



University of  
Salahaddin/ Hawler

**Curriculum Vitae**  
*For*  
*(Abdalla Amr Omar)*

**Iraq**  
KURDISTAN REGION  
GOVERNMENT  
Ministry of Higher  
Education &  
Scientific Research  
Salahaddin University / Erbil  
College of Science  
Geology Department

<b>Family Name/Surname</b>		<b>First Name</b>	Abdalla Amr	<b>Middle Name</b>	Omar	
<b>Home address( Optional)</b>	Iraq- Arbil – Hiwa City					
<b>Postal Address</b>	Iraq- Arbil - College of Science-University of Salahaddin-Dept.of Earth Science and Petroleum					
<b>E-mail</b>	Abdulla.omar@su.edu.krd					
<b>Tel. No. (Optional)</b>	Normal Tel: 2261170					
<b>Date of birth</b>	8-2-1956	<b>Place of birth</b>	Iraq- Sulaymania			
<b>Preparatory graduated from</b>	Shorsh school	<b>Governorate</b>	Iraq- Sulaymania	<b>Year</b>	1976	
<b>Date of first assignment in University</b>	1986	<b>Place of recent work</b>	College of science	<b>Job title</b>	Prof.	
		<b>Academic title</b>	Ass.Prof.	<b>Tel. No</b>		
<b>Researcher's academic attainments</b>	<b>Type of diploma</b>	<b>University</b>	<b>College</b>	<b>Department</b>	<b>Graduation year</b>	<b>Country\ Governorate</b>
	B.Sc	Sulaymania	Science	Geology	1980	Iraq
	M.Sc	Baghdad	Science	Geology	1985	Iraq
	Ph.D	Salahaddin	Science	Geology	2005	Iraq
<b>General specialization</b>	Geology					
<b>Specific specialization</b>	Structural Geology and Remote Sensing					
<b>Academic titles attained</b>	<b>Academic title</b>			<b>Date of attainment</b>		
	Ass.Lecturer			1986-4-16		
	Lecturer			1989-3-12		
	Ass.Prof.			1996-9-28		
Professor			2019-9-18			
<b>Qualifications and Skills</b>						
<b>1-Field experience:</b> I worked and still as a head of university training field courses in geology department, in different places within northern Iraq, drawing geological map, geological cross sections, and structural analysing of the field data. As well as according to the request of FAO/ UN organization/ WRI sub sector, Ground water unit,I worked with them from 10-8-2001 till 15-5-2003 as a consultant in structural geology and remote sensing and during that period I prepared a lot of geological and strucyural maps from field investigation and interpretation of Aerial photos and Landsat images for different parts of northern Iraq, especially in three major government (Arbil, Duhok, Sulymania). I supervised two student one of them specialized in structural geology and the other in geography department specialized in the remote sensing, as well as I engagement in more than three examining committee for M.Sc and Ph.D thesis.						
<b>2- Software Skill</b>						
<b>Software names</b>			<b>Type</b>			
ENVI			Scientific software			
Mapinfo			Scientific software			
Rockwork			Scientific software			
Surfer			Scientific software			
ArcView3.3						
<b>3- Language</b>						

Name of language	Good	Fair				
<b>Kurdish</b>	*					
<b>Arabic</b>	*					
<b>English</b>	*					
<b>Number supervise graduate students</b>	<b>10 student</b>					
<b>The number of committees discussing graduate students</b>	<b>18</b>					
<b>Scientific and Academic committees partaken</b>						
<b>1-Member of geological Society of Iraq</b>	<b>4-Member of I.T.C Society -Netherland</b>					
<b>2-Member of geological Society of Kurdistan</b>	<b>5-</b>					
<b>3-Member of American photogrammetry&amp;RS</b>	<b>7-</b>					
<b>Assignments and posts</b>						
<b>1. Chairman of geology department ( 1996-1998)</b>	<b>5.</b>					
<b>2. Field training course comitte (1991-Till now)</b>	<b>6.</b>					
<b>3. member of the remote sensing research center(2006-2007)</b>	<b>7.</b>					
<b>4.</b>	<b>8.</b>					
<b>Subjects under teaching ( B.Sc, M.Sc, Ph.D Students)</b>						
<b>1. Remote sensing</b>	<b>5. Morphotectonic</b>					
<b>2. Structural geology</b>	<b>6. Geotectonic</b>					
<b>3. Geomorphology</b>	<b>7.</b>					
<b>4. Aerial survey</b>	<b>8.</b>					
<b>Presented thesis\ researches</b>						
researches	Not published	Published	Approved to be published	Publishing place	Volume	Date
Application of Remote sensing in tectonic analysis of lineaments North western Iraq		*		Procc.of 1 <sup>st</sup> national syposium of remote sensing-Iraq	1	1986
Photo geological techniques applied to the fracture mapping in permam anticline (northeastern Iraq)		*		5 <sup>th</sup> Scientific conference of Scientific research council	7	1989
Gravitational phenomena in Ain-Safra anticline (NE-Iraq)		*		Zanco scientific Jour. of salahaddin university	3	1990
Use of SIR-A interpretation for underground water prospecting in southern Iraq		*		Procc. Of remote sensing IMM,london	1	1990
Using aerial photographs as a tool in tectonic study of Tel-Afar area		*		1 <sup>st</sup> scientific conference of geology of Arab world	1	1991
Comparision study between Joints and photolinear features in Ain-safra anticline (Northern Iraq)		*		Procc.of the 2 <sup>nd</sup> Scientific conference of university of salahaddin -Iraq- Arbil	5	1993
Aproposed mechanism of folding for Ain-Safra anticline (NE -Iraq)		*		Jour.geol.Society of Iraq	27	1994
Morphometric study of some drainage basin in Erbil city (North eastern Iraq)		*		JDU	2	1999
Geography of Iraqi-Kurdistan region		*		Brayati center book	3	1998
The orientational characteristics of the structural linear features in western desert of Iraq		*		Jour.geol.Sco.Iraq		2003
Application of statistical method in genetic interpretation of linear features appears on Landsat images in northern Iraq		*		Jour.geol.Soc.Iraq		2003
Structural study o the safine anticline along different cross-section(Kurdistan region-northern Iraq)		*		Journal. Of Kirkuk univer.		2007

Joint analysis in bradost anticline using new techniques		*		Journal. Of Sulimanyia Univ		2007
Abnormal deflections in the some fold axes within Zagros fold and Thrust Belt, Northern Iraq, Mirawa-Mawaran synclinal axis as a case study		*		Proceedings of the 2nd International Conference on Geography and Geology 2011 (WORLD-GEO '11)		2011
Analysis and Interpretation of Minor Folds Developed in the Cretaceous Formations within Azmir Anticlinorium, in a Part of Iraqi Zagros Fold and Thrust Belt, Suliyamania District, Northeastern Iraq		*		J. Basic. Appl. Sci. Res., 1(10)1490-1497, 2011	1(11)	2011
Origin and Spatial distribution of the lineaments in Taq-Taq oil field area-Kurdistan Region NE-Iraq		*		First Geological Conference of Kurdistan (GEOKURDISTAN I)		2012
Tectonostratigraphic and structural imprints from balanced sections across the north-western Zagros fold-thrust belt, Kurdistan region, NE Iraq		*		Arab J Geosci (2015) 8:8107–8129	8	2015
Extraction and Analysis of Tectonic Lineaments using Geoinformatic Techniques, in Tawke Oil Field, Duhok area, Iraqi Kurdistan Region		*		GEOKURDISTAN II The Second Geological Conference of Kurdistan October 6-8, 2015 Sulaimani, Kurdistan Region, Iraq		2015
Construction of Structural model for Harir anticline within Zagros Fold-Thrust Belt, Kurdistan of Iraq		=			ZS Journal	2016
<b>Spatiotemporal Analysis of Vegetation Cover and Its Response to Terrain and Climate Factors in Duhok Governorate, Kurdistan Region, Iraq</b>		=		<b>Iraqi Geological Journal</b>	54	2021
Land degradation assessment using AHP and GIS-based modelling in Duhok District, Kurdistan Region, Iraq		=		Geocarto International	2022	<a href="https://doi.org/10.1080/10106049.2021.1987534">https://doi.org/10.1080/10106049.2021.1987534</a>

## Thesis Name and Abstracts

### 1 . M.Sc Thesis name

#### **Tectonic analysis of lineaments in northwestern Iraq using remote sensing data**

This investigation deals with tectonic analysis of lineaments in northwestern Iraq, bounded by the longitude (41 00 E – 34 30 E ) and latitudes ( 35 00 N – 37 00 N ). Tectonic and structural geology of the area was studied and geological and structural maps were prepared.

Tectonic study of this area was carried out. The basic data of the study were landsat lineaments, aeromagnetic and gravimetric data were also used. The principle objective of the study is to correlate Landsat structural lineaments with geophysical data , thus elucidate basement structures and their effects on sedimentary cover.

Multi-scale approach was applied in interpretation of landsat lineaments ,i.e . Three scale of landsat imagery were used. Statistical analysis was applied to landsat lineaments as well as to aeromagnetic and gravimetric lineaments. The analysis primarily based on directional distribution of lineaments length (density ) and numbers (Frequency) .Frequency and density rose diagrams , as well as histograms were plotted to depict the directional distribution. A spatial frequency contour map and a structural map of the area showing main folds structural lineaments were also drawn.

As a result of this study it is found that most landsat lineaments can readily compared and correlated to aeromagnetic or gravimetric lineaments. Thus, landsat lineaments can also suggest basement faults or deep seated structures. The block faults occurred in the basement since Precambrian and have extended to overlaid strata. Due to various tectonic causes or /and isostatic readjustment of the crust. Thus he role of vertical movements in shaping up the present structural configuration of the area is as significant as the horizontal tectonic stresses due to the alpine orogenies.

### 2 . Ph.D Thesis name

#### **An Integrated Structural and Tectonic Study of the BinaBawi-Safin-Bradost Region In Iraqi Kurdistan**

#### **Abstract**

The BinaBawi-Safin-Bradost region in Northern Iraq has been investigated. The studied structures are located in the Imbricate zone and Foreland Folds Belts of the Alpine Orogen. They include the Bradost, Perat, Harir, Shakrok, Khatibian, Safin, Pirmam and Bina-Bawi anticlines, together with the Bekhme-Khalan, Harir, Mirawa-Mawaran, Kore-Susa synclines. The exposed rocks of the studied region range in age between Early Cretaceous up to the Pliocene. The areas under investigation were subjected to polyphase deformation detected in this study from analysis of statistical amount of structural data taken in the field. Five phases of major folding were detected in the Cretaceous and Tertiary successions, and four phases of minor folding were registered for the same successions.

The tectonic framework of the basement rocks and basement reactivation played an essential role in the stratigraphic setting and the shaping of the fold structures in the region. The geodynamics of the Alpine orogeny in the investigated areas stemmed from the anticlockwise rotation of Arabia, together with collisional transpression. The stress of oblique collision was partitioned into two components. One was parallel to the orogenic front and was responsible for wrench tectonism and strike-slip faulting in the basement parallel to the orogenic front. The other was transverse to the Alpine orogenic trend and was responsible for shortening by reverse displacements on the originally listric normal faults and folding together with transversal strike-slip faults. Wrench tectonism parallel to the Alpine orogenic trend was prevalent over shortening

perpendicular to the orogenic trend in the Early Cretaceous. However, In the Late Cretaceous and Tertiary, shortening across the orogenic belt was prevalent. The curvilinear character of major fold axes in the studied areas is the result of folds lateral growth in a transpressional geodynamic environment with the anticlockwise rotation of Arabia.

Evidence from the field and restoration of cross-sections suggest the absence of regional Jura type decollement underneath the Foreland Folds Belt. Rather limited local detachments may be present in the high folds zone. However continuous detachments may be present starting from underneath the Imbricated Zone towards the axial zone of the orogeny.