# **CURRICULUM VITA**

#### Prof. Dr. ELFETORI FARAJ ABDEWI

**Professor** Mechanical Engineering Department School of Engineering and Applied Science, Libyan Academy for Postgraduate Studies, Tripoli, Libya

ADDRESS:	Elfetori Faraj Abdewi P.O.Box: 93290 Tripoli Tower Tripoli, Libya
Tel.:	+218 91 7480168
E-mail:	elfetori.abdewi@academy.edu.ly
Google Scholar:	https://scholar.google.com/citations?hl=en&user=oWMOXvsAAAAJ
Linkedin:	https://www.linkedin.com/in/elfetori-abdewi-51b057233/
Research Gate:	https://www.researchgate.net/profile/Elfetori-Abdewi-2
Home Page:	https://mee.ase.academy.edu.ly/ar/lecturers/18
Nationality	Libyon

Nationality:LibyanDate of birth:08 February, 1969Place of birth:Zliten, Libya

# FIELD OF SPECIALIZATION:

- Mechanical and Manufacturing Engineering.

# **AREA OF INTEREST:**

- Manufacturing Systems, Composite Materials, Production Engineering, Computational Methods (FEA), Lean Manufacturing, Quality Engineering, and Engineering Operations Management.

## **EDUCATION:**

<b>BSc</b> (1986 – 1990)	Engineering Academy Tajoura, Tripoli – Libya Mechanical Engineering Department
<b>MSc</b> (1997 – 1999)	University Putra Malaysia (UPM), Malaysia Mechanical and Manufacturing Engineering Department, Manufacturing systems.
<b>PhD</b> (2003 – 2007)	University Putra Malaysia (UPM), Malaysia Mechanical and Manufacturing Engineering Department, Manufacturing systems.

## **SCIENTIFIC PROMOTION:**

2 August 2010	Assistant Professor
9 December 2013	Associate Professor
18 February 2021	Professor

# **POSITIONS:**

1990-1996	Teaching Assistant (TA),	Mechanical Engineering Department, Engineering Academy Tajoura, Tripoli, Libya
1996-1999		M.Sc. Student Mechanical and Manufacturing Engineering Department, Faculty of Engineering, University Putra Malaysia (UPM).
1999-2003	Lecturer	Mechanical Engineering Department, Engineering Academy Tajoura, Tripoli, Libya
2003-2007	Ph.D. Student	Mechanical and Manufacturing Engineering Department, Faculty of engineering, University Putra Malaysia (UPM).
2007-2008	Research activities	Mechanical and Manufacturing Engineering Department, Faculty of engineering, University Putra Malaysia (UPM).
Oct. 2008 to 2	013	Head of Mechanical Engineering Department, Engineering Academy Tajoura, Tripoli, Libya
2013 to May 2	2014	Head of Engineering Research Center, Engineering Academy Tajoura, Tripoli, Libya
February 2012	2 to 2015	Staff member (part time) Mechanical Engineering Department, School of Engineering and Applied Science, Libyan Academy for Postgraduate Studies, Tripoli - Libya.
1 <sup>st</sup> April 2012	- 2014	Staff member (part time) Mechanical and Industrial Engineering Department, Faculty of Engineering, Tripoli University, Libya.
October 2015 to date		Staff member Professor (full time) Mechanical Engineering Department, School of Engineering and Applied Science, Libyan Academy for Postgraduate Studies, Tripoli - Libya.
28 March 201	6 to 1 Oct. 2017	Head of Mechanical Engineering Department, School of Engineering and Applied Science, Libyan Academy for Postgraduate Studies, Tripoli - Libya.
12 March 201	9 to 13 February 2021	Head of Quality Office for School of Engineering and Applied Science, Libyan Academy for Postgraduate Studies, Tripoli - Libya.

14 February 2021 to 18 September 2021	Head of Mechanical Engineering Department, School of Engineering and Applied Science, Libyan Academy for Postgraduate Studies, Tripoli - Libya.
19 September 2021 to Date	Head of International Cooperation Department, School of Engineering and Applied Science, Libyan Academy for Postgraduate Studies, Tripoli - Libya.

## **PUBLICATIONS:**

## JOURNALS

- 1- Elfetori F. Abdewi, S. Suliman, A.M.S. Hamouda, E. Mahdi, Effect of Geometry on the Crushing Behaviour of Laminated Corrugated Composite Tubes. *Journal of Materials Processing Technology*, Vol. 172, Issue 3, March 2006, Pp 394-399. <u>https://doi.org/10.1016/j.jmatprotec.2005.07.017</u>
- 2- Elfetori F. Abdewi, S Suliman, A M S Hamouda and E Mahdi, Behaviour of Axially and Laterally Crushed Corrugated Composite Tubes, Submitted to *Journal of Mechanical Engineering Science*. A manuscript number has been assigned JMES435, 5 Jul 2006.
- 3- Elfetori F Abdewi, S Suliman, A M S Hamouda and E Mahdi, Quasi-Static axial and lateral crushing of radial corrugated composite tubes. *International Journal of Thin-Walled Structures*, Vol. 46, Issue 3, March 2008, Pages 320-332. https://doi.org/10.1016/j.tws.2007.07.018
- 4- Elfetori F Abdewi, An Experimental Investegation into Crushing Behavior of Composite Shells with Different Corugation. International *Journal of Science and Engineering Investigations*, IJSEI Vol. 2, Issue 17, June 2013.
- 5- Elfetori F. Abdewi, " Experimental testing of corrugated composite plates with sinusoidal profile as an energy absorber "*Reference Module in Materials Science* and Materials Engineering (MATERIAL APPLICATIONS, PERFORMANCE AND LIFE CYCLE)" Elsevier publication, London, Ref. No. 04092 Oxford: Elsevier; 2016, pp. 1-7. ISBN: 978-0-12-803581-8. 04092-3
- 6- Elfetori F. Abdewi, " Crushing characteristics of multi-layers corrugated composite plates with squire profile "*Reference Module in Materials Science and Materials Engineering (MATERIAL APPLICATIONS , PERFORMANCE AND LIFE CYCLE)*" Elsevier publication, London Ref. No. 04093, Oxford: Elsevier; 2016. ISBN: 978-0-12-803581-8. 04093-5
- 7- Elfetori F. Abdewi, "Energy absorption characteristics of triangular profile composite plate subjected to axial compression load "*Reference Module in Materials Science and Materials Engineering (MATERIAL APPLICATIONS , PERFORMANCE AND LIFE CYCLE)*" Elsevier publication, London, Ref. No. 04094 Oxford: Elsevier; 2016., pp. 1-8, ISBN: 978-0-12-803581-8. 04094-7

- 8- Elfetori F. Abdewi, "FRP composite tube subjected to quasi-static axial and lateral compression loadings "Reference Module in Materials Science and Materials Engineering (MATERIAL APPLICATIONS, PERFORMANCE AND LIFE CYCLE)" Elsevier publication, London, paper Ref. No. 04081, Oxford: Elsevier; 2016, pp. 1-9. ISBN: 978-0-12-803581-8. 04081-9
- 9- Abdewi Elfetori F., " Mechanical Properties of Reinforcing Steel Rods Produced by Zliten Steel Factory "Reference Module in Materials Science and Materials Engineering (MATERIAL APPLICATIONS, PERFORMANCE AND LIFE CYCLE)" Elsevier publication, London, paper Ref. No. 10362, Oxford: Elsevier; 2017. pp. 1-6. ISBN: 978-0-12-803581-8. 10362-5
- 10- Elfetori F. Abdewi " Crashing and Energy Absorption Performance of Corrugated Composite Plate with Different Profile under Impact Loading Conditions "Reference Module in Materials Science and Materials Engineering (MATERIAL APPLICATIONS, PERFORMANCE AND LIFE CYCLE)" Elsevier publication, May 2017.
- 11- Elfetori F. Abdewi " Investigation on Mechanical Properties of Reinforcing Steel Bars Made From Recycled Scraps "Reference Module in Materials Science and Materials Engineering (MATERIAL APPLICATIONS, PERFORMANCE AND LIFE CYCLE)" Elsevier publication, May 2017.
- 12- Elfetori Abdewi and Muammar M. Asbiga "Modeling and Design of Electrical Water Boiler Using Composite Materials" University Journal, Issue No. 21. Vol. (1), 57 – 68. The Center of Research & Scientific Consultancy Zawia University, January, 2019.
- 13- EF Abdewi, "Modeling and Experimental Testing of Corrugated Composite Plates with Different Profiles as an Energy Absorber", *Al academia journal for Basic and Applied Sciences (AJBAS) Vol. 2/No. 2 Dec.* 2020.
- 14- Elfetori F. Abdewi, "Design and Testing of Energy Absorbing System Avoiding Car Crashing with Lighting Poles", *Libyan Journal of Applied Science and Technology* (*LJAST*), *Vol. 8, Issue 1, Dec.* 2020.
- 15- Elfetori. Abdewi, Nedhal. Almeraash, "Design, Modelling, and Manufacturing of a Novel Composite Winding Machine for Producing Complex Shapes", *Journal of Alasmarya University, ISSN: 2706-9524, Vol. 6, No. 5, December* 2021, Special Issue, 2021, pp. 385 – 393. https://journals.asmarya.edu.ly/jau/index.php/Jau/article/view/590/280
- 16- Nureddin O. Fahel Alboum, Elfetori F. Abdewi, "Design and Static Structural Analysis of a Horizontal Pressure Vessel", *International Science and Technology Journal* (ISTJ) ISSN: 2519-9838 (Online), ISSN: 2519-9846 (Print), Vol. 31, November 2022. <u>https://www.stcrs.com.ly/istj/article-details.php?id=623</u>
- 17- EF Abdewi, T Alwuheeshi, "Testing of mechanical properties of composite materials made of almond shells fiber", American Institute of Physics AIP Conference Proceedings 3125 (1), 2024. <u>https://pubs.aip.org/aip/acp/article-abstract/3125/1/020003/3307129/Testing-of-</u> mechanical-properties-of-composite

## **CONFERENCES:**

- 1- Elfetori F. Abdewi., Sulaiman S., Hamouda A.M.S., Megat Ahmad M.M.H., 'Finite Element Analysis and Optimisation of Die Casting Design', Proceedings of 4<sup>th</sup> International Conference on Advances in Materials and Processing Technologies (AMPT'98), August 1998, Kuala Lumpur, Malaysia.
- 2- Elfetori F. Abdewi., Sulaiman S., Hamouda A.M.S., Megat Ahmad M.M.H., 'Computational Study on the Effect of Thermal Stresses on Die Casting Design', Proceedings of *World Engineering Congress 1999 (WEC'99)-Towards the Engineering Vision: Global Challenges & Issues*, 19<sup>th</sup>-22<sup>nd</sup> July1999, Sheraton Subang Hotel and Towers, Kuala Lumpur, Malaysia.
- 3- Abdewi E.F., Sulaiman S., Hamouda A.M.S., Mahdi E., Effect of Geometry on the Crushing Behaviour of Laminated Corrugated Composite Tubes. Worldwide Congress on Materials Manufacturing Engineering and Technology. Advances in Materials Processing Technologies, AMPT'2005.16<sup>th</sup>-19<sup>th</sup> May 2005, Gliwice-wista, Poland.
- 4- Elfetori F. Abdewi, S. Suliman, A.M.S. Hamouda, E. Mahdi, An experimental Investigation into Crushing Behavior of Radial Corrugated Composite Tube. *Third International Conference on Structural Stability and Dynamics, ICSSD 2005, 19th – 22<sup>nd</sup> June 2005*, Florida, USA.
- 5- Elfetori F. Abdewi, S. Suliman, A.M.S. Hamouda, E. Mahdi, An Experimental Investigation of the Effect of Specimen Shape and Geometry on the Energy Absorption of Fiber Glass Composite Tubes. *International Advanced Technology Congress, IATC'2005. Conference on Advanced Materials, CAM'2005*, (238-245). 6 – 8 December 2005, Putrajaya Malaysia.
- 6- Elfetori F. Abdewi, S. Suliman, A.M.S. Hamouda, E. Mahdi, Lateral collapse of Composite Radial Corrugated Tubes. *International Conference on Composite Materials and nano-Structures, iC2MS'06. 25<sup>th</sup> – 29<sup>th</sup> April 2006*, Shah Alam, Selangor, Malaysia.
- 7- Elfetori F. Abdewi., 'Effect of Triangular Profile Shape on the Crushing Behaviour of Radial Corrugated Composite Tubes subjected to axial quasi-static load' Proceedings of *Science and Technology of Composite Materials 09 (COMATCOMP 09)*, PP: 1009-1012, 7-9 October 2009, San Sebastian, Spain.
- 8- Elfetori F. Abdewi, 'Effect of corrugation density on energy absorption characteristics of composite shells subjected to axial crushing load' Proceedings of 21<sup>st</sup> Annual International Conference on Composites (ICCE-21) or Nano Engineering, Tenerife, Canary Islands, Spain, July 21-27, 2013.
- 9- Fathi A. Abrahem & Elfetori F. Abdewi, 'Crushing characteristics of hybrid materials under the effect of axial compression load' Proceedings of 21<sup>st</sup> Annual International Conference on Composites (ICCE-21) or Nano Engineering, Tenerife, Canary Islands, Spain, July 21-27, 2013.
- 10- Abdalmawla Lasmar, John Shirokoff, Elfetori Abdewi and Ahmed Melad 'Numerical Simulation for Thermal Energy Storage Using Encapsulated Phase Change Materials (PCMs) in libya' *Libyan International Conference on Electrical Engineering and Technologies (LICEET 2018)*, Tripoli, Libya, March 04-06, 2018.

- 11- Elfetori. Abdewi, Nedhal. Almeraash, "Design, Modelling, and Manufacturing of a Novel Composite Winding Machine for Producing Complex Shapes",4th Conference on Engineering Science and Technology-CEST-2021, Zliten-Libya, December, 2021.
- 12- Elfetori F. Abdewi, Tariq Alwuheeshi, "Testing of mechanical properties of composite materials made of almond shells fiber", *3rd International Conference on Key Enabling Technologies (KEYTECH 2023)*, 28th – 30th August, Istanbul, Turky, 2023.
- 13-Tariq A Alwuheeshi, Elfetori F. Abdewi, "Investigation of mechanical properties and workability of composite materials made of almond fiber", 1<sup>st</sup> International Conference on Engineering Applications (ICEA 2024), 15th – 17th October, Tripoli, Libya, 2024.

## **SCIENTIFIC ACTIVITIES:**

- Member of the International Energy Foundation, membership (IEF) Membership No. 735.
- Member of the American Society of Mechanical Engineering (ASME), Membership No. 006483226.
- Member of the scientific committee of Engineering Academy Tajoura, since October 2008 to date.
- Reviewer for 2011 4th IEEE International Conference on Computer Science and Information Technology (IEEE ICCSIT 2011).
- Reviewer for the Journal of Industrial Research issued by Center of Industrial Research, Tajoura, Tripoli Libya.
- Appointed as external examiner for faculty of engineering, University of Tripoli since September 22, 2015 Code No. 24 1984 KH
- Member of ARID Platform "the first Electronic Platform gathering of scientists, experts and researchers Arabic speakers" member ship No. 0001-2098.
- Appointed as external examiner for Al Asmarya Islamic University Zliten since August 23, 2017 Code No. JS 3904
- Member of the Scientific Committee and Head of the Mechanical Engineering Track of the First International Conference on Engineering Applications (ICEA 2024).

#### **SUPERVISION:**

#### **MSc Research**

- Fathee Asahlee. Libyan Academy of Postgraduate Studies, Tripoli Libya, "EXPERIMENTAL TESTING OF COMPOSITE MATERIALS AS AN ENERGY ABSORBER FOR CRASHWRTHNESS" (Graduated January, 2013).
- Khaled Albakory. Libyan Academy of Postgraduate Studies, Tripoli Libya, " EFFECT OF CORRUGATION GEOMETRY AND SHAPE ON ENERGY ABSORBTION OF COMPOSITE PLATE SUBJECTED TO COMPRISON LOAD" (Graduated April, 2014).
- 3. Muamer Spiga. Libyan Academy of Postgraduate Studies, Tripoli Libya, *"FINITE ELEMENT MODELING AND OPTIMIZATION OF BOILER DESIGN"* (**Graduated** July, 2014).
- 4. Wesam Esharif. Libyan Academy of Postgraduate Studies, Tripoli Libya, "PRELIMINARY PIPING DESIGN FOR AN OIL PLANT" (Graduated November, 2014).
- Ashraf Alalem. Libyan Academy of Postgraduate Studies, Tripoli Libya, QUALITY CONTROL SYSTEM OF LIBYAN PRODUCTS "CEMENT INDUSTRY AS A CASE STUDY" (Graduated December, 2014).
- Hesham Muhamed. Libyan Academy of Postgraduate Studies, Tripoli Libya, "TESTING AND INSPECTION OF SOME LOCAL PRIVATE SECTOR FACTORIES ACCORDING TO INTERNATIONAL STANDRD OF QUALITY SYSTEM " (Graduated December, 2014).
- Mohamed Alhamrony. Libyan Academy of Postgraduate Studies, Tripoli Libya, "TESTING OF MECHANICAL PROPERTIES OF REINFORCING STEEL RODS PRODUCED BY ZLITEN STEEL FACTORY" (Graduated May, 2016).
- Ibraheem Gazee, Libyan Academy of Postgraduate Studies, Tripoli Libya, "EXPERIMENTAL TESTING OF THERMAL CONDUCTIVITY FOR ADVANCED MATERIALS, METALIC AND NON METALIC MATERIALS" (Graduated July, 2016).
- Mansour Algathban. Libyan Academy of Postgraduate Studies, Tripoli Libya, "SIMULATION OF IMPACT TEST AND ENERGY ABSORPTION PERFORMANCE OF DIFFERENT GEOMETRICAL SHAPES OF COMPOSITE MATERIAL" (Graduated December, 2016).
- Abd-Arahman Dardor. Libyan Academy of Postgraduate Studies, Tripoli Libya, "TESTING OF MECHANICAL PROPERTIES OF STEEL RODS PRODUCED BY SEEDY AL-SAIH FACTORY FOR REINFORCED STEEL" (Graduated July, 2017).

- Abo-Zaid Muhamed. Libyan Academy of Postgraduate Studies, Tripoli Libya, "RESPONSE OF CORRUGATED COMPOSITE STRUCTURE SUBJECTED TO DYNAMIC CRUSHING LOAD" (Graduated August, 2017).
- Nidhal Al-Meraash. Libyan Academy of Postgraduate Studies, Tripoli Libya, "USING CAD SYSTEMS FOR MODELLING A NEW WINDING MACHINE USED FOR PRODUCING COMPLEX CIRCULAR SHAPES " (Graduated September, 2019).
- Muhamed Zwaeed. Libyan Academy of Postgraduate Studies, Tripoli Libya, "STUDYING OF INDUSTRIAL SAFETY IN LIBYAN PRIVATE SECTOR FACTORIES" (Graduated March, 2022).
- 14. Tariq Abd Anabee Alwheshee. Libyan Academy of Postgraduate Studies, Tripoli Libya, "TESTING OF MECHANICAL PROPERTIES AND WORKABILITY OF COMPOSITE MATERIAL MADE OF LIBYAN NATURAL FIBER" (Graduated June 2022).
- Essam Al-Tarhonee. Libyan Academy of Postgraduate Studies, Tripoli Libya, "INVESTIGATION OF MECHANICAL PROPERTIES FOR LIBYAN NATURAL FIBER" (Graduated July 2022).
- 16. Abdul Gader Muftah Meeteq. Libyan Academy of Postgraduate Studies, Tripoli Libya, "DESIGN AN INTELLIGENT SYSTEM FOR MANUFACTURING PROCESS SELECTION" (Graduated March 2023).
- 17. Abdul Rahem Kreedan. Libyan Academy of Postgraduate Studies, Tripoli Libya, "DESIGN AND TESTING OF JOINTS IN COMPOSITE MATERIALS" (Research under progress).
- Samer AbdulHafid Ashnaebly. Libyan Academy of Postgraduate Studies, Tripoli Libya, "DESIGN OF COMPUTER BASED INTELLIGENT SYSTEM FOR MANUFACTURING PROCESSES" (Research under progress).
- 19. Abdelfattah Ibrahim Alariefi. Libyan Academy of Postgraduate Studies, Tripoli Libya, " *THE IMPACT OF APPLYING LEAN MANUFACTURING TOOLS ON WASTE REDUCTION OF ANOKHBA FACTORY FOR PLASTIC BAGS* " (Research under progress).
- 20. AbdulRahman Muhmss. Libyan Academy of Postgraduate Studies, Tripoli Libya, "STUDYING THE EFFECT OF LAYER SEQUENCE ON SYNTHETIC AND NATURAL FIBER HYBRID COMPOSITES" (Research under progress).
- 21. Salaheddin Massoud .Y.Elmrabet. Libyan Academy of Postgraduate Studies, Tripoli Libya, "THE INFLUENCE OF CUTTING MILLING PARAMETERS AND TOOL PATH STRATEGIES ON SURFACE QUALITY IN MOLD STEEL MACHINING" (Research under progress).

22. Ayman Yoseef Albelazee. Libyan Academy of Postgraduate Studies, Tripoli Libya, "TESTING THE EFFECT OF LEAN MANUFACTURING TOOLS ON THE PRODUCTIVITY OF AL-ZAWIA FACTORY FOR ENGINE OILS" (Research under progress).

#### **BSc Research**

- Makhzoom Alameen, Engineering Academy Tajoura, Libya "TESTING OF PHYSICAL AND MECHANICAL PROPERTIES OF LIBYAN NATURAL FIBER" (Graduated October, 2014).
- Husam Muhamed, Engineering Academy Tajoura, Libya "TESTING OF PHYSICAL AND MECHANICAL PROPERTIES OF LIBYAN NATURAL FIBER" (Graduated October, 2014).

## **EXAMINER:**

Appointed as examiner for the following *MSc Researches*:

- 1- Abdusallam Radan Dalef, *QUALITY ENGINEERING USING ROBUST DESIGN IN GALVANIZING PARAMETERS DESIGN IN LOCAL INDUSTRY*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2011.
- 2- Mohamed Aead Adhebsh, ANALYTICAL STUDY OF FLAT PLATE SOLAR COLLECTORS USING DIFFERENT ABSORBER PLATE MATERIALS, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2013.
- 3- Esmail Mohamed Alatersh, *STUDY OF MECHANICAL PROPERTIES OF COLD COMPACTION (CU – CUO, COPPER – COPPER OXIDE) COMPOSITE POWDERS,* Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2013.
- 4- Abdulhadi Ahmed, *TRANSIT PERFORMANCE OF MICRO TURBO SHAFT BASED ENERGY SYSTEM*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2013.
- 5- Yala Salem Alhaj, *DEVELOPMENT OF POWDER METALLURGY (ALUMINUM AND SILICON CARBIDE) BY COLD COMPACTION TECHNIQUE*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2013.
- 6- Omar Ali Almargnee, *DESIGN AND MANUFACTURING OF COMPOSITE WIND TURBINE BLADE*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2016.
- 7- Adel Muhamed Ashawesh, THE EFFECT OF SURFACE FINISHING PROCESSES ON WEAR RESISTANCE OF AISI 1035 CARBON STEEL, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2016.
- 8- Omar Attaher Alasta, *THE EFFECT OF WELDING PARAMETERS ON PLATE MADE FROM MILD STEEL*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2016.
- 9- Ahmed Salem Almalool, *MODELING OF HYDRO-DYNAMIC PRESSURE IN A COMPLEX GEOMETRY COATING UNIT*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2017.

- 10-Abdulmawla Moamer Alfetory, *DETERMINATION OF FACTORS AND THEIR EFFECT ON THE QUALITY OF ADVANCED WELDING TECHNOLOGY (EBW).* Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2017.
- 11-Khaled Abdulwahab Aljaly, *IMPROVING ENGINEERING PERFORMANCE OF AIRCRAFT MAINTENANCE*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2017.
- 12- Khalifa Mohamed Ashanta, *HEAT TREATMENT OF LOW CARBON STEEL St 37*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2017.
- 13-Salah-Addeen Salem Essa, OPTIMIZATION OF CUTTING PARAMETERS FOR REMOVAL RATE AND SURFACE ROUGHNESS OF MEDIUM CARBON STEEL C-45 IN CNC TURNING MACHINING USING TAGUCHI METHOD, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2017.
- 14- Mohamed Omar Abduljaleel, ANALYSIS OF FATIGUE BEHAVIOUR ON MEDIUM CARBON STEEL FOR DIFFERENT HEAT TREATMENT PROCESS, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2017.
- 15-Mohamed Arhomah abokhress, *INVESTEGATIONS ON THE FAILURE OF STAINLESS STEEL 316 WELDMENTS IN SEA WATER DESALINATION PLANTS (WEST TRIPOLI)*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2018.
- 16- Hussam Almabruk Anaylee, *EFFECT OF WELDING METHODS ON CARBON STEEL SHEET*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2018.
- 17- Yoness Mousa Alfasy, METALLURGICAL STUDIES FOR WELDED JOINT OF MISURATE AND IMPORTED LOW CARBON STEEL USED IN BUS MANUFACTURING COMPANY, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2018.
- 18-Osama Ali Jomah, A NUMERICAL SOLUTION FOR PLASTO- HYDRODYNAMIC DIE-LESS DRAWING OF A CONTINUUM THROUGH A SIMPLE TAPERED UNIT, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2019.
- 19-Esmail Alferjany Ashanta, *THE EFFECT OF MACHINING PARAMETERS ON SURFACE ROUGHNESS AND TOOL WEAR FOR ALUMINUM ALLOY 5052*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2019.
- 20- Mohammed Miftah Atbeeqah, *MODELING OF A COMPLEX RHEOMETRIC UNIT* FOR DETERMINATION OF PRESSURE DEPENDENT VISCOSITY, THEORETICAL PREDICTIONS, Department of Marine and Offshore Engineering, Faculty of Engineering, University of Tripoli, Libya, 2020.
- 21-Nuri Mansor Alawaeeb, THE EFFECTS OF DIFFERENT CARBURIZATION TEMPERATURE AND TIME ON THE MECHANICAL PROPERTIES OF LOW CARBON STEEL AISI 1025, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2021.

- 22-Esmail Ebrahem Abozaid, EVALUATION OF VIBRATION MONITORING TECHNOLOGY ON FD FAN IN OIL INDUSTRY, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2021.
- 23-Yoness Muftah Alsaeeh, STUDYING THE WELDING HEAT-AFFECTED ZON OF AUSTEMPERED DUCTILE IRON ALLOYED WITH 1.6 % NI, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2021.
- 24- Abdul Ghanee Alsadeq Ramadan, *STUDY THE EFFECTS OF TURNING ON SURFACE CHARACTERISTICS AND TOOL LIFE BY USING DIE TOOL STEEL*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2021.
- 25-Faisal Omar Salem, *OPTIMIZING WELDING PARAMETERS FOR STEAM TRANSPORT PIPES MADE OF STAINLESS STEEL 316 IN DESALINATION PLANTS*, Libyan Academy for Postgraduate Studies, Tripoli, Libya, 2021.

# **TEACHING EXPERIENCE:**

## **PhD Courses:**

Libyan Academy for Postgraduate Studies, Libya, (since Oct., 2022 to date)

- MID 6241 Lean Manufacturing
- MID 7521 Manufacturing of Composites

#### **MSc Courses:**

Libyan Academy for Postgraduate Studies, Libya, (since 2015 to date)

- MEI 601 Manufacturing Processes
- MEI 602 Modern Metal Cutting
- MEI 603 Welding and Casting Technology
- MEI 605 Application of CAD/CAM
- MEI 610 CNC Machining
- MEI 685 Composite Materials Technology

#### **BSc Courses:**

#### Engineering Academy Tajoura, Libya, (Semester 1&2 1996-2003 and 2007-2014)

- MED 213 Workshop Technology
- MED 224 Production Engineering I
- MED 314 Production Engineering II
- MED 424 Engineering Economy and Management
- MED 323 Mechanical lab

- MED 421 Composite Materials
- GSD 121 Mathematics I
- GSD 211 Mathematics II
- MED 121 Engineering Mechanics I (Statics)
- MED 211 Engineering Mechanics-II (Dynamics)

#### University of Tripoli, Libya (Semester, Libya, 1&2 2013 Part time)

- GE 129 Workshop Technology

#### Alasmarya Isalmic University, Zliten, Libya, (Semester 1&2 2012-2015 Part time)

- MM 554 Composite Materials
- MR 142 Mathematics

## **RESEARCH PROJECTS:**

- 1- Testing of composite materials as an energy absorber for crashworthiness.
- 2- Quality control system of Libyan products "cement industry as a case study".
- 3- Testing and inspection of some local private sector factories according to international standard of quality system.
- 4- Testing of thermal conductivity for advanced materials, metallic and non metallic materials.
- 5- Finite element modeling and optimization.
- 6- Piping Design for an Oil Plant.
- 7- Design and manufacturing of a novel machine used for producing complex geometry of composite tubes.
- 8- Testing of physical and mechanical properties of Libyan natural fiber
- 9- Testing of mechanical properties of reinforced steels and nonferrous alloys produced by local factories (Zliten Steel Factory and Seedi Asaih Steel Factory).
- 10- Energy absorption characteristics of radially corrugated composite shells under different quasi-static loading conditions.

#### **SEMINARS:**

- 1- Using the Finite Element Method as a Power Full Technique, speaker Elfetori Faraj Abdewi, held on 24 February 2003 at Engineering Academy Tajoura.
- 2- Invited for a seminar under title: Moldflow Plastics Advisers, organized by Cybron technology Sdn, Bhd Malaysia, 15<sup>th</sup> April 2004, venue: Crystal Crown Hotel, PJ Kuala Lumpur Malaysia.
- 3- Finite Element Method concept and applications, speaker: Elfetori Faraj Abdewi, held on 17 March 2003 at Research and Development Center, Tripoli, Libya.
- 4- Composite Materials and its applications in real life, speaker Elfetori Faraj Abdewi, held on 30 March 2009 at Engineering Academy Tajoura.
- 5- FEM Intensive course to group of post graduate students, Postgraduate Studies Institute Tripoli Libya, 5 26 June, 2012.
- 6- Invited for a workshop organized by National Center for Quality Assurance and Accreditation of Educational and Training Institutes in Tripoli, Libya 31, December. 2012. Under the title of "review and evaluation of Quality Assurance and Accreditation of Educational and Training Institutes".

## **HONORS:**

- 1- Patent application registered in Malaysian Patent Organization on 9 August 2006, Patent title: "Apparatus for Producing Corrugated Composite Structures and Method for Making the Same" PI 20063841 has been granted on 31 May 2017 and assigned with the patent number MY-162281-A. Inventors: *Elfetori Faraj Abdewi*, Shamsuddin Sulaiman, Abdel Magid S. Hamouda, Elsadig Mahdi Ahmad Saad.
- 2- Awarded **Silver Medal** in UPM Invention and Research Exhibition, "Machine for fabrication of complex composite corrugated tubes", 2005.
- 3- Awarded certificate from Texas A&M University College Station, Texas, USA for attending workshop on 'Composite Materials and Structures (CMS-04)' on 20<sup>th</sup> December 2004, at Faculty of Engineering, University Putra Malaysia, given and signed by Professor J. N. Reddy.
- 4- Awarded certificate from FEA Ltd Forge House, UK for attending 'LUSAS Standard Training' on 9<sup>th</sup> June 1999, at Astasoft Sdn Bhd, Technology Park Malaysia, given and signed by Wong Shih Shu.
- 5- Awarded **Plate of Scientific Distinguish,** from Libyan Union of Libyan Students in Malaysia, 2008 Kuala Lumpur Malaysia.
- 6- A patent has been registered in Libyan Industrial Research Center on 22 August 2010, Patent title: "New machine for producing composite cylinders with multi direction complex shapes". Patent Number: (4065 / 2010). Inventors: *Elfetori Faraj Abdewi*,
- 7- On 9 May 2016 appointed as distinguished scientists and awarded distinction medal for entrepreneur researcher from ARID "the first Electronic Platform gathering of scientists, experts and researchers Arabic speakers".

- 8- Grant Patent No. 4065/2010, entitled "Machine for Manufacturing Composite Material Cylinder and Tubes with Complex Shapes", Director General of the Industrial Research Center, No. 35 / 2021 Tripoli Libya, Inventor: *Elfetori Faraj Abdewi*, 2021.
- 9- Member of a specialized technical committee for preparing, updating and adopting Libyan Standards in the field of Metallurgical Industries, since 10 May 2022 to date, Based on the decision of the General Manager of Libyan National Center for Standardization and Metrology (LNCSM) No. 11/2022 issued on 10, May 2022.