

MOHAMED EL-GOHARY

1. Name and academic rank

Mohamed Abdel-Fattah El-Gohary, Associate professor, full time.

2. Education – degree, discipline, institution, year

- Ph.D., Mechanical Engineering, Alexandria University, Egypt, 2011.
- M.Sc., Mechanical Engineering, Alexandria University, Egypt, 2002.
- B.Eng., Mechanical Engineering, Alexandria University, Egypt, 1996.

3. Academic and Professional experience

3.1 Academic experience

- Beirut Arab University, Associate professor Mechanical engineering Department, present.
- Alexandria University, Egypt, Assistance Professor, 2011- August 2017, full time.
- Alexandria University, Egypt, Lecture, 2002- August 2006, full time
- Alexandria University, Egypt, Teaching Assistance, 1997- August 2002, full time
- Arab Academy for Science and Technology, Egypt AAST, Assistance professor in Mechatronics 2001- May 2017 Part time
- Pharos University, Egypt, Assistance professor in Mechatronics 2001- May 2017 Part time.

3.2 Non-academic experience

- Work as Assistance for the Alexandria Governor 2014- October 2015, part time.
- Work Consultant for Alexandria Municipality for Electromechanical and mechanical since 2014 – August 2017, Part time.
- Member of Alexandria university Central Anti-Corruption committee 2014 – August 2017, Part time.
- Consultant for mechanical engineering project:
- Valley of King Company, SAN STEFANO hotel with Valley of King Company. May 2003 – 2004
- Marsa Alam airport, Mubarak grand studio in the 6th October city and Meridian Hotel Cairo (December 2000 to September 2004).
- Elalamia company Install a complete design office for cranes including overhead crane and jib crane, 2003-006.
- Ezz steel company, design for Burn Scrap 2007.
- Al Amria petrol company, complete as built drawing for oil& phenol unit the unit (capacity 40% of all oil production in Egypt) 2011.
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4. Professional credentials, certificates, or licensing

- ASME Member #000100830756.
- Egyptian Engineers Syndicate, 1996.

5. Professional development activities

- Collaboration with LaRochelle university, France in PHD Program from spring 2020 till now.

- Collaboration with the faculty of Architecture BAU in the field of green building

6. Contribution to the discipline

6.1. Service activities

- Secretary for the faculty of engineering council.
- Member of ABET committee in mechanical engineering department.
- Cooperation with ASME association in workshop “MATLAB & SIMULATION “as instructor, November 7,8&9 2023.
- Editorial Board: Asian journal of Applied Science and Technology (AJAST)
- 2013-2015 Member of SMOT (Sustainable Mediterranean Old Towns) project Team <http://www.smotproject.eu/> funded with EU, 2013-2015.
- 2016 - present Judge, Egyptian Engineering day
- 2012 Leader of Alexandria formula student Team Hockenheim Germany
- 2015 Leader of R.O.V. Team from 2012 to 2015 (1st of Egypt 3rd of international USA 2015)
- Member of BAU Engineering Projects Day committee Tripoli branch for the academic year 2017-2018.
- Member of BAU Engineering Labs committee Tripoli branch for the academic year 2017-2018.

6.2 Publications

6.2.1. Journal publications

- Mohamed El-Gohary , Riad El-Abed 1 and Osama Omar “ Prediction of an Efficient Energy-Consumption Model for Existing Residential Buildings in Lebanon Using an Artificial Neural Network as a Digital Twin in the Era of Climate Change “ Journal of Buildings, 2023, 13, 3074. E-ISSN : 2075-5309.
- M.A.El-Gohary Mohammad F. Yakhni , Housseem Hosni , Sebastien Cauet, and Anas Sakout. “Variables peed induction motors’ fault detection based on transient motor current signatures analysis: A review “ Journal of Mechanical Systems and Signal Processing, Volume 184(2023)109737. ISSN 08883270, 10961216
- M.A.El-Gohary Mohammad F. Yakhni , Housseem Hosni , Sebastien Cauet, and Anas Sakout. “ Design of a Digital Twin for an Industrial Vacuum Process: A Predictive Maintenance Approach” Journal of Machines , Volume10(8),686 August 2022. ISSN **2075-1702**.

- M.A.El-Gohary, Bassem, Nashaat Zakher, M. Elhadary1, and Ibrahim M. El Fahham “ Comparison Between Experimental Life Road Simulation and Computational Fluid Dynamics and Fluid Structure Interaction for Sedan Car “ CFD Letters14, Issue2(2022)81-97
- M.A.Elgoahary and Riad Elabd “ Smart Building Energy Model using Artificial Intelligence Smart Building Energy Model using Artificial Intelligence Smart Building Energy Model using Artificial Intelligence Smart Building Energy Model using Artificial Intelligence” BAU Journal – Science and Technology , Volume 2, Issue 1, ISSN 2706-784X.
- M. F. Yakhni, M. A. El-Gohary and M. N. Ali “ Magnetorheological Damper Voltage Control Using Artificial Neural Network for Optimum Vehicle Ride Comfort “ JOURNAL OF MECHANICAL ENGINEERING AND SCIENCES (JMES) ISSN: 2289-4659 e-ISSN: 2231-8380 VOL. 15, ISSUE 1, 7648 – 7661 DOI: <https://doi.org/10.15282/jmes.15.1.2021.03.0603>
- M. F. Yakhni, M. A. El-Gohary and M. N. Ali “ CONTROL OF MR DAMPER USING ANFIS AND PID CONTROLLER FOR OPTIMUM VEHICLE RIDE COMFORT “ BAU Journal – Science and Technology , Volume 2, Issue 1, ISSN 2706-784X.
- Mohamed A El-Gohary, Ahmed M Ellakany, Mohamad Ali, and Mohamed Elkholy “ Lumped system model for elastic steel-concrete beams with partial interaction “ Multidiscipline Modeling in Materials and Structures, ISSN: 1573-6105, Publication date: 6 September 2019.
- Mohamed El –Gohary, Mahesh P. Nagarkar, Yogesh J. Bhalerao , Gahininath J. Vikhe and Rahul N. Zaware Pati “ Artificial neural network predication and validation of optimum suspension parameters of a passive suspension system.” Received: 5 November 2018 / Accepted: 30 April 201, **published on line 15 May, 2019** , SN Applied Sciences (2019) 1:569, <https://doi.org/10.1007/s42452-019-0550-0>
- M.A.El-Gohary, Tawfik Elemam Mohamed, and T.Awad “ Ship Roll Damping Via Direct Inverse Neural Network Control System” AEJ , Elsevier Volume 57, Issue 4, December 2018, Pages 2951-2960

- M.A.El-Gohary,A.E.Geweda, A. M.El-Nabawy and T.Awad " Improvement of Vehicle Ride Comfort using Genetic Algorithm Optimization and PI Controller" AEJ , Elsevier Volume 56, Issue 4, December 2017, Pages 405-414
- M.A.El-Gohary, A.Abd_Elsalam, and H.A.El-Gamal "Simulation of Nonlinear Quarter Car Suspension System with and without Tire Damping" IJAST Issue 6 volume6, November-December 2016 ISSN 2249-9954.
- M.A.Elghohary, B.N.Zaker, I.M.Elfahham, and H.A.EL-Gamal " Computational Fluid Dynamics Reuslts For Ahmed's Car Model" IJAST Issue 6 volume6, November-December 2016 ISSN 2249-9954.
- M.A.El-Gohary, E.M.Attia ,N..M.Elsodany and H..A.Elgamal " Theoretical and Experimental Study of Magneto-rheological Fluid Disc Brake" AEJ , Elsevier Volume 56, Issue 2, June 2017, Pages 189-200
- M.A.El-Gohary, A.Abd_Elsalam, and H.A.El-Gamal " Modal Analysis on Tire With Respect to Different Parameters " AEJ , Elsevier Volume 56, Issue 4, December 2017, Pages 345-357.
- M.A.El-Gohary, E.M.Attia ,N..M.Elsodany and H..A.Elgamal "Magneto-rheological Fluid Disc Brake Design and performance" IJAST Issue 6, volume 3, May-June 2016 ISSN 2249-9954.
- M.A.El-Gohary, B. M. El-Souhily , S.F. Rezeka , and T. Awad "Generalized Neural Inverse Dynamics Model for Front-Wheel Mid-Size Passenger Car " International Review of Mechanical Engineering (I.R.E.M.E.), Vol. 5 (3), 474-482.
- M.A.El-Gohary, B. M. El-Souhily , S.F. Rezeka , and T. Awad" Generalized Model for Front-Wheel Mid-Size Passenger Car " European Journal of Scientific Research ISSN 1450-216X Vol.52 No.3 (2011),pp. 413-429 [http:// www.eurojournals.com/ejsr.htm](http://www.eurojournals.com/ejsr.htm)
- M.A.El-Gohary, S.F. Rezeka , and T. Awad "Control of Aircraft Maneuvers Using Neural Network " Alexandria Engineering Journal, Vol. 45 (2006), No. 5, 509-515 509.

6.2.2. Conference proceedings

- M.A.El-Gohary, Sebastien Cauet, Anas Sakout. Mohammad F. Yakhni, S. and , H. Assoum “Online Condition Monitoring of a Vacuum Process Based on Adaptive Notch Filters” 16th European Workshop on Advanced Control and Diagnosis. held in Nancy, France during November 16-18, ACD 2022: [Recent Developments in Model-Based and Data-Driven Methods for Advanced Control and Diagnosis](#) pp 61–7.
- Mohamad Ali, Mohamed El –Gohary “Mechanical Characterizations of Furniture Hinges “ November 2018 Conference: 5ième Congrès International Francophone de Mécanique Avancée (CIFMA 2018) At: 31 October, 1 - 2 November 2018. Faculty of Engineering, Lebanese University Hadath, Beirut, Lebanon.
- M.A.El-Gohary, [M. Elzouka](#), and [Abdelhamid Attia](#) "Control of Heat Integrated Distillation Employed by Cryogenic Air Separation Using Decentralized Simple PID Controllers" ASME 2015 International Mechanical Engineering Congress and Exposition, Volume 6A: Energy, Houston, Texas, USA, November 13–19, 2015.