy,**

"Behavior of WovenFabricReinforced Epoxy Composites underBending and Compressive Load", Journal of Engineering Sciences, AssiutUniversity, Vol. 34, No. 2, pp. 453-469, March 2006.

- **M. Abdel Ghafaar, A.A. Mazen, N.A. El-Mahallawy,**

" Bending and Compressive DeformationBehavior of WovenFabricReinforced Epoxy Composites," Production Engineering & Design For Development, PEDD7, Caio, Egypt, pp.735-749, 2006.