

# CURRICULUM VITAE

## **Personal Information:**

**Name** : Dr. Salih Muhammad Awadh

**Degree** : PhD & post Doctorate

**Academic title** : Professor

**Date of birth**: 1964

**Place of birth**: Iraq

**Nationality**: Iraqi

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## **Languages:**

- Arabic (Native, mother language)
- English (Fluent)
- Polish language (Fair)

## **Websites & Information:**

- *Scopus by El-Sevier link:*

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- *Google Scholar link:*

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- *Researchgate link:*

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Researchgate score is 26.75

## **Education:**

**B. Sc.** General Geology from Baghdad University (1985-1986)

**M. Sc.** Geochemistry from Baghdad University (1992)

**Thesis Title:** Petrography and Geochemistry of the Shalair Metamorphic Rock Group, Shalair Valley Area, Northeastern Iraq.

**Ph.D.** Geochemistry and Economic Geology from Baghdad University (2006).

**Thesis Title:** Mineralogy, Geochemistry and Origin of the Zinc-Lead-Barite Deposits from selected areas from north of Zakho Northern Iraq.

**Post doctoral:** University of Warsaw-Poland 2014.

**Affiliation:** Geology Dept, College of Science, University of Baghdad

**Academic title:** Professor Dr.

**Specialization:** Geochemistry and Economic Geology.

**Area of interest:** Geochemistry, Hydrochemistry, Organic Geochemistry, Ore Geology, Environmental Studies, and Industrial Rock and Minerals.

### **Organization and Journal Memberships:**

1. **2008:** Member of Iraqi Academic Team of UNESCO- Iraq Project on Training of Trainers in Environmental Education. United Kingdom (UK). Wales, Bangor University.
2. Editor-in-Chief of the ***Iraqi Geological Journal*** (IGJ), issued by Iraqi Geological Association, since 1968. (March-2015).
3. Editorial board member of ***Iraqi Bulletin of Geology and Mining***. ISSN: 18114539. **Publisher:** Ministry of Industry and Minerals. **Language:** Arabic and English.
4. Editorial board member of International ***Journal of Geoscience Education and Heritage***, open access journal published by ECSciTech – the European Centre for Science and Technology. Databases: ECSciTech PGbase. Since 10-1-2016.
5. Editorial board member of ***Contributions to Geosciences***, open access journal published by ECSciTech – the European Centre for Science and Technology. Databases: ECSciTech PGbase. Since 10-1-2016.
6. Editorial board member of ***Frontiers in Geosciences (FG)***, Editor-in-Chief: Dr. Raja Rizwan Hussain, King Saud University, Riyadh, Saudi Arabia, ISSN: TBD (Print), ISSN: TBD (Online). <http://www.vkingpub.com/journal/fg/editorialBoard.aspx>. American V-King Scientific Publishing.
7. Editorial board member of ***International Journal of Earth Sciences and Engineering***. ISSN **0974-5904**, Elsevier indexing, Published by CAFET-INNOVA Technical Society Hyderabad, INDIA [www.cafetinnova.org](http://www.cafetinnova.org)
8. Editorial board member of ***Journal of Petroleum and Gas Exploration Research (JPGER)***, ISSN:2276-6510 [www.interestjournals.org/JPGER](http://www.interestjournals.org/JPGER), since 1st August, 2012.
9. Associate Editor of ***the International Research Journal of Geology and Mining (IRJGM)***. (ISSN:2276-6618). [www.interestjournals.org/IRJGM](http://www.interestjournals.org/IRJGM)
10. Regional Editorial Board of ***Research Journal of Environmental and Earth Sciences (RJEES)***. Maxwell Scientific Organization. Print ISSN 2041-0484, online ISSN 2041-0492.3

11. Editorial board member of *International journal of Water Resources and Environmental Engineering (IJWREE)*, Academic Journal, Open Access Journal.
12. Editorial board Member of *Geosciences Journal*, Scientific and academic publishing.
- p-ISSN: 2163-1697. e-ISSN: 2163-1719. Website: <http://journal.sapub.org/geo>.
13. Editorial board Member of *Journal of Environmental Research and Management (EJERM)*. E3 Journals 2011. [www.e3journals.org/JERM/editors.html](http://www.e3journals.org/JERM/editors.html)
14. 15. SCIREA Membership Number: **1802206 as senior member for 3 years since 2017.**
16. Journal of Biological and Applied Environmental Research, <http://www.baerj.com/>  
ISSN: 2002-6153. Sweden
- 17.** Journal of Geology & Geophysics, [https://www.omicsonline.org/author-profile/Salih\\_Muhammad\\_Awadh/](https://www.omicsonline.org/author-profile/Salih_Muhammad_Awadh/)
- 18.** Scientific & Academic Publishing,  
<http://www.sapub.org/journal/editorialdetails.aspx?JournalID=1016&PersonID=10185>

### **Association and Society Memberships:**

1. *International Iraqi candidate to the GeoPark UNESCO Program.*
2. Member of the American Association of Petroleum Geologists (AAPG); Membership number: 10170084. Since 18 Sep, 2017; web: <http://www.aapg.org/profile/userid/48309>
3. Member of the International Association of Hydrogeologists (IAH), Membership number: 137532, since 5 March, 2016.
4. Member of the International Association for Promoting Geoethics (IAPG), Oct., 2015, International Association for Promoting Geoethics (IAPG), *Rome, Italy.*
5. Member of American Chemical Society (ACS), 2015, membership number is 30852916.
6. Member of Mineralogical Society of Poland (Polskeigo Towarzytwa Mineralogicznego) since Feb. 2014.
7. Member of International Association of Geochemistry (IAGC), 2012. Membership number is 11193.
8. Member of Iraqi Geologists Union (IGU) since 1994. Membership No. 2820.
9. Senior member of Science Research Association, Membership Number: **1802072, since 30-12-2016.**
10. European Geoscience Union (EGU), ID 525882 since 2019, renew for 2020.
11. Emeritus member for European Geoscience Union (EGU) 2020.
12. Member of Geochemical Society since 25 March 2020: Member ID: 222337.
13. Member of Society of Petroleum Engineering (SEP) since 26 march 2020, Member ID: 5237657

### **Academic and Industrial Experiences:**

- 1) **2014 till now:** Prof. Dr. of geochemistry and Economic Geology.

- 2) **2001 to 2014:** Assist. Prof. Dr. as an academic member of teaching staff at the Department of Geology, College of Science, University of Baghdad- Iraq.
- 3) **1997-2001:** Ministry of Higher Education (Republic of Libya, contraction)
- 4) **1994-1997:** Contractor with the Administration of the Science College (the drug and chemical materials project, and External lecturer in the Geology Dept. College of Science, University of Baghdad).
- 5) **1992-1994:** Head of Division of the Geological Studies and Laboratory at the Ministry of Industry – General Establishment of Phosphate – Akkashat Mine, Western Desert of Iraq.
- 6) **1992- 1994:** Manager of Production Department of the Magnesium Oxide Project - Ministry of Industry - Iraq.

### **Courses that are taught by me:**

#### ***Courses for PhD:***

- 1- Advanced Geochemistry
- 2- Hydrochemistry and Oilfield Water
- 3- Organic Geochemistry
- 4- Metallic and Non-Metallic Ore Deposits
- 5- Seminar

#### ***Courses for M Sc:***

- 1- Geochemistry of Sediments
- 2- Environmental Pollution
- 3- Geochemical Exploration
- 4- Advanced Hydrochemistry
- 5- Isotope Geochemistry

#### ***Courses for Undergraduate:***

1. Geochemistry
2. Ore Geology
3. I taught many other courses such as: General Geology in many Universities (Baghdad University, College of Science, Department of Geology, Department of Physics and Department of Biology (For women)), (Al-Mustanseyiya University, Department of Chemistry and Department of Biology).

### **Publications:**

1. Awadh, SM and Awad AM., 2020, Evaluation of Injana claystone beds for brick industry in Iraq.KUWAIT. accepted in Press.
2. Awadh, SM and Awad AM., 2020, Reserve estimation of Late Miocene Injana claystone beds for Portland Cement and brick industry, middle of Iraq. Iraqi Geological Journal, 53 (1D): in press.
3. Awadh, SM., and Al-Mimar, H., & Yaseen, Z. M. (2020) Groundwater availability and water demand sustainability over the upper mega aquifers of

Arabian Peninsula and west region of Iraq. *Environment, Development and Sustainability*, DOI 10.1007/s10668-019-00578-z.

4. Yaseen ZM & Awadh SM (2019) Meteorological data mining and hybrid data-intelligence models for reference evaporation simulation: A case study in Iraq. *Computers and Electronics in Agriculture*, **167** (105041).
5. Awadh SM & Al-Hamadani JA (2019) Urban geochemistry assessment using pollution indices: a case study of urban soil in Kirkuk, Iraq. *Environ Earth Sci*, 78 (20):1-12. DOI 10.1007/s12665-019-8615-3.
6. Awadh, S.M. & Khalid, S. A., (2019) Tigris River Sediments as Abrasive for Polishing Marble. *Nat Resour Res*, **28** (4): 1371–1383  
<https://doi.org/10.1007/s11053-019-09456-x>.
7. Awadh S. M. and Yaseen, Z. M., (2019) Investigation of silica polymorphs stratified in siliceous geode using FTIR and XRD methods. *Materials Chemistry and Physics*, 228: 45-50. Elsevier IF= 3.
8. Awadh, SM, Al-Auweidy, MRA, Alyaseri A (2018) Geochemical indicator for decipher the paleoredox environment of the Zubair Formation in southern Iraq. *Indian Journal of Natural Sciences*, 9 (51): 15910-15917.
9. Awadh, SM and Khalid, SA, (2019) Assessment of magnetite polishing by using Tigris River sediments in Baghdad: An ore microscopy application. *Iraq Journal of Science*, 60 (1B), Scopus.
10. Yaseen, Z. M., Awadh S. M., Sharafati Ahmed, and Shamsuddin Sh., (2018) Complementary data-intelligence model for river flow simulation, *Journal of Hydrology* 567: 180-190. IF=3.727.
11. Awadh SM and Al-Bassam KS (2019) Zinc-lead mineralization in northern and northeastern Iraq. *Iraqi Bulletin of Geology and Mining, Special issued*, 8:19-40.
12. Awadeesian AM, Al-Jawad SN, Awadh SM and Al-Maliki MM (2018) Chronostratigraphically based reservoir model for Cenomanian carbonates, southeastern Iraq oil fields, *Iraqi Geological Journal*, 51 (2): 1-27.
13. Awadeesian AM, Awadh SM, Al-Dabbas M, Al-Maliki MM, Al-Jawad SN, Hussein AK (2019) A modified water injection technique to improve oil recovery: Mishrif carbonate reservoirs in southern Iraq oil fields, case study, *Iraqi Geological Journal* (Scopus), 52 (1):125-145.
14. Al-Mimar HS, Awadh SM (2019): The role of chemistry of the oil-field water in the distribution of reservoir pressures: A case study of the Mishrif reservoir in the southern oil-fields, Iraq. *Journal of Petroleum Research and Studies*, 0 (22): E52-E64.
15. Awadh SM, Al-Mimar HS, Alyaseri A (2018) Salinity mapping model and brine chemistry of Mishrif reservoir in Basrah oilfields, Southern Iraq. *Arabian Journal of Geosciences* 11(18):552, p. 1-11, DOI 10.1007/s12517-018-3908-5.
16. Al-Mimar HS, Awadh SM, Alyaseri A, Yaseen ZM (2018) Sedimentary units-layering system and depositional model of the carbonate Mishrif reservoir in Rumaila oilfield,

Southern Iraq, *Modeling Earth Systems and Environment*, DOI10.1007/s40808-018-0510-5.

17. Awadh S.M (2018) Petrography and mineral chemistry of a newly discovered Ag and Cd ore minerals in the Zn-Pb-barite occurrence in Alanish area, Zakho, northern Iraq, *Iraqi Bullitin of Geology and Mining*, 14 (2): 97-108.
18. Boschetti Tiziano, Awadh, SM and Salvioli-Mariani E. (2018) Origin and MgCl<sub>2</sub>-NaCl variations in an athalassic sag pond: insights from chemical and isotopic data, *Aquatic Geochemistry*, v 24, issue 98. doi.org/10.1007/s10498-018-9337-y. IF=1.982.
19. Awadh, SM, (2018): Chemical, physical characterization and salinity distribution in the Zubair reservoir at North Rumaila Oil field, Southern Iraq. *Iranian Journal of Oil & Gas Science and Technology*, Vol. 7), No. 1, pp. 20-39.
20. Awadh, SM., Al-Bahadily, H. A. and Al-Ankaz Z. S. (2018): Interpreting the Tectonics of the Abu Jir Fault, Karbla – Najaf Plateau using Mineralogical and Geophysical data. *Iraqi Bulletin of Geology and Mining*. 14 (1): 47-63.
21. Awadh, SM and Ali RA. (2017): Assessment of the Rutba Formation silica sand asabrasive for grinding and polishing galena: a contribution in ore microscopy, *Iraqi Bulletin of Geology and Mining*. Vol.13, No.1:99-106.
22. Awadh S.M (2018) A preliminary assessment of the geochemical factors affecting groundwater and surface water quality around the rural communities in Al-Anbar, Western Desert of Iraq, *Environmental of Earth Sciences*, 77 (30): 1-18.
23. Awadh, SM and Abdulla Fatma H. (2017): Purification of aqueous water from Pb (II) by natural bentonite: An empirical study on chemical adsorption, *Environ Earth Sci*. 76:386.
24. Awadh SM and Fadhil LI, (2016): Assessment of Carbonate rocks, Western Desert of Iraq as dimention stone for building. *The Arab Journal of Sciences and Research Publishing*, Vol. Issue (7): 1, December: 232-248.
25. Awadh, SM and Ali RA., (2017) Evaluation of Iraqi Phosphorite from Akashat Mine as a Polishing and Whitening Material in Human Dentistry: A Study in Medical Geology", *International Journal of Science and Research (IJSR)*, <https://www.ijsr.net/archive/v6i10/v6i10.php>, Volume 6 Issue 10, October:1082 - 1091, #ijsrnet
26. Awadh SM and Al-Ankaz. ZS (2016): Sulfur isotope geochemistry of the bituminous fatha evaporates in Fatha Formation, Hit -Abu jir area, western Iraq. *Iraqi Geological Journal*, 39-49 (2):34-45.
27. Awadh SM and Al-Ankaz. ZS (2016): Inorganic geochemistry and origin of bitumen intruded in Euphrates and Fatha Formations in Hit area, western Iraq, *Iraqi Journal of Science*, Vol. 57, No.4A, pp: 2478-2489.
28. Awadh SM and Nejbert K (2016) Polymetallic sulfide ores hosted in Late Permian carbonate at the Alanish locality, northern Iraq: petrography and mineral chemistry. *Arabian Journal of Geosciences (Springer)*, 9 (9):1-15, DOI 10.1007/s12517-016-2571-y. IF=1.224



29. Awadh SM, and Al-Ankaz ZS, 2016: *Geochemistry and petrology of Late Miocene-Pleistocene Dibdibba sandstone formation in south and central Iraq: implications for provenance and depositional setting. Arabian Journal of Geosciences*, V.9, No. 8: 1-14, Springer, IF=1.224
30. Al-Hamdani, J., Awadh Salih Muhammad, and Ommer Sabah Ibrahim, 2016: *Geochemical partitioning of heavy metals in the urban soil, kirkuk-iraq, Iraqi Geological Journal*, 39-49 (1): 1-24.
31. Awadh, S, M and Al-Kilabi J.E.H., Fras Mudhafer, 2014: *Assessment of Groundwater Quality Using Water Quality Index (WQI) in Al-Hawija Area, Northern Iraq, Iraqi Geological Journal*, V 39-49 (1), 67-76.
32. Awadh, SM, 2016: *Outstanding Universal Values of the Sawa Lake as a World Nature Heritage. Bulletin of the Iraq Natural History Musuem*, 14 (1): 1-11. GIF-0.602.
33. Mirza, T.A., Mohialdeen, I.M. and Awadh, S.M., 2016. *Iron mineralization in the Garagu Formation of Gara Mountain, Duhok Governorate, Kurdistan, NE Iraq: geochemistry, mineralogy and origin. Arabian Journal of Geosciences*, 9(6), pp.1-13. DOI 10.1007/s12517-016-2450-6.
34. Al-Hamdani, J., Merkel, H., B., Awadh S.M., and Ommer Sabah Ibrahim (2016): *Modelling Natural Attenuation of Heavy-Metal in Groundwater of Kirkuk City, Iraq. Iraqi Journal of Science*, 2016, Vol. 57, No.3B, pp:2043-2061.
35. Awadh SM, and Sfoog Asi Hussien, 2015: *Rare earth elements geochemistry of the Upper Oligocene-Middle Miocene succession in the Western Iraq. Iraqi J of Sciences*. 4C (56), 2015.
36. Awadh, SM, Abdulhussein, FM and Al-Kilabi, JA. 2016: *Hydrogeochemical processes and water-rock interaction in groundwater of the Al-Dammam aquifer at Bahr Al-Najaf, Central Iraq. Iraqi Bulletin of Geology and Mining*, 12(1):1-15.
37. Awadh SM, Al-Kilabi, JA, and Khalfah N.H., 2015. *Comparison the Geochemical Background, Threshold and Anomaly with Pollution Indices in the Assessment of Soil Pollution: Al-Hawija, North of Iraq Case Study. International Journal of Science and Research (IJSR)*, Vol. 7, (4), pp: 2357-2363. IF=6.
38. Awadh SM, and Sfoog Asi Hussien, 2015: *Organic geochemistry and stable carbon isotopes of oil seepages in the Abu-Jir Fault Zone at the Al-Anbar governorate, Iraq, Iraqi Journal of Sciences*, 4B (56), 2015.
39. Awadh SM, and Al-Mimar HS, 2015: *Statistical analysis of the relations between API, specific gravity and sulfur content in the universal crude oil, International Journal of Science and Research (IJSR)*. Volume 4, Issue 5, pp:1279-1284. IF=6.
40. Awadh SM and Lenaz A Fadhel (2015): *Assessment of porcellanite in Western Desert of Iraq as aggregates for structural light weight concrete, Journal of Babylon University/Pure and Applied Sciences*, V 23 No 4: 1636-1652.
41. Awadh SM and Lenaz A Fadhel (2016): *Assessment of sandstone in western desert of Iraq as anti-acidic and alkalis benches. Journal of Babylon University/Pure and Applied Sciences*, V 24, No 5:1378-1394.

42. Awadh SM, and Al-Jubory H. E. 2015: Sorption efficiency of bentonite in removal Cd from aqueous solutions, ***Iraqi Journal of Science***. V 56, No 2B, pp:1438-1445.
43. Awadh SM, and Ayad Abud Hammeed Y., 2015: Sorption efficiency of kaolinite in removal Cd from aqueous solutions, ***Iraqi Journal of Science***, V 56, No 3C, pp: 1699-1707.
44. Salman Z. Khalaf, Ali T. Yassin, Salih M Awadh and Rafaa Z. Jassim, 2014: Mineralogical Characteristics of the Ellicott Meteorite Using Scanning Electron Microscopy and Energy Disperse Spectroscopy (SEM-EDS). ***Arab J Geosci***. (2015) 8:4819–4831.
45. Al-Rawi F, Al-Ameri Th. Awadh S. M., 2014: Petroleum geochemistry of oil sample from shallow borehole at Sakran site, western Iraq. ***Arab J Geosci***, 7:545-558. DOI 10.1007/s12517-012-0813-1.
46. Awadh, S. M., 2014: Stable carbon and nitrogen isotopes and elemental composition and origin the organic matter from the Euphrates, Injana and Dibdibba formations in Iraq: discrimination between marine and terrestrial environments. ***Geological Quarterly Journal***, 2014, 58 (4), pp: 729–736, DOI: <http://dx.doi.org/10.7306/gq.1174>.
47. Awadh, S. M and Al-Kilabi, Ayfan J.H., 2014: Assessment of groundwater in Al-Hawija (Kirkuk Governorate) for irrigation purposes. ***Iraqi Journal of Science***, V. 55, No. 2B, pp: 760-767.
48. Awadh, S. M., Al-Yaseri, A. and Hussein, A.R., 2013: The influence of kaolinite migration and pH on permeability in the Zubair reservoir in the North Rumaila Oilfield, southern Iraq. ***Iraqi Journal of Science***, Vol 55, no. 2B, pp: 780-789.
49. Ali, K.K., Awadh S. M. and Al-Auweidy, M. R., 2014: Assessment of natural radioactivity of marl as raw material for Portland cement at Kufa cement quarry in Najaf Governorate. ***Iraqi Journal of Science***, v55, No. 2A, pp: 454-462.
50. Awadh S.M and Towfik S. M., 2013: Sorption Mechanism and Capacity Evaluation of Palygorskite from Iraq to Remove Pb from Aqueous Solution. ***J Geol Geosci*** 2: 126. doi: 10.4172/2329-6755.1000126.
51. Awadh S.M. and Muslim R. E., 2014: The formation model of gypsum barrier, chemical temporal changes, and assessment the water quality of Sawa Lake, southern Iraq. ***Iraqi journal of Science***, Vol 55, no1, pp: 161-173.
52. Awadh S.M., 2015: Cd, Ni, and Pb distribution and pollution assessment in roadside dust from Baghdad City and Western Iraqi Desert. ***Arab J Geosci***, 8, pp: 315–323. DOI 10.1007/s12517-013-1204-y.
53. Awadh S.M. and Abdul Al-Ghani, S. 2013: Assessment of sulfate springs water in the west of Iraq for balneo-therapeutic, drinking, irrigation and aquatic purposes, ***Environmental Geochemistry and Health***, Springer- 36:359–373, 10.1007/s10653-013-9555-6.
54. Al-Dabbas, M. Awadh, S. M., and Zaid A.A., 2014: Facies analysis and geochemistry of the Euphrates Formation in Middle of Iraq. ***Arab J Geosci***, 7:1799–1810, DOI 10.1007/s12517-013-0932-3.



55. Awadh S. M., Ali, K. K., and Alazzawi, A. T., 2013: *Geochemical exploration using surveys of spring water, hydrocarbon and gas seepage, and geobotany for determining the surface extension of Abu-Jir Fault Zone in Iraq: A new way for determining geometrical shapes of computational simulation models. Journal of Geochemical Exploration, Elsevier, 124, pp: 218–229.*
56. Habib R. H., Awadh S. M. and Muslim M.Z., 2012: *Toxic heavy metals in soil and some plants in Baghdad, Iraq. Journal of Al-Nahrain University. Vol.15 (2), June, pp: 1-16.*
57. Awadh S. M. and Ahmed R. M, 2012: *Hydrochemistry and pollution probability of selected sites along the Euphrates River, Western Iraq. Arabian Journal of Geosciences, 6:2501–2518, DOI 10.1007/s12517-012-0538-1.*
58. Awadh S.M. Aboud, Z.S. and Eisa, M.J., 2012: *Chemical and physical control processes on the development of caves in the Injan Formation, Central Iraq, Arab J Geosci (2013) 6:3765–3772.*
59. Awadh S.M. 2012: *Geochemistry and mineralogical composition of the airborne particles of sand dunes and dust storms settled in Iraq and their environmental impact, Environ Earth Sci 66 (8), PP: 2247-2256.*
60. Al-Dabbas, M. Awadh, S. M., and Zaid A.A., 2013: *Mineralogy, Geochemistry and Reserve Estimation of the Euphrates Limestone for Portland Cement Industry at Al-Najaf Area, South Iraq. Arab J Geosci. (6), pp: :491-503, DOI 10.1007/s12517-011-0370-z.*
61. Kamal K. K., Awadh S. M. and Jassim M. Hemad, J. M., 2011: *Ground Radiometric Method as a Tool for Determining the Subsurface Boundary of Buried Bauxitic Karsts, QSU Journal for Science. 16, pp: 37-47.*
62. Awadh S. M., 2010: *Geochemistry of termite hill as a tool for geochemical exploration of glass sand in the Iraqi Western Desert. International Journal of geosciences, Vol.1, pp: 130-138. IF=0.26.*
63. Awadh S. M., Mayson U. A. and Rana A. A. (2011): *Mineralogy and Palyonlogy of the Mesopotamian plain sediments, Central Iraq. Arab J Geosci., 4, pp:1261–1271.*
64. Awadh S. M., and M, R. Luma, 2012: *Climatic prediction of the terrestrial and coastal areas, Iraq. Arab. J. Geosci., 5, pp: 465–469. DOI 10.1007/s12517-010-0257-4.*
65. Awadh S. M, Thamir K. Al-Ameri, Sahar Y. Jassim and Mehmet S. Bayraktutan, 2010: *Fluid inclusions used to assess oil migration in Duhok, North Iraq. Positioning, Scientefic Reserch, 2010, 2, pp: 42-49.*
66. Ayad A. Al- Halem and Awadh S. M., 2009: *Chemical characterization and environmental pollution of drilling waste on-site disposal in some Iraqi oilfields. Proceeding of the 3<sup>rd</sup>Scientific conference. Iraqi Journal of Science, pp: 1866-1871.*
67. Awadh S. M. and Hamed Hassan Abdulla, (2011): *Mineralogical, geochemical and geotechnical evaluation of Al-Swera soil used for the bricks industry in Iraq.. Arabian Journal of Geosciences Vol. 4, pp: 413-419.*
68. Ayad A. Al-Haleem and Awadh, S. M., 2011: *Salinity evaluation of on-site drilling wastes at Bi-Hassan oilfield, north Iraq. Journal of Babylon University, vol.9, no.2, pp:581-589.*

69. Awadh, S. M., 2009: Atmospheric pollution in Baghdad city, Iraq (**Proceeding of 3<sup>rd</sup> scientific conference of College of Science, University of Baghdad. Iraqi Journal of Science**, pp.: 1727-1740.
70. Awadh S. M; 2009: Iron Content Variations in Sphalerite and Their Effects on Reflectance and Internal Reflections under Reflected Light. **Arab. J. Geosci. (AJGS)**, vol. 2, pp: 139-142.
71. Awadh, S. M., Habib R, H. and Al-Bassam, K.S. (2008) Mineralogy, Geochemistry and origin of zinc – lead – barite deposits in Northern Thrust Zone, Northern Iraq. **Iraqi Journal of Sciences. Vol.49, No.2, pp: 124-136.**
72. Awadh S. M. Habib R.H. and Al-Bassam K. S., 2008: Upper Cretaceous carbonate hosted zinc-lead-barite deposits in Northern Thrust Zone, Northern Iraq; Petrography and geochemistry. **Arab. J. of geosci. (AJGS), Springer; vol. 1; no.1, July, pp:75-85.**
73. Awadh, S. M., Habib R, H. and Al-Bassam, K. ,2008: Geneses of the zinc-lead – barite deposits in the Northern Iraq: ore mineralogy, geochemistry, fluid inclusions, lead isotopes and sulfur isotopes implicatiuons. **Dirasat; An International Refereed Research Journal. Vol.35, no.2, pp: 96-110.**
74. Awadh S. M. and Kettanah Y. 2008: Petrology, geochemistry and tectonic environment of the Shalair Metamorphhic Rock Group and Kater Rash Volcanic Group, Shalair Valley area, Northeastern Iraq. **Iraqi Journal of Science. Vol.49, No.1, pp:135-146.**
75. AL-Dulaimi A.S. and Awadh S. M. 2007: Geochemical and paleontological study of Gulneri Formation (Upper Cretaceous) NE Iraq. **Al-Anbar University Journal for pure sciences. ISSN: 1991-8941. Vol.1, No. 3, pp: 64-74.**
76. Awadh, S. M. 2004: Cluster and factor analyses R and Q mode technique of geochemical and petrological data of the Shalair Metamorphic Rock Group, Shalair Valley area, Northeastern Iraq. **Iraqi J. Sci. Vol.45C, No.1, pp: 1-19.**
77. Awadh, S. M. 1999: A new proposal method for sampling and explosion of the phosphatic rocks in the Akkashat Mine, Western desert, Iraq. **Iraqi J. Sci., Vol. 40C, No.4, pp: 1-20.**
78. Awadh, S. M. 2006: Biogeochemistry of arsenic in the water system (short essay). **The Electronic Water Journal.** (Online available).
79. Awadh, S. M. 2006: Mercury and their compounds in the aqueous system (short essay) **The Electronic Water Journal.** (Online available).
80. Awadh, S. M. (2006): The environmental pollution by radon gas and lung cancer. (Short essay). **Journal of Environment and Life. Ministry of Environment. No.11, Dec., p.26-27.**
81. Major and trace element concentrations in human body: their importance and food sources. (Short essay), published in **Journal of Medicine and life.**
82. Medical Geochemistry of Vanadium and Nickel in Human body, (Short essay). **Journal of Medical and life).** under review.

### **Book Editing:**

1. Elawi M. N. and **Awadh S. M.** (2011): Essential in Geology, University of Baghdad, College of science, Earth Science Department, Baghdad, Iraq. 470p.
2. **Awadh, S. M.**, 2015: Energy Science and Technology. Volume 9, Geothermal and Ocean Energy (Ch.14). ISBN: 1-62699-061-1, Studium Press LLC, USA. pp: 364- 382.
3. **Awadh S. M.** and Abdulghani Sura, (2016): Medical Geology of Iraqi Sulfurous Springs: An Overview on Balneology and Mud Therapy. Lab Lambert Academic Publishing, Germany. ISBN: 978-3-659-82796-9.
4. Zaidan Salman kh, **Awadh S M**, Yassein AT (2016): Ore petrography and cosmogeochemistry of Ellicott meteorite, mineralogy and spectrochemistry. Scholar's Press, Germany, **ISBN-13**:978-3-659-83814-9; **ISBN-10**:3659838144; **EAN**: 9783659838149. 65p.
5. **Awadh S. M.** (2016) Gemstones: Mineralogy, Geochemistry, Mode of Occurrences, Identification and Their Beauty (In Arabic), University House for publishing, printing and translation, 96p.
6. **Awadh S. M.** (2020) Geochemistry of Radioactive Isotopes, Chapter in Book "Geochemistry", *in press*.
7. **Sand dunes still under review**

### **Thesis (M. Sc. & Ph. D.) under my supervision:**

1. **Younis Ahmed (PhD): 9/2019**
2. **Ameer (MSc) 0/2019**
3. **Ali Mutlag Awad (PhD)**
4. **Sara Ali Khalid (MSc): Preparation and Manufacturing an Abrasive for Some Industrial Uses From Tigris River Sediments in Baghdad City, started 30-10-2017. Discussed on 29 June 2019, Excellent.**
5. **Heba, S, Almimar (PhD): Litho-fluids geochemistry, probable reservoir damage and hydrodynamics of Mishrif, Khasib and Tanuma reservoirs in selected oil fields, Basrah, southern Iraq. Started 6-2-2017.**
6. **Muhanad Rasim Abbas (PhD): Geochemistry, mineralogy and water chemistry of Zubair reservoir in selected Oil fields in southern Iraq, started 1-2-2017 approximately. Discussed 26 June 2019, Excellent.**
7. **Rana Ali Abbas, Preparation abrasive materials form Iraqi Raw materials., started 12, 2015, discussed in 1-3-2018.**
8. **Zena Saleem Al-Ankaz: Mineralogy, geochemistry and organic geochemistry of bitumen-bearing sedimentary rocks and sulfur deposits in Hit - Abu Jir area, Western Iraq. (start at 20-12-2015), discussed in 1-2-2017.**
9. **Jawdat Abdul Jalil Muhammad Zaki: Urban environmental geochemistry of Kirkuk, Iraq, Ph.D., 18-12-2013, discussed 18-1-2017.**
10. **Al-Ubaidi, Sufuq Asi, 2012: Geochemical Exploration of Radioactive and Transition Elements in Oligocene-Miocene Exposures and Recent Soil Between Al-Qaim and Ramadi, West of Iraq. (Discussed in 8, Nov, 2015 supervision with Excellent degree).**

11. *Harith Ismael Mustaf Al-Jubury, 2013: Mineralogy, geochemistry and sorption efficiency assessment of Trafawi bentonite in removal of heavy metals from solutions. (25-12-2014 Defense and pass excellent,).*
12. *Al-Heeti Ayad A.Yousif, 2013: Mineralogy, geochemistry and sorption capacity evaluation of kaolinite in removal of heavy metals from solutions. (Defense and pass excellent, 18-12-2014).*
13. *Ayad abed Zaid; Petrographic study of the Euphrates Formation in Al-Najaf Area and reserve characterization for cement industry. (M.Sc.), July, 2010. Graduated Very good.*
14. *Rasol Mohamd Ahmed; Hydrogeochemistry of Euphrates river from Hit to Alsaqlawia in Al-Anbar govrenment, western Iraq (M.Sc. thesis), 16 March, 2011. Graduated Very good.*
15. *Zena Saleem Al-Ankaz: Mineralogy, Geochemistry and provenance of Dibdibba Formation in the south and middle Iraq. (M. Sc. thesis). Discussed 1-7-2012. (Graduated Excellent).*
16. *Sura Abd Al-Ghani, 2013; Balneology and mud-therapy of the sulfate spring water along Abu-Jir Fault Zone, (M Sc thesis), discussed in 23-1-2013. (Graduated Excellent).*
17. *Ruaa Essa Muslim, 2013; Hydrogeochemistry of Sawa Lake, Southern Iraq. (M Sc thesis), discussed in 9-6-2013. (Graduated Excellent).*
18. *Saad M. T. 2013; Mineralogy, geochemistry and sorption efficiency of palygorskite in Digma and Akashat Formations, western Iraq. (ph. D). Discussed in 28-7-2013. (Graduated Excellent).*
19. *Linaz Anis Fadhil: Assessment of some selected carbonate, porcelanites and quartzite sandstone, western desert of Iraq for industrial uses, (Ph.D). Discussed in 7-11-2013. (Graduated Excellent).*
20. *Muhanad Rasem Abbas Al-Auweidi,: Qualitative, quantitative and radiological Assessment of marl layer in the Euphrates Formation for Portland cement industry in Kufa cement quarry at Al-Najaf governorate. Discussed in 23-10-2013. (Graduated Excellent).*
21. *Ali Ramthan Hussein: Hydrogeochemistry of oilfield water and formation damage of Zubair Reservoir in West Qurna Field - Southern Iraq. M Sc., (Discussed in 17-12-2013). (Graduated Excellent).*
22. *Joda Efan Hamzah Al-Kilabi, 2012: Hydrogeochemistry of groundwater and the probable effect of Kirkuk irrigation project on its quality in Al-Hawija area, Iraq, M. Sc., (Discussed in 26-12-2013), (Graduated Excellent).*

### **Dissertation of undergraduate students supervised by me.**

***I had supervised many graduation project (B. Sc) such as below:***

1. **Sura Abd Al-Qani (2010):** Hydrogeochemistry of spring waters extended from Haqlaniya to Hit in Iraq **(2009-2010).**
2. **Samer Shaker Salman,** Geochemistry, mineralogy and genesis of iron ore in the Western Desert and north of Iraq **(2010-2011).**
3. **Sura Thamer Sabeeh,** Distribution and geochemistry of palygorskite and bentonite in Iraq. **(2010-2011).**
4. **Shahed Ahmed Abd Al\_Fatah,** Mineralogy and geochemistry of claystone-rich sediments in Gaara and Hyssayniyat Formation. **(2010-2011).**

5. Neaam Umer Farhan, 2012: The probable contamination by Ni and Cd of Baghdad soil near the fuel stations, **2011-2012**.
6. Saif Safaa: Investment of Sabkha for manufacturing of detergents and disinfectants, a study in industrial and environmental geochemistry ((**2012-2013**)).
7. Gheed Jasib, 2015-2016: *Porcelanite efficiency in removal of Cd ions from aqueous solutions*.
8. Safaa, 2015-2016: *Porcelanite efficiency in removal of Cd ions from aqueous solutions*.
9. Thabit Qaduri and Hawraa; Mineralogy and geochemistry of kaolinite bed exposed in Kubasa spring, west of Iraq (2017-2018)
10. Abd Al-Rahman Shallal and Ali Mohamad and Saffa. (2017-2018): The molar relationship and effect of dissolved ions on EC.
11. Noor Najim (2018-2019): The thermal effects on gypsum mineral phases: An FTIR study.
12. Ali Muntaser Ali (2018-2019): The effects of dust storm on daily temperature and environment.
13. Eman Akram (2019-2020): Solubility of carbonate and gypsum

#### **Awards:**

- Publishing in the International Scientific Journals of impact factor, award introduced by the Minster of the Higher Education and Scientific Research- Iraq, 2012.
- The best editor for the best book- award introduced by the Minster of the Higher Education and Scientific Research- Iraq, 2013
- 2017 International reviewer Publons

#### **Theses have been discussed by me:**

1. **Sarmad Jamal Hussein Al-Timimi**, Hydrochemical study for surface and groundwater in Khan Al-Baghdadi area, Anbar, west of Iraq. Supervised by Dr Firas, discussed on 31 March 2020. **Postponed due to CORVID-19.**
2. **Ruaa Isa Muslim Al-Qarashi, 11-6-2019:** Environmental Geochemistry of Wasit Governorate, Iraq, supervised by Dr Murtadha J Isa and Dr Basim.
3. **Mustafa Hatam Muhsin Al-Khaykanee, 11-2-2019**, Sequence stratigraphy and reservoir characterization of Euphrates, Diban, and Jeribe formations in Ajil oil field, Salah Al-Deen Governorate, Central Iraq. Supervised by Dr Salam Ismeal Al-Dulaimi.
4. **Noor Amer Najim, 29-1-2019:** Geochemistry of recent sediments and plant at Basrah, southern Iraq, supervised by Dr Harith Abd Al-Haleem Al-Saad.
5. **Arkan Adel Chether**, Petrology and geochemistry of clastic units of Kolosh Formattion in selected locations, supervised by Ayten Hadi, discussed **19-11-2018**. (v good 84%)
6. **Eqbal Jassin Muhammad, 9-10-2018**, facies analysis and tectostratigraphy evolution of Kolosh Formation in selected location in NE Iraq.
7. **Neam Omer Farhan, 2-10-2018**, Geochemistry and mineralogy of Injana and Muqdadiya formations (U Milcene and Pliocene) in Zurbatia area, E Iraq.

8. **Zainab Abdelretha Hameed Al-Humaidan**. Sedimentological, Mineralogical and paleontological study of subsurface marine core sediments from Umm Qasir Port to Basrah Oil Port., supervised by Dr. Muhannad Al-Jaberi, 7-3-2017.
9. **Mustafa Asaad**, Isotope geochemistry and sedimentology of the Jeribe Formation from selected areas, East of Iraq, by Saad Zaki, **15-3-2018**.
10. **Abd Al-Hadi Hamad Al-Dukhi**: Petrogenesis of serpentinite rocks in Mawat Ophiolite Complex of Zagros Suture Zone, NE Iraq, Abdulhadi Hamad Mohammed Aldokhy, supervised by Abdulsalam Mahdi Salih Altarif and Muhsen Mohammed Ghazal. University of Tikrit, 15-2-2018. Pass 85%.
11. Tay Hatam Mansor, Sedimentology study of the Aaliji Formation in karkuk oilfield, northern Iraq. M Sc thesis, supervised by Lafta Salman Khadum and Faris Najris, 21/05/2017. Pass v good 82%. **Tay Hatam Mansor, 2017**.
12. **Rusul Mahammad Abdul-Latif**, Sedimentology and Tectostratigraphy of the Pila Spi Formation from selected localities in N and NE Iraq. Supervised by Saad Zeki a. Kader. University of Baghdad, **28 March, 2017. Rusul Mahammad Abdul-Latif, 2017**.
13. **Zahraa Salih Radi Al-Shamsi**, Heavy metals in sediment core along Shatt Al-Arab Eustuary, M Sc thesis, **University of Basrah, by 9 March, 2017**. Supervised by Prof Dr Abbas H. Mohammed and Prof Dr Hamid T. Al- Saad.
14. Evaluation of organic and sedimentary facies of Naokelekan Formation (late Jurassic) in selected wells from Balad and Ajil oilfields (**In Arabic**); **Mustafa Tawfiq Hasib, 22 2-2017, University of Tikrit**, College of Science, Dept. of Applied Geology. Supervisor: Dr Lafta Salman Kadhum and Fawzi Mardan Omer (87%).
15. **Mena Saad Mohamed**, Environmental impact assessment of East Baghdad oil Field. M Sc Thesis, Baghdad University, College of Science, Dept. of Geology. 31-5-2016. Supervision: Enaam J Abdullah. (Pass v good, 89).
16. Suitability of manufacturing lightweight aggregate from recent clays in selected locations, Saldh Al-Din governorate. By **Qutaiba Fadhel Abd-Alqader Taha**, supervision by Sawsan Hamid Al-Hazaa, 19 May 2016. University of Tikrit, Pass. Excellent.
17. Water resource evaluation of Lesser Zab River Basin. **Ayad Abed Zaid**. supervised by Al-dabbas, Ph D Thesis, 24-11-2015.
18. Geochemistry and mineralogy of the bituminous sedimentary rocks of the Jurassic sequences (Sargelo, Naokelekan and Chia Qara Formations) and geochemical characteristics of oil seepages in Northern Thrust Zone in North Zako, North Iraq. Ph D. Thesis, **Amjed Shehab Hamad Al-Jaafary**, Supervised by Ayten Hadi, Discussed in **5-2-2015**.
19. The environmental and hydrogeological changes resulting from the operation and using of Iraq's Main Drain (Third River Project). Ph D. Thesis, University of Basra. **Inass Abd Al-Raza Al-Malah**, supervised by Adel Al-Badran and Qusay Al-Suhail. **25-12-2014**.
20. Hydrogeological and hydrochemistry study of Al-rahaliya- Al-Ekhedher area, M Sc thesis. University of Baghdad, Supervised Mutaz AlDabbas, submitted by **Shadad Adel Fadhel**, discussed in **1-10-2014**.

21. Petroleum system analysis and reservoir development of Addaimah oil field, Messan Governorate, South of Iraq, M Sc thesis. University of Baghdad. **Heba Sadoon Muhsin Almimar**, supervised by Thamer Al-Ameri, discussed **7-9- 2014**.
22. **Mohanad Hamed Al-Jaberi**, Sedimentological, geochemical and hydrological study of clastic and organic sediments in south Iraq-North and northwestern Arabian Gulf. Ph D Thesis. **Discussed 18-12-2013**. Supervised by Prof Al- Dabbas.
23. The study of physical and chemical properties of gypcrete deposits in Basrah governorate southern Iraq and improvements their properties for plaster industry. **M Sc theisi, Ajel Swain Alhadadi**. University of Basra, supervisor **Dr. Sattar J Al-Khafaji**, Discussed in **28-10-2013**.
24. Content and relations between the major and rare earth elements in Tigris River in dissolved and suspended forms. University of Musol. Ph D Theisi, **Hazim Jumaa Mahmood**. Supervisor **Dr Hisham Yahya Dhannoun**, discussed in **13-10-2013**.
25. Geochemistry of water and sediments of Dokan lake and Lesser Zab River, Kurdistan Region, NE Iraq. **Awaz Kareem Rasul**, Ph.D., University of Salahaddin. Supervised by **yawooz A. kettanah and Ayser M Al-Shamaa**, discussed in **16-7-2013**.
26. Geochemistry and mineralogy of clay units in the Injana Formation, Khanwaq area, Sala Adin governorate. **Esraa Salman**, M Sc thesis, Geology Department, College of Science, University of Basra. **27-3-2012**. Supervised by Dr **Sattar Jabar**.
27. Assessment of the heavy metals in the sediments of the Euphrates River in Al-Anbar province. **Ahmed Subhi Al-Rawi**, M Sc thesis, Chemistry Dept. University of Al-Anbar. **5-12-2012**. Supervised by Tahseen A. Zaidan and Emad M. Salih Al-Heety.
28. Total petroleum system for the western basin of southern Iraq. **Rasha Fauzy Faysal**. Ph. D. Thesis, Petroleum Geology, University of Baghdad. **22-10-2012**. Supervised by Al-Ameri Thamer Kh.
29. Petrology, Geochemistry and petrogenesis of amphibolites rock from the Penjween Area, NE Iraq. **Dalia Kameran Hasan**. M Sc Thesis, University of Baghdad. **18-10-2012**. Supervised by Ayten H.
30. Hydrological study of the lower part of Wadi Al-Khur basin, SW Iraq. **Ali Hussain Ali**. M Sc Thesis, University of Baghdad. **8-10-2012**. Supervised by Al-Shammaa Ayser
31. Environmental study of Dalmaj Marsh area, Wasit governorate, Iraq. **Wassan Muhammad Jassim Al-Zerraj**. M Sc thesis, University of Baghdad. **3-7-2012**. Supervised Al-Dabbas M.
32. Relationship between surface and shallow groundwater in the eastern side of Shatt Al-Hilla, Iraq, **Arshad Wahab Abdul Rheem Al-Anzy**. M Sc thesis, University of Baghdad.**30-4-2012**. supervised **Al-Jabari Muqdad Hussain Ali**.
33. Mineralogy and geochemistry of Muqdadiya Sandstone in eslected areas of Mesan, NE Iraq, **Jassim Jabar, Al-Samaani**, M Sc thesis, University of Basrah. **19-11-2011**, Supervised by **Sattar J R**.



34. Petrochemistry and petrogenesis of basic rocks of Mawat Ophiolite Complex, NE Iraq. **Emad Khadhim Abdulzahra Alsaffi**. M.Sc thesis, University of Baghdad, **17-11-2008**. Supervised by Ayten H
35. Determination of heavy metals (Pb,Cd,Ni) and Uranium concentration in selected soil at Baghdad city. M.Sc. in physics by **Adawia Mohsen Alwan**. College of science for women, University of Baghdad. **4-6-2009**. Supervised by Reyadh Al-Ubaidi.
36. Mineralogy and geochemistry of the iron ore deposits in Asnawa aeea, NE Iraq. Ph .D, by **Maysaa Ali Abed Awn**. Thesis in Geochemistry, College of science, University of Baghdad. **31-3-2011**. Supervised by Habib R H.
37. **Mohammad Lateef Husein, Subpervised Dt Mohanad Al-Jaberi 19 Feb 2020 Basrah**

**Thesis reviewed scientifically by me:**

- 1- Petrogenesis, chronogeochemistry and tectomagmatic setting of the granitoid intrusions in the Shalair valeey area, NE Iraq. Emad Khadhum Abd Al-Zahra, 2-10-2016. Pass 88%.
- 2- Geochemical study of Pb in surface zones and its effects on Kirkuk city, N Iraq.2015 By: Noor Mohamad Sameen; Supervised by: Al-Jumaili Hassan Ahmed Ali. Evaluated by me in 11 May 2015. From Ministry of Higher Education and Scientific Research.
- 3- Petrographical, geochemical and petrogenesis study of chromite bearing ultramafic and associated rocks inMawat and Penjween ophiolite complexes northeastern Iraq. Basim Hameed Sultan (PhD), under supervision of Dr Sattar Al-Khafaji. From Ministry of Higher Education, No and Date 1456 in 22/4/2015. (86% Pass). Sent **22 April, 2015**.
- 4- Study of pollution groundwater in the southwest of Baghdad using the geography information system (GIS) supervised by Dr. Mustafa Ali Hassan, 2015.
- 5- Water resources evaluation in Alton Kopri Basin NE Kirkuk, pH.D., Mazin Abd Al-Adheem Al-Abadi, 3-11-2013, supervision by Prof Dr Ayser Al-Shammaa.
- 6- Evaluation of fire clay as binding materials for manufacturing fire brick. Department of Physics, M Sc. 19-9-2013. Supervisor, Dr Harith.
- 7- Petrography, facies analysis and provenance of Khabour Formation Northern Iraq, Muhammad Fakhry Umer. Ph D Thesis, March, 2012. Supervised by Thamer Al-Shamary.
- 8- Mineralogy amd Geochemistry of Sargelo Formation (middle Jurassic), Sulaimaniya Governorate, NE Iraq. Hayder Faleh Ahmed. M. Sc. Thesis, Aug. 2012, supervised by Ahmed Al-Shakeri.

**Patent reviewed by me:**

- 1- Designing and testing of geomembrain for lining of hazardous-waste dumping sites using Iraqi bentonite and porcellanite. 1-2-2011. (Al-Bassam).
- 2- Manufacturing thick-meter device. Al-Rawi, D.Y; 9-2013.

### **Book Editing:**

1. Elawi M. N. and **Awadh S. M.** (2011): Essential in Geology, University of Baghdad, College of science, Earth Science Department, Baghdad, Iraq. 470p.
2. **Awadh, S. M.**, 2015: Energy Science and Technology. Volume 9, Geothermal and Ocean Energy (Ch.14). ISBN: 1-62699-061-1, Studium Press LLC, USA. pp: 364-382.
3. **Awadh S. M.** and Abdulghani Sura, (2016): Medical Geology of Iraqi Sulfurous Springs: An Overview on Balneology and Mud Therapy. Lab Lambert Academic Publishing, Germany. ISBN: 978-3-659-82796-9.
4. Zaidan Salman kh, **Awadh S M**, Yassein AT (2016): Ore petrography and cosmogeochemistry of Ellicott meteorite, mineralogy and spectrochemistry. Scholar's Press, Germany, **ISBN-13**:978-3-659-83814-9; **ISBN-10**:3659838144; **EAN**: 9783659838149. 65p.
5. **Awadh S. M.** (2016) Gem Stones: Mineralogy, Geochemistry, Mode of Occurrences, Identification and Their Beauty (In Arabic), University House for publishing, printing and translation, 96p.
6. Awadh S, M (2020) Geochemistry of radioactive isotopes In thch Chpater in Geochemistry book.

### **Scientific reviewer for promotion to assistant professor:**

- 1- University of Al-Nahrain.
- 2- University of Baghdad- Ibn-Al-Haitham College
- 3- University of Thi Qar, College of Science
- 4- University of Mosul- College of Science, Dept. of Geology
- 5- University of Tikrit, College of Science.

### **Scientific reviewer for promotion to assistant professor:**

- 1- University of Babylon, College of Sciences, Applied Geology.
- 2- University of Dayala
- 3- University of Thmar- Republic of Yamen

### **Conferences and Symposiums:**

1. Iraqi Geological Conference (GeoIraq 17<sup>th</sup>) 24-25 April 2019 will be held in Baghdad. Present three papers and a vice president of the Organizing Committee.
2. First International Petroleum Engineering Conference, Misan University, 23-24/4/2019, Member of the Scientific Committee, and accepted abstract.
3. Iraqi GeoPark 14-4-2019, The president of the symposium and the chairman of the symposium.
4. World Congress on Geochemistry (Geochemistry 2017), Pulsus, 16-17 Nov 2017 Atlanta USA. Organizing Committee.
5. Consultation meeting on the preparation of geo park files related to the UNESCO in the Arab region, 8 - 9 August 2018, Kuwait, State of Kuwait, presentation SAWA.
6. The First International Congress on Geoscience (ICG1), 20th to 24th March 2018 in El Jadida, Morocco. Accepted abstract (The Sawa Lake as an Iraqi natural heritage by Salih Muhammad Awadh)
7. 1st Conference of the Arabian Journal of Geoscience, 12-15 Nov 2018. Accepted and published paper (Potential salinity mapping of the Mishrif reservoir in Basrah oilfields, Southern Iraq).

8. International Conference on Global Civil Engineering Challenges in Sustainable Development & Climate Change, 17-18 march 2017, I participated as: International advisory Committee.
9. 1<sup>st</sup> International Scientific Conference on Geophysics & Remote Sensing (ISCGR-2018) "New Technology Applications of Geophysics & Remote Sensing in Petroleum Exploration" presented 2 papers: **(1)** *Organic Geochemistry and Stable Carbon Isotopes of Oil Seeps along the Abu-Jir Fault at Al-Anbar Governorate, west of Iraq.* **(2)** Mineralogy and geochemistry of native sulfur lenses hosted in gypsum and bitumen seepage in Abu-Jir area, Western Iraq. 14-15/11/2018.
10. The 3rd Open Session of the International Geoscience Programme (IGCP) Council and the presentation of the new UNESCO Global Geoparks applicants, 21 Feb, 2018. (Presentation). **France**
  2. *The GeoPark UNESCO Program*, 2nd meeting- Amman-Jordan, Landmark Hotel, attendance and present Sawa Lake and Iraqi Marsh for the Local and International GeoPark, 15-16/11/2017.
  3. The 16th Iraqi Geological Conference (GeoIraq-16th), 26-27 April, 2017, Oil Cultural center, Baghdad, Iraq.
  4. The 43rd IAH Congress (Montpellier, France), 25-29 Sept 2016. Abstract acceptance" Balneo-Mud Therapy of Iraqi Sulfurous Springs.
  5. The scientific symposium of water in Babylon, 12 May 2106. University of Babylon, college of Science, Dept. of Applied Geology (**Attendance**).
  6. The scientific symposium of future vision of Mining and Metallurgical Engineering, University of Technology, Baghdad, 18, April 2016. **2nd session Charman and Oral Presentation:** Mining works in phosphate Akashat mine.
  7. Symposium of Iraqi Wetlands Day 2016: At Iraqi Geological Union- Baghdad- Al-Mansoor on 4th Feb 2016. **Member of the Scientific committee, Oral presentation:** Geochemistry of Iraqi sulfurous springs.
  8. Symposium of Geopark of Iraq, 2016: A member of the Scientific Committee. At Iraqi Geological Union- Baghdad- Al- Mansoor on 6 April 2016. **Oral Presentation:** Sawa Lake is an outstanding Iraqi natural heritage.
  9. Symposium of Earthquakes, University of Baghdad, college of Sciences, Dept. of Geology. 4-May, 2015, (**Attendance**).
  10. Unite for Heritage symposium, University of Baghdad, College of Arts, Dept. of Heritages, 28-March, 2015. (**Attendance**).
  11. Symposium of Archiology, Ministry of Environment, Baghdad Environmental Office. (**Oral Presentation**): Sawa Lake as world natural heritage. 11-12/3/2015.
  12. The Second Conference on Geological studies in Archiolohy (GeoArciology), University of Baghdad, College of Science, Geology Dept., 15-16 April, 2015. Accepted abstract Sawa, and presented, Natural Heritage and present paper (**Oral Presentation**) and Chairman of session.
  13. Symposium of Geographical Role In Solving Contemporary Problems in Iraq, Kufa University, Education College, Geography Dept. (**Attendance**), 1st April, 2015.
  14. Symposium of climatic changes and its environmental impacts. University of Baghdad, College of Science. The Environmental Center. (**Attendance**), 23,9- 2013.
  15. The international conference Leadership, Education Innovation, 15-16 may, 2014, Fulbright Commission-Warsaw University, Poland. (**Attendance**).
  16. Workshop of Education and Innovation, Fulbright Commission-Warsaw University, Poland. (**Attendance**).

17. Recent Contribution to the Geology of Iraq, Iraq Geological Survey, 15- 16/12/2013. **Chairman of the Geochemistry session.**
18. The Second International Conference of the Iraqi oil Studies. University of Baghdad, College of Science, Earth Science Dept. **(Attendance)**, 10-12-2013 to 12-12-2013.
19. The symposium of Earthquake. Department of Geolgy, University of Baghdad. Dec-2013, **(Attendance).**
20. The 1st Scientific Conference of Engineering problems in the Baghdad soil and its treatment. **13-14 Mach, 2013.** University of Baghdad, College of Science, Earth Science Dept. (Member of organization committee) **(postponed).**
- 21.. The University of Technology and College of Science-University of Al-Anbar, 20-03-2013. **(Attendance).**
22. The 2nd Scientific Conference of Center of Desert studies, University of Anbar. **24-26- December – 2012, (oral presentation).**
23. The 1st scientific symposium of Oilfield in Iraq: Reality and Ambition; 2-4 2013. University of Dyala, Dept of Petroleum Geology and Minerals, **(Attendance).**
24. The 2nd Scientific Conference of Pure Science, College of Science, University of Anbar. 20-22/11/2012, **(Oral Presentation).**
25. The Sixth Scientific Conference of College of Science, Babylon University, **6-7/2-12, (Attendance).**
26. The 1st Scientific Conference of Dust Storm and its Environment Effects: The Causes and Treatments. **17-18/ 10/2012.** University of Baghdad, College of Sceince, Earth Science Dept, **(Oral Presentation).**
27. The First EAGA Workshop on Iraq, Hydrocarbon exploration and field development (European Association Geoscientists and Engineers. **29 April- 2 May 2012,** Istanbul-Turkey, **(Abstract sent and accepted)**
28. The Second Geological Conference (Our Natural Resources as a Base for the Development of the Society). University of Mosul, College of Science, Dept of Geology, **25-26, April, 2012, (Attendance).**
29. 30. Sustainable Development and the Future of Our Water Resources. University of Al-Anbar, Center of Desert Studies, **18-19-April-2012.**
31. The Fifth National Conference on Environment and Natural Resources, 24-26 Jan, 2012: University of Basrah, College of Science.**(Oral Presentation** of Dust storm paper)
32. Organizer committee of The International conference on Iraqi Oil Studies, 20-22, Dec, **2011.** University of Baghdad, College of Science, Earth Sciences Department. **(5 papers oral presented).**
33. The 18th International Petroleum and Natural Gas Congress and Exhibition of Turkey (IPETGAS, 2009). May, 13-15, **2011.**
34. Organizer committee of First symposium of Archiogeology 23-24, Mach, **2011.** University of Baghdad, College of Science, Earth Sciences Department.
35. Water symposium. The Center of Desert Studies, University of Al-Anbar, 22-23, March, **2011, Attendance).**
36. Symposium of the Mining Geology, 5-6 May, 2010. University of Baghdad, College of Science, Earth Sciences Department, **Attendance).**
37. The 1st Petroleum Geology of Iraq Symposium. University of Baghdad, College of Science, Earth Sciences Dept. 21-22 April, **2010, (Oral Presentation).**
38. The 1st Scientific Conference for Pure Sciences, 16-17, **2009.** University of Al-Anbar, College of Science. Iraq, **(Oral Presentation).**
39. 17th International Petroleum and Natural Gas Congress and Exhibition of Turkey (IPETGAS, 2009). May, 13-15, **2009, (Oral Presentation).**

40. The 8th International Conference of Jordanian Geologists Association. 6-7 April, **2004, ((Oral Presentation).**
41. The 3rd Scientific Conference of College of Science, University of Baghdad. 24- 26 March, **2009, (Oral Presentation).**
42. The 33rd International Geological Congress- Oslo, (Narway), **6-14 Aug. 2008, (Poster).**
43. The 6th International Conference on Eastern Mediterranean Geology and the 9<sup>th</sup> International Conference of Jordanian Geologists Association. **2-5 April, 2007, (Oral Presentation).**
44. The 1st Scientific Conference for Center of Desert Studies, **22-24, 2009.** University of Al-Anbar, Iraq, **(Oral Presentation).**
45. The 6th International Conference on Geochemistry (ICG). Alexandria, University, Egypt. 16-16 Sep., **2004. (Abstract sent and accepted).**

**Official Field Work Course:**

- Field work course of the 4th year students, 2 May- 8 May, 2015. Central Iraq. Abu Jir Fault Zone.
- Field trip to the Thau Lagoon and Balaruc thermal and Larstic Springs. 30 Sep 2016.  
Four sites were visted:
  - 1- Mont Saint Clair (Sete)- Overview of the Thau basin.
  - 2- Balaruc thermal spa and La Vise spring (picinic) at Setes.
  - 3- Issanka karst spring
  - 4- Causse d'Aumelas