# **Curriculum Vitae**

## **Personal Information**

Name: Hussein Alaa Jaber Mustafa Al-Tabtabaie

Date & Place of Birth: 15/11/1984 (Baghdad, Iraq)

Degree: PhD in Materials Engineering

Scientific Title: Professor

Work Location: Department of Materials Engineering/

**University of Technology-Iraq** 

**General and Precise** Materials Engineering/ Ceramic Materials

**Specialty:** 

Marital Status: Married

Languages: Arabic (Native) and English

Residence Address: Baghdad - Al-Saydia Phone Number: 00964-7708041318

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## **Academic Achievement**

Degree	Specialization	University	Year
B.Sc.	Materials Engineering	University of Technology- Iraq	(2005-2006) (The first student in the department during the four years)
M.Sc.	Materials Engineering	University of Technology- Iraq	2009 Thesis: "Preparation and Study of Some Factors Effecting on Some Physical and Mechanical Properties of Ceramic"
Ph.D.	Materials Engineering	University of Technology- Iraq	2013 Thesis: "Preparation and Characterization of Boron Carbide at Low Temperatures"

#### **Academic Titles and Grant Dates**

- 1- M. Engineer in 2006.
- 2- Assistant Teacher in 2009.
- 3- Teacher in 2013.
- 4- Assistant Professor in 2016.
- 5- Professor in 2023

## **Positions and Jobs**

- **1- 2008 2006:** m. Engineer, Materials Engineering Department/University of Technology.
- **2- 2009 -up to date:** Lecturer, Department of Materials Engineering/University of Technology.
- **3- 2014 2019:** Member of the examination committee for postgraduate studies in the Department of Materials Engineering.
- **4- 2014 2016:** Director of the Quality Assurance and University Performance Division in the Materials Engineering Department/University of Technology.
- **5- 2019 2023:** Head of the Ceramic and Building Materials Engineering Branch in the Materials Engineering Department/University of Technology.
- **6- 2019 2023:** Head of the Materials Engineering Department/Deputy at the University of Technology.

# **Academic and Scientific Experiences**

- Teaching the subject of **refractories**, fourth stage.
- Teaching **engineering and functional ceramic materials**, fourth stage.
- Teaching the subject of **powder technology**, fourth stage.
- Teaching the subject of **powder technology processes**, doctoral level.
- Teaching ceramic materials and manufacturing methods, master's degree.
- Teaching the subject of **refractories Lab.**, fourth stage.
- Teaching subject of **computer laboratory**, first stage,
- Teaching **engineering drawing**, first stage.
- Evaluating many international and local scientific researches in the field of materials engineering.
- Discussing many doctoral theses and master's theses in the field of materials engineering.

## **Conferences, Seminars and Training Courses**

- Participation in the first international scientific conference on materials engineering and laser applications.
- Participation in the scientific symposium of the Materials Engineering Department/University of Technology.
- Participation in the International Scientific Conference for the second and fourth sessions of Materials Science and Engineering/Malaysia.
- Participation in the workshop on the quality system and university performance evaluation in the Materials Engineering Department.
- Obtaining a computer proficiency certificate from the University of Technology.
- Obtaining the International Computer Proficiency Certificate (IC3) at the University of Baghdad.
- Participation in the computer teaching and learning methods course at the University of Technology Center for Continuing Education.
- Obtaining a certificate from the German company Knauf for rapid prefabricated construction (dry wall system).
- Participation in a training course on the quality system and academic accreditation within the American IREX organization program, which was held in Erbil/ Iraq.
- Obtaining a certificate from the Administrative Leadership Skills
   Development Course at the University of Technology Center for Continuing Education.

# **Participation in Committees**

- Chairman of the Quality Assurance and Performance Evaluation Committee in the Materials Engineering Department for three years.
- Member of the examination committee for postgraduate studies for six years.
- Member of the graduate studies documents audit committee.
- Member of the Scientific Promotions Committee in the Materials Engineering Department.
- Member of the comprehensive examination committee for doctoral students in the Materials Engineering Department.

- Member of the Scientific Committee of the Ceramic and Building Materials
   Engineering Branch in the Materials Engineering Department.
- Head of the Delisting Committee in the Materials Engineering Department.
- Chairman of the Voluntary Work and Donations Committee in the Materials Engineering Department.
- Chairman and member of many postgraduate student discussions (Master's and PhD).
- Chairman of the ministerial committee formed for the purpose of creating postgraduate studies (master's studies) in the Department of Materials Engineering/University of Diyala- Iraq.

## Some published scientific researches

- ❖ Mohamed H. AL-Taie, Fadhil A. Chyad and Hussein A. Jaber, "Effect of Zirconia Addition on Some Physical and Mechanical Properties of Porcelain", Eng. & Tech. Journal, Vol. 27, No. 11, 2009.
- ❖ Fadhil A. Chyad, Mohamed H. AL-Taie and Hussein A. Jaber, "Preparation and Studying Some Physical and Mechanical Properties of Porcelain with Using Feldspar Replacement", The Iraqi Journal For Mechanical and Material Engineering, Vol. 10, No. 3, 2010.
- ❖ Hussein Alaa Jaber and Sinan Salman Hamde, "Preparing and Studying the Effect of HA and ZrO₂ Addition on Fracture Strength of Dental Ceramic", Eng. & Tech. Journal, Vol. 28, No. 6, 2010.
- Fadhil A. Chyad, Mohamed H. AL-Taie, and Hussein A. Jaber, "Synthesis of B₄C/YTZP Composite Powder and Studying Effect of its Addition on Mechanical Properties of B₄C", Eng. & Tech. Journal, Vol. 32, Part (A), No. 5, 2014.
- ❖ Mohamed H. AL-Taie, Fadhil A. Chyad and Hussein A. Jaber, "An Experimental Investigation of B₄C Preparation from Boric Acid Polymeric Gel Precursors at Low Temperature", the Iraqi Journal for Mechanical and Material Engineering, Vol.14, No.4, 2014.
- Hussein AlaaJaber, "Synthesis of Mullite Powder from Aluminum Nitrate and Precipitated Silica using Sol-Gel Process", Eng. & Tech. Journal, Vol. 34, Part (A), No. 8, 2016.
- ♣ Hussein Alaa Jaber, "Fabrication of Carbon Nanotube Reinforced Al<sub>2</sub>O<sub>3</sub>/Cr<sub>2</sub>O<sub>3</sub> Nanocomposites by Coprecipitation Process", Al-Khwarizmi Engineering Journal, Vol. 12, No. 4, 2016.
- ❖ Hussein Alaa Jaber, "Effect of Glass Wool Addition on Some Properties of Cement Mortar", Eng. & Tech. Journal, Vol. 34, Part (A), No. 14, 2016.
- Hussein Alaa Jaber, "Study the Effect of Glass and Carbon Fibers on the Firebrick Properties", Eng. & Tech. Journal, Vol. 35, Part (A), No. 4, 2017.
- Ahmed M. Al-Ghaban, Hussein A. Jaber and Aya A. Shaher, "Investigation of Addition Different Fibers on the Performance of Cement Mortar", Eng. & Tech. Journal, Vol. 36, Part A, No. 9, 2018.

- ❖ Ahmed M. Al-Ghaban, Hussein A. Jaber and Aya A. Shaher, "A Comparative Investigation on Mechanical Properties of Various Fibers Reinforced Concrete", Eng. & Tech. Journal, Vol. 37, Part A, No. 1, 2019.
- Hussein Alaa Jaber, Rawnaq Salahuddin Mahdi and Ayad K. Hassan, "Influence of eggshell powder on the Portland cement mortar properties", Materials Today: Proceedings, Elsevier, Vol. 20, 2020.
- ❖ Aseel M. Abdullah, Hussein A. Jaber and Hanaa A. Al-Kaisy, "Impact Strength, Flexural Modulus and Wear Rate of PMMA Composites Reinforced by Eggshell Powders", Eng. & Tech. Journal, Vol. 38, Part A, No. 07, 2020.
- ♣ Huda Sattar Ali, Hussein Alaa Jaber and Saad B.H. Farid, "Investigation of fluorescent lamp glass waste as a fluxing agent in porcelain bodies", Materials Today: Proceedings, Elsevier, Vol. 21, 2021.
- ❖ Israa Z. Ahmed, Hussein A. Jaber and Shaymaa M. Salih, "Electrophoretic deposition used to prepare and analyze the microstructure of chitosan/hydroxyapatite nanocomposites", Eng. & Tech. Journal, Vol. 39, No. 11, 2021.
- ❖ Suha Q AL-Shahrabalee, Hussein Alaa Jaber, "The Impacts of Calcium Ions Substitution in Hydroxyapatite with Neodymium and Zinc on Biological Properties and Osteosarcoma Cells", Eng. & Tech. Journal, Vol. 40, No. 12, 2022.
- Suha Q AL-Shahrabalee, Hussein Alaa Jaber, "Investigation of the Nd-Ce-Mg-Zn/Substituted Hydroxyapatite Effect on Biological Properties and Osteosarcoma Cells", Journal of Renewable Materials, Elsevier, Vol. 11, No. 3, 2022.
- ❖ Nariman Hussein Mohammed, Shihab A. Zaidan, Hussein Alaa Jaber, "Studying Dieelectric Properties and Characterization of Glazw Procelian after Adding Micro PZT to The Porcelian Glaze Layer", Harbin Gongye Daxue Xuebao/Journal of Harbin Institute of Technology, Vol. 54 No. 4, 2022.
- Israa Zuhair Ahmed, Hussein Jaber, Shayma Salih, "Hydroxyapatite/Chitosan Coating By Electrophoretic Deposition on SS 316L For Biomedical Application", Egyptian Journal of Chemistry, Vol. 65, No. 132, 2022.
- Suha Q AL-Shahrabalee, Hussein Alaa Jaber, "Bioinorganic Preparation of Hydroxyapatite and Rare Earth Substituted Hydroxyapatite for Biomaterials Applications", Bioinorganic Chemistry and Applications, Hindawi, 2023.
- Suha Q AL-Shahrabalee, Hussein Alaa Jaber, "Investigation in Hydroxyapatite after Cationic Substitution with Neodymium and Magnesium", Journal of Population Therapeutics and Clinical Pharmacology, Vol. 30, No. 4, 2023.
- ❖ Israa Zuhair Ahmed, Hussein Alaa Jabber, Shaymaa M. Salih, "Electrophoretic Deposition and Characterization of Chitosan-Hydroxyapatite Nanocomposite Coatings", AIP Conf. Proc., Vol. 2457, No. 1, 2023.
- ❖ Abeer F Al-Attar, Hussein Alaa Jaber, "Statistical study of optimizing preparation new SOFC anode", IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA), 2023.
- Shaimaa A Naser, Rana A Anaee, Hussein A Jaber, "Deposition of GdSmTi Coating for Corrosion Control of SS 316L in Bio-Field", Eng. & Tech. Journal, Vol. 41, No. 6, 2023.
- ♣ Abeer Farouk Al-Attar, Hussein Alaa Jaber, Rana A Anaee, "Produce Solid Oxide Fuel Cell Anodes as (BaTiO₃)100-x-(MgO) x for Clean Energy", Results in Engineering, Vol. 19, 2023.

- ❖ Abeer F. Al-Attar, Hussein Alaa Jaber, Ammar Mousa Hasan, "Enhancement of Mechanical Properties in Glass-Fiber Woven Reinforced Hybrid Composites for Aerospace Applications: An Empirical Investigation", Revue des Composites et des Materiaux Avances, Vol. 33, Issue 6, pp. 347-355, 2023.
- ❖ Shaimaa Naser, Rana Anaee, Hussein A Jaber, "In Vitro and In Vivo Study for Behavior of Coated SS316 L with SmNiTi and GdNiTi by DC Sputtering", Chemistry Africa, Springer International Publishing, Vol. 7, pp. 1303–1310, 2024.
- Shaimaa A Naser, Rana A Anaee, Hussein A Jaber, "Gd-Ni-Ti coating to reduce corrosion of SS 316L for bioapplication", Advances in Materials and Processing Technologies, Taylor & Francis, pp. 1-12, 2024.
- Shaimaa A Naser, Rana A Anaee, Hussein A Jaber, Anees A Khadom, "Deposition of nickel-titanium coating on stainless steel 316L by direct current sputtering for bio-implants: Electrochemical, microstructural, and morphological investigations", Inorganic Chemistry Communications, Elsevier, Vol. 165, 112478, 2024.
- ❖ Altememy, M.A., Muhieldeen Al-Gailani, M.W., Yu, L.J., Hassan, C.S., Jaber, H.A., "Development and characterisation of thermal properties of hybrid composites from date palm fiber and glass wool reinforced unsaturated polyester", Journal of Engineering Science and TechnologyThis link is disabled., Vol. 19, No. (4), pp. 1401–1419, 2024.
- Altemmey, M.A., Muhieldeen, M.W., Yu, L.J., Hassan, C.S., Jaber, H.A., "Characterization of the Mechanical and Morphological Properties of Hybrid Composites from Date Palm Fiber/Glass Wool Reinforced by Unsaturated Polyester", International Journal of Computational Methods and Experimental Measurements, Vol. 12, No. (3), pp. 309–321, 2024.

#### **Patents**

- 1- Obtaining a patent entitled "Preparation of an advanced ceramic material used for personal protection from cheap, low-temperature materials." Names of the researchers: Prof. Dr. Fadel Attia Jiyad, Prof. Dr. Muhammad Haider Al-Taie and Dr. Hussein Alaa Jaber. The patent granting authority is the Central Organization for Standardization and Quality Control, Iraq, No. 4107, 2014.
- 2- Obtaining a patent entitled "Preparation of nano-sized substituted hydroxyapatite through the use of rare earth elements, magnesium, and zinc for biological applications." Names of researchers: Dr. Hussein Alaa Jaber, Engineers Suha Qais Muhammad Hassan. The patent granting authority is the Central Organization for Standardization and Quality Control, Iraq, No. 7671, 2022.

# **Honors and Certificates of Appreciation**

Obtaining many letters of thanks and certificates of appreciation from ministries, heads of universities and various departments, and from multiple organizations and associations.