

# Curriculum Vitae

## 1-Personal Information

Name *Falak O. Abas*

Affiliation assistant professor

(Included Phone and Email)

Date of Birth 30/9/1973 ,

[falak\\_usama@yahoo.com](mailto:falak_usama@yahoo.com),

[falaksarraf73@gmail.com](mailto:falaksarraf73@gmail.com), 07702899612

Place of Birth Baghdad

Nationality Iraqi

Marital Status married



## 2-Scientific Rank

Chemical engineering and environmental pollution

## 3-Research Interests

1. Re-use of solid waste.
2. Preparation of adhesive systems.
3. design different treatment systems for liquid and solid.

## 4-Education

Date	Discipline	Degree	Institution	Thesis Title
1995	Chemical engineering	BSc.	University of technology	Production of cyclohexane
1998	Chemical engineering	MSc.	University of technology	Preparation of polyvinyl formal suitably used for wire enamel
2002	Chemical engineering	PhD.	University of technology	Pyrolysis of scrap tires

## 6-Management Posts (if available)

2. Proceeding training courses in dealing solid waste & plastic recycling.
3. Head of solid waste department.
4. Heading team for E.I.A of various projects.
5. Head of environmental techniques department.
6. Head of Investigation Research Center.

## **8-Academic Experience**

### **1-Undergraduate Level**

1. University Lecturer teaching various undergraduate courses in chemical engineering and in material engineering in university of technology.
2. University Lecturer teaching various undergraduate courses in chemical engineering in university of Koya.

## **9-Employment History (if available)**

1. Design for different industrial systems (lab scale and small pilot plant).
2. Assessing soil chemical contents.
3. Environmental Impact Assessment (EIA).

## **10-License/Certification (if available)**

Iraqi forum of inventors

## **11-Honors and Distinctions (if available)**

- Bronze distinction in international conference of al ataba al abasia
- Grant and distinction for women day
- Grant and distinction for patent
- Grant and distinction for preparing of research center
- Grant and distinction for preparing of conference

## **12-Skills and Qualifications (Language and computer)**

I have skill and qualification in English language and computer

## **13-Publications/ Books**

### **1- Supervision**

### **2-Research**

Under publication

Manufacturing of high efficient concrete coating resistance for corrossions occurred for concrete by using natural wastes (husks dates, date seeds)

## Accepted Manuscripts

1. Study Thermo-Mechanical Properties Of Polyester Composite Reinforced By Ceramic Particles, SiC
2. Thermo- mechanical behavior of epoxy composite reinforced by carbon and Kevlar fiber

## Published

1. Isam K., Falak O. Abas "Preparation and characterization of poly vinyl formal suitably used for wire enamel", hadhramout for studies and researches/ Biannual Refereed Scientific Journal, dec. 2002.
2. Mahmood B., Thamer J., Falak O. Abas , "Evaluation of oils produced from the pyrolysis of scrap tires under inert and reduced atmosphere", Engineering & Technology Journal, 2004.
3. Mahmood B., Thamer J., Falak O. Abas , "Optimization of pyrolysis conditions of scrap tires under inert gas atmosphere", J.Analysis Applied Pyrolysis, 2004.
4. Mahmood B., Thamer J., Falak O. Abas, "Pyrolytic studies of scrap tires: part 3, Evaluation of active carbon produced from the pyrolysis of scrap tires under nitrogen and reduced pressure", Engineering & Technology Journal, 2005.
5. Mahmood B., Thamer J., Falak O. Abas, "Pyrolytic studies of scrap tires: Optimization conditions for pyrolysis of scrap tires under reduced pressure", Engineering & Technology Journal, 2007.
6. Falak O. Abas, "Vanadium oxide recovery from spent catalysts by chemical leaching", Engineering & Technology Journal, 2007.
7. Nawal E., Falak O. Abas , "Study the improvement of Ardema sand to use it metallurgical processes (by polymer additives)", Engineering & Technology Journal, 2007.
8. Nawal E., Falak O. Abas, "Study the high temperature properties for composite material of aluminum alloys", Engineering & Technology Journal, 2007.
9. Falak O. Abas, Ragad U. Laith A., "Re-use of poly vinyl formal (PVF)-Bitumen and PVF-Phenol in improving of characteristics properties of aluminum joints", Al- Qadisiaa Engineering Journal, 2006.
10. Fadil S. Falak O. Abas, Ragad U., "Study the effect of urea-weight and adhesion promoter on mechanical properties of urea-melamine-formaldehyde resin", Diala Jornal 2008.
11. Falak O. Abas, Ragad U., Tarek H., "Use of solid waste lignin in reinforcement of UF-R system", National Jornal of chemistry, 2008.

12. Falak O. Abas, Mukhleed A., Ragad U., "Use of lignin to improve mechanical properties of coated wood", Tikrit Journal for engineering and science, 2010.
13. Falak O. Abas, Mohamed U., Ragad U., "Optimization of Asphalt Mix Improved by the Addition of Scrap Tires", Engineering & Technology Journal, 2010.
14. Ekthair J., Falak O. Abas, Mohamed U., "Using of Steel Slag in Modification of Concrete Properties", Engineering & Technology Journal, 2010.
15. Falak O. Abas, Mukhleed A., Ragad U., "Comparison of the use of sacks and commercial fibers to improve thermo- mechanical properties of (epoxy- polyvinyl formal) resins blend", Al- TAQNI Journal, 2011.
16. Falak O. Abas, Mukhleed A., Ragad U., "Synthetic sacks as reinforced in the thermosetting composites", Al- Khwarizmi Engineering Journal, 2011.
17. Falak O. Abas, Ragad U. Eman A., "Reuse of nylon fiber (sacks container) in improvements of thermo- mechanical properties for (polyester- polyvinyl formal) system", basic education college Journal, 2011.
18. Falak O. Abas , Sarmed E. , Ragad U. , " Study the improvement of thermo-mechanical properties for polyester adhesives by using different fibers (glass , leveler , and carbon)", Ibn – Al- Haitham Journal for pure and applied science , 2009.
19. Falak O. Abas, Sarmed E., Ragad U., "A comparison study of different ceramic filler on mechanical and other properties of Glass, Kevlar/polyester composites" , Engineering & Technology Journal, 2011.
20. Falak O. Abas, Azhar M., "The Study of Immunological and Cytogenetic Effects of Polyvinyl Alcohol ", Engineering & Technology Journal, 2011.
21. Falak O. Abas, Ragad U., Nagam H., "Silica / charcoal addition of the composite polyvinyl fluoride membranes for water/ organic vapor separation", Engineering & Technology Journal, 2011.
22. Falak O. Abas, Ragad U., Alyaa E., " Preparation of high efficient (epoxy/plants coal/alumina) primers applied to concrete petroleum tanks", Engineering & Technology Journal, 2011.
23. Falak O. Abas, Abdul – Hameed, Laylaa. L., "Towards data base of Baghdad municipal solid waste management", Koya University journal, 2011.
24. Falak O. Abas, "Re – use of scrap polyurethane in manufacturing of new product applications", Koya University journal, 2011.

25. Falak O. Abas , Mohamed U. , Salah F. , " optimal design of bituminous improvement residue in roofing and building applications " , Tikrit Journal for Engineering and science , 2010.
26. Falak O. Abas, Mohamed U., Ragad U., "improvement of soil characteristics by addition of scrap tires", Engineering & Technology Journal, 2011.
27. Falak O. Abas\*, Enass A. Abdul Ghafoor, Mohammed U.Abass, Talib Kamil Abd, " RE-USE OF WASTE TIRES RUBBER AS FINE AGGREGATE REPLACEMENT IN CONCRETE MIX APPLICATIONS" INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY, [Abas, 4(3): March, 2015].  
[http://www.ijesrt.com/issues%20pdf%20file/Archives-2015/March-2015/17\\_RE-USE%20OF%20WASTE%20TIRES%20RUBBER%20AS%20FINE%20AGGREGATE%20REPLACEMENT%20IN%20CONCRETE%20MIX%20APPLICATIONS.pdf](http://www.ijesrt.com/issues%20pdf%20file/Archives-2015/March-2015/17_RE-USE%20OF%20WASTE%20TIRES%20RUBBER%20AS%20FINE%20AGGREGATE%20REPLACEMENT%20IN%20CONCRETE%20MIX%20APPLICATIONS.pdf)
28. Dr. Falak O. Abas, Raghad U. Abass, Mohammed O.Abass, A Modeling Comparison Studies for Thermo-Mechanical and other Properties of RHDPE and RLDPE Wastes", Eng. & Tech. Journal , Vol.32,Part (A), No.3, 2014. [http://www.uotechnology.edu.iq/tec\\_magaz](http://www.uotechnology.edu.iq/tec_magaz).
29. Dr.Falak O. Abas, Mohammed A. A., Bahra D. Ghafour, " New Method for Recycling of Waste Paper in Useful Products", Eng. & Tech. Journal , Vol.31,Part (A), No.17 , 2013. [http://www.uotechnology.edu.iq/tec\\_magaz](http://www.uotechnology.edu.iq/tec_magaz).
30. Dr. Falak O. Abas, Raghad U. Abass, Enas .A .A, " The Use of New Techniques in The Management of Waste Plastic by Reuse it in The Asphalt Mix", Eng. &Tech.Journal, Vol. 32,Part (A), No.10, 2014. [http://www.uotechnology.edu.iq/tec\\_magaz](http://www.uotechnology.edu.iq/tec_magaz).
31. Raghad U.Abass ,.Falak U.Abass, .Aseel B. Al-Zubaidi, " Effect of Addition Bio Filler (Beans Shell powder) Reinforcement By Polyester Composites", International Journal of Scientific & Engineering Research, Volume 6, Issue 2, February-2015.
32. Raghad U.Abass, Falak O.Abass , Mohamed A.A., " Improvement of Mechanical Properties of Polyester Composite Reinforced By Bio Filler (okra Shell)", international journal of innovative science and engineering technology, feb.2015.
33. Raghad U.Abass, Falak O.Abass , Mohamed A.A., " Improvement of Mechanical Properties of Polyester Composite Reinforced By Bio Filler (Beas Shell)", international journal of science and engineering technology, vol.6, no.2, feb.2015.

34. Falak O. Abass, Raghad O. Abass , Mukheled A. Hussien, "Use of Lignin Fibers to Improve Mechanical Properties of Coated Wood", Tikrit Journal of Eng. Sciences/Vol.16/No.3/September 2009, (30-37).

<http://www.iasj.net/iasj?func=fulltext&ald=21726>.

35. Falak O. Abas, Raghad O. Abas, Sarmad I. Ibrahim, " A Comparison Study of Different Ceramic Filler on Mechanical and Thermal Properties of Glass, Carbon Kevlar / Polyester Composites", Eng. & Tech. Journal ,Vol. 28, No. 12, 2010.

[http://www.uotechnology.edu.iq/tec\\_magaz](http://www.uotechnology.edu.iq/tec_magaz).

36. thermal behaviour of paraffin wax/polyvinyl alcohol composite material , Aseel Basim Al- zubaidi , falak O. Abas, Raghad A. Abass, Al- Khwarizmi Engineering Journal - 2016.

<file:///D:/Users/Win7/Desktop/%D8%A8%D8%AD%D8%AB%20%D9%85%D8%AC%D9%84%D8%A9%20%D8%A7%D9%84%D8%AE%D9%88%D8%A7%D8%B1%D8%B2%D9%85%D9%8A.pdf>

37. Improvement of mechanical properties of polyvinyl alcohol by addition of biomaterial (Okra shell and peel peas) for production of environmentally friendly products, Falak O. Abas, Mesopotamia Environmental Journal, 2016.

[file:///D:/Users/Win7/Downloads/mej\\_pub2016\\_922212.pdf](file:///D:/Users/Win7/Downloads/mej_pub2016_922212.pdf)

38. Design a mechanical- biological system for treatment biological wastes (orange peels, Peel peas, Okra shell) with optimization and qualification for liberal and residue products, falak O. Abas, Azhar Haleem, 2017.

<http://www.aensiweb.net/AENSIWEB/aeb/aeb/2017/February/71-83.pdf>

39. A.A. MOHAMMED,1,2,7 D. BACHTIAR,1 M.R.M. REJAB,1 X.X. JIANG,1,3 FALAK O. ABAS,4 RAGHAD U. ABASS,5 S.F. HASANY,6 and JANUAR P. SIREGAR1 " Effects of KMnO4 Treatment on the Flexural, Impact, and Thermal Properties of Sugar Palm Fiber-Reinforced Thermoplastic Polyurethane Composites, JOM <https://doi.org/10.1007/s11837-018-2869-1> \_ 2018 The Minerals, Metals & Materials Society

### **3-Books**

- New Techniques used in analysis of different materials, part (1), Falak O. Abas , Raghad Usama Abass, Mohammed A.A., sarabookpublication.com., 2015.

- New Techniques used in analysis of different materials, part (2), Falak O. Abas, (acceptance).
- Environmental detriments and benefits, "under review".

### **Patents:**

1. Formulation of compsite mixture of silver micro-particle amalgam / polyvinyl alcohol gel resin as new applicationof composite dental supports and filling, Falak O. Abas<sup>1</sup> environmental research center / university of technology, Aseel Basim Al-Zubaidi<sup>22</sup>material engineering department/ university of technology, Raghad A.Abass<sup>2</sup> / applied science department / university of technology, 2016.

2. Manufacturing of composite polymeric membranes from polyvinyl alcohol and waste date palm (seat and stem) using in water treatment, Falak O. Abas / University of Technology – chemical engineering department, Abdul Hameed M-J Al Obaidy/ University of Technology – Environmental Research Center, Raghad A. Abass/ University of Technology / applied science department, Ali Adeel / University of Technology – Environmental Research Center, 2017.

3. Manufacturing of insulated composite materials of epoxy/ natural fibers (nut residues, Pine remnants) for insulation of large structures (heat, cold, and Noise) evaluated practically, falak O. Abas, 2018

### **14-Invited Lectures and Seminars\* (if available)**

- Application of nanotechnology in environmental treatment techniques.
- Re-use of scrap tires in new techniques
- New techniques to treatment biological wastes
- Re-use of scrap tires in new composite system
- Re-use of waste plastic in new composite system
- New techniques used for monitoring pollutants
- Koya record

### **15-Conferences and Training (if available)**

1. Mahmood B., Thamer J., Falak O. Abas, "A home made thermo gravimetric system for the study of thermal decomposition of bulky samples of scrap tires", conference for chemists, 2002.

2. Falak O. Abas, Ragad U. Enass A., "Mechanical, thermal, and chemical properties of waste plastic particles – fibers reinforced epoxy composites", conference of basic education college of Al- Mostanseria, 2009.
3. Falak O. Abas, Mohamed U., Layla L., "Use of waste rubber to improve thermo-chemical and electrical properties of epoxy resin", conference of basic education college of Al- Mostanseria, 2009.
4. Falak O. Abas, Thamer J., Mahmood M., "studied the pyrolysis of scrap tiers under reduced pressure", 1st conferences for University of Technology for modern techniques in refinery of oil and gas, 2011.
5. Falak O. Abas, "modern Techniques used for waste water treatment from petroleum refineries ", conference of oil under the use of water sources in the petroleum industry and alternatives", 2009.
6. Falak O. Abas, "recycling as important in the environmental safety techniques ", conferences for Material engineering department / University of Technology, 2010.
7. Falak O. Abas " international conference of al Ataba Al- Abassia, Karbla" , 2017.
8. Prepared by Falak O. Abas, "New Environmental techniques used in treatment of refinery solid wastes during drilling ", Environmental Research Center / University of Technology, 15-19 / 3 / 2009.
9. Prepared by Falak O. Abas, "New methods used for selection of solid wastes dumping locations ", Environmental Research Center / University of Technology, 14-18 / 6 / 2009.
10. Participant for Falak O. Abas, "Development skills in research methodology ", University of Koya, 12-13 Oct. 2011.
11. Participant for Falak O. Abas, " Geophysical applications at the university of Arkansas at little rock", University of Koya, 11-13 / Dec., 2011.
12. al- Ataba al- Abassia conference from 4-7/ 4/ 2017 for patents .
13. MATEC Web of Conferences 225, 01021 (2018) UTP-UMP-VIT SES 2018 Study thermo-mechanical properties of polyester composite reinforced by ceramic particles, SiC
14. MATEC Web of Conferences 225, 01022 (2018) UTP-UMP-VIT SES 2018 Thermo-mechanical behavior of epoxy composite reinforced by carbon and Kevlar fiber