

Abdelhay Mohamed Abdelhay (20 Years of experience)

Prof. Dr. Eng. Abdelhay Mohammed Abdelhay

**Professor, Mechanical Engineering Dept., Faculty of Engineering
Helwan University.**

Prof. Abdelhay has thirty years of experience in teaching, research, consulting and training at the Helwan University, the Alabama University (USA), Yanbu Industrial College (Saudi Arabia) and several public and private companies in Egypt. He has got “The Most Outstanding Dissertation Award”; (USA - 1991), The Best Mechanical Invention Award - 3rd Position (Saudi Arabia - 1994) and the “Prize of State for Engineering Sciences (Egypt 2004-05).

[\(ABDELHAY1953@YAHOO.com\)](mailto:ABDELHAY1953@YAHOO.com)

*Mobile : (+2) 0126544545
Phone : (+2) 02-23590240
(+2) 02-33112938*

Objective Capable of delivering and carrying out special courses or traininga programs for private sectors and companies inside and outside Egypt for self - interested courses in Mechanical Manufacturing / Production, Mechaics or Industrial engineering fields.

Education **Doctorate of Philosophy (Ph.D.)**

University of Alabama
Tuscaloosa, Alabama, USA
1982 - 1988

Master of Engineering (M Sc)

Helwan University
Cairo, Egypt
1979 - 1982

Bachelor of Science (B Sc)

Assuit university
Minia, Egypt
1971 - 1976

Thanaweya Amma, Science Major

Imbaba Secondary school
Giza, Egypt
1968 - 1971

Experience A total of 20 Years of National and International Experience in USA, KSA and Egypt

Professional Career Experience **Sept. 2007-Present**
Canadian International College (CIC)
Engineering Department
Job Title : Head of Engineering Department

Teaching and assisting in the delivery of academic education courses for undergraduates, the courses include:

- Machine Design, Machine Tool Design, Strength of Materials, Metallurgy, Manufacturing Technology, Engineering Drawing, AutoCad, Measurements, Metal Cutting, Manufacturing Processes, and more.

In addition, I'm involved in several administrative, academic, and cultural activities in the University, include:

- Duties: Managing all Acadmic and Adminstrative aspects of the engineering Department (Manufacturing, Communications, and Computer Programs)

Sept. 2006 – Sept 2007
Industrial education College,
Helwan university
Job Title : Vice Dean for Eduction and Students affairs

Main Responsibilities include:

- All aspects and duties related to the Education process and Students affairs (academic, and cultural activities)

Aug 1991 – Aug 1997
Yanbu Industrial College,
Royal Commission for Yanbu and jaubil projects, KSA
Lecturer

Main Responsibilities include:

**Professional
Career
Experience
(Cont.)**

- Delivering many courses in Manufacturing Engineering Technology
- Course Developments for the New opened MET department
- Establishing 4 Different Labs for the MET department (Metallugraphics Lab, Material Testing Lab, Inspection and Measurements Lab and Mechaical drive Lab)

Aug 1988 -Sept. 2007

Faculty of engineering, Helwan University

(Ass Prof, Assoc Prof and full professor)

Assistant for the Department Head for the Division of Machining Speciality.

Main Responsibilities include:

- Teaching many Courses for undergraduate and graduate students
- Academic Advisor for Graduate Students
- Members in different Faculty commmites (Student Affairs, Purchasing, Students acitivities, etc)
- Responsible for the Mechanical engineering Workshops and Labs.

Ph.D. Study

Some of the PH D studied course (Major: Solid Mechanics + Minor 1 : Fluid Mechanics + Minor 2 : Mathematics) are as shown in Table Below.

• Experimental Stress analysis	• Bearing Theory
• Mechanical Behavior of Materials	• Finite-Element Method in Engineering Mechanics
• Continuum Mechanics	• Finite Difference Methods in Fluid Dynamics
• Transport Phenomena	• Boundary Layer Theory
• Matrix and Vector analysis	• Theory of Elasticity
• Engineering Fracture Mechanics	• Variational Methods in Mechanics

Ph D dissertation:

“ A study of High Strain Rate Generation of Adiabatic Shear Bands
in Ti6Al4V -Titanium Alloy”

**Published
Papers**

- 1- A. M. Moussa and **A. M. Abdelhay**, " Factors Affecting Residual Machining Stresses", 2nd PEDAC Inter. Conf., Dec. 22-27 1983, University of Alexandria (Egypt).
- 2- A. M. Moussa and **A. M. Abdelhay**, " Residual Machining Stresses In Turning Operations", 2nd PEDAC Inter. Conf., Dec. 22-27 1983, University of Alexandria (Egypt)
- 3- **A. M. Abdelhay**, A. M. Moussa and A. E. Carden, " Dynamic Deformation Of Ti 6Al 4V-Alloy Under Direct Shear Mode Of Testing Up To 10 E05 /Sec", MET-4 Conf., Zagazig University (Egypt) and Leicester Polytechnic (U K) held in Cairo, March 1988.
- 4- **A. M. Abdelhay**, A. M. Moussa and A. E. Carden, " Observation Of Adiabatic Shear Bands Under Direct Shear Mode Of Testing In Ti 6Al 4V-Alloy Under Direct Shear Mode Of Testing

- Up To 10 E05 /Sec", MET-4 Conf., Zagazig University (Egypt) and Leicester Polytechnic (U K) held in Cairo, March 1988.
- 5- **A. M. Abdelhay**, " Study Of The Loading Pulse Geometry Due To Collinear Impact Of TWO Elastic Rods", Proc. of the Inter. AMSE Conf. on Systems Methodologies to ,Data ,Applications of Signals " 199 ,30-28 .Dec ,(Egypt) Alexandria , "Engineering Problems ,1 .Vol ,press pp. 73-82.2AMSE
- 6- **A. M. Abdelhay**, "Determination Of The Sliding Coefficient Of Friction Under Condition Of Plastic Deformation", Proc. of the Inter. AMSE Conf. on" Applications of Signals, Data, Systems Methodologies to Engineering Problems", Alexand ,(Egypt)ria .95-83 .pp ,1 .Vol ,AMSE press 1992 ,30-28Dec
- 7- **A. M. Abdelhay**, " Study Of The Loading Pulse Geometry Due To Collinear Impact Of TWO Elastic Rods", Proc. of the Inter. AMSE Conf. on Applications of Signals, Data, Systems Methodologies to 1992 ,30-28 .Dec ,(Egypt) Alexandria , "Engineering Problems A.82-73 .pp ,1 .Vol ,MSE press
- 8- Mobarek and **I.M.IA. M. Abdelhay**, " An Experimental Investigation Into The Effect Of Machining Variables Of The ECM Drilling " Engineering Resea ,Helwan University ,rch Bulletin .70-51 .pp ,1991January ,1 .Vol,(Egypt)Helwan
- 9- **A. M. Abdelhay**The Influence Of Plastic Deformation Upon " , "Surface Roughness And Specific Power In Metal Cutting .Vol , "B"s AMSE Periodical ,Measurement and Control ,Modeling .54-49 .pp ,1994 ,4 .No ,53
- 10- **A. M. Abdelhay** Effect Of Sequence Of Operations ",On CylindricalThe Fourth , "Errors When Machining Sleeve Bearings 75 .pp ,4 .Vol ,1995 .Nov ,(K S A)Jeddah ,Conference .Saudi Eng .81-
- 11- **A. M. Abdelhay** Statistical Analysis Of " ,Wahab-El .I.and A The , "Roundness Errors Arise From Three Machining Methods .74 - 69 .pp ,4 .Vol ,1995 .Nov ,Conference .Fourth Saudi Eng
- 12- A.I. El-Wahab and **A. M. Abdelhay**Investigation Studies On " , rpolation Algorithms Adopted For CNCTThree Circular Inte

- ,Helwan University ,Engineering Research Journal ,"Machines .8 -1 .pp ,1995April ,4 .Vol,(Egypt)Helwan
- 13- **A. M. Abdelhay** and. A.I. El-Wahab "Optimizing Burnishing Process Parameters For Geometrical Shape And Surface Finish " PEDAC' 97, 6th Inter. Conf.,, 15 - 17 Feb., 1997, Alexandria (Egypt), pp. 395 - 404.
 - 14- A.I. El-Wahab and **A. M. Abdelhay**A New Algorithm And Tool " , .th Inter6 ,97PEDAC' ,"Design For CNC Profile Burnishing Alexandria , ,,,Conf, Egypt, pp. 385 - 393, 15 - 17 Feb., 1997.
 15. M.I. Etman, O. .M. .Dawood and **A. .M. Abdelhay**, "Artificial Neural Networks As An Alternative For Evaluating Parameters Of Ultrasonic Response To Metal Permanent Deformation", PEDD 6, Ain Shams University, Cairo, Egypt, pp. 182-193, 12-14 Feb., 2002.
 - 15- **A. .M. Abdelhay** and O. M. Dawood," Characterization Of Material's Permanent Deformation By Ultrasonic Technique." 7th Inter. Conf. On PEDAC, Alex, Egypt Vol.III, pp.1431-1441, Feb., 2001.
 - 16- O. M. Dawood, **A. M. Abdelhay**, A. El-Zomor, and A. D. El-Lethy," Evaluation Of Microstructure Characteristics Of Plain Carbon Steel Using Ultrasonic Wave Parameters". 1st Symposium on Heat Treatment of Metals and Alloys, TIMS Cairo, Egypt, pp. 123 -134, 3-5 Nov., 2001.
 - 17- S. F. Moustafa, Z. Abdel-Hamid, and **A. .M. Abdelhay** , " Copper Matrix Sic And Al2O3 Particulates Composites By Powder Metallurgy Technique", Materials Letters, Vol 53, pp. 244-249, 2001.
 - 18- **A. M. Abdelhay**, and I. M. I. Mobark, " Ultrasonic Evaluation Of Surface Roughness Using Normal Incidence Pulse - Echo Technique ", PEDD6 , Ain Shams University, Cairo, Egypt, pp. 607-617, 12- 14 Feb., 2002.
 - 19- M. I. Etman, **A. M. Abdelhay**, and O. M. Dawood , "Evaluating Ultrasonic Response To Surface Finish Parameters Using Back Propagation Neural Networks", 3rd Assuit Univ. Int. Conf., MEATIP 3, pp. 485-492, 24-26 Dec., 2002.

- 20- **A. .M. Abdelhay**, " Application Of Artificial Neural Networks To Predict The Carbon Content And The Grain Size For Carbon Steels", Egyptian J. Solids, Vol. 25, No. 2, pp.229 -243, 2002.
- 21- **A. .M. Abdelhay**, " Biaxial Stress State Evaluation Using Nondestructive Ultrasonic Technique", Sci. Bull. Fac. Eng. Ain Shams Univ., Vol. 38, No. 1, pp. 291-300, March 31, 2003.
- 22- **A. .M. Abdelhay**, " Prediction On Pressure Vessel Working Stresses With Artificial Neural Network Approach Using Ultrasonic NDT", Bulletin – TIMS, Vol. 81, pp. 39-49, Jan 2003
- 23- **A. .M. Abdelhay** , and M. T. El-Wakad, " Stresses Induced In Abutment Teeth Due To Long Span Bridge (A Case Study)", 4th Int. Implantology Conf., Egyptian Scientific Soc. For Dental Implantologist, Cairo 3-5, April 2001.
- 24- Ahmed H. Youssef, and **A. .M. Abdelhay**, " Strain Gauge Analysis of Class III Removable Partial Denture With and Without Rest", El-Azhar J. of Dental Science, Vol. 4, No. 2, pp. 257-262, April, 2001.
- 25 **A. .M. Abdelhay**, S. F. Moustafa, and M. W. Abdelhalim, " Evaluation of a New Copper Matrix Composites with Coated Reinforcement Alumina Particulates", Proceedings of the 8th Inter. Cairo Uni. MPD conference, Cairo, Egypt, Vol. 1, pp. 659-665, Jan 4-6, 2004.
- 26 **A. M. Abdelhay**, A. Hegazy, and E. E. Elgharieb, " COMPARATIVE EXPERIMENTAL STUDY FOR ADHESIVE BONDING JOINTS", Presented in the the PEDD7 , Ain Shams University, Cairo, Egypt, 7 –10 Feb., 2006.

*Attended
Training
Courses*

- " Technical Report Writing for ASEC Top Manger Engineers" at HIS consulting office. (Egypt, 2006 -2007)
- " Mechanical Measurement" at at HIS consulting office. (Egypt, 2001-2005)
 - "Materials Heat Treatment" at Arab organization for Industrialization Consulting Center (AOI). (Egypt, 1998 - 2007)
 - "Design for Manufacturing" at Arab organization for Industrialization Consulting Center (AOI). (Egypt, 1998 -

2007)

Awards

International and National awarded certificates.

*i: Encouragement National Award**In Engineering Field (2004) Egypt**ii- The Most Outstanding Dissertation Award**(USA - 1991)**iii: Best Mechanical Invention Award - 3rd Position**(Saudi Arabia - 1994)**Iv: Prof.\ Hassan Hosni Award for the Best M Sc thesis**(under my supervision)(2006)***Special Skills****Managerial Skills**

- Five years of **Managerial** activities as Engineering head Department (CIC), Vice Dean (Ind Edu college, Helwan univesity) and Division chairman in Mechanical engineering Department (Helwan University).
- Having good Presentation skills and get along Communication with other
- Hard worker, Creative, Dynamic, self confident and can work as a team with leadership skills

Marketing Skills

- NA

Computer Skills

- Efficiency in using Windows 2007.
- Efficiency in using Auto Cad 2005.
- Efficiency in using Fortran Programming Language.
- Efficiency in using Internet.

Languages

- Native speaker of Arabic
- Fluent in English

Personal Data

Date of Birth May 11th, 1953
Place of Birth Cairo, Egypt
Nationality Egyptian

References

- **Prof. Dr. Abdelhai Ebied**
Ex Helwan University President
Chairman of Universities Athletic Union, Cairo-Egypt
- **Prof. Kaddah Shaker Kaddah**
CIC Dean
Faculty of engineering, Ain shams University, Cairo-Egypt

Documented References

Furnished upon request