# **CURRICULUM VITAE**

PERSONAL DATA				
Name Present Positions	Ibrahem Maher Abdelrahem Soltan  • Assistant Professor  Mechanical Engineering Department, Faculty of Engineering, Kafrelshiekh University, Egypt  • Member in Engineering board (Egypt)  • Mechanical Consultant of Kafrelsheikh University, Kafrelsheikh, Egypt. (Elevators, Firefighting,)  • Member in MYTRIBOS (Malaysia)  http://www.mytribos.org/pdf/membership.pdf (No. 86)  https://www.mytribos.org/index.html  • MENDELEY Advisor in Egypt.  • Verified Reviewer in some international Journals. https://publons.com/author/509817/ibrahem-maher#profile  • Head of Crisis and Disaster Unit			
Home Adduses	Faculty of Engineering, Kafrelshiekh University, Egypt.			
Home Address	Elmadina Elminwara St., Hay Emera, Desouk city, Kafrelsheikh, Egypt. +201003008986			
H/N No.				
Citizenship	Egyptian  Enhance 01 1079			
Date of Birth	February 01, 1978			
E-mails	<u>ibrahemmaher@eng.kfs.edu.eg</u>			
	My Website Pages			
My Professional website	www.kfs.edu.eg/ibrahemmaher.html			
Google Scholar	http://scholar.google.com.my/citations?user=2dJmzJYAAAAJ&hl=en			
ORCID	orcid.org/0000-0003-3947-9971			
Web of Sci. Researcher ID	<u>E-9202-2015</u>			
Scopus	http://www.scopus.com/authid/detail.url?authorId=56191148600&eid=2 -s2.0-84932146367			
<b>Publons Reviewer Page</b>	https://publons.com/author/509817/ibrahem-maher#profile			
منصة أريدARiD	http://arid.my/0001-0613			
Microsoft Academic	https://academic.microsoft.com/#/detail/2136065847			
ACADEMIA page	https://kfs.academia.edu/IMaher			
ResearchGate page	https://www.researchgate.net/profile/Ibrahem-Maher			
EDUCATION				
Ph.D.	University of Malaya, Malaysia, July 2016, Manufacturing Engineering.			
M. Sc.	Assiut University, Egypt, June 2008, Production Engineering.			
B. Sc.	Assiut University, Egypt, May 2002, Production Engineering.			

# **EXPERIENCE**

### 2016 to Now,

# Assistant Professor (Kafrelsheikh University), Full time.

- Conduct high quality research and publish articles in ISI journals and international conferences.
- Supervising of masters and final year projects students.
- Teaching some courses related to manufacturing engineering to postgraduate and undergraduate students.
- Supervising of international competition projects such as Formula student and Robocon.
- Work collaboratively with peers across the faculty in all aspects of academic endeavor and contribute to mentoring of other staff such as Marking control system.
- Involvement in broad administrative functions of the Faculty, coordination of subjects, attends departmental and faculty meetings.
- Final year project examiner board.
- Head of a health and safety risk.
- Member in marking control system of postgraduate and undergraduate.

# **2016 to now**

# Assistant professor (Mechatronic Engineering Systems Program, Faculty of engineering, Kafrelsheikh University, Egypt), Part time.

- Teaching some courses related to manufacturing engineering to undergraduate students.
- Supervising of international competition projects such as Formula student and Robocon.
- Work collaboratively with peers across the faculty in all aspects of academic endeavor and contribute to mentoring of other staff such as Marking control system.
- Involvement in broad administrative functions of the Faculty, coordination of subjects, attends departmental and faculty meetings.
- Final year project examiner board.

#### 2019 - 2021

# Assistant professor (Egypt Japan University of Science and Technology - E-JUST, Borg ElArab, Egypt), Part time.

- Teaching some courses related to manufacturing engineering to undergraduate students.
- Work collaboratively with peers across the faculty in all aspects of academic endeavor and contribute to mentoring of other staff.

#### 2017 - 2019

- Head of Mechatronic Engineering Systems Program, Faculty of Engineering, Kafrelshiekh University, Egypt.
- Head of marking control system, 3ed year of faculty of engineering, Kafrelsheikh University.
- Member of cumulative marking control system of faculty of engineering, Kafrelsheikh University.
- Member in marking control system of Mechatronic Engineering Systems Program, Faculty of Engineering, Kafrelshiekh University, Egypt.

# 2016 - 2018

# Assistant professor (Higher Institute for Engineering and Technology, Kafrelshekh city, Egypt), Part time.

- Teaching some courses related to manufacturing engineering to undergraduate students.

- Work collaboratively with peers across the Faculty in all aspects of academic endeavor and contribute to mentoring of other staff.
- Member in marking control system of Higher Institute for Engineering and Technology, Kafrelshekh city, Egypt.

#### 2016 - 2017

# Assistant professor (Higher Institution of Engineering and Textiles Technology, El-Mahala city, Egypt), Part time.

- Teaching some courses related to manufacturing engineering to undergraduate students.
- Work collaboratively with peers across the Faculty in all aspects of academic endeavor and contribute to mentoring of other staff.

# 2013 - 2016

# Research Assistant and PhD. Student (Malaya University, Malaysia)

- Conduct high quality research and publish articles in ISI journals and international conferences.
- Assist in supervising master, and final year projects students.
- Teaching some courses related to manufacturing engineering to undergraduate students.

### 2008 - 2013

# Research and Teaching Assistant (Kafrelsheikh University, Egypt)

- Conduct high quality research and publish articles in ISI journals and international conferences.
- Assistant in teaching some courses related to manufacturing engineering to undergraduate students.
- Assisting in supervising of international competition projects such as Robocon.
- Work collaboratively with peers across the faculty in all aspects of academic endeavor and contribute to mentoring of other staff.
- Involvement in broad administrative functions of the faculty, coordination of subjects, attends departmental meetings.

### 2004 - 2008

#### Instructor and Teaching Assistant (Assiut University, Egypt)

- Conduct high quality research and publish articles in ISI journals and international conferences.
- Assistant in Teaching some courses related to manufacturing engineering to undergraduate students.
- Assisting in supervising of international competition projects such as Robocon.
- Work collaboratively with peers across the faculty in all aspects of academic endeavor and contribute to mentoring of other staff.
- Involvement in broad administrative functions of the faculty, coordination of subjects, attends departmental meetings.

ACADEMIC HONORS	
2013 - 2016	University Scholarship for PhD in Manufacturing Engineering, University
	of Malaya, Malaysia.
2004 - 2008	University Education Scholarship for MSc. in Production Engineering,
	Assiut University, Egypt.
1997 - 2002	University Education Scholarship throughout the Undergraduate
	Engineering Program, Assiut University, Egypt.

RESEARCH AND INNOVATION				
Area of expertise	<ul> <li>Manufacturing Automation (CNC machine tools, CAD/CAM, Intelligent automation).</li> <li>Cutting tool technology (Metal cutting operations using multiple sensors, data acquisition, and signal processing technology).</li> <li>Advanced manufacturing processes (EDM, Wire-EDM, Fused deposition modelling, 3d printing).</li> <li>Machining (Higher accuracy and productivity machining technology).</li> </ul>			
Research interest	<ul> <li>Additive Manufacturing</li> <li>Advanced Manufacturing technology</li> <li>Production Engineering</li> <li>Applied soft computing.</li> <li>Fuzzy modelling</li> <li>ANFIS modelling</li> <li>Neural network</li> <li>Micro-machining</li> <li>CNC machining</li> <li>Wire-EDM</li> <li>Materials processing</li> <li>Micro-surface characterization</li> <li>Design of experiments</li> <li>CAD/CAM</li> <li>Coating technology</li> <li>Electro-thermal machining</li> </ul>	<ul> <li>Cleaner Production</li> <li>Non-conventional machining</li> <li>3-D printing</li> <li>Fused deposition modelling</li> <li>Melt treatment.</li> <li>Sustainable production</li> <li>Heat-affected zone</li> <li>White layer zone</li> <li>Chip morphology</li> <li>EDM Wire electrodes</li> <li>Rapid prototyping</li> <li>EDM</li> <li>Cutting speed</li> <li>Surface roughness</li> <li>Surface morphology</li> <li>Intelligent machining</li> <li>Porous metals</li> </ul>		
Projects	Design and manufacturing Self-propelled Firefighting robot and climber of ramps and stairs.  Amount 11,000 EGP Duration 2020 - 2021  Design and manufacturing a Ventilator device using local components.  Amount 100,000 EGP Duration 2020 - 2021  Design and manufacturing 4D printer with local components.  Amount 50,000 EGP.  Duration 2020 - 2021  Design and manufacturing of single seater electric urban car.  Amount 75,000 EGP.  Duration 2019 -2020  Design and manufacturing of an internal combustion Formula student race car to participate in international Formula Student Competition.  Amount 75,000 EGP.  Duration 2019 -2021  Design and fabrication of an electric racing bike to participate in			

international moto student competition.

Amount 75,000 EGP.

Duration 2019 –2021

Solid Waste Management

Amount 1,205,700 EGP.

Duration 8/2017 - 2/2018

Development of a new performance criteria for higher wire-electrical discharge machining performance considering the ecological and economical aspects.

Amount 12,000 USD.

Project Number 20-2013B

Duration 12/2013-12/2016

Surface Roughness Prediction in End-Milling Process.

Amount 5,000 USD.

Duration 4/2004 - 6/2008

# **COURSES TAUGHT**

# I have been teaching the following undergraduate and postgraduate courses.

# 2016 - Now, Postgraduate courses, Kafrelsheikh University

- Non-Traditional Machining Methods
- Machining by Numerically Controlled Machine Tools (CNC)
- Material-Handling Systems Design

# 2016 - Now, Undergraduate courses, Kafrelsheikh University

- Theory and technology of metal cutting
- Machine design
- CNC
- Electromechanical Equipment and Instalments Engineering
- Non-conventional machining processes
- Computer Aided Design
- CAD/CAM
- Machine tool design
- Materials Handling
- Mechanical Design
- Machines of Metal Cutting and Forming
- Production Engineering
- Production Technology

# 2019 – 2021, Undergraduate courses, EJUST- Egypt Japan University of Science and Technology

- Manufacturing Processes Laboratory
- Introduction to manufacturing processes
- Machining workshop laboratory
- Conventional machining processes

# 2016 - Now, Mechatronic Engineering Systems Program Kafrelsheikh University

- Advanced Manufacturing Process
- Computer Aided Mechanical Design (1)

- Stress Analysis
- Computer Aided Mechanical Design (2)
- Computer aided engineering drawing
- Computer aided mechanical drawing.
- CNC
- Industrial Automation

# 2016 – 2018, Higher Institute for Engineering and Technology, Kafrelshekh city, Egypt.

- Engineering drawing
- Descriptive projection
- Safety
- Engineering drawing
- Descriptive projection

# 2016 - 2017, Higher Institution of Engineering and Textiles Technology, El-Mahala city, Egypt.

- Mechanical vibration
- Theory of machines
- Dynamics of Mechanisms and Robotics

### 2013 – 2016, University of Malaya, Malaysia.

I have been assisted in teaching the following undergraduate and postgraduate courses;

- Basic Manufacturing Process
- Advanced Manufacturing Process

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/IPI	$K_{K}$	SKILL	

- AutoCAD (2D and 3D)
- CNC Programming
- MasterCAM (2D and 3D).
- Solid Works
- Minitab
- Microsoft Office

- EndNote
- Mendeley
- Photoshop
- Matlab (Fuzzy, NN, ANFIS)
- ImageJ
- SPSS

# OTHER PROFESSIONAL SKILLS

- Specialized in the development of specifications and receipt of Electric Elevators.
- Training of personnel and mechanical engineers to operate and control the CNC machine tools.
- Training of personnel and Oil and Gas engineers to apply Fitness for Service API 579-1/ASME FFS-1 2007.
- Training of personnel and Oil and Gas engineers to apply oil and gas laboratory operations management.

# SOME OF ENGINEERING CONSULTANCY WORKS

1- Solid waste management consultant of ministry of environment, Egypt (2018).

#### Some of my engineering consultancies for Kafrelsheikh University projects.

- 2- Supervising the implementation and receipt of firefighting works for the new female students dormitory building.
- 3- Supervising the implementation and receipt of elevators works for faculty of information and computer science.
- 4- Supervising the implementation and receipt of elevators works for the University restaurant.
- 5- Supervising the implementation and receipt of elevators works for Nano technology center.

- 6- Supervising the implementation and receipt of firefighting works for Nano technology center.
- 7- Inspect and report writing about the central firefighting unit of the University.

## Some of my engineering consultancies for general projects.

- 8- Design and prepare the specifications of elevators for Mitobus hospital, Fowa hospital, Desouq hospital, Sidi salem hospital, a building in Qalin city, a building in Alhamul city, a building in Desouq, a building in Biala city, a building in Kafrelshiekh city, a building in Baltim city, and a building in Fowa city (2016 -2021).
- 9- Evaluation of materialistic assets of buildings, laboratories, technological workshops, playgrounds, furniture, and equipment of Higher institute of engineering and technology in Tanta city, Egypt (May 2017).
- 10- Evaluation of materialistic assets of buildings, laboratories, playgrounds, swimming pool, Buses, furniture, and equipment of Al-Rowad international school in Tanta city, Egypt (June 2017).
- 11- Evaluation of materialistic assets of buildings, laboratories, playgrounds, horse stable, Buses, furniture, and equipment of Family international school in Tanta city, Egypt (June 2017).
- 12- Evaluation of materialistic assets of buildings, laboratories, playgrounds, swimming pool, furniture, and equipment of Nefertari international school in Elsalam city, Egypt (December 2017).
- 13- Evaluation of materialistic assets of buildings, laboratories, playgrounds, Buses, furniture, and equipment of Diwan international school in Beniswief city, Egypt (December 2017).

#### **SUPERVISING**

I have been supervising the following MSC and projects in Kafrelsheikh University, Egypt.

#### **Masters:**

- Free form surface CNC milling path generation (Running).
- Effect of post weld heat treatment on mechanical behavior of stainless steel (Running).
- Surface characteristics enhancement by electrical discharge coating (Running).
- Laser material deposition enhancement in laser additive manufacturing (Running)
- Nozzle design and assistant-gas flow analysis in laser cutting (Running).
- Optimal Design of Parallel Robots (Running).

# Final year projects

- Self-propelled firefighting robot and climber of ramps and stairs (2020/2021).
- Design and manufacturing of single seater electric urban car (2019/2020).
- Design and Manufacturing model of filling and capping machine (2018/2019).
- Friction stirs welding of aluminum alloy (2017/2018).

I have been assisted in supervising the following projects and masters in University of Malaya.

### Masters

- Prediction of CrAlN Coating parameters on Al-Si Alloy (LM28) to enhance the surface integrity-Fuzzy Modelling (2015).
- ANFIS modelling approach to predict the volumetric shrinkage and surface roughness in fused deposition modelling rapid prototyping process (2016).

#### • Final year projects

- Improve the machining performance of Wire-EDM at different peak current, pulse on time, and wire preloading ANFIS modelling (2013/2014).
- ANFIS modelling to investigate the cutting performance of different wire electrodes in machining Titanium alloy (Ti6Al4V) using WEDM (2014/2015).

• Wire vibration, lag, and breakage in wire electrical discharge machining (2015/2016).

# **EXAMINER AND REVIEWER**

#### **PHD External Examiner**

I have been appointed as an External Examiner for evaluation of PhD Thesis titled "experimental investigations on electro discharge surface modification of die steel P20+NI", Submitted by Ramdatti Jayantigar Lakhmangar, Nr. Vishwakarma Government Engineering College, Gujarat Technological University, Ahmadabad, India, 2020.

## Paper review

I am a verified reviewer in the following international journals:

https://publons.com/author/509817/ibrahem-maher#profile

https://www.reviewerrecognition.elsevier.com/#/profile/224b217c-bc3a-4188-825c-b231c9536233

- Journal of Cleaner Production, Publisher (Elsevier).
- Measurements, Publisher (Elsevier).
- Applied soft computing, Publisher (Elsevier)
- Journal of Manufacturing Processes, Publisher (Elsevier).
- Neural computing and applications, Publisher (Springer).
- Machining science and technology, Publisher (Taylor & Francis).
- International Journal of Industrial and Systems Engineering, Publisher (Inderscience).
- International Journal of Manufacturing Research, Publisher (Inderscience).
- Advances in Mechanical Engineering, Publisher (SAGE).
- Surface Engineering and Applied Electrochemistry, Publisher (Allerton Press).
- Mechanical Systems and Signal Processing (Elsevier).
- Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science (SAGE).
- Arabian Journal for Science and Engineering (Springer nature).

# **PUBLICATIONS**

#### **Patents**

[1] Ibrahem Maher, Ahmed A. D. Sarhan, M. Hamdi, (2016), Develop a new wire electrode design for wire electrical discharge machining, Malaysia, PI 2016700115.

#### **Book Chapters**

[1] Ibrahem Maher, Ahmed A. D. Sarhan, Houriyeh Marashi, (2017). 1.9 Electrical discharge energy effect on white layer thickness in WEDM, Comprehensive Materials Finishing, **Elsevier**.

https://books.google.com.my/books?hl=en&lr=&id=8SmlCgAAQBAJ&oi=fnd&pg=PA231&ots=vN DLKHHMVZ&sig=JqQyW-D9BXSmBVLilk7GgnEZhm8#v=onepage&q&f=false

[2] Houriyeh Marashi, Ahmed A. D. Sarhan, Ibrahem Maher, Mohd Sayuti, (2017). 1.7 Various Techniques to Improve EDM Capabilities: A Review. Comprehensive Materials Finishing, Elsevier.

https://books.google.com.my/books?hl=en&lr=&id=8SmlCgAAQBAJ&oi=fnd&pg=PA171&ots=vNDLKHHNQW&sig=9eTb5jrgKuLyM-jwkFyjjLYUMqI#v=onepage&q&f=false

# **Papers**

#### 2021

- [1] Ibrahem Maher, Q. M. Mehran," Adhesion strength prediction of CrAlN coating on Al-Si alloy (LM28) Fuzzy modelling", Metals and Materials International, 2021, <a href="https://link.springer.com/article/10.1007/s12540-020-00946-9">https://link.springer.com/article/10.1007/s12540-020-00946-9</a> (ISI-cited publication).
- [2] Bahaa, Saleh, Ibrahem Maher, Yasser Abdelrhman, Mahmoud Heshmat, and Osama Abdelaal." Adaptive Neuro-Fuzzy Inference System for Modelling the Effect of Slurry Impacts on PLA Material Processed by FDM", Polymers, 13, 118, 2021, <a href="https://www.mdpi.com/2073-4360/13/1/118">https://www.mdpi.com/2073-4360/13/1/118</a>, (ISI-cited publication).

### 2020

[1] YS Dambatta, AAD Sarhan, I Maher, M Hourmand, "Volumetric shrinkage prediction in fused deposition modelling process-ANFIS modelling approach", International Journal of Materials and Product Technology 59 (4), 347-365,2020. <a href="https://www.inderscienceonline.com/doi/abs/10.1504/IJMPT.2019.104568">https://www.inderscienceonline.com/doi/abs/10.1504/IJMPT.2019.104568</a>, (ISI-cited Publication).

#### 2019

[1] Fadhil, Sadeem Abbas; Hassan, Mohsen A; Haseeb, A.S.M.A; Jaafar, Harith I; Al-Ajaj, Ekram Atta; Alrawi, Aoday H; Maher, Ibrahem" Manufacturing of porous aluminum 2024 alloy samples with impressive compression properties", Materials Research Express, 076509, Vol. 6, 2019.

https://iopscience.iop.org/article/10.1088/2053-1591/ab10af/meta, (ISI-cited Publication)

#### 2017

[1] I. Maher and A. A. D. Sarhan, "Proposing a new performance index to identify the effect of spark energy and pulse frequency simultaneously to achieve high machining performance in WEDM," Int. J. Adv. Manuf. Technol., vol. 91, no. 1–4, pp. 433–443, 2017.

https://link.springer.com/article/10.1007/s00170-016-9680-3, (ISI-cited Publication)

[2] M. Marani, V. Songmene, and I. Maher, "Investigation on surface finish and tool condition while turning al20 mg2 si metal matrix composite," International Journal of Advances in Science, Engineering and Technology, vol. 5, Iss 3, Supp. 1. pp. 11-14, 2017.

http://espace2.etsmtl.ca/id/eprint/19091/

- [3] I. Maher, A. A. D. Sarhan, and H. Marashi, "Wire Rupture Optimization in Wire Electrical Discharge Machining using Taguchi Approach," MATEC Web Conf., vol. 95, p. 7014, Feb. 2017. <a href="https://www.matecconferences.org/articles/matecconf/abs/2017/09/matecconf\_icmme2017\_07014/matecconf\_icmme2017\_07014.html">https://www.matecconferences.org/articles/matecconf/abs/2017/09/matecconf\_icmme2017\_07014/matecconf\_icmme2017\_07014.html</a>
- [4] H. Marashi, A. A. D. Sarhan, I. Maher, and M. Hamdi, "Performance of Electrical Discharge Milling and Sinking in Micro Graphite Powder Mixed Dielectric," Mater. Sci. Forum, vol. 900, pp. 127–130, 2017.

https://doi.org/10.4028/www.scientific.net/MSF.900.127

# 2016

- [1] H. Marashi, A. A. D. Sarhan, I. Maher, and M. Hamdi, "Performance of Electrical Discharge Milling and Sinking in Micro Graphite Powder Mixed Dielectric," in International Conference on Innovative Engineering Materials (ICIEM 2016), 2016.
- [2] I. Maher, A. A. D. Sarhan, H. Marashi, M. M. Barzani, and M. Hamdi, "White layer thickness prediction in Wire-EDM using CuZn coated wire electrode ANFIS modeling," Trans. IMF, 2016. https://www.tandfonline.com/doi/abs/10.1080/00202967.2016.1180847, (ISI-cited Publication)

[3] I. Maher, A. A. D. Sarhan, and H. Marashi, "Wire Rupture Optimization in Wire Electrical Discharge Machining Using Taguchi approach," in International Conference on Innovative Engineering Materials (ICIEM 2016), 2016.

#### 2015

- [1] Ibrahem Maher, Ahmed A.D. Sarhan, M. Hamdi (2015) Review of improvements in wire electrode properties for longer working time and utilization in wire EDM machining. The International Journal of Advanced Manufacturing Technology, 76(1-4), pp. 329-351 http://dx.doi.org/10.1007/s00170-014-6243-3, (ISI-cited Publication).
- [2] Ibrahem Maher, M.E.H. Eltaib, Ahmed A.D. Sarhan, R.M.El-ZAHRY (2015) Cutting force based adaptive neuro-fuzzy approach for accurate surface roughness prediction in end milling operation for intelligent machining. The International Journal of Advanced Manufacturing Technology, 76(5-8), pp. 1459-1467. <a href="http://dx.doi.org/10.1007/s00170-014-6379-1">http://dx.doi.org/10.1007/s00170-014-6379-1</a>, (ISI-cited Publication).
- [3] Barzani, M. M., Sarhan, A. A. D., Farahany, S., Ramesh, S., & Maher, I. (2015). Investigating the Machinability of Al–Si–Cu cast alloy containing bismuth and antimony using coated carbide insert. Measurement, 62(0), pp. 170-178. <a href="http://dx.doi.org/10.1016/j.measurement.2014.10.030">http://dx.doi.org/10.1016/j.measurement.2014.10.030</a>, (ISIcited Publication).
- [4] Ibrahem Maher, Liew Hui Ling, Ahmed A. D. Sarhan, M. Hamdi (2015) Improve wire EDM performance at different machining parameters—ANFIS modeling, 8th Vienna International Conference on Mathematical Modelling (MATHMOOD), IFAC Paper Online, Vienna University of technology, Vienna, Austria, pp. 105-110. <a href="http://dx.doi.org/10.1016/j.ifacol.2015.05.109">http://dx.doi.org/10.1016/j.ifacol.2015.05.109</a>, (Elsevier Publication).
- [5] Ibrahem Maher, Ahmed A.D. Sarhan, M. Hamdi (2015) Increasing the productivity of the wire-cut electrical discharge machine associated with sustainable production, Journal of Cleaner Production, 108(0), pp. 247-255. <a href="http://dx.doi.org/10.1016/j.jclepro.2015.06.047">http://dx.doi.org/10.1016/j.jclepro.2015.06.047</a>, (ISI-cited Publication).
- [6] Ibrahem Maher, Ahmed A. D. Sarhan, M. Hamdi, (2015) White layer thickness prediction in WEDM-ANFIS modeling, Proceeding of Malaysian International Tribology Conference 2015, Malaysian Tribology Society, 16~17 November, Penang, Malaysia, pp. 240-241. <a href="https://books.google.com.my/books?hl=en&lr=&id=KSDNCgAAQBAJ&oi=fnd&pg=PA240&ots=smlsikwfrZ&sig=C8AsZ0Noi4hMytdrLIOcmPI7QO8#v=onepage&q&f=false">https://books.google.com.my/books?hl=en&lr=&id=KSDNCgAAQBAJ&oi=fnd&pg=PA240&ots=smlsikwfrZ&sig=C8AsZ0Noi4hMytdrLIOcmPI7QO8#v=onepage&q&f=false</a>, (Google book Publication).
- [7] Barzani, M. M.; Sarhan, A. A. D.; Singh, R.; Maher, I.; Farahany, S. (2015) In Investigation into effect of silicon morphology on surface roughness while machining Al-Si-Cu-Mg alloy, Proceeding of Malaysian International Tribology Conference 2015, Penang, Malaysia, pp 238-239. <a href="https://books.google.com.my/books?hl=en&lr=&id=KSDNCgAAQBAJ&oi=fnd&pg=PA238&ots=smlsikxcl\_&sig=vZHaSKvRiAIHamkOaL6Jb5IVVb8#v=onepage&q&f=false,">https://books.google.com.my/books?hl=en&lr=&id=KSDNCgAAQBAJ&oi=fnd&pg=PA238&ots=smlsikxcl\_&sig=vZHaSKvRiAIHamkOaL6Jb5IVVb8#v=onepage&q&f=false,</a> (Google book Publication).
- [8] Marashi, H.; Sarhan, A. A. D.; Maher, I.; Sayuti, M.; Hamdi, M. (2015) In Enhanced surface roughness of AISI D2 steel machined using nano-powder mixed electrical discharge machining, Proceeding of Malaysian International Tribology Conference 2015, Penang, Malaysia, pp 242-243. <a href="https://www.researchgate.net/publication/283256941\_Enhanced\_surface\_roughness\_of\_AISI\_D2\_steel\_machined\_using\_nanopowder\_mixed\_electrical\_discharge\_machining, (Google book\_Publication).">https://www.researchgate.net/publication/283256941\_Enhanced\_surface\_roughness\_of\_AISI\_D2\_steel\_machined\_using\_nanopowder\_mixed\_electrical\_discharge\_machining, (Google book\_Publication).</a>

#### 2014

[1] Maher I, Eltaib M. E. H., Sarhan A. D, El-Zahry R. M (2014) Investigation of the effect of machining parameters on the surface quality of machined brass (60/40) in CNC end milling—ANFIS modeling. The International Journal of Advanced Manufacturing Technology, 74(1-4), pp. 531-537 http://dx.doi.org/10.1007/s00170-014-6016-z, (ISI-cited Publication).

#### 2006

[1] Ibrahem Maher, M. E. H. Eltaib and R. M. El-Zahry, (2006) surface roughness prediction in end milling using multiple regression and adaptive neuro-fuzzy inference system, fourth Assiut university International Conference on Mechanical Engineering Advanced Technology for Industrial production (MEATIP4), Assiut University, Assiut, Egypt, pp. 614-620 http://dx.doi.org/10.13140/RG.2.1.2225.4246

### **Papers Under Review**

- [1] Ibrahem Maher, Ahmed A. D. Sarhan, M. Hamdi, Identify the optimum spark energy and pulse frequency values to achieve higher productivity in WEDM, Transactions of the IMF. (Under review)
- [2] Ibrahem Maher, Ahmed A. D. Sarhan, M. Hamdi, New sustainable index to identify most suitable type of wire electrode for higher EDM performance considering the ecological and economic aspects, Journal of Cleaner Production. (Under review)
- [3] Ibrahim Maher, Hassan A. El-Hofy, Mohamed H. El-Hofy, Ultrasonic Vibration Assisted EDM and µEDM: A Review, International Journal of Advanced Manufacturing Technology, (Under Review)
- [4] Swellam Wafa Sharshir, A.W. Kandeal, Youssef M. Ellakany, Ibrahem Maher, Gamal B. Abdelaziz, Tubular solar still; Carbon black nanoparticles; Carbonized wood; Wood thickness, Thin-film evaporation (Under review)

DEVELOPMENT COURSES FACULTY MEMBERS			
Assiut University	Faculty and leadership development project (FLDP),.		
	1 - Morals and professional ethics (April 2005).		
	2 - Effective teaching (May 2005).		
	3 - Thinking Skills (March2007).		
	4 - Recent trends in thinking (March2007).		
	5 - Teaching to the large and mini-teaching (June 2007).		
	6 - Scientific publishing (March2008).		
Kafrelsheikh University.	Faculty and leadership development center (FLDC),		
	1 - Methods of scientific research (April 2010).		
	Faculty of education, Kafrelsheikh University.		
	1 - Session of the university teacher preparation (March 2009).		
NAQAAE	National Authority for Quality Assurance and Accreditation of		
	Education (NAQAAE).		
	1 - Strategic planning for higher education institutions (July 2010).		
	2 - Institutional self – evaluation for higher education (August 2010).		