CURRICULUM VITAE

* PERSONAL DATA:

Name: Assoc. Prof. **Dr. Basim A. Khidhir**

Date of Birth: 15th Aug 1963 Place of Birth: Baghdad Iraq

Nationality: Iraqi

Marital Status: Married with four kids

Present Address: Chwar chra, sulaimanyah

Iraq

E-mail: basim.khidhir@spu.edu.iq

H/S: +964 7711562648

Languages: Fluent in spoken and written Kurdish, Arabic and English

languages.

Wide range of inter-disciplinary issues (numerically and experimentally) in aerospace material, statistical analysis, design of experiments and optimization, prediction and modeling, finite element modeling, cutting tool design. I have published more than 40 refereed papers in prestigious international journals, most of ISI listed journals and that makes my h-index to be (5) (Source: Scholar). The FULL list of my publications can be seen in the following links:

https://scholar.google.com/citations?user=O1eTqEQAAAAJ&hl=en

http://www.scopus.com/authid/detail.url?authorId=35801121900

http://www.authormapper.com/search.aspx?q=Basim%20A.%20Khidhir

http://www.researchgate.net/profile/Basim_Khidhir2

EDUCATION:

2008 2011 PhD in Mechanical Engineering (Manufacturing)

Universiti Tenaga Nasional Malaysia. .

1989 - 1992 Awarded M.Sc. First Class Honours in Production Engineering,

University of Technology-Baghdad-Iraq

1981-1985 Awarded B.Sc. Honour Production Engineering, University of

Technology-Baghdad-Iraq.

*** ACADEMIC EXPERIENCE:**

2012- Present Head of Dept. of Production Engineering & Metallurgy,

Head of Postgraduate unit

College of Technical Engineering, Sulaimani Polytechnic University, Slemani, Kurdistan Region, Iraq.

2008- 2011 Associated Professor,

Mechanical Engineering Program, Faculty of Engineering,

UNISEL Malaysia.

2004-2007 **Deputy of Dean,**

Slemani Technical College Slemani, Kurdistan Region, Iraq.

2000-2003 Mechanical Engineer/ Drilling

FAO, Slemani Office, United Nation

1997-2000 Technical Institute in Erbil

Senior Lecturer, Dept. of Mechanical Engineering

Erbil, Kurdistan Region, Iraq.

1985-1997 **Manager of Production department.**

Manager of Die and tool Production Department.

Al-Ekha'a Mechanical Company, Minister of Industries, Baghdad,

Iraq.

*** COURSES TAUGHT:**

Manufacturing Process

Instrumentation and Measurement

Computer Aided Manufacturing (CIM)

Production Engineering

Auto CAD

CNC Programming

Fundamental of Welding

Welding Machine

Machine Design

Mechanical Vibrations

Theory of Machines

Strength of materials

Dynamics

Static Engineering Drawing Engineering calculus Differential equations

* DEPARTMENTAL PROGRAMMES DEVELOPED:

M Sc Programme in Mechanical Engineering, Al-Ekha a Establishment

B Sc Programme in Mechanical Engineering, Technical College in Sulaimaniah.

Diploma Programme in Mechanical Engineering, Technical institute In Erbil.

* INITIATED AND DEVELOPED LABORATORIES:

Welding Lab, Technical College in Sulaimaniah, Iraq.

Fluid Dynamics Lab, Technical College in Sulaimaniah, Iraq

Material Lab, Technical College in Sulaimaniah, Iraq.

Fluid Mechanics Lab, Technical College in Sulaimaniah, Iraq.

Machinery Lab, Technical institute in Erbil, Iraq.

Sand Lab, Technical institute in Erbil, Iraq.

* INDUSTRIAL EXPERIENCE

1994-1997	Manager of Dies & Fixtures Department - Al- Ekha a Establishment, Ministry of Industry -Iraq
1993-1994	Tool Designer Mechanical Designs and Technology rout sheet, Al- Ekha a Establishment Ministry of Industry Iraq.
1992-1993	Manager of Production Department, Al- Ekha a Establishment, Ministry of Industry -Iraq
1985-1992	Production Engineer Manufacturing and Maintaining of Machine tools, Al- Ekha a Establishment Ministry of Industry - Iraq

* Field EXPERIENCE

2000-2003 United Nation, FAO

Northern Iraq

Drilling Officer (Mechanical Engineering/ Drilling)

DESCRIPTION OF DUTIES

- Commission the drilling Rigs supplied to the Governorate.
- Provide operation and Maintenance of the Rig including:
 - 1. Prepare spare-parts manual and its usages.
 - 2. Ensure routine maintenance of the Rigs.
 - 3. Ensure professional operation of the rigs.
 - 4. Solve Mechanical problems and assist in related repairs, and
 - 5. Prepare guidelines for operation including repair and maintenance.
- Assist in well designing, development, Pumping tests and other field operation.
- Prepare the reports of drilling results, effects, working plans etc.
- Lead and participate as a lecturer in Drilling school courses in cooperation between FAO and MOAI in additional training of local drilling staff for six months period.

No. of vehicles and equipments:

- 1. (9) Drilling Rigs (24 ton and 30 ton capacities).
- 2. (11) Water Tankers (8000 lt. each).
- 3. (4) Crane Lorries (10 ton each).
- 4. (2) Backhoe Shovels.
- 5. (5) Mobile workshops.
- 6. (2) Service Rigs.

Manager of:

- (9) Rigs crew each of (15) members as:
- (1) Mechanical Engineer.
- (1) Geologist.
- (1) Chief driller.
- (2) Assistants of Chief driller.
- (7) Drillers.
- (3) Drivers.

*** ADMINISTRATIVE SERVICES:**

Member: Sscientific committee to develop a BSc Programme in Mechanical Engineering, Technical College in Sulaimaniah, Iraq - 2004-2008

Member: High College committee, Technical College in Sulaimaniah, Iraq - 2005-2008

Member: Curriculum Review Committee Faculty of Engineering, 2004-2008

Member: Recruitment and Promotion committee, Mechanical Engineering Department, 2004-2008

Chairman: Safety Committee, Department of Mechanical Engineering, 1998 2000

Member: Examination Committee, Department of Mechanical Engineering, 2005 2007.

Member: Technical committee for laboratories development, Department of

Mechanical Engineering, 2004 2005

* RESEARCH INTERESTS:

Cutting Tool Design Production Planning CNC programming CAD/CAM Automation Quality Control

* SUPERVISED POSTGRADUATE STUDIES:

A. <u>Doctorate of Engineering</u>

Name of Student	Title	University	Status
Moaz H. Mohamed Ali	Finite element modeling for prediction of machining parameter of Titanium alloys.	University Tenaga Nasional (UNITEN)	Graduated
Diyar Ismail Ahmed	Investigate hydrodynamic lubrication behavior under different lubricant additives and for different coatings.	University Technology Mara (UiTM)	Graduated
Yassin Mustafa Ahmed	Modeling And Optimization Of Multi-Layer Welding Of Titanium (Ti 6al 4v) Alloy By Response Surface Methodology.	University Tenaga Nasional (UNITEN)	Graduated

B. Master of Engineering

Name of Student	Title	University	Status
Alogaiel Waleed Nasser S.	Statistical analysis of surface roughness and tool wear of AISI 1020 using response surface methodology in dry turning.	University Tenaga Nasional (UNITEN)	Graduated

* SELECTED SUPERVISED FINAL YEAR PROJECTS

- [1] Temperature distributed in weldment joints. (Dler Shouker, Technical College in Sulaymaniah-Iraq, 2007).
- [2] Mechanical properties for different welding jionts. (Awat Khalid, Technical College in Sulaymaniah-Iraq, 2007).
- [3] Study of parameters that affect the cutting tool life (Kawan Ali, Technical College in Sulaymaniah-Iraq, 2007).
- [4] A manufacturing system design at segamaga Sdn Bhd. Nur Soffinaz Bt. Zainol, 2009.
- [5] Optimization of machining parameter when machining nickel based alloy. Paratheran s/o Arkashan, UNISEL), 2010.
- [6] Study the effect of coated cutting tool on surface finish when machining Aluminium alloy Kunapatinom s/o Rajeef, UNISEL, 2010.
- [7] Study of cutting condition when maching Aluminium Alloy Ahmed altaher, UNISEL, 2010.

* COMPUTER & PROGRAMMING SKILLS:

<u>Skill</u>		Years	Proficiency
✓	AutoCAD	>15	Advanced
\checkmark	CNC Machines Programming	>15	Advaced
\checkmark	CAM Systems(MasterCAM)	>10	Advanced
\checkmark	Finite Element Analysis (Advantedge)	>10	intermidiat

* STRENGTHS:

- ✓ Strong capacity for teamwork
- ✓ Ability to communicate openly and productively with team members
- ✓ Dynamic team player
- ✓ Highly inquisitive
- ✓ Creative and resourceful excellent skills in communication and collaboration.
- ✓ Sense of responsibility
- ✓ Leadership of production workshops
- ✓ Industrial experience (12 years)
- ✓ Field experience (3 years)
- ✓ Teaching experience (10 years)
- ✓ In both physical and academic senses, I am very energetic. I have the ability to complete large bodies of work in a limited time frame.

* ADDITIONAL SKILLS:

- ✓ Good experience in teaching and training AutoCAD courses
- ✓ Practical experience in Mechanical engineering design
- ✓ Practical experience in preparing path technology for mechanical designs
- ✓ High Knowledge of production engineering and all related operations
- ✓ High experience in machining technology
- ✓ Good experience in CNC machines
- ✓ Practical experience in quality control and final inspection of machined parts
- ✓ Good experience in all assembly and fitting operations.

* PROFESSIONAL MEMBERSHIP:

- [1] Iraqi Union for Engineers
- [2] Iraqi Engineering Society
- [3] Kurdistan Engineering union.

* PUBLICATIONS

A. Dissertation/Thesis

- (1) PhD, Dissertation, 2011 Statistical Modeling of machining parameters for predicting of surface roughness values using knowledge based system for Nickel based Hastelloy C-276 University Tenaga Nasional, Malaysia.
- (2) MSc, Dissertation, 1992 **Study the effect of exit and foot formation in intermittent turning** University of Technology, Iraq.

B. Article/Papers in Journals

- 1. **Basim A. Khidhir** Comprehensive Study on Machinability of titanium composite Journal of Materials Science and Chemical Engineering, MSCE, Vol.4 No.2, Feb 2016.
- 2. **Basim A. Khidhir** A Contribution on Controlling the Parameters of Welding of Titanium Multi-Pass by Fuzzy Logics Submitted to the Kurdistan Journal of Applied Research KJAR, 2015.
- 3. **Basim A. Khidhira**, Ayad F. shahab, Sadiq E. Abdullah and Barzan A. Saeed Investigating and Modeling the Machinability of Al 6061 using Response Surface Methodology Applied Mechanics and Materials May 2015 (Volume 761), 267-272.
- 4. **Basim A. Khidhir**, Waleed Al- Oqaiel, Pshtwan Muhammed Kareem PREDICTION MODELS BY RESPONSE SURFACE METHODOLOGY FOR TURNING OPERATION American Journal of Modeling and Optimization. 2015, 3(1), 1-6.
- Yassin Mustafa Ahmed, Khairul Salleh Basim, Ali Khidhir Mohamed Sahari, Mahadzir Ishak; OPTIMIZATION OF MULTI-LAYER WELDING OF TITANIUM ALLOY Research Journal of Applied Sciences, Engineering and Technology 04/2015.
- 6. Yassin Mustafa Ahmed, Khairul Salleh, Basim Ali Khidhir Mohamed Sahari, Mahadzir Ishak STUDY OF MECHANICAL PROPERTIES ON THICK TITANIUM ALLOY (TI- 6AL- 4V) MULTI-PASSES WELD Journal of Multidisciplinary Engineering Science and Technology 04/2015; 2(4).
- **7.** Ali, Moaz H.; Ansari, M. N. M.; **Khidhir, Basim A.**; Mohamed, Bashir; Oshkour, A. A Simulation machining of titanium alloy (Ti-6Al-4V) based on the finite element modeling Journal of the Brazilian Society of Mechanical Sciences and Engineering (2014) 36: 315-324.
- 8. Yassin Mustafa Ahmed, Khairul Salleh Mohamed Sahari, Mahadzir Ishak, **Basim Ali Khidhir**; Titanium and its Alloy, International Journal of Science and Research (IJSR), (ISSN: 1991-8178), Vol. 3, Issue 10, October 2014.

- Yassin Mustafa Ahmed, Khairul Salleh Mohamed Sahari, Mahadzir. shak, Basim Ali Khidhir "History of Elements and Welding processes (article paper)" Australian Journal of Basic and Applied Sciences, 8(13) August 2014, Pages: 296-315
- 10. Parween Ali khudhur, Omer S. Zarroog, **Basim A. Khidhir**, "Investigation The Fracture Toughness Of Sugar Palm Fiber Reinforced Epoxy Composites" International Journal of science and Research (IJSR) 12/2013.
- 11. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, "Analysis of Factors Interaction for Maximum Oil-Film Pressure in Hydrodynamic Journal Bearing" accepts for publication in the Caspian Journal of Applied Sciences Research (CJASR), 2013.
- 12. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Application of Response Surface Methodology to Predict Oil-Film Pressure in Journal Bearing. *IEEE Business Engineering and Industrial Applications Colloquium 2013*.
- 13. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Comparison of Response Surface Model with Fuzzy Logic in Predicting the Oil-Film Pressure in Journal Bearing. *IEEE Symposium on Humanities, Science and Engineering 2013*.
- 14. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Fuzzy Logic based Model to Predict the Oil-Film Pressure in Journal Bearing. *Journal of Tribology*. (ISI-cited publication). Under Review.
- 15. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Prediction of Oil-Film Pressure in Journal Bearing using Response Surface Methodology. *Probabilistic Engineering Mechanics*. (ISI-cited publication). Under Review.
- 16. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Fuzzy Logic and Response Surface Methodology based Prediction Model for Oil-Film Pressure in Journal Bearing. *Applied Soft Computing*. (ISI-cited publication). Under Review.
- 17. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Modeling and Prediction of Oil-Film Friction in Journal Bearing based on Response Surface Methodology. *Scientia Iranica*. (ISI-cited publication). Under Review.
- 18. **Basim A. Kidhir,** Bashir Mohammed, Adeel H. Suhail, N. Ismail Investigating the Influence of Approach Angle for Ceramic Cutting Tools on Chip Formation During Turning Volume 37, Number 3 (2012), Arabian Journal for Science and Engineering April 2012, Volume 37, Issue 3, pp 793-802.

- 19. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, A.A. Oshkour Investigation on Chip Formation during Machining Using Finite Element Modeling Advanced Materials Research Vol. 505 (2012) pp 31-36.
- 20. Moaz H. Ali, R. Balasubramanian, Bashir Mohamed, Basim A. Khidhir, Effects of Coolants on Improving Machining Parameters while Mach-Inability Titanium Alloy (Ti-6Al-4V): A Review, Applied Mechanics and Materials Journal, 2011, Vols.110-116, pp.1657-1666, Switzerland, Scopus.
- 21. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, A.A. Oshkour, Investigation on Chip Formation During Machining Using Finite Element Modeling, Advanced Materials Research Journal, 2012, Vol.505, pp.31-36, Germany, Scopus.
- 22. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, and A. A. Oshkour, Prediction of High Cutting Speed Parameters for Ti-6Al-4V by Using Finite Element Modeling, International Journal of Modeling and Optimization (IJMO), 2012, Vol.2(1), pp.31-35, IACSIT in Singapore.
- 23. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, Finite Element Modeling For Prediction Of Stress Strain At Several Feed Rates And Cutting Speeds For Titanium (Ti-6Al-4V) Alloy, Advanced Materials Research Journal, 2012, Vol.[], pp. [], Germany, Scopus.
- 24. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, Research on Finite Elements Modeling To Predict the Machining of Titanium Alloys Through Numerical Software Simulation ,The Arabian Journal for Science and Engineering, 2011, Under Review, ISI Springer.
- 25. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, Finite Element Modeling For Predicting The Effect Of Cutting Speed On The Cutting Forces And Energy For Titanium (Ti-6Al-4V) Alloy, Journal of Mechanical Science and Technology, 2012, Under Review, ISI Springer.
- 26. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, Predicting the Effect Depth of cut On Machining Parameters For Ti-6Al-4V By Using Finite Element Modeling, International Journal of Precision Engineering and Manufacturing, 2012, Under Review, ISI Springer.
- 27. Moaz H. Ali, Bashir Mohamed, M.N.M.Ansari and **Basim A. Khidhir**, Finite Element Modeling For Prediction The Effect Of Nose Radius On Cutting Forces For Titanium (Ti-6Al-4V) Alloy, Journal of Engineering Science and Technology Review 5 (2) (2012) 26-29.
- 28. **Basim A. Khidhira**, Bashir Mohamed Study on burr formation mechanism when turning nickel based alloys Accepted for publication, Journal of Experimental Techniques, Society for Experimental Mechanics, Inc. 2010.

- 29. **Basim A. Khidhir**, Bashir Mohamed, **2010** Machining of Nickel based alloys using different cemented carbide tools Journal of Engineering Science & Technology, vol. 5, issue 1, pp. 110-115.
- Basim A. Khidhir, Bashir Mohamed, 2010 Modification approach of fuzzy logic model for predicting of cutting force when machining nickel based Hastelloy 276.
 2009. American J. of Engineering and Applied Sciences 3 (1): 207-213, ISSN 1941-7020.
- 31. **Basim A. Khidhir;** Bashir Mohamed, **2009** Selecting of Cutting Parameters from Prediction Model of Cutting Force for Turning Nickel Based Hastelloy C-276 Using Response Surface Methodology European Journal of Scientific Research, 2009ISSN 1450-216X Vol.33 No.3, pp.525-535.
- 32. Ismail S., **Basim A. Khidhir**, **2007** Improvement of vehicles performance by changing drag coefficient, speed of car and project of front area Journal of Zanko, University of Salah-Aldein,.

C. Article/Papers in Conferences

- 1. **Basim A. Khidhira**, Ayad F. shahab, Sadiq E. Abdullah and Barzan A. Saeed Investigating and Modeling the Machinability of Al 6061 using Response Surface Methodology 3rd International Conference on Design and Concurrent Engineering, iDECON 22 23 September 2014.
- 2. M.H. Ali, B. Mohamed, M.N.M. Ansari, G.H.K. Rao, **B. A. Khidhir** "Finite Element Modeling investigation On the Effect of Nose Radius on Machining Parameters for Titanium (Ti-6Al-4V) Alloy" TechConnect World 2012, June 18-21, Santa Clara, California.
- 3. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Application of Fuzzy Logic Approach to Predict Oil-Film Pressure in Journal Bearing. *International Conference on Advances in Mechanical Engineering 2013*.
- 4. Diyar I. Ahmed, S. Kasolang, **Basim A. Khidhir**, B. F. Yousif. Application of Response Surface Methodology to Predict Oil-Film Friction in Journal Bearing. *International Conference on Advances in Mechanical Engineering 2013*.
- 5. Diyar I. Ahmed, S. Kasolang, B. F. Yousif, **Basim A. Khidhir**. Viscosity Fitting of Environmentally Friendly Lubricant into the Industrial Lubricant using Soybean Oil as a Base Stock. ¹³th International Conference on Environmental Science and Technology (CEST 2013).
- 6. Moaz H. Ali, **Basim A. Khidhir**, Bashir Mohamed, R. Balasubramanian, A.A. Oshkour, Machining of Titanium Alloys: A Review, UNITEN SCORED 2011.

- 7. Moaz H. Ali, Bashir Mohamed, M.N.M.Ansar, and **Basim A. Khidhir**, Finite Element Modeling Prediction The Effect Of Nose Radius On The Equivalent Strain (PEEQ) For Titanium (Ti-6Al-4V) Alloy, Nanotech12 Conference, 2012, USA.
- 8. Adeel H. Suhail, N. Ismail, **Basim A. Kidhir**, Bashir Mohammed Materials machinability comparison using surface roughness and root mean square for cutting tool vibration as performance characteristics in turning process World Engineering Congress 2010, 2nd 5th August 2010, Kuching, Sarawak, Malaysia.
- 9. Sadam. H. Hussein, Kamal Nasharuddin Bin Mustapha, Amir H. Al-Falahi, **Basim A. Khidhir**, Hamzah.Bin.MD.Yousf Using Box-Behnken to Specify Number of Experiments Required to Study the Structural Behavior of LWRC Beams Made with Palm Oil Clinker with Web Openings UNITEN GRADUATE STUDENT CONFERENCE ON RESEARCH AND DEVELOPMENT 2010 (UNITEN Scored IEEE).
- 10. **Basim A. Khidhir**; Bashir Mohamed Analyzing the effect of cutting speed on surface finish and tool wear when machining nickel based Hastelloy 276. International Advanced of Technology Congress (ATCi), PWTC, Malaysia. November 3-5, 2009.
- 11. **Basim A. Khidhir**, Bashir Mohamed, Zaimah Hassan, H. Hatab, Effect of cutting speed on surface roughness and chip formation when machining nickel based Hastelloy C-276 UNITEN GRADUATE STUDENT CONFERENCE ON RESEARCH AND DEVELOPMENT 2008(UNITEN SCORED).
- 12. **Basim A. Khidhir**; Bashir Mohamed, 2009 On line monitoring to study the effect of burr formation on tool wear and surface roughness when machining nickel based Hastelloy C-276. 25th regional conference on solid state science & technology.
- 13. **Basim A. Khidhir**, Bashir Mohamed, 2008 Expert System For Prediction of Machining Parameters: A Review UNITEN GRADUATE STUDENT CONFERENCE ON RESEARCH AND DEVELOPMENT 2008(UNITEN SCORED).
- 14. Samuel Savarimuthu, **Basim A. Khidhir** & Kannan M. Munisamy, **2008** Optimized G-Code Programming For The Fabrication of Ventilated Disc Brake Test Specimen Using Okuma OSP-U10M CNC Milling Machine Accepted, UNITEN GRADUATE STUDENT CONFERENCE ON RESEARCH AND DEVELOPMENT 2008(UNITEN SCORED).
- 15. **Basim A. Khidhir, 2000** Study the Exit in intermittent cutting University of Duhok First conference,
- 16. **Basim A. Khidhir, 2000** Study the influence of foot formation in intermittent cutting University of Duhok First Conference,

* Reviewer of the following journals,

- 1. Journal of Engineering Manufacture, http://www.sagepub.com/journals/Journal202016.
- 2. Journal of Engineering Science & Technology, www.jestec.taylors.edu.my.
- 3. International Conference on Statistics in Science, Business and Engineering 2012.
 www.icssbe2012.com.

❖ Software Copy write

 Basim A. Khidhir, Bashir Mohamed, Moamin A. Mahmoud, 2010 Development of Expert system for prediction Machining Parameter When Machining Nickel Based Alloy C-276. University Tenaga Nasional, No. 398494- K.