

Contact Info:

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Biographical sketch:
(Academic Degrees-Fellowships and Associations)

1. Qualifications

Degree	Institute	Topic	Place & Country	Date
Ph.D.⁽¹⁾	Applied Science & Engg., Sheffield University	Mechanical Engg. (Manufacturing Engineering)	Sheffield, Great Britain	1990
M.Sc.⁽²⁾	Faculty of Engg., Suez Canal University	Production Engg. (Metal Cutting & Machining)	Port Said, Egypt	1983
B.Sc.	Faculty of Engg., Suez Canal	Production Engineering	Port Said, Egypt	1979

University

(1) "*Mathematical Models and In-Process Monitoring Techniques for Cutting Tools*"

(2) "*Fundamental Study of the Machinability of Some Engineering Materials*"

2. Career History

Interval		Position	Place
From	To		
June 2016	October 2017	Professor Emeritus	Department of Production Engineering and Mechanical Design, Faculty of Engineering, Port Said University, Egypt.
Mar. 2006	June 2016	Full Professor	Department of Production Engineering and Mechanical Design, Faculty of Engineering, Port Said University, Egypt.
Jan. 1995	Feb. 2006	Associate Professor	Department of Production Engineering and Mechanical Design, Faculty of Engineering, Suez Canal University, Egypt.
Jan. 1990	Dec. 1994	Assistant Professor	Department of Production Engineering and Mechanical Design, Faculty of Engineering, Suez Canal University, Egypt.
Oct. 1983	Dec. 1989	Assistant Lecturer	Department of Production Engineering and Mechanical Design, Faculty of Engineering, Faculty of Engineering, Suez Canal University, Egypt.

Dec. 1979	Sept. 1983	Instructor	Department of Production Engineering and Mechanical Design, Faculty of Engineering, Suez Canal University, Egypt.	
Leave in Kuwait				
Dec. 12, 2016	August, 2018	Full Professor	Department of Manufacturing Engineering Technology, College of Technological Studies, PAAET, KUWAIT.	
Jan 2nd, 2005	Dec. 11, 2016	Associate Professor	Department of Production Technology, College of Technological Studies, PAAET, KUWAIT.	
Sept. 1995	Jan 1st, 2005	Assistant Professor	Department of Production Technology, College of Technological Studies, PAAET, KUWAIT.	
2. Membership in Scientific and Culture Associations and Societies				
Society			Period	Tasks
2019 3rd International Conference on Material Engineering and Advanced Manufacturing Technology (MEAMT 2019) will be held in Shanghai, China on 26-28 April, 2019.			2019	Technical Committee
International Association of			2018	EMINENT

	Engineering & Technology Researchers		COMMITTEE MEMBERS
	2018 International Joint Conference on Agricultural and Biosystems Engineering (JCABE 2018), Khalifa University in Abu Dhabi, UAE on Nov. 20-22, 2018.	2018	International Scientific Committee
	Universal Researchers (UAE)	2015 until Now	Scientific Committee
	Science and Engineering Institute (SCIEI)	2012 until Now	Technical Committee Chair and reviewer
	World Academy of Science, Engineering and Technology (WASET)	2011 until Now	Member and reviewer
	International Association of Computer Science and Information Technology (IACSIT)	2010 until Now	Committee of the relevant IEEE conference
	International Scientific Academy of Engineering & Technology (ISAET)	2011 until Now	Member and reviewer
	International Institute of Engineers (IIENG)	2012 until Now	Editorial Board
	International Association of Engineers,	2008	Member

	(IAENG)	until Now	
	ICIET 2014: International Conference on Industrial Engineering and Technology, Cairo, Egypt October 26 - 27, 2014	2014	Conference Committee
	South Asia Institute of Science and Engineering (SAISE)	2013	Senior Member (20131210001)
	2014 2nd Asia Conference on Mechanical and Materials Engineering (ACMME 2014), Taipei, Taiwan, July 28-29, 2014.	2013	International Technical Committee
	ICIEOM 2014: International Conference on Industrial Engineering and Operations Management, Cairo, Egypt October 26 - 27, 2014	2014	Conference Committee
Publications:	Publications		
	a) Published papers in peer-reviewed journals and periodical		
1	Waleed El-Garaihy, El-Sayed Abd El Rassoul, Abd-Alrahman Alateyah, Ayman Mohamed Alaskari, and <u>Samy Oraby</u> , “Data Manipulation Approach and Parameters Interrelationships of the High-Pressure Torsion for AA6061-15%SiCp Composite”, SAE International Journal of Materials and Manufacturing, vol. 11(3), 2018, 1-15.		
2	A Alaskari, S Oraby, “Adaptive Control Simulation to Optimize Metal Removal for Rough Turning”, Journal of		

		Engineering Research, vol 6 (2), 2018, 209-231. Kuwait University Publisher.
	3	W El-Garaihy, A Alaskari, E Ameshaie, S Oraby , “ <i>On the effect of HPT processing conditions on relative density, mechanical properties and microstructural evolution of hot compacted AA6061-- mathematical empirical and response surface approach</i> ”, Advanced Materials Letters, 8 (5), VBRI Press AB, pp. 620-628, 2016.
	4	A Shalwan, S Oraby , A Alaskari, “ <i>Mathematical Modelling of the Interfacial Adhesion of Date Palm/Epoxy</i> ”, Journal of Materials Science Research 5 (3), 29, 2016.
	5	M. S. Alajmi, S. E. Oraby , “ <i>Monitoring of Coated and Uncoated Cutting Edge Performance using Infrared Thermography of Chip Temperature</i> ”, International Journal of Mining, Metallurgy and Mechanical Engineering (IJMMME), 3(3), 2015, 74-78.
	6	A. Almazrouee, T. Shehata, S Oraby , “ <i>Effect of Welding Parameters on the Weld Bead Geometry of Low Alloy Steel using FCAW – Empirical Modeling Approach</i> ”, International Journal of Mining, Metallurgy and Mechanical Engineering (IJMMME), 3(3), 2015, 88-92.
	7	Alajmi, M. S., & Oraby, S. E. (2015). “ <i>Using Infrared Thermograph of Chip Temperature to Monitor Cutting Edge Performance</i> ”, Applied Mechanics & Materials.
	8	El-Garaihy, W. H., S. E. Oraby , El-Sayed MA Rassoul, and H. G. Salem. “ <i>On the Effect of SiC Content and Processing Temperature on Relative Density and Hardness of Hot Compacted Aluminum AA6061 Composite-Mathematical Empirical and Response Surface Approach.</i> ”, Journal of

		Materials Science Research 4, no. 3 (2015): 1.
9		Alajmi, M. S and Oraby S. E. “ <i>On the Influence of the Speed-Feed Interaction on the Wear Rate and Life of Multiple Coated Carbide Inserts Considering Rough Turning Process.</i> ”, Applied Mechanics and Materials, Trans Tech Publications 575 (2014): 431-436.
10		Oraby, Samy E. , “ <i>Influence of regular and random cutting tool deformation on the cutting force of three-dimensional turning operation</i> ”, Int. J. Machining and Machinability of Materials, 14, no. 4(2013): 311-341.
11		Oraby, S. E. , “ <i>Determination of the Real Cutting Edge Wear Contact Area on the Tool-Workpiece Interface in the Light of Cutting Forces Variations</i> ”, Applied Mechanics and Materials, Manufacturing Engineering and Process II, (2013): 1406-1411.
12		Al-Khalid, Hamad, Ayman Alaskari, and Samy Oraby. “ <i>Statistical and Graphical Assessment of Circumferential and Radial Hardness Variation of AISI 4140, AISI 1020 and AA 6082 Aluminum Alloy.</i> ” Materials 5, no. 1 (2012): 12-26.
13		Oraby, Samy , Ayman Alaskari, and Abdulla Almazrouee. “ <i>Prior Surface Integrity Assessment of Coated and Uncoated Carbide Inserts Using Atomic Force Microscopy.</i> ”, MDPI, Materials 4, no. 4 (2011): 633-650.
14		Alaskari, A. M., Oraby, S. E. and Al-Khalid, H. K., “ <i>Mathematical Modeling Experimental Approach of the Friction on the Tool-Chip Interface of Multicoated Carbide Turning Inserts</i> ”, International Journal of Advances in Machining and Forming Operations, 3, 2(2011): 167-183.
15		Al-Khalid, H. ; Alaskari, A.; Oraby, S. “ <i>Hardness Variations</i>

		<i>as Affected by Bar Diameter of AISI 4140 Steel</i> ", World Academy of Science, Engineering and Technology, International Science Index 51, no. 5.3 (2011): 212 - 218.
16		Alaskari, A.; Oraby, S. ; Almazrouee, A., " <i>SEM and AFM Investigations of Surface Defects and Tool Wear of Multilayers Coated Carbide Inserts</i> ", World Academy of Science, Engineering and Technology, International Science Index 49, no. 5.1 (2011): 504 - 508.
17		Oraby, S. ; Alaskari, A. (2010), " <i>Atomic Force Microscopy (AFM) Topographical Surface Characterization of Multilayer-Coated and Uncoated Carbide Inserts</i> ", World Academy of Science, Engineering and Technology, International Science Index 46, 4(2010): 377 - 388.
18		Oraby, S. E. , and A. M. Alaskari. " <i>On the variability of tool wear and life at disparate operating parameters.</i> ", <i>Kuwait Journal of Science and Engineering</i> 35, no. 1B (2008): 123-150.
19		Oraby, S. E. , and A. M. Alaskari. " <i>Surface topography assessment techniques based on an in-process monitoring approach of tool wear and cutting force signature.</i> ", <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> 30, no. 3 (2008): 221-230.
20		Alaskari, A. M., and S. E. Oraby. " <i>On the effect of heat treatment on the forming properties of pre-deformed low carbon steel.</i> ", <i>Kuwait J. Sci. Engg.</i> 34, no. 2B (2007): 193-206.
21		Alaskari, A. M., and S. E. Oraby. " <i>The effect of predeformation level on the variability of forming properties of low carbon steel.</i> ", <i>Kuwait J. Sci. Engg.</i> 33, no. 2 (2006):

	219-232.
22	Oraby, S. E. , A. F. Al-Modhuf, and D. R. Hayhurst. " <i>A diagnostic approach for turning tool based on the dynamic force signals.</i> ", ASME, Journal of manufacturing science and engineering 127, no. 3 (2005): 463-475.
23	Almehshaiei, E. A., S. E. Oraby , and M. A. Mahmoud. " <i>Tool Wear Prediction Approach for Turning Operations Based on General Regression Neural Network (GRNN) Technique.</i> ", In: Adaptive Computing in Design and Manufacture VI, Springer (2004): 161-172.
24	Oraby, S. E. , and D. R. Hayhurst. " <i>Tool life determination based on the measurement of wear and tool force ratio variation.</i> ", International Journal of Machine Tools and Manufacture 44, no. 12 (2004): 1261-1269.
25	Oraby, S. E. , A. Al-Askari, and E. A. Al-Mehshaiei. " <i>Quantitative and qualitative evaluation of surface roughness-tool wear correlation in turning operations</i> ", Kuwait J. Sci. & Engg., 31, no. 1 (2004): 219-244.
26	Oraby, S. E., E. A. Almehshaiei, and A. Alaskari. " <i>An adaptive control simulation approach based on a mathematical model optimization algorithm for rough turning.</i> ", Kuwait J. Sci. Engg. 30, no. 2 (2003): 213-234.
27	Almehshaiei, E., and S. Oraby . " <i>An expert system machinability data bank (ESMDB) approach.</i> ", Kuwait Journal of Science and Engineering 30, no. 1 (2003): 315-328.
28	Oraby, S. E. , " <i>On the Accuracy of POINT-TO-POINT (PTP) CNC Programming</i> ", Port-Said Engineering Research Journal 3 (2) (1999): 147-166
29	S. Mahrous, S. E. Oraby , N. Gadallah, M. Es. Abdelmoniem,

		<i>"Theoretical Aspects in Dredging and Their Verifications"</i> , University of Helwan Engineering Research Journal 50, (1996): 191-200.
30	<u>Oraby, S. E.</u> , <i>"Monitoring of turning operation via force signals Part I: Recognition of different tool failure forms by spectral analysis."</i> , Wear 184, no. 2 (1995): 133-143.	
31	<u>Oraby, S. E.</u> , <i>"Monitoring of Machining Processes via Force Signals - Part II: Recognition of Tool Wear using the Dynamic Data System (DDS)"</i> , Port-Said Scientific Engineering Bulletin 6, no. 1 (1994)	
32	<u>Oraby, S. E.</u> , <i>"Computer-aided surface finish quality control."</i> , Modelling Measurement and Control, B 55 (1994): 55-64.	
33	Gaffer, H. I., <u>S. E. Oraby</u> , and M. A. Helaly. <i>"A basic concept of on-line tool wear monitoring of finish turning operation."</i> , Modelling Measurement and Control, B 55 (1994): 45-45.	
34	<u>S. E. Oraby</u> , S. Mahrous, M. Es. Abdulmoneim, N. Gadallah, <i>"A Comparison Between Two Grades of Dredging Teeth (Forged vs Cast) Employed at Suez Canal"</i> , University of Helwan Engineering Research Bulletin 4, (1993): 40-51	
35	S. M. Abdou, G. E. Abou Raya, <u>S. E. Oraby</u> , T. A. and El Sarrag, <i>"Effect of Al-Inclusion on Wear Resistance of Gray Cast Iron"</i> , Port Said Scientific Engineering Bulletin 5 (1993): 211-222.	
36	Oraby, S. E., and D. R. Hayhurst. <i>"Development of models for tool wear force relationships in metal cutting."</i> , International Journal of mechanical sciences 33, no. 2 (1991): 125-138.	
37	<u>Oraby, S. E.</u> , and D. R. Hayhurst. <i>"High-capacity compact three-component cutting force dynamometer."</i> International	

Journal of Machine Tools and Manufacture 30, no. 4 (1990): 549-559.

b) International Conferences

1 **Samy Oraby**, Ayman Alaskari, “*Adaptive Control Program for Rough Turning Machining Processes*”, 6th Int'l Conference on Advances in Engineering Sciences and Applied Mathematics (ICAESAM'2016) Dec. 21-22, 2016 Kuala Lumpur (Malaysia), pp. 13-18.

2 **Oraby, Samy E.** “*Determination of the Real Cutting Edge Wear Contact Area on the Tool-Workpiece Interface in the Light of Cutting Forces Variations.*” 2013 The 2nd International Conference on Manufacturing Engineering and Process (ICMEP 2013), 13-14 April 2013, Vancouver, Canada.

3 **S. E. Oraby**, “*Effect of tool edge wear and failure on the friction, rubbing and ploughing forces of multicoated carbide turning inserts*”, The 10th Global Conference on Sustainable Manufacturing GCSM 2012, Oct. 31- Nov 2nd, 2012, Istanbul, Turkey.

4 Hamad K. Al-Khalid, Ayman M. Alaskari and **Samy E. Oraby**, “*Hardness variation as affected by bar diameter of AISI 4140 steel*”, International Conference on Manufacturing Systems Engineering ICMSE 2011, Bangkok, Thailand, (WASET, Vol. 51(2011): 231-237).

5 Ayman M. Alaskari, **Samy E. Oraby** and Abdulla I. Almazrouee, “*SEM and AFM Investigations of Surface Defects and Tool Wear of Multilayers Coated Carbide Inserts*”, International Conference on Manufacturing Systems

		Engineering ICMSE 2011, Dubai, UAE, (WASET, Vol. 49(2011): 534-538.
	6	Samy E. Oraby and Ayman M. Alaskari, " <i>Atomic Force Microscopy (AFM) Topographical Surface Characterization of Multilayer-Coated and Uncoated Carbide Inserts</i> ", International Conference on Manufacturing Systems Engineering ICMSE 2010, Dubai, UAE, (WASET, Vol. 46(2010): 402-413).
	7	A. M. Alaskari and S. E. Oraby , " <i>Surface Topography Assessment Techniques based on an In-process Monitoring Approach of Tool Wear and Cutting Force Signature</i> ", Proc., The World Academy Science, Engineering and Technology, 2009, Dubai, UAE (WASET, Vol. 25(2009), 264-274).
	8	S. E. Oraby and A. M. Alaskari, " <i>On the Variability of Tool Wear and Life at Disparate Operating Parameters</i> ", Proc., The World Academy Science, Engineering and Technology, 2009, Dubai, UAE (WASET, Vol. 25(2009): 499-507).
	9	A. M. Alaskari and S. E. Oraby , " <i>On the effect of heat treatment of the predeformed low carbon steel</i> ", International MultiConference of Engineering and Computer Scientists IMECS 2007, International Association of Engineers, Hong Kong 21-23 March 2007.
	10	S. E. Oraby and A. M. Alaskari, " <i>The Effect of Predeformation Level on the Variability of Forming Properties of Low Carbon Steel</i> ", International MultiConference of Engineering and Computer Scientists IMECS 2007, International Association of Engineers, Hong Kong 21-23 March 2007, pp: 2087-2092.
	11	Mahdi. S. Alajmi, S. E. Oraby and Ibrahim I. Esat, " <i>Neural</i>

		<i>Network Models on the Prediction of Tool Wear in Turning Processes: A Comparison Study</i> ", The IASTED International Conference on "ARTIFICIAL INTELLIGENCE AND APPLICATIONS ~AIA 2005~ as part of the Twenty-Third IASTED International Multi-Conference on APPLIED INFORMATICS, February 14-16, 2005 Innsbruck, Austria.
12		E.A. Almeshaiei, S.E. Oraby, M. A. Mahmoud, " <i>Tool Wear Prediction Approach for Turning Operations Based on General Regression Neural Network (GRNN) Technique</i> ", Adaptive Computing in Design and Manufacture VI, ISBN (978-1-85233-829-9) & ISBN (978-0-85729-338-1) (eBook), DOI 10.1007/978-0-85729-338-1, Springer-Verlag London 2004, pp. 161-171.
13		<u>S. E. Oraby</u> , " <i>ON THE ACCURACY OF POINT-TO-POINT (PTP) CNC PROGRAMMING</i> ", Proc. 2nd Int. Conf. On Computers in Industry, Bahrain, Nov. 2000, pp. 323-340.
14		<u>S. E. Oraby</u> , A. E. Eshra, M. O. Mousa and H. M. Abo-Elenin, " <i>Interrelationships Between Cutting Force Variation and Introduced Tool Wear in Face Milling Operations</i> ", Current Advances in Mechanical Design & Production, Sixth Cairo University International MDP Conference, Cairo, Jan. 2-4, 1996, pp. 215-223.
15		<u>S. E. Oraby</u> , " <i>On the Variability of Turning Tool Wear at Variable Parameters</i> ", Proc., 5th Conf. on Theoretical and Applied Mechanics, Academy of Scientific Research and Technology, March 1995, Cairo, Egypt.
16		H. I. Gaffer, <u>S. E. Oraby</u> , and M. A. Helaly, " <i>A Basic Concept of On-Line Tool Wear Monitoring of Finish Turning Operations</i> ", The Proceedings of the 4th Int. Conf. on

		Production Engineering and Design for Development PEDD'93, Ain-Shams University, Dec. 27-29, 1993, Cairo, EGYPT.
	17	S. E. Oraby , " <i>Computer-Aided Surface Finish Quality Control</i> ", The Proceedings of the 4th Int. Conf. on Production Engineering and Design for Development PEDD'93, Ain-Shams University, Dec. 27-29, 1993, Cairo, EGYPT.
	18	S. E. Oraby and M. A. Helaly, " <i>A Dynamic Characteristics Concept for Monitoring and Control the Tool Failure</i> ", 5th Int. Conf. on the Developments in Production Engineering, Design & Control PEDAC'92, Alexandria University, Dec. 27-29, 1992, Alexandria, EGYPT, pp.425-436.
	19	S. E. Oraby , " <i>Tool Life Determination Based on the Measurement of Wear and Tool Force Ratio Variation</i> ", 5th Int. Conf. on the Developments in Production Engineering, Design & Control PEDAC'92, Alexandria University, Dec. 1992, Alexandria, EGYPT, pp.437-445.
	20	S. E. Oraby and D. R. Hayhurst, " <i>Tool Wear Detection Using the System Dynamic Characteristics</i> ", Paper 6, 2nd Int. Conf. on the Behaviour of Materials in Machining - Advanced Machining for Quality and Productivity, The Institute of Metals, York, ENGLAND, pp. 39-58, Nov. 1991.
	21	M. Es. Abdel Moneim and S. E. Oraby , " <i>A New Simple (Comparative) Machinability Index</i> ", Proc., The 3rd Cairo University Conference on Mechanical design and Production (MDP-3), pp. 555-559, Dec. 1985, Cairo, Egypt.
		c) Published Books
	1	S. E. Oraby , S. Al-Harashani, I. Attalla, and W. Abdel-Razak, " <i>Principles of Metal Forming</i> , Technical Secondary School Course

	<p data-bbox="466 155 1367 189">Book, Ministry of Education, Kuwait State, 2000 (in Arabic).</p> <p data-bbox="466 193 1367 227">Google Scholar Citations:</p> <p data-bbox="466 231 1367 264">https://scholar.google.com/citations?user=NYpbPNUAAAAJ&hl=en</p> <p data-bbox="466 268 1367 302">https://www.facebook.com/se.oraby</p> <p data-bbox="466 306 1367 340">Research ID: M-7910-2014</p>
<p data-bbox="241 366 435 467">Academic Research Interests:</p>	<ul data-bbox="517 366 1367 534" style="list-style-type: none"><li data-bbox="517 366 951 400">• Metal Cutting and Machining;<li data-bbox="517 413 1367 447">• Conventional and Nonconventional Manufacturing Processes;<li data-bbox="517 460 1005 494">• Modern Manufacturing Processes;<li data-bbox="517 508 1159 541">• Computer Numerical Control (CNC) Systems.