|  |
| --- |
| ▼ الاسم المستخدم في نشر البحوث حسب الكوكل سكولر Ayad A.H. Faisal |

|  |
| --- |
| ▼ الاتجاهات البحثية  * معالجه تلوث تربة ومياه |

|  |
| --- |
| ▼ الدرجة العلمية استاذ |

|  |
| --- |
| ▼ الأبحاث المنشورة |

**1) Faisal, A.A., (1998) “Motion of Continuous Air Cavities in Horizontal and Inclined Circular Pipes”. M.Sc Thesis, Babylon University, Babel, Iraq.**

**2) Kareem, N.K., M.A. Al-Thafairy and A.A. Faisal, “Sewage Outfall Effect on the Pollution Specifications for Euphrates River in Al-Mussiab District”. Journal of Babylon University, Vol.9, No.3, PP.994-1002, September 2004. (in Arabic Language)**

**3) Faisal, A.A., M.A. Al-Thafairy and T.R. Abbas, “Environmental Effects of Chloride on Sewerage System of Al-Hilla District”. Journal of Babylon University, Vol.9, No.3, PP.1006-1015, September 2004. (in Arabic Language)**

**4) Al-Baidania, J.H., A.A. Faisal and O.A. Mohammed, “Evaluation of Indoor and Outdoor Air Quality for Babylon University Site”. Journal of Babylon University, Vol.9, No.3, PP.1016-1027, September 2004. (in Arabic Language)**

**5) Faisal, A.A., “The Movement of Dense Organic Liquids in Porous Mediums (1.Numerical Model)”. Journal of Babylon University, Vol.13, No.3, PP.444-459, November 2006.**

**6) Faisal, A.A., (2006) “Numerical Modelling of Light Non-Aqueous Phase Liquid Spill Transport in an Unsaturated-Saturated Zone of the Soil”. Ph.D Thesis, Baghdad University, 2006.**

**7) Al-Suhaili, R.H. and A.A. Faisal, “The Migration of Light Organic Liquids in an Unsaturated-Saturated Zone of the Soil”. Journal of Engineering, Baghdad University, Vol.13, No.3, PP.1649-1678, September 2007.**

**8) Faisal, A.A., “Efficiency and Reliability of Reverse Osmosis Desalination Systems”. Iraqi Journal of Chemical and Petroleum Engineering, Baghdad University, Vol.8, No.4, PP.59-62, December 2007.**

**9) Faisal, A.A. and M.O. Karkush, “Quantitative Description of the Two-Phase Constitutive Relationships for Organic Liquid Contaminants”. Journal of Babylon University, Vol.15, No.4, 2008.**

**10) Faisal, A.A., “Influence of Rubber Constituents on Performance of Asphalt Paving Mixtures”. Journal of Engineering, Baghdad University, Vol.14, No.4, PP.3153-3164, December 2008.**

**11) Faisal, A. A., W. M. S. Kassim and Tamara K. Hussein “Influence of Clay Lens on Migration of Light Non-aqueous Phase Liquid in Unsaturated Zone”. ASCE J. of Environmental Eng., Vol.137, No.1, January 2011.**

**12) Al-Suhaili, R.H. and A.A. Faisal, “Two-phase capillary pressure-saturation relationship for kerosene in Iraqi sand". Jordan Journal of Civil Engineering, Vol.6, No.4, PP.37-48, 2012.**

**13) Faisal, A.A. and Hmood, Z., "Groundwater protection from cadmium contamination by zeolite permeable reactive barrier" Taylor and Franics, Desalination and water treatment, published online 28 Oct 2013.**

**14) Faisal, A.A. and Hussein, A.A., "Modeling and Simulation of Copper Removal from the Contaminated Soil by a Combination of Adsorption and Electro-kinetic Remediation". Journal of Engineering, Baghdad University, Vol.19, No.6, PP.695-716, 2013.**

**15) Faisal, A.A. and Hmood, Z., "Modeling and simulation of cadmium removal from the groundwater by permeable reactive barrier technology". Journal of Engineering, Baghdad University, 2013.**

**16) Faisal, A.A., Talib, R. and Salim, H., "Iron Permeable Reactive Barrier for Removal of Lead from Contaminated Groundwater". Journal of Engineering, Baghdad University, 2014.**

**17) Faisal, A.A. and Ziad, T., "Phenol Removal Using Granular Dead Anaerobic Sludge Permeable Reactive Barrier in a Simulated Groundwater Pilot Plant". Journal of Engineering, Baghdad University, 2014.**

**18) Al-Suhaili, R.H. and A.A. Faisal, “Simulation of three-dimensional flow of light non-aqueous phase liquids in an unsaturated-saturated zone". American Journal of Engineering Research (AJER), Vol.3, No.6, PP.37-48, 2014.**

**19) Faisal, A.A. and Ahmed, M., "Removal of copper ions from contaminated groundwater using waste foundry sand as permeable reactive barrier". Int. J. Environ. Sci. Technol., (2015) 12:2613-2622.**

**20) Faisal, A.A., Talib, R. and Salim, H., "Removal of zinc from contaminated groundwater by zero-valent iron permeable reactive barrier". Taylor and Franics, Desalination and water treatment, 55 (2015) 1586–1597.**

**21) Faisal, A.A., Kubba, F. and Madhloom, H., "Experimental and theoretical modeling of trichloroethylene dissolved plume transport in fully saturated sandy soil". Accepted in International conference in sustainable Development in Iraq 2013.**

**22) Faisal, A.A., Kubba, F. and Madhloom, H., "Modeling of Trichloroethylene Migration in Three-Dimensional Saturated Sandy Soil". Arab J Sci Eng, (2014) 39:7763–7769.**

**23) Sulaymon, A.H., Faisal, A.A. and Ziad, T., "Performance of granular dead anaerobic sludge as permeable reactive barrier for containment of lead from contaminated groundwater". Taylor and Franics, Desalination and water treatment, 56 (2015) 327–337.**

**24) Faisal, A.A. and Ziad, T., "Using granular dead anaerobic sludge as permeable reactive barrier for remediation of groundwater contaminated with phenol". ASCE J. of Environmental Eng., 141 (2015) 04014072-1 to 04014072-9.**

##### **25)  Faisal, A.A. and Ziad, T., "**[**Remediation of groundwater contaminated with lead-phenol binary system by granular dead anaerobic sludge permeable reactive barrier**](https://www.researchgate.net/publication/311627802_Remediation_of_groundwater_contaminated_with_lead-phenol_binary_system_by_granular_dead_anaerobic_sludge_permeable_reactive_barrier?ev=prf_pub)**" Article · Dec 2016 · Environmental Technology.**

##### **26)  Faisal, A.A. and Ziad, T., "**[**Using sewage sludge as permeable reactive barrier for remediation of groundwater contaminated with lead and phenol**](https://www.researchgate.net/publication/309522528_Using_sewage_sludge_as_permeable_reactive_barrier_for_remediation_of_groundwater_contaminated_with_lead_and_phenol?ev=prf_pub)**" Article · Oct 2016 · Separation Science and Technology.**

##### **27)  Faisal, A.A. and Ziad, T., "**[**Groundwater protection from lead contamination using granular dead anaerobic sludge biosorbent as permeable reactive barrier**](https://www.researchgate.net/publication/277955436_Groundwater_protection_from_lead_contamination_using_granular_dead_anaerobic_sludge_biosorbent_as_permeable_reactive_barrier?ev=prf_pub)**" Taylor and Franics, Desalination and water treatment,57 (2016) 3891–3903.**

**28) Sulaymon, A.H., Faisal, and** [**Khaliefa**](https://www.researchgate.net/profile/Qusay_Khaliefa)**,, Q. M. "**[**Simultaneous adsorption–precipitation characterization as mechanisms for metals removal from aqueous solutions by cement kiln dust (CKD)**](https://www.researchgate.net/publication/267861405_Simultaneous_adsorption-precipitation_characterization_as_mechanisms_for_metals_removal_from_aqueous_solutions_by_cement_kiln_dust_CKD?ev=prf_pub)**" Taylor & Francis Desalination and Water Treatment, 57(2016) 819-826.**

##### **29) Sulaymon, A.H., Faisal, and** [**Khaliefa**](https://www.researchgate.net/profile/Qusay_Khaliefa)**,, Q. M. "** [**Cement kiln dust (CKD)-filter sand permeable reactive barrier for the removal of Cu(II) and Zn(II) from simulated acidic groundwater**](https://www.researchgate.net/publication/276066300_Cement_kiln_dust_CKD-filter_sand_permeable_reactive_barrier_for_the_removal_of_CuII_and_ZnII_from_simulated_acidic_groundwater?ev=prf_pub)**" Journal of hazardous materials, 297 (2015) 160–172**

##### **30)  Sulaymon, A.H., Faisal, and** [**Khaliefa**](https://www.researchgate.net/profile/Qusay_Khaliefa)**,, Q. M. "**[**Dominant Mechanisms for Metal Removal from Acidic Aqueous Solutions by Cement Kiln Dust**](https://www.researchgate.net/publication/308712978_Dominant_Mechanisms_for_Metal_Removal_from_Acidic_Aqueous_Solutions_by_Cement_Kiln_Dust?ev=prf_pub)**" Article · Sep 2016 · Mine Water and the Environment.**

##### **31) Faisal, A.A."Effect of pH on the performance of olive pips reactive barrier through the migration of copper-contaminated groundwater" Taylor and Franics, Desalination and water treatment, 57 (2016) 4935–4943.**

##### **32) Faisal, A.A. and Hussein, A.A., "**[**An Acidic Injection Well Technique for Enhancement of the Removal of Copper from Contaminated Soil by Electrokinetic Remediation Process**](https://www.researchgate.net/publication/281316907_An_Acidic_Injection_Well_Technique_for_Enhancement_of_the_Removal_of_Copper_from_Contaminated_Soil_by_Electrokinetic_Remediation_Process?ev=prf_pub)**" Separation Science and Technology. 50 (2015) 2578–2586.**

**33)**[**FIRAS HASHIM KAMAR**](https://www.researchgate.net/researcher/2077825817_FIRAS_HASHIM_KAMAR)**·**[**AHMED A. MOHAMMED**](https://www.researchgate.net/profile/Ahmed_Mohammed83)**·**[**AYAD A.H. FAISAL**](https://www.researchgate.net/profile/Ayad_Faisal2) **"[Biosorption of Lead, Copper and Cadmium Ions from Industrial Wastewater Using Fluidized Bed of Dry Cabbage Leaves](https://www.researchgate.net/publication/304526522_Biosorption_of_Lead_Copper_and_Cadmium_Ions_from_Industrial_Wastewater_Using_Fluidized_Bed_of_Dry_Cabbage_Leaves?ev=prf_pub)" Revista de Chimie –Bucharest, 67(2016) 1039-1046.**

|  |
| --- |
| ▼ الكتب والمؤلفات |

**Ziad T. Abid Ali and Ayad A.A. Faisal (2016) Treatment of Pb and Ph Contaminated Simulated Groundwater Using PRB. Scholars Press, Germany, ISBN: 978-3-639-86455-7**

|  |
| --- |
| ▼ رسائل الماجستير الذي اشرف عليها |

1. **“Influence of Lens on Migration of Non-Aqueous Phase Liquid in Unsaturated- Saturated Zones”. M.Sc Thesis, Baghdad University, 2008.**
2. **"Copper Removal from the Contaminated Soils using Adsorption and Electro-kinetic Remediation" M.Sc Thesis, Baghdad University, 2012.**
3. **"Electro-kinetic Remediation of Lead, Nickel and Zinc-Contaminated Soil" Remediation" M.Sc Thesis, Baghdad University, 2012.**
4. **"Removal of Cadmium from Groundwater by Permeable Reactive Barrier Technology" M.Sc Thesis, Baghdad University, 2013.**
5. **"Removal of Copper Ions from Contaminated Groundwater Using Waste Foundry Sand as Permeable Reactive Barrier" M.Sc Thesis, Baghdad University, 2013.**

|  |
| --- |
| ▼ اطاريح الدكتوراه الذي اشرف عليها |

1. **"Removal of cadmium and phenol from contaminated soil by an upward electro-kinetic process" PhD Thesis, Baghdad University, 2013.**
2. **"Heavy Metals Removal and Hydraulic Performance in Permeable Reactive Barriers" PhD Thesis, Baghdad University, 2013.**
3. **"Transport of Trichloroethylene Contaminant in Groundwater" PhD Thesis, Al-Mustansiryah University, 2013.**
4. **"Treatment of lead and phenol-contaminated Using Permeable Reactive Barrier" PhD Thesis, Baghdad University, 2014.**