

## CURRICULUM VITA

**Name** Prof. Dr. *Abdelkader Abdelkarim Ibrahim*  
**Birth Date** 28 Dec. 1960 - Egypt  
**Major specialty** Mechanical Engineering  
**Minor specialty** Design and production Engineering  
**Address** 1- Villa 108, Bank Misr street, First Quarter-fifth neighboring, Badr City , Cairo, Egypt  
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### QUALIFICATIONS

- Ph.D.** Mechanical Eng. (production), Carried out in Zagaaig University, Egypt, 1990.
- M.Sc.** Mechanical Eng. (production), Zagazig University, 1987.
- B.Sc.** Mechanical Eng. (Production).Zagazig University, with general grade "Excellent with honor degree" MAY 1983.

### The most important leadership experiences:

1. Head of the General Technical Materials Section, Vocational Training Center, Central Military Region, Dubai, 1990-1996, participated in the establishment of the Center.
2. Head of Quality and Accreditation Department, Yanbu Industrial College, from February 2010 to July 2013
3. Director of Quality, Accreditation and General Coordinator for communication with the international academic accreditation bodies in the colleges and institutes sector - Royal Commission in Yanbu 2010-2013 - where the Royal colleges and institutes of Yanbu have received international accreditation from ABET, ACBSP and CEA., the only center in the middle east region internationally accredited by CEA.
4. Auditor of the Ministry of Higher Education to follow up the progress of the educational process in private engineering institutes in 2013-2014
5. Participate in the evaluation of high institutes of engineering and technology (industrial and engineering Institutes committee) from 2013 to 2014.
6. Expert in the Project Management Unit - Ministry of Higher Education - Director of New Programs and International Accreditation of Laboratories August 2013 - until September 2014 (Ministerial Decision)
7. Head of the Department of general Subjects in Special Programs - Faculty of Engineering, Shubra
8. General Coordinator for Administrative Quality - Benha University (decision of the President of the University) The University has obtained the ISO 9001-2008 in

March 2017, and ISO9001-2015 in March 2018

9. Dean of the Institute of Engineering and Technology of Aviation (February 2017 up to date)

## **EXPERIENCE**

### **• Academic Activities**

#### **1 Shoubra faculty of Engineering, Benha university as:**

- Teaching assistant, May 1983- Mar. 1987.
- Ass. Lecturer, Mar.1987- Oct.1990.
- Ass. Prof., 1990 - 2003
- Associate Professor, 18 Nov. 2003- June 2013
- Full professor, June 2013- Now

#### **Teaching the following subjects:**

- Quality Control.
- Production management and Quality control
- Machine Design.
- Theory of Vibration
- Machine Construction.
- Theory of Machines.
- Engineering Drawing.
- Non traditional machining.
- Engineering metrology.
- Computer Aided Manufacturing (CAM)
- Computer Numerical Control.
- Maintenance using vibration and computer applications.

#### **2. Benha Higher Institute of Technology, Part time, 1997- 2006**

Supervising B.Sc. Projects, and Teaching the following subjects

- Quality Control.
- Mechanics of machine.

#### **3- Delta Academy for science – Al-Mansoura, Part time. 2002- 2005**

#### **Teaching the following subjects**

- Production Management
- Operation research 1, and 2
- System programming
- Management Information System (MIS)
- Project Management

#### **4- Misr University for science & Technology, Faculty of Engineering, Part time, 2<sup>nd</sup> term 2005, Teaching the following subjects:**

- Total Quality Management
- Reliability and availability

#### **5. Head of general technical subjects and welding section, Vocational Training**

**Center, Defense, Dubai, 1991:1996**

- Supervise workshop layout and machines installation,
- preparing and supervise the courses of different technical seminars,

**6. Yanbu Industrial college, Yanbu El-Senaicia, K.S.A. (ABET, and ACBSP Accredited college) , Sep. 2006- July 2012.**

- Assistance professor, Teaching the following courses:
  - Mechanical Design II.
  - Introduction to manufacturing technology.
  - Introduction to drafting
  - Mechanical drafting
- Member of the committee for preparing the training program for 2 years SAFRA Co. students training.
- B.Sc. program Coordinator from Sep. 2007- Feb. 2010.
- Member of the ABET accreditation committee For Associate degree programs 2007/2009, and B.Sc. program 2008/2010.
- Head of Quality assurance and Accreditation Department. Feb. 2010- July 2012.  
Responsible for the following accreditation:
  - **TAC of ABET, Inc.** for Engineering Technology Programs,
  - **ACBSP** for Administration and Accounting Programs, and
  - **CEA** Commission of English Language Accreditation

**7. Colleges and Institutes Sector at yanbu, Royal Commission for Jubail and Yanbu, KSA**

- Head of Quality assurance and Accreditation ( July 2012-July 2013)
- Leading The team for Effective participation in 4<sup>th</sup> National Quality Week for KSA, Nov. 2011

**8- Consultant For Project Management Unit, Ministry of Higher Education, Egypt, Sep. 2013- Sep. 2014, with the following duties:**

- Supervise and follow up the labs international accreditation projects.
- Supervise and follow up the projects of development of Universities' administrations systems (ISO 9001-2008).

**9. Alsalam Higher Institute of Technology, (2014-2016), Teaching the following courses:**

- Machine Design,
- Mechanical Drawing,
- Manufacturing Process and CNC machines,
- Statistics,
- Vibration,
- Theory of Machines And Robotics.

**10. Sina University, Faculty of Engineering Science, (2016), Teaching the following courses:**

- Vibration,
- Mechanical and Electrical Engineering.

## • **Training Activities**

### **Preparing and teaching the following courses:**

1. **Maintenance using Fault analysis and diagnosis** (15 days course Theoretical and practical) for Engineers At Benha Higher Institute of Technology, Aug.1989.

2. **Maintenance with On condition monitoring using vibration analysis** (5 days course) At Benha Higher Institute of Technology, for the followings:

- Engineers, Jun 1989
- Technicians, Jun. 1989
- Engineers, Sep. 1989.

3-**The following courses at Arab management associations, Cairo, and Alexandria 1996-2015:**

Maintenance Management, Engineering metrology, Transportation Management, Quality Control, TQM, Welding Technology, Industrial environment, Technical report writing, Air pollution, Construction project management, Advanced Production Management, Predictive Maintenance, Reverse Engineering and uses in spare parts production, Root cause analysis.

The above courses were repeated many times, 1996- now

**Consultant for the society**, Supervise all Technical Seminars, 1996- 2015

4. **The following courses at Kuwait:**

- Selection of engineering materials and applications, Oil Company Dec. 1997.
- Industrial Safety, May 1999.

5. **The following courses at APROMAC, Cairo:**

- Oiling and greasing, Maintenance, Cairo, 2000

6. **The following courses at Development center, Cairo:**

- Welding Codes, Sep. 2000.
- Corrosion control, Jan 2001.
- Welding Technology Sep. 2001.

7. **The following courses at Sadat Academy, Cairo:**

- Statistical Quality Control, June 2003
- Project Management, July 2003
- TQM and ISO 9000, Sep. 2003
- Inventory Control using Computer, Mar. 2004.
- Forecasting in feasibility study using Computer, Mar. 2004.

8. **The following courses at Alwatania poultry co. – Alkaseem, Saudi Arabia**

- Preventive maintenance, Apr. 2006
- Occupational safety, Apr. 2008

9- **The following courses at Yanbu continuous education – Yanbu, Saudi Arabia**

- Project management, Jan. 2008, Apr. 2008
- Total quality management, Jan. 2008, Apr. 2008

10- **The following courses at San-Masr Company.**

- Maintenance management 2014
- Measurement and sensor technology 2015

**11- The following course at Enppi Training & Development Center, Alexandria:**

- Reverse engineering in manufacturing spare parts, July 2016

• **Practical Activities**

**1- Consultant for ISO 9001-2000 Qualification for the following Companies:**

- Arabic union Co. for Shipment and discharge, Alexandria, 2001.
- Egyptian Co. for general storehouses, Alexandria, 2002.

**2. Design and planning manager, Misr Trailer Co., 1983:1987 with the following activities:**

- Planning and layout of the factory, Supervise all steel construction processes
- Design and supervise the production for the prototypes of the trailers, semi-trailers, tippers, low bed trailers.

**3. Member of the Consultation group For Midequip Co. for hospital equipping.1996-1997., as follows:**

- Design and supervise the steel construction works, and pre-installation for medical equipment for Sharm El-Sheikh hospital.
- Supervise pre-installation for medical equipment including all mechanical and Electrical works for the following cancer centers: Damanhour center, Domiat Center, El- Menia center, and El-Salam center
- Supervise renewal of the following hospitals: Suize Chest hospital, And Rashid hospital

**4- Consultant for International office for engineering and trading, Electrolab Co., Ten TEC Co. Oct. 1999 – Oct. 2000.**

**5- Consultant for Arab Contractor ( Shoubra Branch) 2000 – 2006.**

With the following activities:

- Supervise the repair of different cranes
- Design for 3 Axle Tipping Trailer, flat bed trailer, and low bed trailer

**Attendance for the following courses:**

- 1- Successfully attendance For ISO 9001-2000 Transition course, By AGA Ltd IRCA, Cairo Aug.2001**
- 2-Computer Numerical Control (CNC) machines (6 days course Theoretical and practical) By EMCO CO. (Austeria), Dubai. Jan. 1989.**
- 3-Vibration and Noise Measurement Analysis, By Bruel & Kjaer Co. , Demark, June 1989.**
- 4- Teaching Techniques in the University”, Benha University, Oct. 1990.**
- 5- The use of technology in teaching ( 3 weeks course), Faculty of Engineering, Benha university , Mar 2006**
- 6- Development of staff member’s capabilities (3 courses), Benha University, July-Aug., 2006.**
- 7- Development of staff member’s capabilities (1 course), Benha University, Aug., 2007.**

- 8- **Performance Management.** Yanbu, KSA, Jan 2011
- 9- **Competency Model Workshop.** Yanbu, KSA, Feb. 2011
- 10- **Continuous improvement for quality.** Yanbu, KSA, Nov. 2011

### **PUBUSHED BOOKS:**

1. An Introduction to Workshop Technology, 1988.
2. Engineering Drawing (part I), 1990.
3. Engineering Drawing (part II), 1991.
4. Theory of Vibration, 2001.
5. Mechanical Engineering Design, 1999.
6. Operation Research (1) 2002.
7. Operation Research (2) 2003.
8. Production Management 2003.
- 9- Production Management, 2004
- 10- Operating system fundamentals, 2005.
- 11- Office software packages, 2006.

### **PUBUCATIONS**

1. M. S. Hamed, Y. A. Mashad, **A. A. Ibrahim** “*Correlation Between vibration Measurement and Surface Quality In Grinding Operation*”, Eng. Res. Journal of EL-Mataria faculty of Eng., Helwan university, vol.11, PP (144-158), Mar.1989, Cairo, Egypt.
2. **A. A. Ibrahim** “*Studying The Effect of underlying Processes The Finishing Process*”, Eng. Res. Journal of EL-Mataria faculty of Eng., Helwan university, vol.3, PP (70 - 77), Mar.1995, Cairo, Egypt
3. **A. A. Ibrahim**, S. A. Elkady, T. M. Tawfik “*Theory of Surface Production in Electrochemical Grinding*”, Eng. Res. Journal of EL-Mataria faculty of Eng., Helwan university, vol.3, PP (78-85), Mar.1995, Cairo, Egypt
4. **A. A. Ibrahim** “ *The Effect of Specimen Preparation on The Machinability*” , 22<sup>nd</sup> international conference on computers and industrial engineering , American university, PP(248-251), Dec 1997, Cairo, Egypt.
5. **A. A. Ibrahim** “ *A Study For Roundness Error In The Cylindrical Plunge Grinding*” 22<sup>nd</sup> international conference on computers and industrial engineering , American university, PP( 503-506), Dec 1997, Cairo, Egypt.
6. **A. A. Ibrahim** “*The Wheel-Work Interference in the cylindrical plunge grinding*” 8<sup>th</sup> INT. AMME conference , PP(321-328) 12-14 May. 1998,. Cairo, Egypt.
7. **A. A. Ibrahim** “*The Roundness Error In Cylindrical Plunge Grinding (Causes And Cures)*” 8<sup>th</sup> INT. AMME conference , PP(329-337) 12-14 May. 1998, Cairo, Egypt.
8. **A. A. Ibrahim**, A. M. A. Soliman, and H. A. Housin “ *Influence of Workpiece Support on the Generated Surfac in Turning* “, Procd. Of Conference Intelligent Systems in Design and Manufacturing III, Part of SPIE’S Intelligent Systems and Smart Manufacturing, Paper No. 4192-62,Boston, Nov.-2000, USA.

9. Saber M. Abd-Rabbo, and **A. A. Ibrahim** “ *Theoretical and Experimental Investigation Into An Axial vibration During Turning*” Bulletin of the Faculty of Engineering, Minia University, Vol 20 No. 2, PP(23-31), Jan 2002, Egypt.
10. **A. A. Ibrahim**, and M. H. EL-AXIR “ *An Investigation into oblique Turning for Mild Steel with Two Different Workpiece Support using RSM*” The second Minia International Conference for Advanced Trends In Engineering, PP(1134-1144), 7-9 April 2001, Egypt.
11. M. Abdel Mohsen, **A. A. Ibrahim**, F. S. Ahmed, and M. M. Okasha " *Machined Surface Characteristics Produced By Electrochemical Grinding*" Sci. Bull. Fac. Eng. Ain Shams Univ. Vol.37, No.4, December 2002, Egypt.
12. M. H. EL-AXIR and **A. A. IBRAHIM** " *Some Surface Characteristics Due To moving Rest Ball Burnishing*" 3<sup>rd</sup> Assiut International Conference on Mechanical engineering Advanced Technology for Industrial Production ( MEATIP3), PP(382-391), 24-26 Dec. 2002, Assiut, Egypt.
13. M. H. EL-AXIR and **A. A. IBRAHIM** " *Some Surface Characteristics Due To Center Rest Ball Burnishing*" Al-Mansoura engineering Journal, June 2003, Egypt.
14. **A. A. Ibrahim**, Saber M. Abd Rabbo, and Yehia El- Mashad " *Fuzzy Knowledge Base Controller to Comensate The Roundness Error in The Cylindrical Plunge Grinding*" Al-Mansoura engineering Journal, June 2003, Egypt.
15. El-Axir, M. H., and **Ibrahim, A. A.**, “*Some surface characteristics due to center rest ball burnishing*”, J. Materials Processing Technology. 167(1), pp(47-53.) , 2005.
16. **A. A. Ibrahim** "An investigation into ball burnishing process of carbon steel on a lathe "AL-AZHAR ENGINEERING TENTH INTERNATIONAL CONFERENCE, December 24-26, 2008, Egypt.
17. **A.A. Ibrahim**, S.M. Abd Rabbo, “*ROUNDNESS ERROR COMPENSATION IN TURNING USING FUZZY LOGIC*”, Engineering Research Journal of EL-Mataria faculty of Eng., Helwan university, VOL. 102, PP (M 22-M35), December 2005, Cairo, Egypt.
18. **A.A. Ibrahim**, S.M. Abd Rabbo,, M.H. El-Axir, A.A. Ebied, “*Center rest balls burnishing parameters adaptation of steel components using fuzzy logic*”, Production Engineering & Design for Development, PEDD7, February 7-9, 2006, Cairo, Egypt
19. **A.A. Ibrahim**, S.M. Abd Rabbo,, M.H. El-Axir, A.A. Ebied, “*Center rest balls burnishing parameters adaptation of steel components using fuzzy logic*”, journal of materials processing technology , 2 0 9, pp. 2428–2435, 2 0 0 9 .
20. **A.A. Ibrahim**, “*IMPROVING ROUNDNESS ERROR IN THE CYLINDRICAL PLUNGE GRINDING USING AI TECHNIQUE*” Engineering Research Journal of EL-Mataria faculty of Eng., Helwan university, VOL. 117, PP (M 124-M142), June2008, Cairo, Egypt.
21. **A. A . Ibrahim**, F. S. Ahmed, K. ELshazly, S. Samir, “*EFFECT OF CUTTING CONDITION IN TURNING ON FATIGUE BEHAVIOR OF 0.12% CARBON STEEL*”, Fourth Assiut University Int. Conf. on Mech. Eng. Advanced Tech. For Indus. Prod., (MEATIP4), pp(578-589), December 12-14 (2006).
22. **A.A. Ibrahim**, “*Fatigue Life Enhancement of Carbon Steel By Ball Burnishing Process*”, Mansoura Engineering Journal (MEJ), Vol..33 ,No. 2, pp(M.1-M.9), June 2008, Egypt

23. Z. M. Yehia, A. A. Ibrahim, I. M. Ibrahim, R. A. Mahmoud , “*Effect of Niobium Addition on Stamping Tool Steel Properties*”, Engineering Research Journal, Faculty of Engineering Shebin El-kom, Menoufia University, Vol. 32, No. 1 January 2009, Egypt.
24. A.A. Ibrahim , S. M. Abd-elrahman, M. Z. Zahran, and H. H. El-Mongy, "AN INVESTIGATION FOR MACHINERY FAULT DIAGNOSIS USING ADAPTIVE WAVELET ANALYSIS", Sixth Jordanian International Conference, Paper No. 5, CD, October 22-24/2007, Paper No. 5, Amman, Jordan.
25. A.A. IBRAHIM , S. M. Abd-elrahman, M. Z. Zahran, and H. H. El-MONGY, “*An experimental investigation for gear fault diagnosis using adaptive wavelet analysis of vibration signals*”, Bulletin of Faculty of Engineering, Faculty of Engineering, Menia University, Vol. 26, No. 2, July 2007, Egypt.
26. YASIR A. HADI, SAJI VARGHESE and A. A. IBRAHIM” *EFFECTS OF MACHINING PARAMETERS IN TURNING ON ROUNDNESS ERROR OF MACHINED COMPONENTS*”, International Journal of Materials Engineering and Technology Volume 2, Issue 1, pp. 55-68, 2009.
27. A. A. Ibrahim, S. M. Abdrabbo, H. Gheith , M. Abd El-Salam, and M. El-Samanty, “*Online Tool Wear Monitoring In Turning Using Vibration Analysis And Artificial Neural Network*”, Ain Shams Journal of Mechanical Engineering (ASJME),Vol. 2, pp.201-212, October, 2009.
28. S. M. ABDRAKBO, A. A. IBRAHIM, “*SURFACE TEXTURE OPTIMIZATION IN TURNING PROCESS BASED ON RSM AND GENETIC ALGORITHMS* “, Minia Journal of Engineering and Technology, (MJET), Vol. 29, No. 1, pp. 86- 100, January 2010.
29. S. M. Abdel-Rahman, A.A. Ibrahim , and H. H. El-Mongy “*Rolling-Element Bearing Fault Diagnosis using Adaptive Wavelet Analysis of Vibration Signals*”, Engineering Research Journal, Faculty Engineering, Mataria, Helwan University, Vol.125, pp. M25-M41, March 2010.
30. A. A. IBRAHIM , “*An Investigation for Surface Integrity of Al2O3/A356 Composites Using Roller Burnishing Process on a Milling Machine*”, Applied Mechanics and Materials journal, Vol. 330 (2013), pp 37-44.  
Also published and presented in: 4<sup>th</sup> International Conference on Mechanical, Industrial, and Manufacturing Technologies (MIMT 2013), Bali Island, Indonesia, March 16-17, 2013.
- 31- A.A. Ibrahim, Tamer Khalil, Tarik Tawfeek, “*Study the influence of a new ball burnishing technique on the surface roughness of AISI 1018 low carbon steel*” International Journal of Engineering & Technology, 4 (1) (2015) 227-232.
- 32- M. M. Salem, A. A. Ibrahim, S.S. Mohamed, and Sayed A. Abdallah “*CHARACTERISTICS OF THE SURFACE PRODUCED BY ELECTRIC DISCHARGE MACHINE (EDM) PROCESS*”, Minia Journal of Engineering and Technology, (MJET), Jan. 2017.

### Reviewer for the following

- 1-Int. Journal of Advanced Manufacturing Technology, Springer (2003- Now).
- 2- King Abdelaziz City for Science and Technology (KACST) 2011- now.
- 3-119<sup>th</sup> ASEE Annual Conference & Exposition!- Spurring Big Ideas in Education- June 10



- 13, 2012- San Antonio, Texas ( Reviewed 4 papers.)

**Supervisor The following thesis:**

1. M.Sc Thesis with the title “ Performance of Electrochemical grinding” Shoubra Faculty of engineering, Zagazig University 1990-1993
2. M.Sc. Thesis “Mathematical modeling of Electrochemical grinding processes” Shoubra Faculty of engineering, Zagazig University 1997-2002.
3. M.Sc. Thesis “The usage of system analysis approach in planning the environmental management system”, Institute of environmental studies, Ain Shams University. 1999-2003.
4. M.Sc. Thesis “Effect of inoculation on the properties of tool steel” Shoubra Faculty of engineering, Zagazig University 1999-2004.
5. M.Sc. Thesis “Using vibration analysis measurements for fault diagnosis ” Shoubra Faculty of engineering, Zagazig University 2001-2005
6. M.Sc. Thesis “Fatigue life of machined components ” Shoubra Faculty of engineering, Zagazig University 2003-2005
7. M.Sc. Thesis “Online Tool Wear Monitoring in Turning using Vibration Analysis” Shoubra Faculty of engineering, Zagazig University 2004-2008.
8. M.Sc. Thesis “An investigation of surface characteristics of surface produced By EDM process”, Shoubra Faculty of engineering, Benha University, 2014- 2016.