Dr. Mohammed Saber

Associate Professor

Personal Data:

Nationality |Egyptian
Date of Hire | 21/09/2014
Date Rank Obtained | 27/00/2011
Department | Mechanical Engineering
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Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Mechanical Engineering	Mechanical Design	Nottingham University	Nottingham, UK	2011
Masters (M.Sc.)	-	-	-	-	-
Bachelor (B.Sc.)	Production Engineering and Mechanical Design	Production Engineering and Mechanical Design	Mansoura University	Mansoura, Egypt	2000

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

PhD	Experimental and Finite Element Studies of Creep and Creep Crack Growth in P91 and P92 weldments
Master	-

Experiences:

Title of Job	Address of Work	Country	Date	
Associate Professor	King Faisal University	Saudi Arabia	From	Oct. 2022
			To	Current
Assistant Professor	King Faisal University	Saudi Arabia	From	Sep. 2014
			To	Oct. 2022
Associate Professor (on leave)	Port Said University	Egypt	From	April 2020
			To	Current
Assistant Professor (on leave)	Port Said University	Egypt	From	Dec. 2011
			To	April 2020

Research Interests:

1. Mechanics of Solids
2. Manufacturing processes
3. Material testing
4. Mechanical Design
5. Fracture mechanics

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	Khaled Abdelgawad, Ahmed Nassef, Mohamed Eraky and **M. Saber**	Mechanical Behaviour of Seamless Pipes Using Ring Expansion Technique and Novel Hoop Stress Correlation Factor (K)	Experimental Techniques, 2023	https://doi.org/10.1007/s40799-023-00683-9
2	Mahmoud Sultan, Ahmed Nassef, Gamal Abdulnaser and **Mohammed Saber**	A novel procedure to determine the hoop mechanical properties of pipe materials using ring elongation testing technique	International Journal of Pressure Vessels and Piping, 2023	https://doi.org/10.1016/j.ijpvp.2023.105001
3	**M. Saber** and H. Chouikhi	Numerical analysis of thread modelling techniques in threaded joints	Technical Gazette, 2023	https://doi.org/10.17559/TV-20220504091929
4	**Mohammed Saber** and Balhassn Ali	On the Determination of Material Mechanical Properties of ST 37 Pipes using O-ring Specimens	Experimental Techniques, 2021	https://doi.org/10.1007/s40799-021-00455-3
5	**M. Saber** and H. Chouikhi	Development of the Bi-cone Mandrel Ring Expansion Test to Evaluate the Hoop Stress in Extruded Aluminum Tubes	Experimental Mechanics, 2021	https://doi.org/10.1007/s11340-021-00692-y
6	**Mohammed Saber**	Bending Test and Simulation of Welded Galvanized Steel Pipes	Technical Gazette (TV-TG),2021	https://doi.org/10.17559/TV-20200112110105
7	Ahmed Elkaseer, Ali Abdelaziz, **Mohammed Saber** and Ahmed Nassef	FEM-Based Study of Precision Hard Turning of Stainless Steel 316L	Materials, 2019	10.3390/ma12162522
8	**Mohammed Saber**	Analysis of Integrated Cylinder-Shaped Steel Flywheels in Flywheel Energy Storing Systems	Port Said Engineering Research Journal, Egypt,2019	10.21608/PSERJ.2019.14198.1004
9	**M Saber**	Finite Element Simulation of Metal Cutting of Aluminum Using Johnson-Cook Damage Model and Shear Failure Model	Mansoura Engineering Journal (MEJ),2017	https://dx.doi.org/10.21608/bfemu.2020.90303
10	El-shrief E. , **Saber M.** , Nassef A. and Shaker M	Numerical Simulation to Study the Influence of Welding Sequence on	Port Said Engineering Research Journal, 2016	10.21608/PSERJ.2016.33653

		Distortion and Residual Stresses of Butt-Welded Plates		
11	Prof. Dr. Ebtisam F. Abdel-Gwad, Dr. Ahmed Abdel Rahman Elkaseer, Dr. **Mohamed Saber** and Eng. Mahmoud Samy Elqazzaz	Evaluation of Mixed Structural Steel lap Joints Using Experimental and Finite Element Methods	Port Said Engineering Research Journal, 2016	10.21608/PSERJ.2016.33670
12	Balhassn S. M. Ali, Terry Y. P. Yuen and **Mohammed Saber**	Creep Evaluation of Traditional and Nuclear Power Plants High Temperature Components Using Small Pin Loaded One-Bar and Two-Bar Specimens	Nuclear Technology, 2016	https://doi.org/10.13182/NT15-117
13	**M. Saber**, T. H. Hyde and W. Sun	Numerical study of the effects of crack location on creep crack growth in weldment	Engineering Fracture Mechanics, 2016	https://doi.org/10.1016/j.engfracmech.2016.01.010
14	A. Abdelaziz , A. Elkaseer , **M. Saber** , A. Nassef	FE Simulation Study of Ultra-Precision Turning of Stainless Steel 316L	Conference on Applied Mechanics and Mechanical Engineering, Military Technical College, Kobry El-Kobbah, Cairo, Egypt, April 19-21, 2016	-
15	Balhassn S. M. Ali and **Mohammed Saber**	Numerical Investigation of the Effects of Misalignment on the Pre-mature Failure of the Standard and Sub-size Uniaxial Creep Test Specimens	Proceedings of MECHATECH '16 conference, MAY 17-18, 2016, Istanbul, Turkey	-
16	D. W. J. Tanner, **M. Saber**, W. Sun and T. H. Hyde	Creep Behavior of P92 and P92 Welds at 675°C	Journal of Pressure Vessel Technology,2013	doi: 10.1115/1.4024640
17	D. W. J. Tanner, **M. Saber,** W. Sun and T. H. Hyde	Creep Behavior Of P92 and P92 Welds at 675°C	Proceedings of the ASME 2012 Pressure Vessels & Piping Division Conference, PVP2012, July 15-19, 2012, Toronto, Ontario, CANADA	
18	**M. Saber,** D. W. J. Tanner, T. H. Hyde and W. Sun	Determination of Creep and Damage properties for P92 at 675°C	The Journal of Strain Analysis for Engineering, 2011	https://doi.org/10.1177%2F0309324711413012
19	Sun, W., Hyde, C. J., Hyde, T. H., Becker, A. A., Li, R. and **Saber, M.**	Finite Element Analysis of Creep Crack Growth for Compact Tension and Thumbnail Crack Specimens	Proceedings of ICAPP 2011, Nice, France, May 2-5, 2011, Paper 11262.	-
20	Hyde, T. H., **Saber, M.** and Sun, W.	Creep crack growth data and prediction for a P91 weld at 650 °C	International Journal of Pressure Vessels and Piping, 2010	https://doi.org/10.1016/j.ijpvp.2010.09.002

21	Hyde, T. H., Li, R., Sun, W. and **Saber, M.**	A simplified method for predicting the creep crack growth in P91 welds at 650°C	Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2010	https://doi.org/10.1243%2F14644207JMDA330
22	Hyde, T. H., **Saber, M.** and Sun, W.	Testing and modelling of creep crack growth in compact tension specimens from a P91 weld at 650°C	Engineering Fracture Mechanics,210	https://doi.org/10.1016/j.engfracmech.2010.03.043
23	Hyde, T. H., **Saber, M.** & Sun, W.	Creep Crack Growth in a P91 Weld at 650°C	WELDS. Sanibel Harbour Resort & Spa, Fort Myers, Florida, USA.	-

Language Proficiency:

1. Arabic (mother tongue)
2. English (very good)
3. French (a little)