Republic of Iraq Ministry of high Education & Scientific Research University of Basrah College of Science Dept. of Geology



Curriculum Vitae

• <u>Personal</u>

Title & name	Assist.Prof. Dr. Sattar J. Al-Khafaji
Date of birth	July 1 st 1961
Nationality	Iraqi
Address	Geology Dept., College of Science
	University of Basrah – Iraq.
	E-mail: <u>khafaji52000@gmail.com</u>
Languages	Arabic, English.

• Field of specialization

Geochemistry, Mineralogy, Industrial Rocks and Minerals., Clay Mineralogy,

• Area of research

Geochemistry , ,Mineralogy, Industrial Rocks and Minerals, Clay mineralogy, Ceramics, Refractories and Mineral Assessment. Ceramics , Refractories and Mineral Assessment.

• **Qualification**

B.Sc. (1984) Geology, Baghdad University, Iraq.

M.Sc. (1989) Geochemistry, Baghdad University, Iraq.

Ph.D. (2001) Geochemistry and Industrial Rocks.

Baghdad University, Baghdad - Iraq.

M.Sc.Thesis title: Rare-earth elements geochemistry of the industrial clay deposits in Iraq,Baghdad university, 136p.

Ph.D.Thesis title: Mineralogy and Geochemistry of Iraqi flint clays from the western desert and their suitability for the Refractories industry,Baghdad University, 153p.

• Experience

1. Field geologist (1/7/1990 to 1/7/1993) at the geological survey & mining company in Baghdad participate in:

a. Field geological survey.

b. Mineral prospecting for kaolinite & bauxite deposits at the western desert of Iraq.

c. Mineral prospecting for lead and zinc deposits in north Iraq.

d. Report writing and geological mapping.

2. Lecturing in the College of Science, University of Basrah, Geology Dept., covering the following :

a.Undergraduate Studies:-

General Geology, Clay Mineralogy, Mineralogy, Crystallography,

Geochemistry, Economic Geology ,Industrial Rocks ,Minerals and field geology. **b.** Postgraduate Studies:-

Advanced Geochemistry, Exploration Geochemistry, Advanced & Applied Clay Mineralogy,

Advanced Economic Geology, Ore geology. Advanced Industrial Rocks & Minerals, Ceramic and building materials, Quaternary deposits.,Min

c. A lecturer at the Dept. of Engineering Materials of basrah university ,College of Engineering in the subject ; methods of extracting engineering materials (2001- 2003),lecturer at the Dept.of petroleum engineering in the subject of General Geology ,mineralogy, petroleum geology, Structural geology ,Well logging.

d.A lecturer at Department of Geology,Bagdad university in the subjet of Geochemistry and Industrial rocks (2012-2014)

e.Continuous at now as a assistant professor in Geochemistry and Industrial Rocks at Geology Dept., College of Science, Basrah university.

• <u>Achievement:</u>

- **1.** One of the founders of the Geology department in the college of science, university of Basrah (1993).
- 2. A member of the Iraqi Geologists union since 1989.
- **3.** The head of dept. of Geology at Basrah university (1/7/2002 to 5/7/2003).
- 4. A member of the Iraqi society for Nanotechnology.
- **5.** A member in more than 50 Examination committees of M.sc. and Ph.D students in Basrah university and other universities in Iraq.

• Participations

- a) The project of Geological Survey and Mineral Prospecting for Kaolinite & Bauxite deposits in western Iraq.
- **b**) The project of mineral exploration for lead & zinc ores in northern Iraq.
- c) Combined studies in reservoir and Geochemical field with South Oil Company, southern Iraq.
- d) Participate in a Basic course of SEM at the center for Microscopy and Microanalysis at the university of Queesland, Australia, May, 2010.
- e) Training course in D rilling Techniques and Well activites courses in istanbaul by Total Oil Company, April ,8th to 22th , 2011and 2015 .

f) Academic visitor to Angara University at 2012.

<u>Published Literatures</u>

- Major, Trace, and Rare earth elements geochemistry of Ga'ara deposits in Iraq, The 11th Iraqi Geological conference, Baghdad, October 15-17, 1994.
- 2- Geochemical aspects of Yamama formation in west Qurna oil field, southern Iraq. An internal study combined with south oil company, 1994.
- **3-** Mineralogy, Geochemistry and origin of tuff in Al-Mukdadia formation (Pliocene) Injana area Iraq. J. Basrah Researches, Vol. 4, No. 28, pp155-167.2002
- 4- Mineralogy, Geochemistry of Karstic Iraqi flint clay, western desert Iraq, Arab World Geological Conference, Cairo, Feb, 2002.
- **5-**Assessment of Iraqi flint clay for Refractories Industry, Arab World Geological Conference, Cairo, Feb, 2002.
- **6-** Assessment of Dibdibba sand (southern Iraq) for the manufacturing of semi silica brick. Raffedain Journal of science, Mosul University, Iraq, Vol.16, No.3, 2005.
- 7- Assessment of Dwekhla kaolinite, Umm Urthma sand and waste glass for the manufacturing chemical porcelain, Iraqi Journal of earth sciences, Mosul university, 2005.
- **8-** Sedimentological and mineralogical aspects of khor Abdullah supratidal sediments, north west Arabian gulf. Marin Mesapotamica, vol. 21, no.1, 2006
- 9- Mineralogical, Geochemical and Technological aspects of iron oxides of Hussainiyat kaoline, western desert, Iraq, Basrah Journal of science, 2008.
- **10-** Identification and upgrading of feldspar in some Sand deposits Iraq.Basrah Journal Researchs,vol.5,15,2010.
- **11-** Mineralogy and geochemistry of Dibdibba sandstone formation bearing feldspar in Zubair and safwan area's southern Iraq .Iraqi Journal of Sceince ,vol.52,No.1,2011.
- 12- Improvement of clay deposits for Building-Bricks purposes in Missan governorate, souther Iraq . Iraqi Bulletin of geology and mining vol.8,No.1,2012.
- **13-** Chemical and mineralogical assessment of raw materials for Cement industries at Kufa Cement plants ,Basra Journal of Scince,vol.26,no.1,(24-35),2008.
- 14- Some evidence on the ocurrance of feldspar minerals in sand deposits of Dibddiba formation in Thiqar, southern Iraq .,Iraqi Journal for desert studies ,vol.2,No.2,2010.
- **15-** Facies analysis and sedimentological modeling of Jeribe formation outgroups ,north western Iraq .National Journal of earth sciences,Mousl,Iraq. 2012
- **16-** Pollution assessment of soil among highways from Basrah-Nassiriya and Samawa cities by Polycyclic aromatic hydrocarbons,International journal for sciences and technology,vol.13,No.1,2018
- **17-** Geochemical and biological study of Holocene deposits in Al-Muthana province, southern Iraq, Iraqi journal of science, vol.60, No7, pp1521-1529, 2019

- **18-** Spatial characteristics and Heavy Metals Pollution in Urban Soil of Basrah, Iraq, Indian Journal of Ecology, Vol.47, No.4, pp969-978., 2020
- **19-** Mineralogy and petrography of Gulneri Formation in Sulaimaniya area,North East of Iraq,International Journal of Mining Science,Vol.5,Issue2,pp1-13,2019
- **20-** Mineralogical and Geochemical aspects of sand dunes in Missan Governorate, southeastern Iraq, Iraqi Journal of Science, Vol.63, No.9, 2022
- **21-** The reality of mineral resources in Iraq, Zurbatiya area as acase study, The first international conferences for Natural resources in Iraq, 25-28 October 2021, Tikrit University, Iraq.
- 22- Mineralogy, Geochemistry and provenance of Injana Formation in Zurbatiya and Badra areas ,Eastern Iraq., The first Geological conference (GeoBasrah-1), 15-17 March, 2022.
- **23-** Mineralogy and petrography of fatha gypsum rocks in Zurbatiya area, eastern Iraq. Basrah Journal of Science, Vol. 38, No. 2, pp328-346, 2020
- 24- Additives effects on producing gypsum plaster in zurbatiya area, eastern Iraq, Samarra Journal of Pure and Applied Science, Vol.2, No2, PP-79-88.

• <u>Postgraduate Supervision:</u>

M.Sc. Thesis including the following titles:-

- 1- Geotechnical Assessment of soil in Ammara city, southern Iraq, April(2002). (un published), student name: Al-khafaji, W. R.
- 2- Geological & reservoir evaluation of Zubair formation in selected wells, southern Iraq, (unpublished) Nov.(2003), Student name: Al-canaani, A..A.
- **3-** Assessment the suitability of some Iraqi raw materials and waste glass for the manufacturing of chemical porcelain (unpublished), Sep. (2003), **Student name:** Saeed, A..M.
- **4-** Assessment study of cement produced at Kufa cement plants and the raw materials used in its manufacture, (unpublished), Nov.(2004), **Student name:** Al-Ali, S. H.
- **5**-Microfacies and modeling of Jeribe formation (Early middle Miocene), northern Iraq, (unpublished), Dec. (2005), **Student name:** Al-Ayobe, N. S.
- **6-** Geophysical application (Magnetic & Electric) in archeological prospecting of Tel-Al-Khanaizerat site, in Al-Dora area, southern Baghdad city, Iraq, (unpublished), Dec. (2005), **Student name:**Hannina, S. E.
- **7-** Assessment and improvement the properties of some recent sediments selected from areas northern Basrah for manufacturing building bricks. (unpublished), June, 2006, **student name:** Al-Saad, H. A.
- 8- Sedimentological, Mineralogical and Geochemical study of selected khor-Abdullah coastal sediments N & NW Arabian Gulf, (unpublished), June 2006, student name: Al-Jabbiry, M. H.
- **9-**Petrographical, Geochemical study of dibddiba sand deposits Bearing feldspar in selected areas, southern Iraq. (unpublished), June2007, **student name:** Al- Najar, N. A.

- **10-**Hydrogeochemistry and evaluation of ground water in some selected wells,Northern east of Missan ,North-eastern Iraq. (unpublished), **student name:** Jabbar. F. K.
- **11-** Effect of some additives on the engineering properties of Amara soil in some selected areas, (unpublished), **Student name:** Al-Meyahee, M. M.
- **12-**Effect of the waste of Um-Qasar Cement factory on the properties of surrounding soil southern Iraq (unpuplished), June 2011, **student name** :khalaf, Y.I.
- **13-**Mineralogy and geochemistry of Sandstone of Al-Mukdadiya formation in selected areas ,north-eastern Missan ,Iraq.(unpuplished),Dec,2011.**student name** :Alsamaan ,J.J.
- 14-Assessment of some recent deposits in Al-Teeb area eastern Missan for ordinary and light weight Building Bricks industry ,(unpuplished),April 2012,student name:Sameen,N.W.
- **15-**Assessment of stuitability of some selected Quaternary soils in Thiqar governorate for fabrication of Building bricks.,(unpuplished) May,2012 **student name:**Hassan ,N.J.
- **16-**Study of physical and chemical properties of Gypcerte deposits and improvement their properties for plaster Industry, (unpuplished),2012 .**student name** :Yaseen ,A.S.
- **17-**Mineralogy and geochemistry of clay units of Injana formation ,northern Iraq .(under accomplished).2013,**student name:**Abdulla,A.S.
- **18-**Environmental pollution assessment of soil and plants along high way between Basrah –Nassiriya and Samawa city by polycyclic aromatic hydrocarbons and heavy metals,(unpuplished), July,2018, **Student name**:Al-Saleh,I.J.
- **19-**Mineralogy,Petrography and Geochemistry of Gulneri Formation in Sulaimania area,NE-Iraq.(unpuplished),2019,Student name: Al-Saad,A.1.S.
- **20-**Assessment of limestone and Marl of Ibrahim Formation in Zurbatiya area ,Eastern Iraq for Ordinary Portland Cement.(unpublished).2020,Student name:Al-Ali,N.A,.
- **21-**Urban Environmental Geochemistry of Basrah city,Southern Iraq.(unpuplished),2020,Student name:Jalal.G.K.
- **22-**Mineralogy,Geochemistry and Industrial assessment of sand dunes,Missan Governorate,Southeast of Iraq.(unpuplished).2022,student name:Al-Halfi,F.M.

Ph.D Thesis including the following titles:-

1-Effect of Root zone (Rhizosphere) of data palm, phoenix dactylifera and ZIziphus, on some mineralogy , chemical, physical and biological properties of some cal careous soils , southern Iraq (unpuplished) sept, 2010, **student name:** Yassen .M.M.

2-Petrographical,geochemical and petrogenesis study of chromite bearing ultramafic and assocated rocks inMawat and Penjween Ophiolite complexes-Northeastern Iraq.(unpuplished), 2014 **Student name :**Sultan .B.M.

3-Mineralogy,Geochemistry and assessment of Injana and Mukdadiya claystone in t Missan and Wasit gover norate and their assessment for normal and light weight brick industry (under accomplished) ,2014,**Student name:**Al-Saad.,H.A.

4-Mineralogy,Geochemistry and provenance of Injana Formation in selected areaS,North-East and East of Iraq,(unpuplished),2020, **Student name**: Al-Najjari,N.K.

5-Mineralogy,Geochemistry and Industrial evaluation of Fatha gypsum rocks in Zurbatiya area-Eastern Iraq.(unpuplished).2020,**Student name**:Al-Hadadi,A.S.Y.

• <u>Conferences & Seminars</u>

- 1) 11th Iraqi Geological conference, Baghdad, May 2-4, 1994.
- 2) 14th Iraqi Geological conference, Baghdad, Oct. 15-17, 2000.
- 3) 5th Conference on Geochemistry, Al exandria Egypt, Sep. 12-13, 2001.
- 4) 6th International Conferences on Geology of the Arab World, Cairo, Feb. 2002.
- **5**) 1st Seminar on Engineering materials research, College of Engineering, Mosul University, Iraq, 11th, Dec. 2002.
- **6**) 6th international conference on Geochemistry 15-16 Sept.Alexandaria.Egypt, 2004.
- The international conference on Aquatic Resources of the Arab region,7-9thMay,2005,Alexandaria,Egypt.
- 8) 2nd international conferences on the geology of the Tethys on march ,19-22,2007,Cairo university ,Egypt.
- 9) 6th international conference of Jordanian Geologists Association ,Amman,April,2-5,2007.
- **10**) 3rd national conference on Environmental and natural Resources Basrah university ,College of science ,7-8 Nov.,2007.
- **11**) 1st international meeting economics in the middle east Cairo ,1-3,Jan,2008.
- **12**) 3rd international conference on the geology of the Tethys ,Aswan ,8-11 Jan,2008.
- 13) Scientific conference for Marine Science Basra university ,Marine Science center ,Basra ,23-25Dec,2008.
- 14) 9th international geological conference of the Arab world ,Cairo,24-29,Mar ,2008.
- **15**) 1st international symposiam on the petroleum and other geological resources in the Tethys Realm ,17-25 March ,2009,Cairo university.
- 16) 4th Scientific conference university of Babylon –College of science ,27-28,May 2009.
- **17**) 1st scientific conference for center of desert studies university of Unbar ,Iraq .22-24,Dec ,2009.
- **18**) 3rd international Syrian Chemical conference ,27-29 October ,2010,Aleppo-Syria.
- **19**) 5th international conference on environment and national Resources Jan ,2012,basra,Iraq.

- **20**) 1st international conference Roles universities and local councils in planning and development ,22-23,feb ,2012,Thiqar,Iraq.
- 21) 17th Iraqi Geological conference,24-25 April,2019,Baghdad.,Iraq.
- **22**) 1st International conference,25-28 October,2021, in Natural Resources (GeoIraq .1),Tikrit university,Tikrit,Iraq.
- 23) 1st Geological conference(Geobasrah-1),15-17 March,2022,Basrah,Iraq.

• <u>Referees</u>

- **1.** Dr. M. A. Al- Dabbas, Dept. of Geology, College of science, Baghdad University. Iraq. *E-mail:* profaldabbas@yahoo.com
- **2.** Dr. T. A. Thanoon, Dept. of Geology, College of science, Mosul University, Iraq. *E-mail:* <u>tathanoon@yahoo.com</u>
- **3.** Dr. N. S. Al-Maliky, Dept. of physics, College of science, Basrah University, Iraq. *E-mail:* <u>njarrih@yahoo.com</u>