

# Ass. Professor Dr.Asawer A. Al-Wassiti

# PERSONAL PARTICULARS

Name:Asawer A. KwaeriAlwasitiDate of Birth:1974Sex:femaleNationality:IraqiLanguages:English / ArabicEmail:asaw20042003@yahoo.comasaweralwasiti@gmail.com15003@uotechnology.edu.iq

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### **EDUCATION**

- 2002-2006 PhD in chemical Engineering (Hydrodynamic characteristics of mixing in non-Newtonian liquid-gas-solid of three phase system) University of Technology, Baghdad, Iraq
- 1996-1999 MSc in Chemical Process Engineering (The corrosion of copper in deaerated and oxygenated sluphericacid) University of Technology, Baghdad, Iraq
- 1992-1996 Bachelor in chemical Engineering (Unit Operation) University of Technology, Baghdad, Iraq

#### **Experience**

- December 2019 till now, Ass. Prof.

Chemical Engineering Department, University of Technology

- Thermodynamics for 3<sup>rd</sup> class
- Thermodynamic for postgraduation
- October 2012 to 2019, Ass. Professor

Petroleum Technology Department/University of Technology

- Fluid Flow for 2<sup>nd</sup> class
- Statistics and Optimization for 3rd class

- Modelling of two phase flow for postgraduate
- 2017 to 2018, **Ass. Dean of Petroleum Technology Department for scientific affairs**Petroleum Technology Department/University of Technology
  - Fluid Flow for 2<sup>nd</sup> class
  - Optimization for 3rd class
  - Statistics for 3<sup>rd</sup> class
  - Modelling of two phase flow for postgraduate

### - 2014 - 2017, The director of Petroleum Technology Research Centre

# - July 2010 to 2014, Ass. Dean of Petroleum Technology Department for scientific affairsPetroleum Technology Department/University of Technology

- mathematics (calculus) sciences for 1<sup>st</sup> class
- Fluid Flow for 2<sup>nd</sup> class

### -September 2002 to 2010, Lecturer

Chemical Engineering Department, University of Technology, Baghdad

- mathematics (calculus) sciences for 1<sup>st</sup> class
- Fluid Flow for 2<sup>nd</sup> class

#### -September 1999-August 2002, Assistant lecturer

Chemical Engineering Department, University of Technology, Baghdad

- Fluid Flow for 2<sup>nd</sup> class
- Chemical Industry for 4<sup>th</sup> class
- Fuel Technology for 2<sup>nd</sup> class

### -September 1999-August 2002, ExternalAssistant lecturer

Chemical Engineering Department, University of Baghdad, Baghdad

- Fluid Flow for2<sup>nd</sup> class
- Unit Operation for 4<sup>th</sup> class

-Supervised number of final year graduation projects since 1999 until now

### **RESEARCH ACTIVITIES**

- Multiphase Flow
- Drilling Fluid
- Corrosion
- Pollution

### **EMPLOYMENT**

- 2000- 2002 and 2006-2010/ Member of undergraduatesexamination committeeat chemical engineering department
- 2008-2010 / Coordinator of postgraduates in chemical engineering department
- 2010 -2014/ AssociatedHeadof Petroleum Technology Department for Scientific Affairs
- 2017-2018/ Associated Head of Petroleum Technology Department for Scientific Affair
- 2010 -2018 / member of Department Council at Petroleum Technology Department
- 2010-2014 / member of Postgraduate Committee at University of Technology
- 2010-2014 / member of Validity of Teaching Committee at University of Technology
- 2012 / member of Sustainable Committee at University of Technology
- 2012 / member of Reload curriculum at Petroleum Technology Department
- 2011 -2013 / Coordinator of a Memorandum of Understanding with Research and Training oil Centre of the Oil ministry
- 2013 till now/ member in Society of Petroleum Engineer (SPE)
- 2013 till 2019 / Faculty Advisor of Student Chapter of SPE( Petroleum Technology Chapter) of SPE

# Training, conferences and Awards

- Participate in Training of (modern methods of chemical analysis) held in Cyprus University in September, 25, 2011
- Held training in (drag reduction in piping system)
- A ward from the minister of higher education
- Participate in training of (E-governance) held at the Ministry of Higher Education
- Participate in first international conference of civil and environmental engineering, Cappadocia 2013, turkey
- Attending the seventh international congress of energy, Ankara, Turkey, 2014
- participate in training of international visitor on (building workforce in oil and gas industry) held by American embassy (20/1-15/2/2015)
- Participate in the third international conference of civil and environmental engineering, Cappadocia 2015, turkey
- Participate and member of organizing committee in the tenth international statistics dayconference, Giresun 2016, turkey
- Participate in the 1st International Scientific Conference of Nanotechnology and Advanced Materials in the Petroleum and Gas Industry "3-4 May 2017 / University of Technology"
- Participate in the 4th Iraqi conference for oil and gas held in Basra, December 2017.
- Scientific committee member of Ist International Conference on Technology and Science, Techno-Science, Antalya, Turkey 2018.
- Keynote speaker in Ist International Conference on Technology and Science, Techno-Science, Antalya, Turkey 2018
- Scientific committee member of IstInternational Conference of Petroleum Technology and Petrochemicals, Baghdad, Iraq, 2019
- Participate and member of organizing committee in the 1<sup>st</sup> internationalapplied statistics conference, Tokat 2020, turkey

### Languages

- Arabic (mother tongue) and English (fluent; written and spoken).

#### **Thesis supervision**

- Sludge Digestion of Waste water Treatment
- Nanotechnology in drilling fluid
- Effect of nanomaterials on lubricity and drag coefficient
- Evaluating of drilling mud with nano additives at high temperature
- Experimental Study of Shale Stability Using Different Additives in Water Based Mud

- Applying Selected Lost Circulation Materials to Study Lost Circulation of Azkand Formation in Khabaz Oil Field

- Experimental processing of Bahar Al-Najaf attapulgite clay for preparation drilling mud

#### **PUBLICATIONS**

- 1- "The Influence of Temperature and BTA Concentration on Corrosion Inhibition of Copper in Oxygenated 0.1 M H<sub>2</sub>SO<sub>4</sub> Solution". Engineering and Technology Journal/University of Technology, 2002.
- 2- "The Treatment of Wastewater of Al-Cohol Factory by Filtration as Primary Treatment". IRAQI JOURNAL OF CHEMICAL AND PETROLEUM ENGINEERING, by the chemical engineering department / College of Engineering /University of Baghdad September, 2002.
- 3- "The Optimum Concentration of Inhibitor Blend for Carbon Steel in Chloride Solution". Tikrit Journal of Engineering Sciences, 2005.
- 4- "The Effect of Flow on Thermodynamic Properties for Inhibited Corrosion Solution of Carbon Steel". Engineering and Technology Journal/University of Technology, 2005.
- 5- Hydrodynamic characteristics of mixing in non-Newtonian liquid-gas-solid of three phase system, International J. Chemical Reactor Engineering, 2008
- 6- Modeling of three phase system with non-Newtonian liquid-gas-solid<sub>1</sub>Asian J. Industrial Engineering, 2009
- 7- Mass transfer of ozone in purified water, Engineering and Technology J. 2009
- 8- Corrosion of copper in deareated and oxygenated 0.1M of H2SO4 solution under controlled condition of mass transfer, *Engineering and Technology J.*, 27,5,2009
- **9- Hydrodynamic characteristics of mixing in three phase system**, *International Review of Chemical Engineering*, 2,1,2010.
- 10- The Inhibitive Effect of BTA on The Corrosion of Copper tating Cylinder Electrode

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in Oxygenated 0.1M H SO Under Controlled Conditions of Mass Transfer

**Optoelectronic,**Sh.A.Sameh I. K. Salih S. H. Alwash A. A. Alwasity,*Engineering* and Technology J., 28,6,2010

11- The Effect of Solid on the Homogenous- Heterogeneous Transition Region in Baffled and Unbaffled Bubble Column with Non-Newtonian Liquid

Asawer A. Alwasiti, Farah T. Alsudany and ShrooqT.Alhameri. *Engineering and Technology* J.vol 28, n0 23, 2010

*12-* Effect of Baffles on Homogenous-Heterogeneous Regime in Two Phase Bubble Column with Non-Newtonian LiquidAsawer A. Alwasiti, Farah T. Alsudany and Ali R. *Engineering and Technology J.,vol 28, no 24, 2010* 

**13- The Use of Gas-to-Liquid Technology (GTL) to ProduceGasoline and Diesel Fuels** Khalid A. Sukkar, Farah T. Jassm, Aswar A. Alwasiti and Muayad M. Hasan, *Engineering and Technology*.

14. Enhancement of Biogas production and organic reduction of sludge by different pretreatment processes, Riyadh S. Almukhtar, AsawerA. Alwasiti, Mohammed T. Naser, IRAQI JOURNAL OF CHEMICAL AND PETROLEUM ENGINEERING, 2012

**15-Enhancement of sludge digestion via different physicochemical methods**,ReyadS. Almukhtar, AsawerA. Alwasiti, Mohammed T. Naser International Conference on Civil and environmental engineering, 2013 Turkey.

16- Improving thePerformance of a Catalytic Membrane Reactor Via
StochasticOptimization, Ghanim alwan and AsawerAlwassiti, *International Review of Chemical Engineering*, 5,2,2010.

17-Study the Feasibility of Alumina for the Adsorption of Metal Ions from Water,

Jenan A. Alnajar, Asawer A. Kwaeri, Ramzi H. Sayhoodand Abbas H. SlaymonIraqi Journal of Chemical and Petroleum Engineering Vol.15 No.3 (September 2014) 37-50

**18-Experimental Study of Natural Sorbent for Oil Spill,** Jenan A. Al-Najar, Asawer A. Alwassiti and ŞerifeSaçmacı, International Conference on Civil and environmental engineering, 2015 Turkey

**19-The effect of additives on phase inversion of two phase flow**, AsawerAlwasiti and Nada Mahdi, Iraqi J. of Engineering and Technology, 35 Part A (2), 2017

- 20- A comparison of nano bentonite and some nano chemical additives to improve drilling fluid using local clay and commercial bentonites, Nada S. Alzubaidi, Asawr A. Alwasiti, Dena Mahmood, Egyptian Journal of Petroleum, 26(3) 811-818 (2017)
- 21- Comparison between Neural Network and Genetic Algorithm in Prediction Adsorption Capacity of Natural Sorbent, Zaidoon M. Shakor, JenanA. ALNajar, Asawer A. Alwasiti, X<sup>th</sup> International Statistics Days Conference, 2016, Giresun, Turkey.
  - 22- Improving Drilling Fluid Properties by Using Nano Additives, Nada S. Alzubaidi,

Asawr A. Alwasiti, Dena Mahmood, Engineering and Technology Journal, 35 part A, No. 10, 2017.

23- Improving the Performance of Drilling Fluid Using MgO Nano

**Particles,**GhufranFalih,Asawer A. Alwasiti , Nada S. Alzubaidi, 4th Iraqi conference for oil and gas held in Basra, December 2017

- 24-Investigation of Lignite NPs for Improved Lubricating Properties of Water-Based Drilling Fluid System, MassaraSalam, Asawer A. Alwasiti , Nada S. Alzubaidi, 4th Iraqi conference for oil and gas held in Basra, December 2017
  - 25- Evaluation of Water Contamination of Iraqi Oil Field, Asawer A. Alwasiti, Layla Lateef Awan, Ist International Conference on Technology and Science, Techno-Science, Antalya, Turkey 2018
  - **26-Improving Power Consumption in Drilling Process Using Nanomaterials**, Asawer A. Alwasiti, Nada Alzubaidi, DenaMahmoo, Massara Salam, GhufranFalih, Ist International Conference on Technology and Science, Techno-Science, Antalya, Turkey 2018
  - 27-Enhancing the Flowability in Petroleum Industry, A review paper, Asawer A. Alwasiti, Ist International Conference on Technology and Science, Techno-Science, Antalya, Turkey 2018
  - 28- Lubricating Properties of Water-Based Drilling Fluid ImprovementUsing Lignite NPs as well as Their Effect on Rheological andFiltration Properties, Massara Salam, Nada S. Al-Zubaidi, and Asawer A. Al-Wasiti, Association of Arab Universities Journal of Engineering Sciences (2019) 26(1): 81–88

29-ENHANCING LUBRICITY OF DRILLING FLUID USING NANOMATERIAL ADDITIVESVES, Asawer A. Alwasitti1, Nada S. Al-Zubaidi and Massara Salam, Petroleum and Coal, Pet Coal (2019); 61(3) 467-479 30-Improving the Performance of Drilling Fluid Using Lignite Nano

**Particles,**GhufranFalih, Nada S. Al-Zubaidi, and Asawer A. Al-Wasiti, Association of Arab Universities Journal of Engineering Sciences (2019)26(1):100–105

- **31-Enhancement in Lubricating, Rheological, and Filtration Properties of Unweighted Water-Based Mud Using XC Polymer NPs,**Massara Salam, Nada S. Al-Zubaidi , and Asawer A. Al-Wasiti,Journal of Engineering, Number 2 Volume 25 February 2019
- 32-Experimental Study on Tanuma Shale Stability Using DrillingFluids with Different Additives, Khalid Mohammed, Asawer A. Alwassiti and Mayssaa Ali AL-Bidry, IOP Conf. Series: Materials Science and Engineering 579 (2019) 012002, 1st International Conference on Petroleum Technology and Petrochemicals
- 33-Improving Drilling Fluid Properties at High PressureConditions Using Selected Nanomaterials, Nada Sabah1, Asawer A. Alswasiti2#, Massara Salam, IOP Conf. Series: Materials Science and Engineering 579 (2019) 012004, 1st International Conference on Petroleum Technology and Petrochemicals
- 34-Applying Selected Lost Circulation Materials to Study LostCirculation of Azkand Formation in Khabaz Oil Field, Mazin J. Shibeeb1#, Asawer A. Alwasiti2, Nada S. Al\_Zubaidi3, IOP Conf. Series: Materials Science and Engineering 579 (2019) 012005, 1st International Conference on Petroleum Technology and Petrochemicals
- 35- IMPROVING THE FLOWABILITY OF HEAVY CRUDE OIL IN PIPELINES USING PREPARED NANOSILICA: EXPERIMENTAL INVESTIGATION AND CFD SIMUL, Asawer A. Alwasiti1, Raheek I. Ibrahim, Pet Coal (2019); 61(6) 1455-1467
  - 36- Preparation Iraqi Attapulgite Clay Using Wet Sieving Process to Be Suitable for Oil Wells Drilling Fluid, Ahmedflayyih Hussein, Abdul khalik F.H., AssawerA.k, Journal of University of Babylon for Engineering Sciences, Vol. (27), No. (4): 2019
  - 37- Experimental study of Zubair shale stability of east Baghdad oil field using different additives in water based mud, Asawer A. Alwassiti, Mayssaa Ali AL Bidry, Khalid Mohammed, Journal of Petroleum Exploration and ProductionTechnology (2020) 10 (3), 1215-1225,https://doi.org/10.1007/s13202-019-00820-4
  - 38- Chemical and Thermal Investigation on Stability of Tanuma Formation Using Different Additives with Drilling Fluids, Khalid Mohammed, Asawer A Al-Wasiti, Mayssaa Ali AL-Bidry, (2020) Journal of Engineering 26 (5), 82-94

- 39- The Effect of Nano Materials on Lost Circulation Control of Azkand Formation in Khabaz Oil Field, Mazin J Shibeeb, Asawer A Alwasiti, Nada S Al\_Zubaidi, Journal of Engineering (2020) 26 (4), 80-93
- 40- Applying Carbon Nanotubes for Enhancing Fluid Flow, Zainab Y. Shnain1, Asawer A. Alwasiti1 and Musaab K. Rashed, IOP Conf. Series: Materials Science and Engineering 881 (2020) 012094
- **41- Effect of acidic treatment on rheologicalproperties of Iraqi attapulgite clay,**Ahmed Flayyih Hussein, F. H. Abdulkhalek, and Assawer A. AL Wassity, AIP Conference Proceedings 2213, 020038 (2020); <u>https://doi.org/10.1063/5.0000344</u>

**42-Optimization of Power Conservation and Pressure Drop of Nanofluid Two-Phase Flow in the Pipeline,** Asawer A. ALWASITI, ZainbY.SHNEEN, Abbas K.AISHALAL, 1st International Applied Statistics Conference (UYIK-2020) Online – Tokat / Turkey, 1-4 October 2020

**43-Energy Analysis and Phase Inversion Modeling of Two-Phase Flow with Different Additives**, AA Alwasiti, ZYShneen, RI Ibrahim, AK Al Shalal, Ain Shams Engineering Journal 12 (1), 799-805

**44-Experimental and numerical study on the degradation of mefenamic acid in a synthetic wastewater**, AA Alwasiti, ZYShnain, MF Abid, AAA Razak, BA Abdulhussein, IOP Conference Series: Earth and Environmental Science 779 (1), 012073

**45-Using Kaolin as Alternative for Na-Bentonite to Improve Hole Cleaning Process in Deviated Wells**, M Amer, AA Alwasiti, MA Al-Bidry, IOP Conference Series: Materials Science and Engineering 1090 (1), 012103

**46-Experimental and Data-driven approach of investigating the effect of parameters on the fluid flow characteristic of nanosilica enhanced two phase flow in pipeline**, Zainab Y. Shnain; Asawer A. Alwaiti; Musaab K. Rashed; Zaidon Mohsin Shakor. :Jun 2021, AEJ - Alexandria Engineering Journal

DOI: 10.1016/J.AEJ.2021.06.017

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