

Dr. Sobhy Mohamed Hassan Ghoneam
Professor of Dynamics of Mechanical System and Tribology

Department of production Engineering & Mechanical Design
Faculty of Engineering, Menoufia University,
Shebin El-Kom, Egypt.

Home Phone: +2-048-2235818

Work phone: +2-048-2222049 ext.1242-1230

Cell phone : +20-5203123

Fax : +2-048-2235818



E-mail : ghoneam22000@Yahoo.com

PERSONAL DATA :

Full name : Sobhy Mohamed Hassan Ghoneam
Birth Date : February 19, 1954
Nationality : Egyptian
Marital Status : Married, and has Three Children
Current Job : Professor in Production Engineering and
Mechanical Design Dept., Faculty of Engineering,
Menoufia University.
Home Address : 14 EL- Bagory Street, Side east, Shebin - EL-
Kom, Menoufia governorate

EDUCATION:-

1-Ph.D. (1984)

Title: "Thermal Effects Caused by EHD Lubrication in Dynamic of Cam Mechanisms"
Major: Mechanical design
Manor: Dynamic and Tribology
Institute: Institute of Aeronautical Technology and Applied Machines,
Mechanical Design Dept. Technical University of Warsaw, Poland.

2-M.Sc. 1980

Title:" A Dynamic Analysis of Cam Mechanisms Using the Finite Element Approach".
Major: Mechanical Design and applied Mechanics"
Institute: Department of production Engineering &Mechanical Design
Faculty of Engineering, Menoufia University,
Menoufia University, Faculty of Engineering, Egypt .

3-B.Sc. May, 1977

Overall Rate : Excellent with honour degree.
Specialization: Production Engineering and Mechanical Design.
Institute : Department of production Engineering &Mechanical Design
Faculty of Engineering, Menoufia University, Egypt.

ACADEMIC CAREER:-

Professor	: (1998 – present)	Menoufia University
Associate Professor	: (1989 – 1998)	Menoufia University
Assistant Professor	: (1985 - 1989)	Menoufia University
Assistant Lecture	: (1981- 1985)	Menoufia University
Instructor and Teaching Assistant:	(1977-1981)	Menoufia University

Administration Posts:

1- Vice Dean : Vice Dean of the Faculty of Engineering, Menoufia University (2001).

2-Cultural Counselor: Cultural Counselor in the Embassy of Arab Republic of Egypt in Poland and the Director of the Educational Mission, from 2001 to 2005.

FIELDS OF INTEREST:

General Field : (Mechanical design)

Specified Field: (Dynamic and Tribology).

Undergraduate and Graduate Courses:

Since 1977 I have been involved in teaching undergraduate and graduate following courses as teaching assistant, assistant lecture, assistant Professor, associate Professor, and Professor:-

Under graduate Courses:-

- *.Machine Design*
- *.Design of Machine Elements*

- . *Computer applications*
- .*Theory of Machine*
- . *Dynamic of Machinery*
- . *Theory of Vibration*
- . *Engineering Drawing*
- .*Applied Mechanics*
- . *Automatic control systems*
- . *History of Engineering Sciences and Technology*
- . *Computer Aided Design*
- . *Fault Diagnosis*

Post graduate Courses:-

- . *Computer Aided Design*
- . *Mechanical Vibration*
- . *Finite Element application and Computer*
- . *Systems Analysis*
- . *Fault Diagnosis in Mechanical Systems*
- . *Tribology*
- . *Machine Tool Design*
- . *Advanced Topics in Machine Design*

Current Research Activities:

Dynamic Analysis and Synthesis of High Speed Mechanisms, Optimum Design of Mechanisms and Machine Element, Tribology in machine design specially Problems of Elements Operating in Contact, Tribology of Ceramics, Thin Film in Tribology, Dynamic Analysis of Composite Materials, Rotor and bearing dynamics, Mathematical Modeling of dynamic systems.

RESEARCH PROJECTS:

- 1- *From 1992 to 1993, a visiting professor at Institute of Aeronautical Technology and Applied Mechanics, the Technical University of Warsaw, Poland. I took part in a project concerning "the influence of ceramic coating on performance of machine elements".*
- 2- *took a part in project concerning "Nonlinear vibration of a tube with gap supports and its control by neural net work" at Department of Mechanical Engineering, Yokohama National University Japan, 1996 during I was a visiting professor.*
- 3- *Participating in the project of the Development of Engineering Education in A.R.of Egypt (Mech. Design P/Kom302), 1995.*

PUBLICATIONS:

Books:

- (1) Book published entitled "Theory of Vibration with Application"
- (2) Book published entitled "Theory of Machine and Mechanisms"
- (3) Book published entitled "Computer Aided Design"

Journal Papers:

- [1] Ghoneam, S.M., et al (1980) " On the Formulation of Finite Element Model of Cam Mechanisms. *Eng. Research Bull., Faculty of Engg. & Tech., Menoufia University, 1, No. 1. PP. 119-153.*
- [2] Ghoneam, S.M., et al (1980) "Effects of Inherent Characteristic of Driving Shaft on the Dynamic Behaviour of a Cam Mechanism" *Eng. Research Bull., Faculty of Engg. & Tech., Menoufia University, 2, No.2, pp. 155-197.*
- [3] Ghoneam, S.M. (1986) " The Effects of Elastohydrodynamic (EHD) Lubrication on the Dynamic Behaviour of a Cam Mechanism" *Journal of Exploitation Problems of Machines Polish Academy of Sciences, Vol. 21, Z.I (65), pp. 135-152.*
- [4] Ghoneam, S.M. (1989) "Optimum Computation of Scuffing in Cam Systems" *Eng. Research Bull., Faculty of Engg, Menoufia University, Vol. XI, Part 1, PP. 123-137.*
- [5] Ghoneam, S.M. (1992) "The Performance of Cam Mechanism With Follower Coated by Ceramics" *Thin Film in Tribology U.K. Tribology Series 25, pp. 409-417.*
- [6] Ghoneam, S.M. (1992) "An Interactive Multi-Objective Technique to Design Cam Follower Mechanism." *Journal of Exploitation Problems of Machines, Polish Academy of Sciences, Vol.27, Z.4 (92), pp.507-523.*
- [7] Ghoneam, S.M. (1992) " Prediction the Dynamic Behavior of a Slider Crank Mechanism with Clearness" *Eng. Res. Bull., Faculty of Engineering, Menoufia University, Vol. XV, Part 1, pp. 183-195.*
- [8] Ghoneam, S.M., et al (1993) "Eigen Analysis of Fiber-Reinforced Composite Plates" *International Journal composite Structures, , U.K., Vol. 25, pp. 521-528.*
- [9] Ghoneam, S.M., et al (1994) "An Investigation into Eigen-Nature of Constrained Cracked Beams" *Eng. Res. Bull, Faculty of Engineering, Menoufia University, Vol. 17, Part 1, pp. 13-29.*
- [10] Ghoneam, S.M., et al (1994) " The Effect of Ceramic Coatings on the Initiation and Development of Scuffing Phenomena". *Journal of Exploitation Problems of machines, Polish Academy of Sciences, Vol. 29, pp. 431-441.*
- [11] Ghoneam, S.M. (1995) " Bound Formulae for Computing Dominant Eigen-Frequencies of Damped Systems with Multiple Frequencies" *Eng. Res. Bull., Faculty of Engineering, Menoufia University, vol. 19, Part 2, pp. 1-16.*
- [12] Ghoneam, S.M. (1995) "Dynamic Analysis of Open Cracked Laminated Composite Beams" *International Journal of Composites Structures, U.K., Vol. 32, pp. 3-11.*
- [13] Ghoneam, S.M. and Strzelecki, S. (2003) "Application of tilting – pad bearing in the design of large output turbines" *Trans of the inst. Of fluid – flow Machinery no.114, pp.201 – 208.*
- [14] Ghoneam, S.M. and Strzelecki, S. (2004) "Dynamically loaded cylindrical journal bearing with recess " *Journal of KONES internal combustion engines, vol .11, No 3-4, and pp.234-241.*
- [15] Ghoneam, S.M. and Strzelecki, S. (2006) "The Problems of Multilobe Journal Bearing Tribosystem" *Mechanics DOI 10.1007-s11012-006-9004-z. Springer Science +Business Media, Mechanics 41, pp 571-579.*

Conference Papers:-

- [1] Ghoneam, S.M., et al (1983) " Synthesis of Cam Mechanism Using Kinteto-Therom Elastohydrodynamic Lubrication, *XI Symposium of Fundamentals of Machine Design, Ins. of Aero. Eng. and Applied Mechanics, Technical Univ. Warsaw, P. 84.*
- [2] Ghoneam, S.M., et al (1984) " Temperature of a Cam Surface, *AUROPROGRESS'83/94, WARSAW, p. 85.*
- [3] Ghoneam, S.M. (1986) "The Motion Effects on the (EHD) Behaviour of Cam Mechanisms" *2nd Conference of Applied Mechanical Engineering, Military Technical College, Cairo, Egypt, MD-2, PP. 13-20.*
- [4] Ghoneam, S.M. and Farweez, M.(1988)" A Theoretical and Experimental Study of Some Dynamic Properties of a Rotor Mounted on Dissimilar Bearings" *3rd Conference on Theoretical & Applied Mechanics, Cairo, Egypt, PP. 307-319 .*
- [5] Ghoneam, S.M. and Farweez, M. (1989)" A suggested Method of Improving the Design of DRRD Poly dyne Cams, Through the Introduction of Acceleration - Based Interior Controls" *3rd conference on Aeronautical Science & Aviation Technology, Military Technical College. Cairo, Egypt, VB-2, pp. 409-423.*
- [6] Ghoneam, S.M. (1989) " Effects of Surface roughness on Dynamic Performance and (EHD) Properties in Cam Mechanisms" *5th International Congress on Tribology, EURTRIB 89, Helsinki, Finland ,Vol. 2, pp. 439-444.*
- [7] Ghoneam, S.M. (1990) " On the Design of High Speed Cam Mechanisms Using Multi-Objective Techniques" *4th Conference on Applied Mechanical Engineering, Military Technical College, Cairo, Egypt, DYN, 7, pp. 67-73.*
- [8] Ghoneam, S.M. (1990) "The Variation of Wear, and Some Rehological Properties of Lubricant in Cam Mechanisms" *III International Symposium Tribological Problems of Elements Operating in Contact, "INSYCONT 90, Poland, pp.443-452.*
- [9] Ghoneam, S.M. (1992) "The Dynamic Performance of Cam Mechanism Induced by the Variation of contact Surface between Cam and Follower " *XIII- Th Polish Conference on Theory of Machines and Mechanisms, PP. 70-84.*
- [10] Ghoneam, S.M., et al (1992) " Effect of Lamina Orientation and Boundary Conditions on Stability of Glass / Polyester Laminates" *fifth Conference of AME, MTC. Vol.1, pp. 88-99, Cairo.*
- [11] Ghoneam, S.M., et al (1994) "An Investigation into Eigen-Nature of Constrained Cracked Beams" *Six the AME Conference, MTC, Cairo, Egypt, pp. 1-15.*
- [12] Ghoneam, S.M. (1994) " Reduction of Vibratory Response of the Large Mechanical Systems Using Multi-Objective Technique, *The First International Conference on Operations Research and Its Applications, ORA-2, pp. 182-190.*
- [13] Ghoneam, S.M. (1995) "The Effects of Ceramic Coating Surface on Temperature and Scuffing Phenomena in Higher Pair System". *International Tribology Conference, Yokohama, Japan, PP. 1495-1500.*
- [14] Ghoneam, S.M., et al (1997) "Vibration Control of a Pipe Supported by a Variable Damper with Gap" *Asia- Pacific - Vibration Conference, 97; pp.208-212.*
- [15] Ghoneam, S.M. (1998) "Analysis of Four bar Mechanism with Coated Laminated Composite Coupler" *Proceedings of the 8th Int, AMME Conference, and MTC, Cairo, PP.22-34.*
- [16] Ghoneam, S.M. and Hamada, A. (1998) "Dynamic Characteristics of Sandwich Composite plates" *Advances in Computational structural Mechanics, Edinburgh, UK, PP. 175-180.*
- [17] Ghoneam, S.M. (2001) "Scuffing in cam and follower - New trends to reduce its effect" *World Tribology Congress -9- Vienna.*
- [18] Ghoneam, S.M. and Strzelecki, S.(2003)" Dynamic characteristics of Rotor Bearing system with the rotor reinforced by light coating of composite materials "

- ISCORMA-2, Gadansc, Poland ,pp.509-517.*
- [19] Ghoneam, S.M. and Strzelecki, S.(2004) "Thermal problems of Multilobe journal Bearing Thibosystem " *AIMETA International .Tribology Conference, Sep. ,14-17,2004,Rome,Italy,pp.533-540.*
- [20] Ghoneam, S.M. and Strzelecki, S.(2005) "Dynamic characteristic of tilting 4- pad journal bearing" *XVII Congress, AIMETA, Firenze, Italy.*
- [21] Ghoneam, S.M. and Strzelecki, S.(2006) "Oil film temperature distribution of pressurized cylindrical 2-pockets journal bearing of variable axial profile" *published in INSYCONT, Krakow, Poland.*
- [22] Ghoneam, S.M. and Strzelecki, S.(2006) "Maximum oil film temperature of high speed journal bearing with variable axial cross section" *AITIC-AIT, Inter. Conf. on Tribology, Parma, Italy.*
- [23] Ghoneam, S.M., et al. (2007) "Dynamic Analysis of an Adhesive Bonded Joint for Composite Structures" *Military Technical College, Cairo, Egypt, Proceeding of the 12-th ASAT Conference.*
- [24] Ghoneam, S.M., et al (2007) "Stability of Tilting 5-Pad Journal Bearing" *International Symposium on Stability Control of Rotating Machinery, ISCORMA 4, Calgary, Alberta , Canada.*
- [25] Ghoneam, S.M., et al. (2008) "Dynamic Response of Adhesively Bonded Joint for Composite Structure at Various Types of Bonded Line Configurations" *Military Technical College, Cairo, Egypt, Proceeding of the 13-th international Conference on Applied Mechanics& Mechanical Engineering.(Under Publication)*
- [26]] Ghoneam, S.M., et al (2008) "Experimental and Analytical Investigations of the Dynamic Analysis of Adhesively Bonded Joints for Composite Structures" *THE 4TH INTERNATIONAL CONFERENCE MECHATRONIC SYSTEM AND MATERIALS- MSM 2008,BIAŁYSTOK, (POLAND)July 14 – 17, 2008.(Under Publication)*
- [27] Ghoneam, S.M. and Strzelecki, S. (2008) "STABILITY OF TILTING 3-PAD JOURNAL BEARINGS OPERATING IN THE TURBULENT REGIME" *THE 4TH INTERNATIONAL CONFERENCE MECHATRONIC SYSTEM AND MATERIALS- MSM 2008, BIAŁYSTOK, (POLAND) July 14 – 17, 2008. (Under Publication)*

Sample of Academic Experience:-

Visiting Scholar (1981-1984):-

A scholarship at Department of Machine Deign , institute of Aeronautical Technology and Applied Mechanics, the Technical University of Warsaw, Poland.

Visiting Scientist

- 1- A visiting professor at Institute of Aeronautical Technology and Applied Mechanics, the Technical University of Warsaw, Poland. From 1992 to 1993.
- 2- A visiting professor at Department of Mechanical Engineering, Yokohama National University, Japan, 1996-1997.

Member:

In International Scientific Committee *Tribology Conference, Yokohama, Japan, World Tribology Congress -9- Vienna, INSYCONT, Krakow, Poland. XVII Congress, AIMETA, Firenze, Italy, AIMETA International Tribology Conference, Rome,Italy, and Eng. Res. Bull., Faculty of Engineering, Menoufia University.*

Reviewer: papers in Journal of Tribology, *Journal of Exploitation Problems of*

Machines Polish Academy of Sciences, Mechanics, Eng. Res. Bull., of some Faculties of Engineering, Egyptian Universities, International Tribology Conference, in Japan, Italy, Poland, Viena, and local Engineering Conferences, M.Sc. Thesis Dissertation, and Ph.D. Dissertation in some Faculties of Engineering, Egyptian Universities.

Participant: A bout 25 International Scientific Conferences (see Publications Papers).

Laboratories Constructor and supervisor of Theory of Machine Lab, And CAD-CAM Lab in Department of production Engineering & Mechanical Design, Faculty of Engineering, Menoufia University, Egypt.

Sample of SUPERVISING:

*"Vibration Analysis of Structural Foundation of Machines Combining Types of Connection Consideration", M.Sc. Thesis, Dissertation H.BLAL, Feb. 1994.

*"Effect of Earth Vibrations on Vibration of Structures" M.Sc. Thesis Dissertation S. El-Shourbagy Faculty of Engineering Mansoura University, 1997.

*"Dynamic Analysis of Laminated Anisotropic Structures", Ph.D. Dissertation, A. HMADA, May, 1994.

*"Nonlinear Dynamic of Visco elastic Mechanical Systems", Ph.D. Dissertation, H.BLAL, 1995.

*"Dynamic Analysis of an Adhesive Bonded Joint for Composite Structures "M.Sc. Thesis Dissertation M. Elemy Morsi, 2007.