

Curriculum Vitae (CV)

Dr. Yosry Abdel-Hafiez Elsayed Mashal

**Emeritus Professor
Mechanical Engineering Department
Faculty of Engineering at Yanbu,
Taibah University, Yanbu Branch, Yanbu, KSA**

E-mail ymashal@taibahu.edu.sa



PERSONAL DATA:

DATE OF BIRTH : 19 / 02 / 1956
PLACE OF BIRTH : Tanta, Gharbia, Egypt
NATIONALITY : Egyptian
MARITAL STATUS : Married
NO. OF CHILDREN : Five
LANGUAGES : Arabic / English (Fluent)

PERMANENT ADDRESS: **Work: Faculty of Engineering, Menoufia University, Shebin Elkom, 32511, EGYPT.**
Tel.: Mobile: +20 (0)10 65445450
Office: +2(0)48 2221549 (1220)
Res.: +20(0)40 3410501
Res. : 1, Hamed Othman street, of Anwar street, Tanta, Egypt.

Achievements:

(Higher Education Commission Success Story, Pakistan):

<http://www.hec.gov.pk/InsideHEC/Divisions/HRD/FacultyHiringPrograms/FFHP/Pages/DrYosryMashal.aspx>

Ph.D. Degree from: <http://www.reading.ac.uk/> (Top Ranking Univ. for Research)

DEGREES:

1- Ph.D. (July, 1990), Reading University, Reading, England, U.K.

Broad Field : Engineering

Special Field: Tribology & Fracture Mechanics

Institute Issuing the Degree: Reading University, Reading, England, U.K.

2- M. Sc. (Nov. 1983), Menoufia University, Shebin Elkom, Egypt.

Broad Field : Production Engineering and mechanical design

Special Field : Production Engineering

Institute Issuing the Degree: Faculty of Engineering, Shebin ElKom, Menoufia University, Egypt.

3- B. Sc. (May 1979) , Menoufia University, Shebin Elkom, Egypt.

Field: Production Engineering and Mechanical Design

Institute Issuing the Degree: Faculty of Engineering, Menoufia University, Shebin Elkom, Egypt.

THESIS:

Ph. D. Thesis: A Fracture Mechanics Approach to the Wear of Ceramics and Glass.

M. Sc. Thesis: Glass Alloys Production and their Physical Properties.

ACADEMIC CAREER:

From 7/7/2019 Till present

Position: Emeritus Professor

Place: Faculty of Engineering, Menoufia University, Shebin ElKom, Egypt

Duties: Teaching undergraduate and post graduate courses.

Supervising Ph. D. & M. Sc Students in their research work.

Working on many B. Sc. Projects and researches for M.Sc. and Ph. D. Degrees.

From 4/8/2011 – 6/7/2019

Position: Associate Professor

Place: Mechanical Engineering Department, Faculty of Engineering at Yanbu, Taibah University, Yanbu branch, Yanbu, KSA.

Duties:

Coordinator of the industrial Engineering Department.

Coordinator of the labs and devices committee.

Coordinator of Allure and appointment committee.

Coordinator of transfer and equivalence committee.

Teaching Undergraduate courses at Faculty of Engineering at Yanbu

From 31/8/2007- 3/8/2011

Position: Foreign Professor

Place: Mechanical Engineering Department, University of Engineering and Technology (UET), Taxila, Pakistan.

Duties: Teaching Undergraduate courses

Teaching Postgraduate courses

Faculty Projects / Higher Education Commission (HEC) funded projects

Organizing Workshop/Symposium/Conference/Seminars.

Supervising Postgraduate Research Students (M.Sc./Ph.D.)

From 28/4/2002 till 30/8/2007

Position: Associate Professor

Place: Faculty of Engineering, Menoufia University, Shebin ElKom, Egypt

Duties: Teaching undergraduate and post graduate courses.

Supervising Ph. D. & M. Sc Students in their research work.

Supervising the Tribology laboratory.

Working on many B. Sc. Projects and researches for M.Sc. and Ph. D. Degrees.

From 9/9/1990 to 27/4/2002

Position : Assistant Professor

Place: Faculty of Engineering, Menoufia University, Shebin ElKom, Egypt

Duties: Teaching undergraduate and post graduate courses and supervising research work. Also, supervising the Tribology laboratory and working on many B. Sc. Projects and researches for Ph. D. Degree.

From October 1986 to July 1990.

Position : Ph.D. candidate at the Department of Engineering, Reading University, Reading, England, U.K.

Place: Department of Engineering, University of Reading, Reading, England, U.K.

Duties: Making Research for Ph. D. and supervising undergraduate students in the Tribology lab., Reading University, Reading, England, U.K.

From July 1986 to September 1986

Attending Pre-sessional English language course on a full time basis

Place: English Language Resource Center, University of Reading, Reading, England, U.K.

From March 1984 to July 1986

Position : Assistant Lecturer

Place: Faculty of Engineering, Shebin ElKom, Menoufia University, Egypt.

Duties: Teaching undergraduate courses.

From October 1979 to March 1984

Position : Demonstrator

Place: Faculty of Engineering, Shebin ElKom, Menoufia University, Egypt.

Duties: Teaching undergraduate courses and working on M. Sc. research.

COURSES TAUGHT:

Tribology (Wear, Friction & Lubrication), Material Science, Production Technology, Fracture Mechanics, Engineering Materials, Mechanics of Materials, Computer Numerical Control on Machining (CNC), Jigs and Fixtures, Automatic Machines, Fatigue of Metals & Structures, Metal Cutting Theories, Manufacturing Processes, Principles of Manufacturing, Engineering Drawing, Workshop Technology, Engineering Technology, Statics.

FIELDS OF INTEREST:

Wear of Materials, Fracture Mechanics, Fatigue, Composite materials, Machinability, Subsurface Energy, Surface Integrity, Experimental Design Techniques and Optimization.

SUPERVISING Ph.D. AND M.Sc. THESIS

Several Ph.D. and M.Sc. thesis were supervised by myself and co-workers in the fields of : Fatigue, subsurface damage, residual stresses and strains, machinability, surface integrity, manufacturing of rare earth magnets & fracture mechanics.

MEMBERSHIPS

Member of the review panel for the 5th International symposium of advanced materials, 21-25 Sep. Islamabad, Pakistan, 1997.

Reviewer for the International Journal of Structural Engineering and Mechanics.

Reviewer for the International Journal of Steel & Composite Structure

Member of the International Scientific Committee for the 6th. International symposium of advanced materials, 19-23 Sep. Islamabad, Pakistan, 1999.

Member of the International Scientific Committee for the 7th. International symposium of advanced materials, 17-21 Sep. Islamabad, Pakistan, 2001.

Member of the International Scientific Committee for the 8th. International symposium of advanced materials, 8-11 Sep. Islamabad, Pakistan, 2003.

Member of the Advisory Board for the 9th. International symposium of advanced materials, 19-23 Sep. Islamabad, Pakistan, 2005.

Member of the Advisory Board for the 10th. International symposium of advanced materials, 3-7 Sep. Islamabad, Pakistan, 2007.

Member of the Advisory Board for the 11th. International symposium of advanced materials, 8-12 August. Islamabad, Pakistan, 2009.

Member of the International Scientific Committee for the “PGSRET” International Conference, organized by International Islamic University, 29 Nov.- 2 Dec. Islamabad, Pakistan, 2010

Member of the International Scientific Committee for the 12th. International symposium of advanced materials, 26-30 Sep. Islamabad, Pakistan, 2011.

Member of the Advisory Board for the 13th. International symposium of advanced materials, to be held in. Islamabad, Pakistan, Sep. 2013.

INVITED SPEAKER & OFFICIAL VISITS:

Official visit (From 15/5 to 7/6 1992) to Washington state University, Pullman, USA.

Research fellow (From 23/8 to 22/12 1996) at the Department of engineering, Reading University, Reading, **England**, U.K.

Invited Speaker & session chairman to the 5th. International Symposium of Advanced materials, Islamabad, **Pakistan**, 1997.

Invited Speaker & session chairman to the 6th. International Symposium of Advanced materials, Islamabad, **Pakistan**, 1999.

Invited Speaker & session chairman to the 7th. International Symposium of Advanced materials, Islamabad, **Pakistan**, 2001.

Invited Speaker & session chairman to the 9th. International Symposium of Advanced materials, Islamabad, **Pakistan**, 2005.

Invited Speaker & session chairman to the 10th. International Symposium of Advanced materials, Islamabad, **Pakistan**, 2007.

Invited & session chairman to the Conference of Failure of Engineering Materials & Structure (22-23 October), MED, UET, Taxila, **Pakistan**, 2007.

Invited Speaker to the Conference of Phase Transformation & Deformation in Engineering Materials, Multan, **Pakistan**, 2008.

Participation at the international Leeds-Lyon Symposium on Tribology, Lyon, **France**, September, 1991.

Participation at the 13th. International Conference on Wear of Materials (WOM), Vancouver, **Canada**, April, 2001.

Participation at the international Leeds-Lyon Symposium on Tribology, Leeds, England, **U.K.**, September, 2004.

Participation at the DGM, International Friction and wear of materials conference, 9-11 April, Aachen, **Germany**, 2008.

Invitation to the CSM, International first annual meeting, 1-4 July, Neuchatel, **Switzerland**, 2008.

Invited Speaker & session chairman to the 3ed. International conference on Frontiers of Advanced Engineering Materials (FAEM-08), 15-17 December, Lahore, **Pakistan**, 2008.

Invited Speaker to the Seminar on Tribology, PCSIR, PITMAEM, Lahore, **Pakistan**, 3 Nov. 2008.

Invited Speaker & session chairman to the 11th. International Symposium of Advanced materials, Islamabad, **Pakistan**, 15 Aug. 2009.

Invitation to the Seminar on Advanced Engineering Coating, PCSIR, PITMAEM, Lahore, **Pakistan**, 21 Dec. 2009.

Invited & session chairman to the “PGSRET” International Conference, organized by International Islamic University, 29 Nov.-2 Dec. Islamabad, Pakistan, 2010

PROJECTS:

1- Higher Education Commission (HEC, Pakistan) 1 million PK Rs. Start up project: (finalized). In this project:

a-Multi-configuration wear and friction machine was designed, manufactured and assembled by myself to run the experiments at variable speeds, variable loads, different configurations of loading and various environment conditions at high accuracy and the machine is attached with a digital read out for accurate friction analysis..

b- Another machine was designed, manufactured and assembled by my self, which is a surface profilometer to assess the surface texture of solids and to measure 12 surface parameters like the most important average surface roughness Ra at high accuracy (0.01 micron). This surface profilometer was connected with the computer for the analysis of the results and for the screen editing of the surface charts.

2- PC1 Project (60 Million Pk. Rs.) for implementation of a complete tribology lab (Proposed at UET, Taxila, Pakistan)

CONFERENCE ORGANIZER / EDITOR

General secretary of the Multi Discipline International Conference (MDIC-2011).

<http://web.uettaxila.edu.pk/uet/MDIC/>

Editor, Taxila Engineering Journal:

<http://web.uettaxila.edu.pk/uet/UETsub/techJournal.htm>

PUBLICATIONS (Total, 28 Publications) :

A- List of Publications in peer reviewed Journals:

- 1- The Role of Water in the Wear of Ceramics, International Journal of Physics. D: Appl. Phys., 25, pp. A205-A211, 1992.
- 2- The Role of Fracture Mechanics Parameters in Glass /Ceramic Wear. International Journal of Fracture Mechanics, Vol. 52, No. 1, pp. 43-50, 1995.
- 3- The Machinability and Tribological Characteristics of Aluminium Alloys with Improved Elevated Temperature Properties using Rapidly Solidified Powder, International Journal of Wear, 250 (1-12) pp. 518-528, 2001.
- 4- Stability, Wear, and Corrosion Characteristics of Rapidly Solidified High Temperature Al-8Fe-4Ce Alloy, Tribology and Interface International Engineering Series, V 48, pages 703-708, 2005.
- 5- The Effect of Annealing on the Strength of Glass and the Conditions of Cracking. Engineering Research Journal, Egypt, Vol V, Part I, pp. 1-8, 1983.
- 6- On the Wear Behaviour, Friction and Machining of Two GFRP Composites, Engineering Research Journal, Egypt, Vol. 3, pp 1-16, March, 1995.
- 7- A Model for Predicting the Critical Delamination Fracture Pressure During Water Jet Drilling of Composite Materials, Engineering Research Journal, Egypt, Vol. 3, pp 17-25, March, 1995.
- 8- The Effect of Crack Growth Rates, Oxide Film Layer and Hydrodynamic Lubrication on the Wear of Medium Carbon Steel, Engineering Research Journal, Egypt, Vol. 58, pp. 31-40, August, 1998.
- 9- A fracture mechanics approach to the water jet drilling of composite materials, International Journal of American science, 9 (10) pp. 262-266 , 2013 (ISI and Impact factor 1)

B- List of Publications in International Conferences

- 1- Particle Detachment Processes in the Dry and Lubricated Wear of Ceramics, 18th. Leeds-Lyon Symposium on Tribology: Lyon, France, September, 1991.
- 2- The Effect of Cutting Parameters on Delamination Fracture Damage During the Milling of Holes on GFRP Composites.4th. International Conference on Prod. Eng. & Design for Development, Ain Shams Univ., Cairo, pp. 611-619, Dec. 27-29, 1993.
- 3- The Effect of Cutting Parameters on Residual Stress and Average Flank Pressure of 11L17 steel and 2024 Aluminum Alloy During Milling Operation, 1st. Intl. Conf. on Mech. Eng. Adv. Tech. For Ind. Prod., Assiut Univ., Assiut, Egypt, pp. 519-530, Dec. 27-29, 1994.

- 4- The Effect of Cutting Parameters on Residual Plastic Strain Distribution in 11L17 steel and 2024 Aluminum Alloy During Milling Operation. 1st. Intl. Conf. On Mech Eng. Adv. Tech. For Ind. Prod., Assiut Univ., Assiut, Egypt, pp. 531-542, Dec. 27-29, 1994.
- 5- On Maintaining Minimum Subsurface Energy During Milling Operation.
1st. Intl. Conf. On Mech. Eng. Adv. Tech. For Ind. Prod., Assiut Univ., Assiut, Egypt, pp. 543-556, Dec. 27-29, 1994.
- 6- The Effect of Metal Removal Rate, Tool Rake Angle and Tool Wear Land Length on The Fatigue Life of 7075-T651 Aluminum Alloy.
6th. AMME (2nd. International) Military Tech. College, Cairo, pp. 453-462, May 1994.
- 7- On the Fracture Mechanics of Metals Under Hydrostatic Bulging, 5th. Intl. Symposium on Advanced Materials, Islamabad, Pakistan, pp. 500-506, Sep. 21-25, 1997.
- 8- On the Wear Behaviour, Friction and Machining of Two "GFRP" Composites, 6th. Int. Symposium of advanced materials, 19-23 Sep. Islamabad, Pakistan, 1999.
- 9- The Relationship Between Ceramic Tool Life and Different Machining Parameters, 7th. International Symposium of Advanced Materials, 17-21 September, Islamabad, Pakistan, 2001.
- 10- Stability, Wear, and Corrosion Characteristics of Rapidly Solidified High Temperature Al-8Fe-4Ce Alloy, 31st. Leeds-Lyon Symposium in Tribology, Leeds, England, U.K. Sep., 2004.
- 11- Delamination and Wear Mechanism of Medium Carbon Steel, 9th. International Symposium of Advanced Materials, 19-23 September, Islamabad, Pakistan, 2005.
- 12- The Effect of Water in the Wear of Ceramics, 10th. International Symposium of Advanced Materials, 3-7 September, Islamabad, Pakistan, 2007
- 13- On the Tribological Characterization of Engineering Ceramics, DGM, Friction and Wear of Materials Conference, 9-11 April, Aachen, Germany, 2008.
- 14- The Effect of Environment on the Fracture Behaviour of Engineering Ceramics, Submitted and accepted for oral presentation in the International conference NANOSMAT, Barcelona, Spain, 21-24 October, 2008.
Presented as a keynote lecture in International conference of frontiers of advanced engineering materials FAEM, 15-17 December, Lahore, Pakistan, 2008.
- 15- Particle Alignment and Density Improvement under Magnetic Field by Isostatic and Axial Pressing of Rare Earth Magnetic Materials, International conference of frontiers of advanced engineering materials FAEM, 15-17 December, Lahore, Pakistan, 2008.

- 16- Manufacturing Technology for Rare Earth Magnets through Powder Metallurgy, 4th. International Mechanical Engineering Congress, 23-24 January, Karachi, Pakistan, 2009.
- 17- Tribology From the Nano Cradle to the Macro Grave, 11th. International Symposium of Advanced Materials, 8-12 August, Islamabad, Pakistan, 2009.
- 18- Contact Mechanics and Tribological Aspects of Coated Surfaces, Keynote Lecture, Seminar on Advanced Engineering and Biomedical Coating, PCSIR, 21 December, Lahore, Pakistan, 2009.
- 19- Parameters to Affect the Tribological Behavior of Advanced Engineering Materials, to be presented as keynote lecture in the 13th. International Symposium of Advanced Materials, Islamabad, Pakistan, Sep. 2013.