**Abeer Farouk Abbas Ali Al-Attar**
**Teaching staff member of the Materials Engineering Department/University of Technology-Iraq.**

## Personal Information

Name: Abeer Farouk Abbas
Surname: Al-Attar
Birth Date: 29 February 1984.
Place of Birthday: KSA.
Sex: Female
Marital status: Married
Languages:
Arabic (Native language) and English.
Mobil: 00964- 7707968331
Work Address: University of Technology- Materials Engineering Department
Branch Ceramics and Building Materials Engineering - Baghdad /Iraq.

Period of employment: 2006 up to date.
E-mail: *Abeer.F.AlAttar@uotechnology.edu.iq*

Scientific status: Lecturer Doctor (Lec. Dr.)

General Specialization: MaterialsEngineering

Specific Specialization: Energy Materials
Nationality: Iraqi

## EDUCATION

1- B.Sc. in Materials Engineering (University of Technology – Materials Engineering Department), 2005.
2-M.Sc. in Materials Engineering (University of Technology – Materials Engineering Department)
Thesis "Manufacture of porous refractory ceramic bodies by mixing local porcelanite with kaolin",2014.
Supervisor:
*Professor. Dr. Mohammed H. Alaiwi.*
*Assist. prof. Dr.Alaa H. Ali.*
3-Ph.D. in Materials Engineering (University of Technology – Materials Engineering Department), 2021.
"Synthesis and Characterizations of $Y_2O_3$ Stabilized Tetragonal Zirconia Electrolytes Doped with Trivalent Additives for Solid Oxide Fuel Cells Applications ", 2021.
Supervisor:
*Professor. Dr. Saad. B.H. Farid*
*Assist. prof. Dr. Fadhil A. H. Mohammed*

## Teaching &Lecture experiences:

- Mathematics:
  - Differential equations, Advanced matrix and vector algebra, Multivariate calculus, Series analysis, Regression analysis.
  - MATLAB.
  - Visual basic.
- Numerical and Engineering.

- Experimental Laboratories:

  - Powder metallurgyLab.
  - Corrosion Lab.(responsible).
  - Heat Transfer and Fluid Lab. (responsible).
  - Chemical MetallurgyLab.
  - Composite materials Lab.
  - Fabrication Lab.
  - Testing Lab.
  - Refractories Lab.

## Experiences:

1- Thermal insulation materials: publishing, supervision, lectures, and training programs.

2- Ceramic Refractories: publishing, and training programs.

3-Manufacturing and determination of chemical, physical, thermal, and mechanical properties of materials.

4- Studies in ceramic composite materials.

5- Energy materials: publishing, supervision, training programs.

## Grants and awards:

A lot of thanks and awards from the Iraqi Ministry of Higher Education and Scientific Research, the dean of the University of Technology, the deans of other Iraqi universities, the head of the Materials Engineering department, and several NGOs during my career.

## Committee memberships:

1- Vice President of Independent Woman Charitable Association.
2- Member in Iraqi society of Nanotechnology.
3- Member of Examination Committee in Materials Engineering Department/University ofTechnology-Baghdad-Iraq.
4- Member of the technical specification committee for scientific devices and research.
5- Rapporteur of Student Affairs committee and educational guidance.
6- Member of quality and performance committee of University of Technology-Materials Engineering Department Branch Ceramics and Building Materials Engineering.
7- Member of recheck lists the names of graduates' preliminary study to return to graduation and audit differences from the way back to the files of students and their belongings.
8- Member of Translating website of Materials Engineering-University of Technology.

## Training Course:

1-English Language,7/9/2005.

2-Computing and computersoftware,3-12/8/2008.

3- Many of the certificates in the field of health and administrative corruption and educational guidance in the field of civil societyorganizations.

4- Session of the Methods of Teaching,2014.

5- Many seminars and workshops in the fields of education and civil society.

## PUBLISHED PAPERS

1- Developing Novel SOFC Electrolyte for Advanced Clean Energy Generation during the Pandemic (COVID-19)
Al-Attar, A.F.A. IEEE 2nd International Maghreb Meeting of the Conference on Sciences and Technique Automatic Control and Computer Engineering, MI-STA 2022 – Proceeding.

2- Effect of Mechanical Alloying on Structural and Electrical Properties of $(P_2O_5)_{(x)}$-$(Y_2O_3)_{(0.03)}$-$(ZrO_2)_{(0.97)}$ Electrolyte
AFA Al-Attar Key Engineering Materials 900, 155-162 2021

3- Optimizing Mechanical and Physical Properties of Phosphorus Pentoxide as Solid Electrolyte 2021
AF Al-Attar 2021 International Conference on Electrical, Communication, and Computer …

4- Synthesis and Characterizations of Y2O3 Stabilized Tetragonal Zirconia Electrolytes Doped with Trivalent Additives for Solid Oxide Fuel Cells Applications
AFA Al-Attar University of Technology –Iraq 2021

5- Characterizations of Synthetic 8mol% YSZ with Comparison to 3mol% YSZ for HT-SOFC 2020
AF Al-Attar, SBH Farid, FA Hashim Engineering and Technology Journal 38 (4), 491-500

6- Ionic conductivity of gamma-$Al_2O_3$ and $Pb_3O_4$ dopants in 8mol%YSZ as electrolyte in SOFC 2019
AF Al-Attar, SBH Farid, FA Hashim AIP Conference Proceedings 2190 (1), 020064

7- Comparison in physical and mechanical properties between doped and non-doped Y-TZP electrolyte for HT-SOFC 2019
AF Al-Attar, SBH Farid, FA Hashim, MJ Eshraghi Energy procedia 157, 1285-1291

8- Nanoindentation Measurements for B2O3-Y-TZP Electrolyte Used in HT-SOFC
AF Al Attar, SBH Farid, FA Hashim, MJ Eshraghi IOP Conference Series: Materials Science and Engineering 454 (1), 012039 2018

9- Electrical Conductivity and Physical Characterizations of Y-TPZ Electrolyte in HT-SOFC 2018
AF Al-Attar, BHF Saad, FA Hashim, MJ EshraghiI nternational Journal of Nanoelectronics and Materials 11 (Special Issue), 89-96

10- Mechanical characterizations of boron oxide doped yttria-stabilized tetragonal zirconia electrolyte for high-temperature solid oxide fuel cell operated
AF Al-Attar, MJ Eshraghi, SBH Farid, FA Hashim International Conference on Pure and Applied Sciences (ICPAS), 157-160 2018

11- Using Iraqi materials to produce lining refractories with international standards
AFA Al-Attar, SQ Saadoon, AL Sultan 2018
1st International Scientific Conference of Engineering Sciences-3rd …

12- Study the Physical Properties and Thermal Conductivity of Light Weight Refractories Bricks Produced by Adding porcelanite to Kaolinite
MH Al-Taie, AH Ali, AF Al-Attar Eng. & Tech. Journal 33 (1), 51-60 2015

13- Study Thermomechanical Properties of Unsaturated Polyester Composite Reinforced by Ceramic Particles (Al2O3)
ALAF Abbas, ALNA Betti, APRU Abbas IJISET 2 (6), 150-152 2015

## PUBLISHED PAPERS

14- Studying Thermal and Mechanical Properties of Unsaturated Polyester Reinforced with TiO2 2015
AF Abbas, RU Abbas, NA Betti International Journal of Innovative Science, Engineering & Technology 2 (5 …

15- Characterizations of Semi-Silica Refractory Bricks Produced from Local Iraqi Materials 2014
DMH Al-Taie, DAH Ali, AF Al-Attar Eng. & Tech. Journal. 32 (9), 2268-2276

16- Manufacture of porous refractory ceramic bodies by adding local porcelanite to the kaolinite 2014
AF Abbas, MH Alaiwi, AH Ali University of Technology-Iraq.

17- Manufacture of Light Weight Ceramic Bodies as Thermal Insulator From Local Material 2011
AAA Al-Taie M, Al-Malki Anam Engineering and Technology Journal 29 (8), 1471-1481

18- دراسة الخواص الحرارية لمادة متراكبة ذات اساس بوليمري مدعمة بدقائق النحاس
عبير فاروق عباس, احمد سحر حسين
مجلة الهندسة والتكنولوجيا 28 (18), 2010