



## السيرة الذاتية

### المعلومات الشخصية

اسم عضو هيئة التدريس: **د. مالك علي عبده عنافرة**

الرتبة الأكاديمية: **استاذ مشارك**

الكلية: **كلية الهندسة**

القسم:

الجنسية: **أردني**

العنوان:

رقم الهاتف: **0790851286**

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### المؤهلات العلمية

الدرجات العلمية مع المجالات والمؤسسة والتاريخ:

- بكالوريوس في برنامج علم المواد الجامعة جامعة بغداد التكنولوجية السنة 2000
- ماجستير في برنامج هندسة المواد الجامعة ساينس ماليزيا السنة 2007
- عنوان الرسالة/ المشروع

### **PROPERTIES AND CORROSION BEHAVIOUR OF BRONZE- 40%W AND BRASS- 40%W COMPOSITE USED IN FISHING TACKLES APPLICATION**

- دكتوراه في برنامج هندسة المواد الجامعة ساينس ماليزيا السنة 2011
- عنوان الأطروحة:

### **“Carbothermal Synthesis of Nanoparticles Titanium Carbide by Mechanical Activation”**

### ACADEMIC EXPERIENCE

- Duration: **(May 2021 – Present).**
- University: **Amman Arab University,**
- Academic Rank: **Head of Aircraft Maintenance Department**
- Date the rank was granted:
- The body granting the rank:
- College: **Aircraft Maintenance Department**
- Country: **Amman, Jordan**

- Duration: **(February 2021 – Present).**
- University: **Amman Arab University,**
- Academic Rank: **Associate Professor**
- Date the rank was granted:
- The body granting the rank:
- College: **Aircraft Maintenance Department**
- Country: **Amman, Jordan**

- Duration: **(February 2018 – February 2021).**
- University: **University of Tabuk,**
- Academic Rank: **Associate Professor**
- Date the rank was granted: **2018**
- The body granting the rank: **2021**

- College: **Department of Mechanical Engineering**
- Country: **Tabuk, Saudi Arabia**

- Duration: **(September 2012- February 2018).**
- University: **University of Tabuk**
- Academic Rank: **Assistant Professor**
- Date the rank was granted:
- The body granting the rank:
- College: **Department of Mechanical Engineering**
- Country: **Saudi Arabia**

- Duration: **(March 2011- August 2012).**
- University: **Multimedia University (MMU),**
- Academic Rank: **Lecturer**
- Date the rank was granted:
- The body granting the rank:
- College:
- Country: **Melaka, Malaysia**

- Duration: **(July 2007 to April 2010).**
- University: **University Sains Malaysia (USM),**
- Academic Rank: **Teaching and Research Assistant**
- Date the rank was granted:
- The body granting the rank:
- College:
- Country: **Penang, Malaysia**

- Duration: **(August 2001- May 2006).**
- Institution: **Ministry of Education of Jordan**
- Academic Rank: **Teaching and Research Assistant**
- Date the rank was granted:
- The body granting the rank:
- College:
- Country: **Jordan**

## NON-ACADEMIC EXPERIENCE

- Duration:
- Institution:
- Department:
- Country:

## CERTIFICATIONS OR PROFESSIONAL REGISTRATIONS

- ABET Accreditation, which was held on 24- 25 December 2016, organized by University of Tabuk College of Engineering.
- Engineering Professional Skills Assessment (EPSA), which was held on 30-31 March, 2016, organized by University of Tabuk College of Engineering.
- Basic Milling and Lathe Operation which was held on 16-18 March,2011, organized by Multimedia University Faculty of Engineering and technology.
- Overview of synthesis, fabrication& characterization of materials with theory of inventive problem solving (TRIZ) which was held on 7-8<sup>th</sup>October2009 organized by school of materials engineering.
- (Interpersonal skills) which was held on 11August2009 organized by school of materials engineering.

- (Advanced materials characterization techniques) this was held on 6-7<sup>th</sup> August 2009 organized by school of materials engineering.
- (Stress Management) held on 25 November 2008 organized by school of Civil engineering.
- (Electron Backscatter Diffraction in scanning Electron Microscope) which was held on 18-19 June 2008 organized by school of materials engineering.
- (Auto lab Electrochemical Impedance Spectroscopy) which was held on 28 May 2008 organized by school of materials engineering.
- Short course on (Production of high-quality steels through secondary process/refining) which was held on 12-13 May 2008 organized by school of materials engineering.
- (Fundamental on Thermal Analysis) which was held on 30 April 2008 organized by school of materials engineering.
- (Occupational safety and health) which was held on 16 February 2008.
- The international computer-driving license (ICDL) from 20/7/2005 to 20/12/2005. serial number UN040133665.
- German language course from 27/11/2000 to 31/12/2000 organized by AL Mustansiriya Institute.

### **CURRENT MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

- American Society of Mechanical Engineers (ASME).
- Jordan Engineers Association (JEA).

### **HONORS AND AWARDS**

- Best researcher award for the Contribution and Honourable Achievement in Innovative Research.
- Sanggar Sanjung, (Hall of Fame) Award 2009, Universiti Sains Malaysia, Publication Category

### SERVICE ACTIVITIES (FUNDING)

- Financial support from the Deanship of Scientific Research (DSR), University of Tabuk, Tabuk, Saudi Arabia, under grant no.S-1438-0254.
- Financial support from the Deanship of Scientific Research (DSR), University of Tabuk, Tabuk, Saudi Arabia, under grant no.S-1437-0033.
- Financial support from the Deanship of Scientific Research (DSR), University of Tabuk, Tabuk, Saudi Arabia, under grant no.S-1436-0019.
- Financial support from the Deanship of Scientific Research (DSR), University of Tabuk, Tabuk, Saudi Arabia, under grant no.S-1435-0018.
- Financial support from Fundamental Research Grant Scheme (FRGS), Malaysia, and Development of solar assisted chemical heat pump dryer for agriculture produces.
- Financial support from Telecom Malaysia. Development of Photovoltaic/thermal solar collector (PV/T) system.
- Financial support from Fundamental Research Grant Scheme (FRGS), Malaysia, Grant No. 203.PBAHAN.6071127.

### THE MOST IMPORTANT PUBLICATIONS IN LAST FIVE YEARS

- 1- Mohammad Ismail , Awni H. Alkhazaleh , Ala' Sirhan c, **Malek Ali** , Abdullah Masoud Ali e, Jafar Masri, Development and characterisation of myristic acid-paraffin wax, silica fume and zinc oxide cementitious composites for thermal control in buildings, Case Studies in Thermal Engineering, Volume 63, 2024.
- 2- **Malek Ali** , Applications of nanotechnology, and Nano production techniques, Open Engineering, <https://doi.org/10.1515/eng-2024>, 2024.
- 3- **Bilal A. Jarrah, Dan Neculescu, Malek Ali1, Anwar H. Al Assaf**, Two-Layer Thin Plate Temperature Control, Jordan Journal of Mechanical and Industrial Engineering, Volume 81 , Number 3, 2024.
- 4- **Malek Ali** , Thermosetting polymer composites: Manufacturing and properties study, Reviews On Advanced Materials Science, Volume 62/ Issue 1, 2023.
- 5- **Malek Ali**, Abderraouf Gherissi and Yousef Altaharwah, Experimental and simulation study on a rooftop vertical-axis wind turbine, Open Engineering, Volume 13/ Issue 1, 2023.
- 6- **Malek Ali**, Epoxy–Date Palm Fiber Composites: Study on Manufacturing and Properties, International Journal of Polymer Science, Volume/ 2023, Article ID 5670293, 2023.

- 7- **Malek Ali**, Anwar H. Al-Assaf, and Mohammad Salah, Date Palm Fiber-Reinforced Recycled Polymer Composites: Synthesis and Characterization, *Advances in Polymer Technology*, Volume 2022 / Article ID 7957456. 2022.
- 8- Mohammad Ismail, Awni H. Alkhazaleh, Jafar Masri, Abdullah Masoud Ali, **Malek Ali**, Experimental and Numerical Analysis of Paraffin Waxes during Solidification inside Spherical Capsules, *Thermal Science and Engineering Progress*, Volume 26, 2021.
- 9- **Malek Ali\***, Abderraouf Gheriss, Anwar H. Al-Assaf and Mohammad Ismail, Review the effects of ceramics sand particle on most casting defects, *Journal of Ceramic Processing Research*, 23(3): 257-262, 2021, (2021).
- 10- **Malek Ali**, Review of Stir Casting Technique and Technical Challenges for Ceramic Reinforcement Particulate and Aluminium Matrix Composite, *Journal of Silicate Based and Composite Materials*, 72, No. 6, pp198-204, (2020).
- 11- Abderraouf GHERISSI, **Malek Ali**, Superficial hardening improvement of nano and microcomposite Al /TiC. *Journal of Silicate Based and Composite Materials*, Vol. 72, No. 1, 25–29, (2019).
- 12- **Malek Ali**, Abderraouf GHERISSI, Synthesis and characterization of Al-SiO<sub>2</sub> composites. *Journal of Ceramic Processing Research* 20(3):259-263, (2019).
- 13- **Malek Ali**, Abderraouf GHERISSI, Synthesis and Characterization of the Composite Material PVA/Chitosan/5% Sorbitol with Different Ratio of Chitosan. *International Journal of Mechanical & Mechatronics Engineering*, Vol:17 No:02, (2017).
- 14- **Malek Ali**, Synthesis and Study the Effect of HNTs on Composite Material. *International Journal of Materials and Metallurgical Engineering* Vol:10, No:2, (2016).
- 15- **Malek Ali**, Synthesis and Characterization of Epoxy Matrix Composites Reinforced With Various Ratios of TiC JJ. *M.I. Eng.*, Vol. 10 Number 4, pp 231-237, (2016).

- 16- **Malek Ali**, Balakumeren Suppiah, Zaid Muayaduldeen, Preparation and Corrosion Behavior of Bronze -40%w Composite. J. M.I. Eng., Vol. 10 Number 2, pp141-147, (2016).
- 17- **Malek Ali**, and Zaid Muayaduldeen, Effect of Milling Duration on powder characterization of (TiO<sub>2</sub>, and graphite). Journal of Ceramic Processing Research, Vol. 16, No. 5, pp. 1~5, (2015).
- 18- **Malek Ali**, Samer falih, Synthesis and Characterization of Aluminum Composites Materials Reinforced with TiC Nano- Particles. Jordan Journal of Mechanical and Industrial Engineering, Volu. 8No. 5, pp. 244-250, , (2014).
- 19- **Malek Ali**, Transformation and powder Characteristics of TiO<sub>2</sub> during high energy milling. Journal of Ceramic Processing Research, Vol15, No. 5, pp. 290~293, (2014).
- 20- **Malek Ali**, Ali Samer Muhsan, Projjal Basu, and Faiz Ahmad<sup>1</sup> Developments of Al-12Si Alloys by Reinforcing TiC and TiN Particles. Journal of Engineering Mechanics 10.1061/(ASCE)EM.1943-7889.0000743, (2013).
- 21- **Malek Ali**, Projjal, and Marwa Liwa, Effect of Mo-Si molar ratio on the Synthesis of MoSi<sub>2</sub> through Mechanical Alloying. Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry. DOI:10.1080/15533174.2012.762783, (2013).
- 22- Souiyah Miloud, **Malek Ali**, Finite Element Model of Crack Growth under Mixed Mode Loading. International Journal of Materials Engineering, Vol.2(5), pp 67-74, (2012).
- 23- Basem Abu Ziend, **Malek Ali**, M. I. Fadhel, Souiyah M., Design and develop a nondestructive infrared spectroscopy instrument for assessment of mango (mangifera indica) quality. Journal of Food Science and Technology, DOI 10.1007/s13197-012-0880-z, (2012).
- 24- **Malek Ali**, Marwa Liwa, Modification of parameters in mechanochemical synthesis to obtain <math>\alpha</math>- and <math>\beta</math>-molybdenum disilicide. Advanced Powder Technology Vol. 24, pp183–189, (2012).
- 25- **Malek Ali**, Projjal Basu, Marwa liwa, M. I. Fadhel, Souiyah M., and Basem Abu Ziend Comparison between the properties of Al-TiC and Al (TiC+Fe<sub>3</sub>C+Fe<sub>2</sub>Ti+Fe) composites. Arabian Journal for Science and

Engineering DOI: 10.1007/s13369-012- 0480-2, (2012).

- 26- **Malek Ali**, and Projjal Basu, Development of an Alternate Route Based on Mechanochemistry Towards the Synthesis of Nanostructured TiC. ISIJ International Vol.51, No.4, (2011).
- 27- **MalekAli**, and Projjal Basu, Mechanochemical Synthesis of Nanostructured Titanium Carbide from TiO<sub>2</sub> Powders. J. Alloys and Compounds. Vol. 500, pp 220–223, (2010).
- 28- **Malek Ali**, and Projjal Basu , Mechanochemical synthesis of nanostructured titanium carbide from industrial Fe–Ti. J. Alloys and Compounds, Vol. 491, pp- 581–583, (2010).

#### INSTITUTIONAL PROFESSIONAL DEVELOPMENT ACTIVITIES IN THE LAST FIVE YEARS

- 1- Mohammad Salah, **Malek Ali**, and Sarah Nabhan, Robust Nonlinear Control for Automotive Active Suspension Systems, Mechatronics and Control Engineering, 2022 Australian & New Zealand Control Conference (ANZCC) 24-25 November 2022. Gold Coast, Australia.
- 2- H. Al-Assaf , Esra Ali, **Malek Ali**, Developing the interactive digital three-dimensional academic curriculum: a case study of augmented virtual reality XR, The Second International Scientific Conference of the Deanship of Scientific Research and Graduate Studies at Amman Arab University, 2021.
- 3- **Malek Ali** (2016)Synthesis and Study the Effect of HNTs on PVA/Chitosan Composite Material, 18th International Conference on Composite Engineering and Technology, Dubai, UAE 25-26 February 2016.
- 4- Basem Abu Izneid, **Malek Ali** Ibrahim sukar, and Miloud Souiyah, Development of Wireless Bluetooth Heart Rate Remote Monitoring System, IET International Conference on Wireless Communications and Applications ICWCA Kuala Lumpur, Malaysia, 8, (2012)
- 5- **Malek Ali**, M. I. Fadhel, M.A. Alghoul and K. Sopian, Developments of Al-12Si Alloys by Reinforcing TiN Particles, 6th WSEAS International Conference on Renewable EnergySources (RES '12) Portugal, July 1-3, 2012,
- 6- **Malek Ali**, M.I. Fadhel, M.A. Alghoul and K. Sopian, Drying Kinetics of Chilli Pepper in a force Convection Indirect Solar Drying, 6th WSEAS International Conference on Renewable Energy Sources (RES '12) Portugal, July 1-3, 2012,

- 7- Basem Abu Izneid , Miloud Souiyah., M.I.Fadhel, and **Malek Ali**, Remote Assessment of Fruit quality Using impedance Spectrometry and Fiber Optic Technique. The 3rd International Biotechnology and Biodiversity Conference & Exhibition ,JOHOR, Malaysia, Jun 06- 09, 2012.
  - 8- **Malek Ali**, M. I. Fadhel, M. A. Alghoul and K. Sopian, Synthesis and Characterization of Aluminum Matrix Composites Reinforced with Various Ratio of TiC for Light Devices. International Conference on Environment, Economics, Energy, Devices, Systems, Communications, Computers, Mathematics (IAASAT), Saint Malo & Mont Saint- Michel, France, April 2-4, 2012.
  - 9- **Malek Ali**, Projjal Basu and Z. Hussain, Effects of process parameters on the mechanochemical synthesis of titanium carbide from alternative sources of raw materials. 4th International Conference on Recent Advances in Materials, Minerals & Environment and 2th Asian Symposium on Materials & Processing (RAMM&ASMP 09). 1<sup>st</sup> -3<sup>th</sup> June 2009. Penang, Malaysia.
  - 10- **Malek Ali**, and Projjal Basu, Synthesis of nanostructured titanium carbide from titanium oxide and ferro-titanium through mechanical activation. VI International Conference on Mechanochemistry and Mechanical Alloying (INCOME2008), 1<sup>st</sup>-4<sup>th</sup> December 2008, Jamshedpur, India.
  - 11- **Malek Ali**, Projjal Basu and Z. Hussain, Synthesis of titanium carbide from titanium oxide through high energy ball milling. 6th International Materials Technology Conference and Exhibition (IMTCE 2008). 24<sup>th</sup>-27<sup>th</sup> August 2008. Kuala Lumpur, Malaysia.
- Malek Ali**. Replacement of Pb in finishing applications by Cu-Sn-W Composite Prepared by Mechanical Alloying. International Conference and Exhibition on Composite Materials and Nano-structure (IC2MS'08), 5<sup>th</sup>-7<sup>th</sup> August, 2008, legacy Hotel, Melaka

#### RESEARCH LINK (Scopus and Google Scholar)

- Google scholar: <https://scholar.google.com/citations?hl=ar&user=68EVMIQAAAAJ>
- Scopus: <https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=57218506484&zone=>
- Orcid : <https://orcid.org/0000-0002-3543-7005?lang=en>
- Research gate: <https://www.researchgate.net/profile/Malek-Ali-2>



دائرة الموارد البشرية  
**Human Resources Department**

**LANGUAGES**

- Arabic
- English