

CURRICULUM VITAE

Dr. Osama Mohammed Elmardi Suleiman Khayal
Associate Professor



June 2021

NATIONALITY: SUDANESE

DATE OF BIRTH: 1966

PLACE OF BIRTH: ATBARA, RIVER NILE STATE, SUDAN

EMAIL ADDRESS: osamamm64@gmail.com or osamakhayal66@nilevalley.edu.sd

MOBILE PHONE NUMBER: 00249919305570

CURRENT JOB: ASSOCIATE PROFESSOR, MECHANICAL ENGINEERING DEPARTMENT, FACULTY OF ENGINEERING AND TECHNOLOGY, NILE VALLEY UNIVERSITY

EDUCATION

2008 - 2017

Nile Valley University (NVU), Ph.D.

Major: Mechanics of Materials

Advisor: Prof. Mahmoud Yassin Osman, Ph.D.

Co – supervisor: Associate Prof. Tagelsir Hassan, Ph.D.

2000 - 2003

Nile Valley University (NVU), M.Sc.

Major: Mechanics of Materials

Advisor: Prof. Mahmoud Yassin Osman, Ph.D.

1995 - 1998

Sudan University of Science and Technology (SUST), College of Engineering, B.Sc.

Major: Mechanical Engineering

ACADEMIC EMPLOYMENT

October 2019 - Present	Dean Faculty of Engineering and Technology, Atbara
August 2017 - Present	Visiting Associate Professor, Kassala and Red Sea Universities
August 2010 - May 2016	Graduate Research Assistant, Nile Valley University (NVU) Faculty of Engineering and Technology project entitled: "Experimental Research Work on Water Current Turbines in Atbara."
January 2010 – January 2011	Head mechanical engineering department, Faculty of Engineering and Technology, Atbara
July 2009 - April 2015	Graduate Teaching Assistant/Assistant Instructor, NVU
August 1998 - December 2008	Graduate Teaching Assistant, Nile Valley University, NVU

HONORS AND AWARDS

2017	Honors Distinction Awarded for Dissertation entitled "Biaxial buckling of thin laminated composite plates."
2003	Outstanding Research Award Awarded by Nile Valley University, Office of Graduate Studies.
1998	Outstanding Graduate Student Awarded by Sudan University of Science and Technology, College of Engineering, Department of Mechanical Engineering.

PROFESSIONAL AFFILIATIONS AND SERVICES

Ad-hoc Reviewer and Editorial Board Member
Journal of Microscopy and Ultrastructure, Elsevier
International Journal of Engineering Research and Advanced Technology
Journal of Serbian Tribology Society
NED University Journal of Research
EUROPEAN JOURNAL OF MANAGEMENT AND SOCIAL SCIENCE (EJMSS)
JOURNAL OF Mechanical and Civil Engineering (GPH)
INTERNATIONAL JOURNAL OF APPLIED SCIENCE (GPH)

Global Journal of Engineering Sciences (GJES)

IJCSMC journal

Springer Book Series Editor of Advances in Materials Research and Technology,

Paper Title: Rotational Thermomechanical Response Model on a Reflection

Photothermal Diffusion Waves for Semiconductor Electro-Magnetized Medium

International Journal of Advanced Engineering and Management (IJOAEM)

Professional Organization Member

Almohandes Forum

Researchgate

Academia.edu

Mendeley

Figshare

Scholar, google.com

Committee Member

Mechanical engineering department member (1993-till now)

Nile Valley University Senate member (2010-2012)

Faculty of engineering and technology board member (2010-2012)

Faculty of engineering and technology board member (2019-till now)

Nile Valley University senate member (2019- till now)

PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES

- [1] Khalid Muhamadin Mohamed Ahmed Bukkur, M.I. Shukri & Osama Mohammed Elmardi Suleiman, (2018). A Review for Dynamic Scheduling in Manufacturing, Global Journal of Researches in Engineering: J General Engineering, Volume 18, Issue 5, Version 1.0, And Online ISSN: 2249-4596 & Print ISSN: 0975-5861, PP. 25 – 37.
- [2] Osama Mohammed Elmardi Suleiman Khayal, September (2016). ANALYSIS OF COMPOSITE LAMINATED PLATES, International Journal of Advances in Scientific Research and Engineering (IJASRE), Vol. 02, Issue 08, ISSN: 2454-8006, www.ijasre.net, PP. 24 – 41.
- [3] Osama Mohammed Elmardi Suleiman Khayal & Mahmoud Yassin Osman, July (2018). Atbara Water Current Turbine, International Journal of Engineering & Computer Science (IJECS), Vol. 1 No. 1, PP. 30 – 46.
- [4] Osama Mohammed Elmardi Suleiman Khayal, Mahmoud Yassin Osman & Tagelsir Hassan, (2018). BIAXIAL BUCKLING OF THIN LAMINATED COMPOSITE PLATES, International Journal of Bridge Engineering (IJBE), Vol. 6, No. 3, PP. 19 – 44.
- [5] Osama Mohammed Elmardi Suleiman, (2017). BIBLIOGRAPHY AND LITERATURE REVIEW ON BUCKLING OF LAMINATED PLATES, International Journal of Bridge Engineering (IJBE), Vol. 5, No. 1, PP. 1 – 9.
- [6] Mahmoud Yassin Osman & Osama Mohammed Elmardi Suleiman, March (2017). Buckling Analysis of Thin Laminated Composite Plates using Finite Element Method, International Journal of Engineering Research and Advanced Technology (IJERAT), Volume. 03 Issue.3, ISSN: 2454 – 6135.
- [7] Osama Mohammed Elmardi Suleiman Khayal, October (2016). Convergence and Accuracy of Dynamic Relaxation Technique in Determination of Central Deflection of Composite Rectangular Laminates, International Journal of Scientific Research Engineering & Technology (IJSRET), ISSN 2278 – 0882, Volume 5, Issue 10, PP. 502 – 509.

- [8] Osama Mohammed Elmardi Suleiman, August (2016). Deflection and Stress Analysis of Fibrous Composite Laminates, International Journal of Advanced Research in Computer Science and Software Engineering, ISSN: 2277 128X, Volume 6, Issue 8, Available online at: www.ijarcsse.com, PP. 105 – 115.
- [9] Osama Mohammed Elmardi Suleiman, April (2017). Deflection of Laminated Composite Plates Using Dynamic Relaxation Method, International Journal of Physical Sciences and Engineering, e-ISSN: 2550-6943, p-ISSN: 2550-6951, Vol. 1 No. 1, PP. 40 – 53.
- [10] Murtada Elshiekh, Khalid Eltayeb & Osama Mohammed Elmardi Suleiman, (2018). Development of Quality Control System for Cement Manufacturing using Software Techniques, International Journal of Advanced Engineering and Management, ISSN 2456-8066, Vol. 3, No. 4, PP. 127–133.
- [11] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman & Tagelsir Hassan, Received Date: March 27, (2019) Published Date: April 23, (2019). Effect of Boundary Conditions on Buckling Load for Laminated Composite Plates, Global Journal of Engineering Sciences, ISSN: 2641-2039, Volume 2-Issue 1, PP. 1 – 8.
- [12] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman & Tagelsir Hassan, Received Date: March 27, (2019) Published Date: April 30, (2019). Effect of Lamination Scheme on Buckling Load for Laminated Composite Decks Plates, Global Journal of Engineering Sciences, ISSN: 2641-2039, Volume 2-Issue 2, PP. 1 – 9.
- [13] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman & Tagelsir Hassan, (2019). Effect of Material Anisotropy on Buckling Load for Laminated Composite Decks Plates, International Journal of Engineering & Computer Science, 2(1), PP. 20 – 31.
- [14] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman & Tagelsir Hassan, Published Online November 2018 in IJEAST <http://www.ijeast.com> (2018). EFFECT OF REVERSING LAMINATION SCHEME OF LAYERS ON BUCKLING LOAD FOR LAMINATED COMPOSITE DECK PLATES, International Journal of Engineering Applied Sciences and Technology, Vol. 3, Issue 7, ISSN No. 2455 – 2143 , PP. 32– 40.
- [15] Imad-Eldin Mahmoud Mahdi, Osama Mohammed Elmardi Suleiman & Ahmed F. Algarray, Oct. (2017). Effects of Boundary Conditions on Cross-Ply Laminated Composite Beams, International Journal of Engineering Research And Advanced Technology (IJERAT), and E-ISSN: 2454-6135, Vol.3 (10), PP. 52 – 59.
- [16] Osama Mohammed Elmardi Suleiman, Ahmed F. A. Igarray & Imad-Eldin Mahmoud Mahdi, Oct. (2017). Free Vibration Analysis of Composite Laminated Beams, International Journal of Engineering Research And Advanced Technology (IJERAT), E-ISSN: 2454-6135, Vol.3 (10), PP. 9 – 25.
- [17] Mahmoud Yassin Osman & Osama Mohammed Elmardi Suleiman, April (2017). Free Vibration of Laminated Plates, International Journal of Engineering Research And Advanced Technology (IJERAT), and ISSN: 2454-6135, Volume. 03, Issue.4, PP. 31 – 47.
- [18] Mahmoud Yassin Osman & Osama Mohammed Elmardi Suleiman, February (2017). Free Vibration Analysis of Laminated Composite Beams using Finite Element Method, International Journal of Engineering Research and Advanced Technology (IJERAT), ISSN: 2454-6135, Volume 3, Issue.2, and PP. 5 – 22.
- [19] Dr. Osama Mohammed Elmardi Suleiman Khayal, December (2018). FUNDAMENTALS OF HEAT EXCHANGERS, INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATIONS AND ROBOTICS, ISSN 2320-7345, Vol.6, Issue 12, PP. 1 – 11.
- [20] Osama Mohammed Elmardi Suleiman, September (2016). IMPERFECTION OF COMPOSITE LAMINATED PLATES, International Journal of Engineering Research and Advanced Technology (IJERAT), ISSN: 2454-6135, Volume 02, Issue.9, PP. 6 – 10.

- [21] Imad-Eldin Mahmoud Mahdi & Osama Mohammed Elmardi Suleiman, Sept. (2017). Influence of Fiber Orientation on the Natural Frequencies of Laminated Composite Beams, International Journal of Engineering Research and Advanced Technology (IJERAT), E-ISSN: 2454-6135, Vol.3 (9), PP. 31 – 43.
- [22] Imad-Eldin Mahmoud Mahdi & Osama Mohammed Elmardi Suleiman Khayal, (2019). LAMINATION SCHEME AND BOUNDARY CONDITIONS EFFECTS ON THE FREE VIBRATION OF LAMINATED COMPOSITE BEAMS, International Journal of Bridge Engineering (IJBE), Vol. 7, No. 1, PP. 1 – 12.
- [23] Mahmoud Yassin Osman & Osama Mohammed Elmardi Suleiman, March (2017). Large Deflection of Composite Beams, International Journal of Engineering Research and Advanced Technology (IJERAT), ISSN: 2454-6135, Volume. 03, Issue.3, PP. 26 – 39.
- [24] Osama Mohammed Elmardi Suleiman Khayal, (2016). Linear Analysis of Composite Laminated Plates Using First Order Shear Deformable Theory, Engineering and Technology Journal, ISSN: 2456-3358, Vol. 1, Issue 2, PP. 75 – 86.
- [25] Osama Mohammed Elmardi Suleiman, April (2017). Linear Deflection of Laminated Composite Plates using Dynamic Relaxation Method, International Journal of Physical Sciences and Engineering, Vol. 1, No. 1, PP. 54 – 67.
- [26] Osama Mohammed Elmardi Suleiman Khayal, February (2017). Literature review on imperfection of composite laminated plates, Journal of Microscopy and Ultrastructure, Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license, 5, PP. 119 – 122.
- [27] Osama Mohammed Elmardi Suleiman Khayal, Tagelsir Hassan, (2018). MATHEMATICAL MODELLING OF LAMINATED PLATES ON BUCKLING, International Journal of Bridge Engineering (IJBE), Vol. 6, No. 2, PP. 25 – 39.
- [28] Osama Mohammed Elmardi Suleiman Khayal, (2017). MECHANICAL PROPERTIES OF COMPOSITE LAMINATED DECKS PLATES, International Journal of Bridge Engineering (IJBE), Vol. 1, No. 1, PP. 01 – 41.
- [29] Osama Mohammed Elmardi Suleiman, Oct. (2016). Mechanical Properties of Composite Laminated Plates, International Journal of Advances in Scientific Research and Engineering (IJASRE), ISSN: 2454-8006, Vol. 02, Issue 09, PP. 14 – 24.
- [30] Osama Mohammed Elmardi, (2016). NONLINEAR ANALYSIS OF RECTANGULAR LAMINATED DECKS PLATES USING LARGE DEFLECTION THEORY, International Journal of Bridge Engineering (IJBE), Vol. 4, No. 3, PP. 01 – 19.
- [31] Osama Mohammed Elmardi, Sept - Oct, (2015). Nonlinear Analysis Of Rectangular Laminated Plates Using Large Deflection Theory, International Journal of Emerging Technology & Research, ISSN (E): 2347-5900 ISSN (P): 2347-6079, Volume 2, Issue 5, PP. 26 – 48.
- [32] M. Mardi Osama, (2012). Nonlinear Analysis of Rectangular Laminated Plates Using Large Deflection Theory, مجلة العلوم الهندسية العدد السادس, PP. 49 – 73.
- [33] Abdalazeem Adam, Tagelsir Hassan & Osama Mohammed Elmardi Suleiman, (2018). Performance and Design Optimization of Solar Powered Stirling Engine Using Genetic Algorithm, International Journal of Advanced Engineering and Management, ISSN 2456-8066, Vol. 3, No. 4, PP. 109 – 119.
- [34] Midhat Victor Fahmi, Osama Mohammed Elmardi Suleiman, & Tarig Awadalla Hamid, January (2019). PERFORMANCE TEST OF DIESEL ENGINES USING ETHANOL-DIESEL FUELS BLENDS, INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATIONS AND ROBOTICS, ISSN 2320-7345, Vol.7, Issue 1, PP. 11 – 19.
- [35] Midhat Victor Fahmi, Osama Mohammed Elmardi Suleiman, & Rajaa Abbas elTaiyeb, January (2019). PERFORMANCE TEST OF DIESEL ENGINES USING JATROPHA-DIESEL FUELS BLENDS, INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER

APPLICATIONS AND ROBOTICS, ISSN 2320-7345, Vol.7, Issue 1, PP. 1 – 10.

[36] Moataz Abdelgadir, Obai Younis Taha & Osama Mohammed Elmardi Suleiman, September (2018). Potentiality of Power Production from Gebeit Alsharaf Dam, Red Sea State, Sudan, Adv. Biotech & Micro, Volume 11, Issue 2, DOI: 10.19080/AIBM.2018.11.555809, PP. 1 – 8.

[37] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman & Tagelsir Hassan, March (2019). Stability of Thin Laminated Decks Plates under Plane Compressive Loading, International Research Journal of Engineering, IT & Scientific Research, ISSN: 2454-2261, <https://doi.org/10.21744/irjeis.v5n2.607>, Vol. 5 No. 2, PP. 1 – 28.

[38] Osama Mohammed Elmardi Suleiman Khayal, (2016). The Effect of Excessive Oil – Gasoline Mixture on the Acceleration of Bajaj Rickshaw Vehicles, *International Journal Of Advanced Research in Engineering & Management (IJAREM)*, ISSN: 2456-2033, Vol. 02, Issue 04, PP. 1 – 8.

[39] Osama Mohammed Elmardi Suleiman Khayal, (2018). The Effect of using Excessive Oil – Gasoline Mixture on the Acceleration of Bajaj Rickshaw Vehicles, Global Journal of Researches in Engineering: J

General Engineering, Online ISSN: 2249-4596 & Print ISSN: 0975-5861, Volume 18, Issue 4, Version 1.0, and PP. 11 – 16.

[40] Imad-Eldin Mahmoud Mahdi & Osama Mohammed Elmardi Suleiman Khayal, (2018). THE EFFECTS OF END CONDITIONS OF CROSS-PLY LAMINATED COMPOSITE BEAMS ON THEIR NON-DIMENSIONALIZED NATURAL FREQUENCIES, International Journal of Bridge Engineering (IJBE), Vol. 6, No. 1, PP. 63 – 72.

[41] Osama Mohammed Elmardi Suleiman, October (2016). Theories of Composite Plates and Numerical Methods Used on Bending and Buckling of Laminated Plates, International Journal of Engineering Research And Advanced Technology (IJERAT), ISSN: 2454-6135, Volume. 02, Issue.10, PP. 1 – 12.

[42] Fatima Mohammed Hussein, Dr. Asia Abu elgasim Elhassan, Dr. Osama Mohammed Elmardi Suleiman, (2019). Urban Upgrading of Deteriorating Residential Environment, Case Study of Alteleih Residential Area, Atbara, Sudan, Journal of Scientific and Engineering Research, ISSN: 2394-2630 CODEN(USA): JSERBR, 6(4): PP. 175 – 179.

[43] Osama Mohammed Elmardi Suleiman Khayal, (2019). Using Dynamic Relaxation Coupled With Finite Differences in the Analysis of Laminated Plates, International Journal of Advanced Engineering and Management, ISSN 2456-8066, Vol. 4, No. 2, PP. 25 – 32.

[44] Osama Mohammed Elmardi, September (2015). Validation of Dynamic Relaxation (DR) Method in Rectangular Laminates using Large Deflection Theory, International Journal of Advanced Research in Computer Science and Software Engineering, ISSN: 2277 128X, Available online at: www.ijarcsse.com, Volume 5, Issue 9, PP. 137 – 144.

[45] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman & Tagelsir Hassan, February (2018). Validation of Finite Element Method in the Analysis of Biaxial Buckling of Thin Laminated Plates, International Journal of Engineering Research and Advanced Technology (IJERAT), E-ISSN : 2454-6135, DOI: <http://dx.doi.org/10.7324/IJERAT.2018.3188>, Volume.4, Issue 2, PP. 29 – 42.

[46] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman & Tagelsir Hassan, (2019). Validity of Finite Element Method: Analysis of Laminated Composite Decks Plates Subjected to in Plane Loading, International Journal of Physics & Mathematics, 2(1), PP. 1-10.

[47] Osama Mohammed Elmardi, (2014). Verification of Dynamic Relaxation (DR) Method in Isotropic, Orthotropic and Laminated Plates using Small Deflection Theory, International Journal

of Advanced Science and Technology, <http://dx.doi.org/10.14257/ijast.2014.72.04>, Vol.72, PP. 37 – 48.

[48] M. Mardi Osama, January (2011). Verification of Dynamic Relaxation Method in the analysis of isotropic, orthotropic and laminated plates using large deflection theory, *مجلة جامعة شندي*, العدد العاشر, ISSN: 1858-571X, PP. 31 – 52.

[49] Osama Mohammed Elmardi Suleiman & Imad-Eldin Mahmoud Mahdi, (2018). VIBRATION OF LAMINATED COMPOSITE DECKS BEAMS, International Journal of Engineering Applied Sciences and Technology, ISSN No. 2455-2143, Published Online May 2018 in IJEAST (<http://www.ijeast.com>), Vol. 3, Issue 1, PP. 61 – 66.

[50] Naeim Farouk, Osama Elmardi, Hussien Alzeber, Ibrahim B. Mansir: Effects of electric power blackouts on steam turbine power plants -- Pal arch's Journal of Archaeology of Egypt/Egyptology 17(6). ISSN 1567-214x (2021).

[51] Fathelrahman M. Adam , A.E. Mohamed , Osama M. Elmardi Suleiman, STUDY OF SOLUTION CONVERGENCE FOR THE FINITE ELEMENT FOUR-NODE SHELL ELEMENT, International Journal of Bridge Engineering (IJBE), Vol. 8, No. 3, (2020), pp. 75-86.

[52] Osama Mohammed Elmardi Suleiman Khayal, ERGONOMICS IN BRIDGE ENGINEERING, International Journal of Bridge Engineering (IJBE), Vol. 8, No. 3, (2020), pp. 27-58.

[53] Dr. Salaheldin Hassabelgabo Abdelrazig Ibrahim, Dr. Osama Mohammed Elmardi Suleiman Khayal, SOLAR ENERGY POTENTIAL AND ASSESSMENT OF CSP PLANT ACCOUNTING FOR SUSTAINABILITY IN SUDAN, International Journal of Engineering Applied Sciences and Technology, 2020 Vol. 5, Issue 7, ISSN No. 2455-2143, Pages 13-19.

[54] Dr. Osama Mohammed Elmardi Suleiman Khayal, PhD. Student Moataz Abdelgadir Ali Abdelgadir, and Dr. Salaheldin Hassabelgabo Abdelrazig Ibrahim, ANALYTICAL AND NUMERICAL STUDY OF HEAT TRANSFER IN FINS, International Research Journal of Engineering and Technology (IRJET) , Volume: 08 Issue: 01 | Jan 2021.

[55] Dr. Osama Mohammed Elmardi Suleiman Khayal, Eng. Salaheldin Hassabelgabo Abdelrazig Ibrahim, UTILIZATION OF BIOGAS IN AGRICULTURAL AND INDUSTRIAL PLANTS, International Research Journal of Engineering and Technology (IRJET), Volume: 07 Issue: 09 | Sep 2020.

[56] Osama Mohammed Elmardi Suleiman Khayal, A REVIEW STUDY OF TECHNICAL EDUCATION IN THE DEMOCRATIC REPUBLIC OF SUDAN, International Journal of Advanced Engineering and Management Vol. 5, No. 2, pp. 9-23, 2020.

[57] Dr. Osama Mohammed Elmardi Suleiman KHAYAL, RELATION BETWEEN HUMAN FACTORS AND ERGONOMICS, ACTA TECHNICA CORVINIENSIS – Bulletin of Engineering [e-ISSN: 2067-3809], TOME XIII [2020] | FASCICULE 2 [April – June].

[58] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman, and Tagelsir Hassan, EFFECT OF BOUNDARY CONDITIONS ON BUCKLING LOAD FOR LAMINATED COMPOSITE DECKS PLATES, The Iraqi Journal For Mechanical And Material Engineering, Vol.20, No2, June. 2020.

[59] Osama Mohammed Elmardi Suleiman Khayal, Review Study of Dynamic Relaxation Numerical Technique Used in Bending of Laminated Composite Plates, Current Trends in Civil & Structural Engineering, DOI: 10.33552/CTCSE.2020.06.000626, Received Date: May 30, 2020, Published Date: June 10, 2020.

[60] Dr. Osama Mohammed Elmardi Suleiman Khayal, A REVIEW STUDY OF DELAMINATION IN COMPOSITE LAMINATED DECKS PLATES, International Journal of Bridge Engineering (IJBE), Vol.8, No. 1, (2020), pp. 71-85.

- [61] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman, and Tagelsir Hassan, EFFECT OF LAMINATION SCHEME ON BUCKLING LOAD FOR LAMINATED COMPOSITE DECKS PLATES, International Journal of Bridge Engineering (IJBE), Vol. 8, No. 1, (2020), pp. 15-34.
- [62] Fathelrahman Ahmed Elmahi, Osama Mohammed Elmardi Suleiman Khayal, Theoretical and Experimental Research Work in Solar Absorption Refrigeration, International Journal of Advanced Engineering and Management Vol. 5, No. 1, pp. 36-60, 2020.
- [63] Osama Mohammed Elmardi Suleiman, Mahmoud Yassin Osman and Tagelsir Hassan, Effect of Boundary Conditions on Buckling Load for Laminated Composite Plates, Global Journal of Engineering Sciences, DOI: 10.33552/GJES.2019.02.000527, Received Date: March 27, 2019 Published Date: April 30, 2019.
- [64] Osama Mohammed Elmardi Suleiman Khayal, Delamination Phenomenon in Composite Laminated Plates and Beams, Bioprocess Engineering 2020; 4(1): 9-16 <http://www.sciencepublishinggroup.com/j/be> doi: 10.11648/j.be.20200401.12 ISSN: 2578-8698 (Print); ISSN: 2578-8701 (Online).
- [65] Osama Mohammed Elmardi Suleiman KHAYAL, CORRELATION BETWEEN ERGONOMICS AND ECONOMICS, ACTA TECHNICA CORVINIENSIS – Bulletin of Engineering Tome XII [2019] | Fascicule 4 [October – December].
- [66] Dr. Osama Mohammed Elmardi Suleiman, DYNAMIC RELAXATION COUPLED WITH FINITE DIFFERENCES IN LARGE DEFLECTION OF LAMINATED DECKS PLATES USING FIRST ORDER SHEAR DEFORMATION THEORY, International Journal of Bridge Engineering (IJBE), Vol. 7, No. 3, (2019), pp. 33-48.
- [67] Osama Mohammed Elmardi Suleiman, (2021). MATHEMATICAL MODELING OF RECTANGULAR LAMINATED PLATES IN BENDING, International Journal of Bridge Engineering (IJBE), Vol. 9, No. 1, (2021), pp. 15-34.
- [68] Osama Mohammed Elmardi Suleiman, (2021). INTRODUCTION TO COMPOSITE DECKS FIBROUS LAMINATES, International Journal of Bridge Engineering (IJBE), Vol. 9, No. 1, (2021), pp. 49-63.
- [69] Merdaci, Slimane, Mostefa, Adda Hadj and Khayal, Osama M.E.S. "Natural Frequencies of FG Plates with Two New Distribution of Porosity" International Journal of Applied Mechanics and Engineering, vol.26, no.2, 2021, pp.128-142. <https://doi.org/10.2478/ijame-2021-0023>.
- [70] Dr. Osama M. E. S. Khayal .2020. Mining Industry in SUDAN, Nile Valley University – Atbara – SUDAN. Available At: <https://www.researchgate.net/publication/346654803>. THE MINISTRY OF INVESTMENTS AND INTERNATIONAL COOPERATION, The Minister's Office, Address: King Abdelaziz Street, 7th Street Intersection, Al Amarat, Khartoum – SUDAN, THE NEW SUDAN, INVESTING FOR STABILITY | GROWTH | WEALTH, Proceedings of Paris Conference, 2021.
- [71] Dr. Osama Mohammed Elmardi Suleiman Khayal & Mohammed Idris Osman, TECHNICAL AND ECONOMIC FEASIBILITY STUDY OF ESTABLISHING ETHANOL FUEL PLANT IN KENANA SUGAR COMPANY, GLOBAL PUBLICATION HOUSE| International Journal of Applied Science|, Volume 02 || Issue 10|| Oct. 2019.
- [72] Dr. Osama Mohammed Elmardi Suleiman Khayal, UTILIZATION OF DYNAMIC RELAXATION METHOD IN SOLVING ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS OF RECTANGULAR ENGINEERING STRUCTURES, GLOBAL PUBLICATION HOUSE| International Journal of Mechanical And Civil Engineering, Volume 02 || Issue 10 || Oct. 2019.

[73] Dr. Osama Mohammed Elmardi Suleiman Khayal, TECHNICAL AND ECONOMIC STUDY FOR IMPROVING ELECTRIC POWER GENERATION, GLOBAL PUBLICATION HOUSE| International Journal of Electronic & Electrical Engineering|, Volume 02 || Issue 10 || Oct. 2019.

ENGINEERING BOOKS IN ENGLISH LANGUAGE

Writes about seventy books in mechanical and civil engineering written in English language. Samples of them shown below:

1. Osama Mohammed Elmardi Suleiman Khayal, October (2017). Biaxial Buckling of Thin Laminated Composite Plates, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-613-8-23615-3.
2. Dr. Osama Mohammed Elmardi Suleiman Khayal, October (2017). Buckling of Thin Laminated Plates using Classical Laminated Plate Theory, www.ektab.com, Jordan.
3. Osama Mohammed Elmardi Suleiman, and Mahmoud Yassin Osman, September (2017). Deflection of Rectangular Laminated Composite Plates using Dynamic Relaxation Method, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, ISBN: 978-3-330-33164-8.
4. Osama Mohammed Elmardi, (2016). Dynamic Relaxation Method, Anchor Academic Publishing, Hamburg, Germany, PDF-eBook-ISBN: 978-3-96067-584-6.
5. Osama Mohammed Elmardi Suleiman, (2015). Further Experimental Research Work on Water Current Turbines, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, ISBN: 978-3-659-58160-1.
6. Osama Mohammed Elmardi Suleiman, November (2015). Introduction and Literature Review on Buckling of Composite Laminated Plates, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-3-659-86387-5.
7. Osama Mohammed Elmardi Suleiman Khayal, November (2017). Literature Review and Mathematical Modeling on Buckling of Laminated Composite Plates, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-08074-3.
8. Osama Mohammed Elmardi Suleiman, (2015). Nonlinear Analysis of Rectangular Laminated Plates, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-3-659-76787-6.
9. Osama Mohammed Elmardi Suleiman May (2018). Questions and Answers in Mechanical Engineering Part One, www.ektab.com, Jordan.
10. Osama Mohammed Elmardi Suleiman May (2018). Questions and Answers in Mechanical Engineering Part Two, www.ektab.com, Jordan.
11. Osama Mohammed Elmardi Suleiman May (2018). Self-Development in Mechanical and Manufacturing Engineering Questions and Answers, www.ektab.com, Jordan.

12. Osama Mohammed Elmardi Suleiman, April (2017). Solution of Problems in Heat Transfer Transient Conduction or Unsteady Conduction, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-3-659-66822-7.
13. Osama Mohammed Elmardi Suleiman, April (2017). Text Book on Dynamic Relaxation Method, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-3-659-94751-3.
14. Osama Mohammed Elmardi Suleiman, (2020). BIOGAS PLANTS TECHNOLOGY, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-67292-4.
15. Osama Mohammed Elmardi Suleiman, (2021). Engineering Psychology and Ergonomics, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-86394-9.
16. Osama Mohammed Elmardi Suleiman, (2020). Estimation of Solar Radiation and Performance of Flat Plate Collector, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-91912-8.
17. Osama Mohammed Elmardi Suleiman, (2020). Fundamentals of Economics in Engineering Projects, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-673982-3.
18. Mansour Hamad Elmamoun, and Osama Mohammed Elmardi Suleiman Khayal, (2021). Fundamentals of Economics in Engineering Projects, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-85537-1.
19. Khalid Taha Elsayed Ali, and Osama Mohammed Elmardi Suleiman Khayal, (2020). LITERATURE REVIEW IN UTILIZING SOLAR ENERGY FOR THERMAL PURPOSES, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-66965-8.
20. Osama Mohammed Elmardi Suleiman Khayal, (2020). LITERATURE REVIEW ON RAIL TRANSPORT, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-68587-0.
21. Khalid Taha Elsayed Ali, and Osama Mohammed Elmardi Suleiman Khayal, (2020). Renewable Energy, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-67500-0.
22. Surag Mohammed Saeed Ali, and Osama Mohammed Elmardi Suleiman Khayal, (2021). Ships' Hull Corrosion Prevention Using ICCP System, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-85406-0.
23. Osama Mohammed Elmardi Suleiman Khayal, (2020). Stability of Thin Laminated Composite Plates, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-67395-2.

24. Osama Mohammed Elmardi Suleiman Khayal, (2020). TECHNICAL EDUCATION IN SUDAN, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-67934-3.
25. Osama Mohammed Elmardi Suleiman Khayal, (2020). Validity of Finite Element Method in Biaxial Buckling, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-68003-5.
26. Osama Mohammed Elmardi Suleiman Khayal, (2021). Air Conditioning Systems, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-86404-5.
27. Osama Mohammed Elmardi Suleiman Khayal, (2021). Corrosion and Biofouling, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-85737-5.
28. Salaheldin Hassabelgabo Ibrahim, and Osama Mohammed Elmardi Suleiman Khayal, (2020). Design and Analysis of Photovoltaic Diesel Hybrid Power System, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-02873-7.
29. Hussein Ahmed Hussein Alzeber, Naeim Farouk and Osama Mohammed Elmardi Suleiman Khayal, (2020). Effects of Electric Power Blackouts on Steam Turbines Power Plants, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-02567-5.
30. Tarig Awadalla Hamid Fitaha, and Osama Mohammed Elmardi Suleiman Khayal, (2020). Hybrid and Diesel Fuel, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-55567-8.
31. Osama Mohammed Elmardi Suleiman Khayal, (2021). Mechanical Engineering, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-3-86405-2.
32. Osama Mohammed Elmardi Suleiman Khayal, (2020). Solar Energy Applications, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-91917-3.
33. Osama Mohammed Elmardi Suleiman Khayal, (2020). Solid Mechanics, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-67920-6.
34. Osama Mohammed Elmardi Suleiman Khayal, (2020). The Grand Ethiopian Renaissance Dam, LAP LAMBERT Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-2-91916-6.
35. Mohammed Zakreia Abdelrahman, and Osama Mohammed Elmardi Suleiman Khayal, (2020). Application of Integration Maintenance System in Berber Cement Company, Noor Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-0-77846-8.

36. Osama Mohammed Elmardi Suleiman Khayal, (2020). Performance Tests on a Flat Plate Collector in Atbara Sudan, Noor Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-0-78132-1.
37. Osama Mohammed Elmardi Suleiman Khayal, (2020). Self-Development of Career in Mechanical and Manufacturing Engineering, Noor Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-0-77854-3.
38. Osama Mohammed Elmardi Suleiman Khayal, (2020). Sensors in Automobiles, Noor Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-0-78065-2.
39. Osama Mohammed Elmardi Suleiman Khayal, (2020). Tribology in Vehicles, Noor Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-0-77981-6.
40. Osama Mohammed Elmardi Suleiman Khayal, (2020). Tribology in Vehicles, Noor Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-0-77981-6.
41. Osama Mohammed Elmardi Suleiman Khayal, (2020). Vehicles Using Oil – Gasoline Mixture, Noor Academic Publishing, Member of Omni Scriptum Publishing Group, Germany, and ISBN: 978-620-0-77994-6.

ENGINEERING BOOKS IN ARABIC LANGUAGE

Writes about hundred books in mechanical and civil engineering written in Arabic language. Samples of them shown below:

1. بروفيسور/ محمود يس عثمان ودكتور/ أسامة محمد المرضي سليمان خيال، مارس 2019م. كتاب اهتزازات ميكانيكية ISBN: 978-613-9-43200-4، Germany، Noor Publishing، (Mechanical Vibrations)
2. دكتور/ أسامة محمد المرضي سليمان خيال، أكتوبر 2018 م. كتاب ديناميكا حرارية الجزء الأول، Noor Publishing، Germany، ISBN: 978-620-2-35617-6
3. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 2019م. كتاب ديناميكا حرارية الجزء الثاني، Noor Publishing، Germany، ISBN: 978-613-9-43045-1
4. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 1993م. كتاب عمليات تصنيع (2)، www.ektab.com
5. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. الاحتراق (Combustion) www.kutubinfo.com
6. د. أسامة محمد المرضي سليمان خيال، مايو 2018 م. الإعجاز العلمي الهندسي في القرآن www.kutubinfo.com
7. د. أسامة محمد المرضي سليمان خيال، مايو 2017 م. الأقتصاد الهندسي ENGINEERING ECONOMICS www.kutubinfo.com
8. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 2018م. كتاب التحليل الاقتصادي الهندسي، www.ektab.com
9. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 2019 م. التوربينات الغازية، www.ektab.com
10. دكتور/ أسامة محمد المرضي سليمان خيال، مارس 2017م. التوربينات محورية السرطان، www.ektab.com

11. دكتور/ أسامة محمد المرضي سليمان خيال، ديسمبر 2016م. التوربينة الدفعية أو توربينة عجلة بلتون، www.ektab.com.
12. د. أسامة محمد المرضي سليمان خيال، مايو 1990 م. الديناميكا الحرارية 1. www.kutubinfo.com.
13. دكتور/ أسامة محمد المرضي سليمان خيال، مايو 2018م. أمثال وحكم، www.ektab.com.
14. دكتور/ أسامة محمد المرضي سليمان خيال، أغسطس 2018م. كتاب حلول مسائل في انتقال حرارة وكتلة الجزء الأول، www.ektab.com.
15. دكتور/ أسامة محمد المرضي سليمان خيال، 2019م. انتقال حرارة وكتلة، Noor Publishing Germany. ISBN: 978-613-9-42793-2.
16. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. انحراف العارضات باستخدام طريقة العناصر المحددة، www.kutubinfo.com.
17. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. تحليل الجملونات، www.kutubinfo.com.
18. دكتور/ أسامة محمد المرضي سليمان خيال، 2018 م. تصميم الأنظمة الميكانيكية، www.ektab.com.
19. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. تطبيق طريقة العناصر المحددة في انتقال الحرارة، www.kutubinfo.com.
20. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م حل مسائل تحليل الإجهادات باستخدام أسلوب العناصر المحددة. www.kutubinfo.com.
21. دكتور/ أسامة محمد المرضي سليمان خيال، 2016م. حلول مسائل في أجهزة قياس وتحكم، Published by E-Kutub.com. ISBN: 978-1-78058-206-1. ekutub.info@gmail.com.
22. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 2018 م. دراسة نظرية ومختبرية لمضخات الطرد المركزي، www.ektab.com.
23. دكتور/ أسامة محمد المرضي سليمان خيال، أكتوبر 2015 م. كتاب أساسيات الصيانة، www.ektab.com.
24. دكتور/ أسامة محمد المرضي سليمان خيال، أكتوبر 2016 م. كتاب أساسيات المرونة واللدونة، www.ektab.com.
25. دكتور/ أسامة محمد المرضي سليمان خيال، يونيو 2018 م. كتاب آلات هيدروليكية، www.ektab.com.
26. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 2019 م. كتاب التصميم بمساعدة الحاسوب، www.ektab.com.
27. دكتور/ أسامة محمد المرضي سليمان خيال، ديسمبر 2016 م. كتاب التوربينات الغازية، www.ektab.com.
28. دكتور/ أسامة محمد المرضي سليمان خيال، فبراير 2016 م. كتاب الرسم الهندسي، www.ektab.com.
29. دكتور/ أسامة محمد المرضي سليمان خيال، ديسمبر 2017 م. كتاب انتقال الحرارة بالغيان والتكثيف، www.ektab.com.
30. دكتور/ أسامة محمد المرضي سليمان خيال، يونيو 2018 م. كتاب انتقال حرارة وكتلة أمثلة محلولة ومسائل إضافية، www.ektab.com.
31. دكتور/ أسامة محمد المرضي سليمان خيال، سبتمبر 2018 م. كتاب انتقال حرارة وكتلة، www.ektab.com.
32. دكتور/ أسامة محمد المرضي سليمان خيال، مارس 2019 م. كتاب اهتزازات ميكانيكية، www.ektab.com.
33. دكتور/ أسامة محمد المرضي سليمان خيال، يونيو 2018 م. كتاب اوتوماتية وهندسة تحكم، www.ektab.com.

34. دكتور/ أسامة محمد المرضي سليمان خيال، مارس 2016 م. كتاب حلول مسائل في أجهزة قياس وتحكم الجزء الأول، www.ektab.com.
35. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 2016 م. كتاب حلول مسائل في أجهزة قياس وتحكم الجزء الثاني، www.ektab.com.
36. دكتور/ أسامة محمد المرضي سليمان خيال، أغسطس 2018 م. كتاب حلول مسائل في المبادلات الحرارية، www.ektab.com.
37. دكتور/ أسامة محمد المرضي سليمان خيال، ديسمبر 2015 م. كتاب حلول مسائل في انتقال حرارة وكتلة، www.ektab.com.
38. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 2016 م. كتاب ديناميكا حرارية الجزء الثاني، www.ektab.com.
39. دكتور/ أسامة محمد المرضي سليمان خيال، أكتوبر 2018 م. كتاب ديناميكا حرارية الجزء الأول، www.ektab.com.
40. دكتور/ أسامة محمد المرضي سليمان خيال، فبراير 2016 م. كتاب مضخات السريان نصف القطري والمحوري، www.ektab.com.
41. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. ماكينات الإزاحة الموجبة، www.kutubinfo.com.
42. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. محطات القدرة البخارية، www.kutubinfo.com.
43. دكتور/ أسامة محمد المرضي سليمان خيال، يناير 1998 م. محطات القدرة الحرارية، www.ektab.com.
44. د. أسامة محمد المرضي سليمان خيال، سبتمبر 2018 م. مذكرة انتقال حرارة برنامج معالجات نظم الإدارة الهندسية www.kutubinfo.com، modified and corrected version
45. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. مذكرة في تصميم أعمدة نقل القدرة، www.kutubinfo.com.
46. دكتور/ أسامة محمد المرضي سليمان خيال، إبريل 2019 م. مذكرة محاضرات ميكانيكا المواد الجزء الأول، www.ektab.com.
47. دكتور/ أسامة محمد المرضي سليمان خيال، إبريل 2018 م. مذكرة محاضرات اقتصاد هندسي، www.ektab.com.
48. دكتور/ أسامة محمد المرضي سليمان خيال، يونيو 2018 م. مذكرة محاضرات آلات هيدروليكية، www.ektab.com.
49. دكتور/ أسامة محمد المرضي سليمان خيال، 2018 م. مذكرة محاضرات أوتوماتية وهندسة تحكم، www.ektab.com.
50. د. أسامة محمد المرضي سليمان خيال، يناير 2019 م. مذكرة محاضرات تصميم وصلات اللحام، www.kutubinfo.com.
51. د. أسامة محمد المرضي سليمان خيال، 2017 م. مذكرة محاضرات ديناميكا حرارية 1، www.kutubinfo.com.
52. د. أسامة محمد المرضي سليمان خيال، 2017 م. مذكرة محاضرات ديناميكا حرارية 2، www.kutubinfo.com.
53. د. أسامة محمد المرضي سليمان خيال، فبراير 2019 م. مذكرة محاضرات في الإشعاع الحراري، www.kutubinfo.com.

54. د. أسامة محمد المرضي سليمان خيال، فبراير 2019 م. مذكرة محاضرات في الاهتزازات الميكانيكية 1،
www.kutubinfo.com.
55. د. أسامة محمد المرضي سليمان خيال، فبراير 2019 م. مذكرة محاضرات في الاهتزازات الميكانيكية 2،
www.kutubinfo.com.
56. د. أسامة محمد المرضي سليمان خيال، فبراير 2019 م. مذكرة محاضرات في التروس العدلة أو القائمة،
www.kutubinfo.com.
57. د. أسامة محمد المرضي سليمان خيال، فبراير 2019 م. مذكرة محاضرات في قوى التروس،
www.kutubinfo.com.
58. د. أسامة محمد المرضي سليمان خيال، إبريل 2019 م. مذكرة محاضرات ميكانيكا المواد الجزء الثالث،
www.kutubinfo.com.
59. د. أسامة محمد المرضي سليمان خيال، إبريل 2019 م. مذكرة محاضرات ميكانيكا المواد الجزء الثاني،
www.kutubinfo.com.
60. د. أسامة محمد المرضي سليمان خيال، يونيو 2018 م. مذكرة مدخل لانتقال حرارة وكتلة،
www.kutubinfo.com.
61. دكتور/ أسامة محمد المرضي سليمان خيال، إبريل 2019 م. ميكانيكا المواد الجزء الأول، www.ektab.com.
62. دكتور/ أسامة محمد المرضي سليمان خيال، إبريل 2019 م. ميكانيكا المواد الجزء الثاني، www.ektab.com.
63. دكتور/ أسامة محمد المرضي سليمان خيال، 2020 م. أقتصاديات الهندسة، Noor Publishing ، Germany،
ISBN: 978-620-0-77837-6.
64. دكتور/ أسامة محمد المرضي سليمان خيال، 2020 م. الاستثمار في دولة السودان، Noor Publishing ،
Germany، ISBN: 978-620-0-78118-5.
65. دكتور/ أسامة محمد المرضي سليمان خيال، 2021 م. التوربينات الدفعية، Noor Publishing ، Germany،
ISBN: 978-620-2-79236-3.
66. دكتور/ أسامة محمد المرضي سليمان خيال، 2021 م. التوربينات الغازية، Noor Publishing ، Germany،
ISBN: 978-620-2-79241-7.
67. دكتور/ أسامة محمد المرضي سليمان خيال، 2021 م. التوربينات محورية السريان، Noor Publishing ،
Germany، ISBN: 978-620-2-79237-0.
68. دكتور/ أسامة محمد المرضي سليمان خيال، 2021 م. التوربينات نصف القطرية، Noor Publishing ،
Germany، ISBN: 978-620-2-79233-2.
69. دكتور/ أسامة محمد المرضي سليمان خيال، 2019 م. انتقال حرارة وكتلة، Noor Publishing ، Germany،
ISBN: 978-613-9-42793-2.
70. دكتور/ أسامة محمد المرضي سليمان خيال، 2020 م. تصميم العناصر والأنظمة في الهندسة الميكانيكية، Noor
Publishing ، Germany، ISBN: 978-620-0-78137-6.
71. دكتور/ أسامة محمد المرضي سليمان خيال، 2021 م. دراسة نظرية ومختبرية لمضخات الطرد المركزي، Noor
Publishing ، Germany، ISBN: 978-620-2-79219-6.

72. مهندس حسن علي محمد نور، دكتور / محمد مبارك يوسف ودكتور / أسامة محمد المرضي سليمان خيال، 2021 م. دور الهيئة السودانية للمواصفات والمقاييس في اختبار جودة الحديد، Noor Publishing، Germany، ISBN: 978-620-2-79289-9
73. دكتور / أسامة محمد المرضي سليمان خيال، 2021 م. كتاب الرسم الهندسي للمهندسين والفنيين الجزء الأول، Noor Publishing، Germany، ISBN: 978-620-2-79226-4
74. دكتور / أسامة محمد المرضي سليمان خيال، 2021 م. كتاب انتقال الحرارة بالغلجان والتكثف، Noor Publishing، Germany، ISBN: 978-620-2-79288-2
75. دكتور / أسامة محمد المرضي سليمان خيال، 2019 م. كتاب امتزازات ميكانيكية، Noor Publishing، Germany، ISBN: 978-613-9-43200-4
76. دكتور / أسامة محمد المرضي سليمان خيال، 2020 م. كتاب صيانة الآلات الميكانيكية، Noor Publishing، Germany، ISBN: 978-620-0-78138-3
77. دكتور / أسامة محمد المرضي سليمان خيال، 2021 م. كتاب عمليات تصنيع، Noor Publishing، Germany، ISBN: 978-620-0-77960-1
78. دكتور / أسامة محمد المرضي سليمان خيال، 2020 م. كتاب مبادلات حرارية، Noor Publishing، Germany، ISBN: 978-620-0-77806-2
79. دكتور / أسامة محمد المرضي سليمان خيال، 2020 م. مقاومة المواد الهندسية، Noor Publishing، Germany، ISBN: 978-620-0-78134-5

TEACHING EXPERIENCE

INSTRUCTOR OF RECORD

Summer 2018	Instrumentation and Control, Nile Valley University
Winter 2018	Mechanics of Materials, Red Sea University
Summer 2017	Heat and Mass Transfer, Nile Valley University
Winter 2017	Axial and Radial Flow Pumps, Kassala University
Summer 2016	Axial and Radial Flow Turbines, Nile Valley University
Winter 2016	Fluid Mechanics, Blue Nile University
Summer 2015	Thermodynamics, Nile Valley University
Winter 2015	Steam Power Plants, Kordofan University
Summer 2014	Gas Turbines, Nile Valley University
Winter 2014	Internal Combustion Engines, SUST University
Summer 2013	Applied Mechanics, Nile Valley University
Winter 2013	Dynamics, Kassala University
Summer 2012	Design of Mechanical Elements, Nile Valley University
Winter 2012	Design of Mechanical Systems, Red Sea University
Summer 2011	Engineering Drawing, Nile Valley University
Winter 2011	Machine Drawing, Blue Nile University
Summer 2010	Refrigeration, Nile Valley University
Winter 2010	Air Conditioning, Kassala University

TEACHING ASSISTANTSHIPS

Summer 2009	Design of Mechanical Elements, Nile Valley University
Winter 2009	Design of Mechanical Systems, Nile Valley University
Summer 2008	Engineering Drawing, Nile Valley University
Winter 2008	Machine Drawing, Nile Valley University

Summer 2007
Winter 2007

Refrigeration, Nile Valley University
Air Conditioning, Nile Valley University

TEACHING INTERESTS

Lectures: Fluid Mechanics, Thermodynamics, Mechanical Vibrations, Analysis of Composite Materials and Structures, Automation and Control, Instrumentation, Supervision of Undergraduate and Postgraduate Studies in Mechanical, Production and Civil Engineering.

SUPERVISION OF UNDERGRADUATE AND GRADUATE STUDIES

Supervised more than 300 undergraduate theses in bachelor of mechanical and production engineering, and more than 300 diploma studies and 20 graduate theses in master studies. External examiner for more than 10 theses in master degrees.

EXTERNAL EXAMINER OF GRADUATE STUDIES

1. Effects of Electric Power Blackouts on Steam Turbines Power Plants - Case Study of Power Plants in Sudan, A thesis submitted to the Faculty of Graduates – Red Sea University in Fulfillment of the Requirements for the M.sc Degree in Mechanical Engineering, Student Hussien Ahmed Hussien Alzeber, and Supervisor Associate Professor Dr. Naeim Farouk, September 2020.
2. بحث بعنوان : دور الهيئة السودانية للمواصفات والمقاييس في اختبار جودة الحديد، دراسة تطبيقية على: الهيئة السودانية للمواصفات والمقاييس ، ولاية البحر الأحمر (2020-2017 م) ، بحث تكميلي مقدم لنيل درجة الماجستير في الهندسة الميكانيكية، إعداد الطالب حسن علي محمد نور، إشراف الدكتور محمد مبارك يوسف، ديسمبر 2020م.
3. Ships' Hull Corrosion Prevention through Impressed Current Cathodic Protection 'ICCP' System, A Case Study of Sudan Navy Ships, (2017/2019), A Thesis Submitted for Partial Fulfillment of Master Degree in Mechanical Engineering (MSc) – Red Sea University. By Student: Surag Mohammed Saeed Ali and Supervisor: Dr. Mohamed El Mubarak, 2019.
4. Parametric Study of a Single Effect Lithium Bromide-Water Absorption Cooling System Powered by a Waste Heat from Diesel Engine, A thesis submitted in Partial Fulfillment of the Requirements for the Master Degree in Mechanical Engineering (Energy and Power Systems Management) - Faculty of Engineering and Technology, Nile Valley University. Student: Yagoub Abdallah Mohammed Ahmed, Supervisor: Dr. Osman Wageiallah Mohammed, 2021.

SUPERVISION OF GRADUATE STUDIES

1. Master Degree by Research in Mechanical Engineering – Faculty of Engineering and Technology, Nile Valley University, Study of Failure in Hydraulic Systems, (Case study of machinery used in local gold mining), By Student: Salih Adam Burma, and Supervisor Dr. Osama Mohammed Elmardi Suleiman Khayal, Date: September 2014.
2. Using Light Fuel Oil (LFO) and Crude Oil (CRO) in Internal Combustion Engines (ICE), Technical and Environmental Study, A Thesis submitted in Partial Fulfillment of the Requirements for the Master Degree in Mechanical Engineering - Faculty of Engineering

- and Technology, Nile Valley University. Student: Awadalla Khideir Omer Youssef, and Supervisor: Osama Mohammed Elmardi Suleiman Khayal, May 2017.
3. TROUBLESHOOTING OF HYDRAULIC SYSTEMS IN THE CEMENT INDUSTRY, A Thesis Submitted in Fulfillment of the Requirements for MSc in Mechanical Engineering, Student: Engineer Mansour Hamad Elmamoun, Atbara Cement Factory, and Atbara City, Sudan. Supervisor: Associate professor Dr. Osama Mohammed Elmardi Suleiman Khayal, Nile Valley University, Faculty of Engineering and Technology, Atbara, Sudan, Mechanical engineering department, June 2021.
 4. Economic and Technical Optimization of Operation and Maintenance for Pump Stations, Case Study in Sudanese Petroleum Pipelines Company Limited, Student: Engineer Elhilali Ahmed Mohammed Elhilali, Supervisor: Associate Professor Dr. Osama Mohammed Elmardi Suleiman Khayal, Nile Valley University, Faculty of Engineering and Technology, Atbara, Sudan, Mechanical engineering department, August 2020.

THESES

1. Osama Mohammed Elmardi Suleiman Khayal, December (2017). Biaxial Buckling of Thin Laminated Composite Plates, A thesis Submitted in Fulfillment of the Requirements for PhD in Mechanical Engineering, Republic of Sudan, Ministry of Higher Education and Scientific Research, Nile Valley University, Faculty of Post – Graduate Studies.
2. Osama Mohammed Elmardi Suleiman Khayal, August (2003). Nonlinear Analysis of Rectangular Laminated Plates, A thesis Submitted in Fulfillment of the Requirements for Master of Science in Mechanical Engineering, Republic of Sudan, Ministry of Higher Education and Scientific Research, Nile Valley University, Faculty of Post – Graduate Studies.
3. Osama Mohammed Elmardi Suleiman Khayal, August (1998). Experimental Research Work on Water Current Turbines, A thesis Submitted in Partial Fulfillment of the Requirements for Bachelor of Science in Mechanical Engineering, Republic of Sudan, Ministry of Higher Education and Scientific Research, Sudan University of Science and Technology, Faculty of Post – Graduate Studies.
4. Osama Mohammed Elmardi Suleiman Khayal, March (1990). Technical and Economic Feasibility Study of Establishing a Machining Workshop in Atbara.

EXECUTED PROJECTS

1. Preparation of technical and economic feasibility studies of establishing production and mechanical engineering workshops in Atbara city (1990 – until now).
2. Supervisor in mill house, powerhouse and general maintenance in Kenana Sugar Company (1990-1992).
3. Design and installation of floating pumping units in Atbara agricultural food security project (1991- 1994).
4. Design and installation of floating pumping units in Wadi Halfa agricultural food security project (1992- 1993).
5. Design and installation of Atbara water current turbine in River Nile State (1990-2000).
6. Experimental Research Work on Water Current Turbines (1995- 1998).

7. Establishment of machining workshop for crank grinding, cylinder boring and honing, cylinder head repair and maintenance (2005-2020). Alkamali workshops group for small industries.
8. Establishment of automotive maintenance workshop for small, medium and complete overhaul of different sizes of engines (2010-2020). Alkamali workshops group for small industries.
9. Issuance of technical and economic feasibility studies of establishing workshops in different specialization of engineering (2010-till now).
10. Supervision of more than 300 diploma of technology projects (design and execution of engineering projects) (1990- 2020).
11. Supervision of more than 300 Bachelor of Science projects (design and execution of engineering projects) (1990- 2020).
12. Rehabilitation and reconditioning of machining workshop in faculty of engineering and technology, Atbara (2010-2012).
13. Rehabilitation and reconditioning of automobiles workshop in faculty of engineering and technology, Atbara (2010-2012).

CITATIONS

Samples of citations presented below:

1. Milad Saeedifar, Dimitrios Zarouchas, Damage characterization of laminated composites using acoustic emission: A review, Structural Integrity & Composites Group, Delft University of Technology, the Netherlands, Composites Part B 195 (2020) 108039.
2. Basem Saoud Suliman, A HYBRID EXACT STRIP AND FINITE ELEMENT METHOD FOR MODELLING DAMAGE IN COMPOSITE PLATES, Thesis submitted in fulfilment of the requirement for the degree of Doctor of Philosophy, February 2018, School of Engineering, Cardiff University.
3. Yue Zhang , Jianfeng Shi, Jinyang Zheng, A method of fracture toughness JIC measurement based on digital image correlation and acoustic emission technique, Materials and Design 197 (2021) 109258.
4. Achchhe Lal , Anant Parghi , Anil Kumar Mahto , Rahul Kumar, Buckling Response Analysis of Laminated Plates Subjected to Localized Bi-axial In-plane Compressive Loading, IOP Conf. Series: Materials Science and Engineering 1004 (2020) 012025 IOP Publishing doi:10.1088/1757-899X/1004/1/012025.
5. Channabasavaradhy Suragimath, M.Tech in Machine Design, Department of Mechanical Engineering, BMS Institute of Technology and Management, Bengaluru, India. Modal Analysis of Composite Beam using MATLAB, International Journal of Engineering Science and Computing, January 2019.
6. Aniqanaeem, COW DUNG CAN BE AN EXCELLENT SOURCE OF BIOFUEL, Posted on 20 September 2020.
7. Author: Catarina Isabel Seixas da Silva, Supervisor: Lucas da Silva, Co-Supervisors: Ana Queirós José Marques, Development of a process to obtain a graded distribution of particles along the overlap of adhesive single lap joints, Departamento de Engenharia Mecânica, Faculdade de Engenharia da Universidade do Porto, Rua Dr. Roberto Frias, and 4200-465 Porto, Portugal. A thesis submitted for the degree of MSc of Mechanical Engineering, June 2019.
8. Ali Nemati Giv, Majid R. Ayatollahi, S. Hengameh Ghaffari & Lucas F.M. da Silva (2018). Effect of reinforcements at different scales on mechanical properties of epoxy

- adhesives and adhesive joints: a review, *The Journal of Adhesion*, 94:13, 1082-1121, DOI: [10.1080/00218464.2018.1452736](https://doi.org/10.1080/00218464.2018.1452736).
9. FABRICATION AND CHARACTERIZATION OF RICE HUSK PYROLYZED BIOCHAR REINFORCED POLYPROPYLENE COMPOSITE, by Tareq Hossain Student No: 1014112503. A thesis submitted to the Department of Materials and Metallurgical Engineering in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE IN MATERIALS SCIENCE, Department of Materials and Metallurgical Engineering BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY Dhaka-1000, Bangladesh MARCH 2020.
 10. Cael Geier Steven Christopher Philippos, Handheld Electronic Vaporizer for Sedating Bees, BREE 495 Engineering Design 3, And Professional Engineer Mentor: Dr. Mark Lefsrud, Client: Dr. Mark Lefsrud.
 11. Hans Marius Remmen, DYNAMIC RESPONSE ANALYSES OF A SEMI-SUB INSTALLATION VESSEL DURING THE INSTALLATION OF A WIND TURBINE ONTO A FLOATING SPAR BUOY, Master's thesis in Ship Design Supervisor: Karl Henning Halse, Norwegian University of Science and Technology Department of Ocean Operations and Civil Engineering June 2019.
 12. Zeynep TAŞLIÇUKUR ÖZTÜRK, Abdullah Koray PEHLİVAN, INVESTIGATION OF MECHANICAL PROPERTIES OF WELDING ELECTRODES USED FOR HIGH STRENGTH LOW ALLOY STEELS, *Journal of Naval Sciences and Engineering* 2020, Vol. 16, No.2, pp. 171-192, Mechanical Engineering/Makine Mühendisliği.
 13. Torrey Holland, Ali Mazin Abdul-Munaim, Christopher Mandrell, Robinson Karunanithy, Dennis G. Watson and Poopalasingam Sivakumar 1, UV-Visible Spectrophotometer for Distinguishing Oxidation Time of Engine Oil, *Lubricants* 2021, 9, 37. <https://doi.org/10.3390/lubricants9040037>.
 14. Université Larbi tébessi- Tébessa – Faculté des Sciences et de la Technologie, Département de Génie Civil, THÈSE Présenté pour l'obtention du diplôme de DOCTORAT LMD En : Génie Civil Spécialité : Structures, Matériaux et Géotechnique Par : BOUGUESSIR HAMZA, CONTRIBUTION A L'ETUDE DE L'ENDOMMAGEMENT EN STATIQUE DU BETON POLYMERE A FIBRES MINERALES ET VEGETALES : APPROCHE EXPERIMENTALE ET NUMERIQUE, Promotion : 2018/2019.
 15. Sreehari. V. M, Ravi Kumar. Maiti. D. K., Structural Analysis Using Shear Deformation Theories Having Nonpolynomial Nature: A Review, *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 12, Number 20 (2017) pp. 10389-10396.
 16. YX Hao, MX Wang, W Zhang et al., Natural vibration of imperfect sandwich plates considering the effects of transverse stretching, First Published April 27, 2021. <https://doi.org/10.1177/10775463211013153>.
 17. Andrea Muñoz-Ibáñez, Jordi Delgado-Martín, Miguel Costas, Juan Rabuñal-Dopico, Jose Alvarellos-Iglesias, Jacobo Canal-Vila, Pure Mode I Fracture Toughness Determination in Rocks Using a Pseudo-Compact Tension (pCT) Test Approach, *Rock Mechanics and Rock Engineering*, Issue 7/2020.
 18. Gonenli, C., Das, O. Effect of crack location on buckling and dynamic stability in plate frame structures. *J Braz. Soc. Mech. Sci. Eng.* **43**, 311 (2021). <https://doi.org/10.1007/s40430-021-03032-2>.
 19. Kamyar Shirvanimoghaddam, Ehsan Ghasali, Amir Hossein Pakseresht, S.M.R.Derakhshandeh, Masoud Alizadeh, Touradj Ebadzadeh, Minoo Naebead, Super

- hard carbon microtubes derived from natural cotton for development of high performance titanium composites, Volume 775, 15 February 2019, Pages 601-616.
20. X.J. Gu, Y.X. Hao, W. Zhang, J. Chen, Dynamic stability of rotating cantilever composite thin walled twisted plate with initial geometric imperfection under in-plane load, *Thin-Walled Structures*, Volume 144, 2019, 106267, ISSN 0263-8231.
 21. Mishra, B.B., Kumar, A., Samui, P. and Roshni, T. (2021), "Buckling of laminated composite skew plate using FEM and machine learning methods", *Engineering Computations*, Vol. 38 No. 1, pp. 501-528. <https://doi.org/10.1108/EC-08-2019-0346>.
 22. Imad-Eldin Mahmoud Mahdi, Osama Mohammed Elmardi Suleiman and Ahmed F. Algarray, Effects of Boundary Conditions on Cross-Ply Laminated Composite Beams, *International Journal of Engineering Research And Advanced Technology (IJERAT)* E-ISSN : 2454-6135 DOI: <http://dx.doi.org/10.7324/IJERAT.3144> Vol.3 (10) Oct -2017.
 23. T Hemanth Kumar and G Sri Harsha, Three-dimensional finite element analysis on the flexural behavior of composite beams under linear displacement 2021 *IOP Conf. Ser.: Mater. Sci. Eng.* 1136 012030.
 24. Hao Zhang, Johann Guilleminot, Luis J. Gomez, Stochastic modeling of geometrical uncertainties on complex domains, with application to additive manufacturing and brain interface geometries, *Computer Methods in Applied Mechanics and Engineering*, Volume 385, 1 November 2021, 114014, ISSN 0045-7825, <https://doi.org/10.1016/j.cma.2021.114014>.
 25. Lidiya Kurpa, Victoriya Tkachenko & Anna Linnik, (2020). Buckling of laminated plates subjected to non-uniform distributed in-plane force, *Mechanics Based Design of Structures and Machines*, DOI: 10.1080/15397734.2020.1831933.
 26. Experimental and Computational Analysis of Periodic Laminated Fiber-Reinforced Composite Beams, A thesis submitted in partial fulfilment of the requirements For the degree of Master of Science in Mechanical Engineering, By Julian Rodriguez, May 2020.
 27. Karim Egab et al, 2019. Numerical investigation of stress analysis of composite materials with various elasticity, *IOP. Conf. Ser.: Mater. Sci. Eng.* 518 032036.
 28. E. Gokulnathan, S. Pradeep, Neethu Jayan, M. Laxmi Deepak Bhatlu, S. Karthikeyan, Review of heat transfer enhancement on helical coil heat exchanger by additive passive method, *Materials Today: Proceedings*, Volume 37, Part 2, 2021 Pages 3024-3027, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.08.725>.
 29. F. Ionescu et al, 2020. Reconditioning by Welding of the Spiral Heat Exchangers Made of Austenitic Stainless Steel - X2CRNIMO17-12-2IOP Conf. Ser.: Mater. Sci. Eng. 916 012049.
 30. PUTRA, ELVINE HANDIKA and Bizzy, Irwin (2020) PENGARUH JUMLAH BAFFLE TERHADAP KINERJA ALAT PENUKAR KALOR TIPE SHELL AND TUBE. Undergraduate thesis, Sriwijaya University.
 31. Carlos ToroWei Wang Humza Akhtar, 2021. The Model Factory as the Key Enabler for the Future of Manufacturing, *Implementing Industry 4.0*.
 32. M. Akpınar et al., "Duration Estimation of Vehicle Based Production: Case Study of Assembly Line," 2020 International Conference on Data Analytics for Business and Industry: Way towards a Sustainable Economy (ICDABI), 2020, pp. 1-4, Doi: 10.1109/ICDABI51230.2020.9325618.
 33. Avnit Kumar Ramamurthy, Ravi Prakash Natarajan, Sambavi Ravi & Renganathan Sahadevan, (2020). An innovative plasma pre-treatment process for lignocellulose bio-ethanol production, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, DOI: 10.1080/15567036.2020.1815900.

34. J. Suleiman, M. T. Muhammad, S. Y. Lema, A. Abdullah, Comparison for the Efficacy of Column Purified Fractions of *Sinna occidentalis* and *Moringa oleifera* against *Bulinus globosus* (Intermediate Host of *Schistosoma haematobium*) from Goronyo and Shagari Dams, Sokoto State, Nigeria, Vol 1 No 6 (2020).
35. M. Machesa, L. Tartibu, F. Tekweme, M. Okwu and D. Ighravwe, "Performance Prediction of a Stirling heat engine using Artificial Neural Network model," 2020 International Conference on Artificial Intelligence, Big Data, Computing and Data Communication Systems (icABCD), 2020, pp. 1-6, Doi: 10.1109/icABCD49160.2020.9183890.
36. Wayan Suryasa, Jose Reynaldo Zambrano Mendoza, Jean Telmo Mendoza Mera, Maria Elena Moya Martinez, Maria Rodriguez Gamez. Mobile devices on teaching-learning process for high school level, International Journal of Psychosocial Rehabilitation, Volume 24 - Issue 4(2020). <https://doi.org/10.37200/IJPR/V24I4/PR201012>.
37. Tilahun N.D., Lemu H.G. (2021) Mechanical Vibration Analysis of Fiber Reinforced Polymer Composite Beams Using Analytical and Numerical Methods. In: Delele M.A., Bitew M.A., Beyene A.A., Fanta S.W., Ali A.N. (eds) Advances of Science and Technology. ICAST 2020. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 385. Springer, Cham. https://doi.org/10.1007/978-3-030-80618-7_24.

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Or

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