



Dr. Abdullah Ali Al-Diabat

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Research Fields:

- Structural Geology; Stress- Strain analysis , Fracture analysis
- Tectonics
- Application of Remote Sensing in Geology;
- Engineering Geology
- Water Resources and Environment

Education:

- **Ph.D.:** Structural Geology **1996-1999**
Baghdad University, Iraq.
- **M.Sc.:** Structural Geology **1990-1992**
Yarmouk University, Jordan
- **B.Sc.:** Earth and Environmental Sciences **1983-1987**
Yarmouk University, Jordan
- Jordan General Secondary School Certificate, Jordan **1983**

PROFESSIONAL TRAINING AND CONFERENCES:

- **Al-Diabat, A. A. N.;** Atallah, M.; Dwairi, I. M. .A. (1994) Structural setting of the area south of Gharandal (Wadi Araba), with special reference to the white Sandstone and its industrial potential. **5th** Jordanian Geol. Conf. and **3rd** Geol. Conf. On Middle East (GEOCOM-III), Amman, 3- 5 October 1994. **Presentation and abstract**, p188.
- **Al-Diabat, A. A,** Salih, M., and Atallah, M., (2001) Paleostress analysis of the Cretaceous rocks in the eastern margin of the Dead Sea Transform. **The 7th** Jordanian Geological Conference, Amman. **Presentation.**

- **Diabat, A.** and Masri, A., (2002) The state of palaeostress along the Siwaqa Fault (Central Jordan) based on fault slip data. The **15th** Iraqi Geological Congress, 15-17 December, Baghdad. (*Presentation*).
- **Diabat, A.** (2007) Structural and stress analysis in Amman area, based on fault-slip data. The **9th** Jordanian Geological Conference and the **6th** Geol. Symp. On Eastern Mediterranean Geology, Amman, 2- 5 April (*Presentation*).
- **Diabat, A.**, (2007) Fractures and karst development in hard carbonates, northern Jordan. The **9th** Jordanian Geological Conference and the **6th** Geol. Symp. On Eastern Mediterranean Geology, Amman, 2- 5 April (*Presentation*).
- Attending the Workshop "**The Energy in Jordan, Current and Future**", 1 November 2005, Faculty of Natural Resources and Environment, The Hashemite University, Zarqa, Jordan .
- Participation in Science Day about **Environmental Effect of Quarry in Jordan**, *Organized by:* Al al-Bayt University and Jordanian Engineering Association, in Al al-Bayt University, Al Mafraq-Jordan. **23 March 2005**
- Science Day about "**Renewable Energy**", *Organized by:* Al al-Bayt University and Embassy of Germany, in Al al-Bayt University, Al Mafraq-Jordan. **20 April 2008.**
- Training by **Ministry of Education** in the field of General sciences and advanced teaching methods, **1993.**
- *Ten days training by Natural Resources Authority in the field of Environmental Geology, 7th- 16th October, 1995. The course was funded by the Overseas Development Administration (ODA); research and production of the course modules was funded by British geological survey(BGS) training group.*
- Workshop, 18th December 1995 in the **Ministry of Energy and Mineral Resources**, about Updating and Revising Draft Environmental Guidelines for Energy sector operations in Jordan.
- Remote sensing and Ilwis- software, **ACSAD/ Syria**, 2004.
- Remote sensing and Ilwis- software, **ACSAD/ Syria**, 2005.
- ARC GIS version 9, **Guttingen University/ Germany**, 2005.
- Blackboard , Al al-Bayt University, 2005.
- GIS and remote sensing, Al al-Bayt University, 2008.

SCHOLARSHIPS & AWARDS:

- Cultural Exchange Scholarship between Jordanian and Iraqi governments, **1996 - 1999.**
- Honored with the Yarmouk's University Medal of Scientific Excellence, **1992.**

TITLE OF M.Sc. THESIS:

- Structural setting of the area south of Gharandal (Wadi Araba), with special reference to the white sandstone and its industrial potential, **1992.**

TITLE OF Ph.D. THESIS:

- Paleostress and Strain analysis of the Cretaceous rocks in the eastern margin of the Dead Sea Transform Fault ,**1999.**

EMPLOYMENT RECORD:

- **May, 2016 to present**, Professor (FULL)\ Institute of Earth and Environmental Sciences, Al al-Bayt University.
- Sabbatical year at Yarmouk University, **8 Sept. 2013 - 13 Sept. 2014**.
- **November 22, 2010 to May, 2016** , Associate professor\ Institute of Earth and Environmental Sciences, Al al-Bayt University.
- **September 21, 2004 to November 22, 2010** , Assistant professor\ Institute of Earth and Environmental Sciences, Al al- Bayt University.
- **September 21, 2003 to September 21, 2004** , Full time lecturer in Structural Geology, Institute of earth & environmental sciences, Al al- Bayt University.
- **February 2003 - May 2003** : Part time Lecturer in Structural Geology, Institute of earth & environmental sciences, Al al- Bayt University
- **February 2002 - May 2002**: Part time Lecturer in Structural Geology, Institute of earth & environmental sciences, Al al- Bayt University.
- **August 2000 - September 2003**: Structural geologist, Geological Mapping Division, Natural Resources Authority, Amman- Jordan.
- **September 1996 - October 1999**: Preparation for Ph.D. Thesis.
- **September 1992 - August 1996**: Teacher with the Ministry of Education in the field of physics, chemistry, biology, geology and general sciences.
- **September 1990 - April 1992**: Teaching assistant, Department of Earth and Environmental Sciences, Yarmouk University; General and Structural geology labs.
- **September 1987-September 1989**: (Military Service).

MEMBERSHIPS:

- Jordanian Geologist Association (JGA).
- Jordan Society for Expanding and Developing the Natural Resources.

PUBLICATIONS:

- 1- Shatnawi, A., **Diabat, A., (2015)**. SILTATION OF WADI AL-ARAB RESERVOIR- USING GIS TECHNIQUES. **Jordan Journal of Civil Engineering**. (accepted on Vol. 10, No., 2016).
- 2- **Diabat, A.,** Ahmad F., Hammouri N., Obeidat M., (2015). Karst development related to extensional fracture network at Bany- Kanana area, northern Jordan. **Arabian Journal of Geosciences**. **8:4999–5014**.
- 3- **Diabat, A.** (2015) Structural and stress analysis of the area between Al- Akeider and Mughayyer as Sirhan, Northwest Badi, Jordan. **Jordan Journal of Earth and Environmental Sciences**, **7: 37-48**.

- 4- Al-Farajat, M., **Diabat, A.**, Al-Adamat, R., Al-Amoush, H., (2015). Geo-structural analysis accompanied with GIS vulnerability mapping, validated by hydro- chemical modeling, in determining spatial expansion of landfills, case study from Jordan. **Jordan Journal of Civil Engineering**. (accepted on Vol. 10, No.3, 2016).
5. Fayez Ahmad, Sherif Farouk, Khaled El-Kahtany, Hashem Al-Zubi Abdullah **Diabat**. (2015) Late Cenomanian oysters from Egypt and Jordan. **Journal of African Earth Sciences**. **109: 283-295**.
- 6- Al-Farajat, M., **Diabat, A.**, Al Hassanat H., Ibweni, M., Shawaqfeh, J., (2015). Developing a Geoinformatic-engineering Stability Modeling Method, using Field Data and GIS Environment, A Case Study from Al Qarara Area in Wadi Musa, Jordan. **Indonesian Journal on Geoscience**. **2: 1-21**.
- 7- **Diabat, A.**, (2013) Fracture systems and dissolution cavities development in hard carbonates, northern Jordan. **Jordan Journal of Earth and Environmental Sciences**. **Vol. 5, No.2: 73- 78**.
- 8- **Diabat, A.**, (2013) Fracture systems of granites and Quaternary deposits of the area east of Aqaba: indicators of reactivation and neotectonic activity. **Arabian Journal of Geosciences**. **Vol. 6, No. 3: 679- 695**.
- 9- Al Amoush H., Hammouri N., Al Farajat M., Salameh E., **Diabat A.**, Hassoneh M., Al- Adamat R., (2013) Integration of aeromagnetic data and landsat imagery for structural analysis purposes: a case study in the southern part of Jordan. **Journal of Geographic Information System**, **5: 198-207**.
- 10- Batayneh A., Ghrefat H., **Diabat A.**(2012) Lineament characterization and their tectonic significance using gravity data and field studies in the Al-Jufr area, southeastern Jordan Plateau. **Journal of Earth Science**, **23: 873- 880**.
- 11 - Bany Yaseen I., Al-Hawary Z., **Diabat A.**, (2010) Petrology, geochemistry, petrogenesis and reactivation of volcanic tuffs at Dear El-Kahif area, NE – Jordan. **Jordan Journal of Civil Engineering**, **Vol.4, No.4:336-350**.
- 12- Al- Adamat R., **Diabat A.**, Shatnawi Gh.,(2010) Combining GIS with multicriteria decision making for siting water harvesting ponds in Northern Jordan. **Journal of Arid Environment**, **74: 1471-1477**.
- 13- Khatib, N., Atallah,M., **Diabat, A.**, (2010) Paleostress analysis of the Cretaceous rocks in northern Jordan. **Jordanian Journal of Earth and Environmental Sciences**, **3: 25- 36**.

- 14- Diabat, A.** (2009) Structural and stress analysis in Amman area, based on fault-slip data. **Journal of African Earth Sciences, 54: 155-162.**
- 15- Al- Farajat, M., Diabat, A., Mashagbeh, A.,** (2008) Deducing thickness of the soil cover and its engineering characteristics in Al al-Bayt University using seismic refraction. *J. Applied Geophysics, Egyptian Society of Applied Petrophysics, (ESAP). Vol. 7, No. 1.* (in Arabic).
- 16- Diabat, A.,** (2007) Paleostress Analysis of the Cretaceous- Tertiary Rocks in Central Jordan. **Dirasat, University of Jordan, 34: 192- 200.**
- 17- Diabat, A.,**(2006) The state of paleostress along the Siwaqa Fault (Central Jordan) based on fault-slip data. **Al-Manarah, Al al- Bayt University, 12: 131- 150.**
- 18- Diabat, A.,** (2005) Sinkholes related to Tectonic Factor at Ghor Al Haditha Area, Dead Sea/ Jordan. **Hydrogeologie und Umwelt, Wurzburg. Heft 33.**Germany.
- 19- Diabat, A., and Masri, A.,**(2005) Orientation of the paleostresses along Zarqa Ma, in Fault. **Mu, tah Lilbuhuth wad- Dirasat. 20: 57- 71.**
- 20- Diabat, A., Atallah, M., and Salih, M.,** (2004) Paleostress analysis of the Cretaceous rocks in the eastern margin of the Dead Sea Transform, Jordan. **Journal of African Earth Sciences. 38: 449-460.**
- 21- Diabat, A. A., Salih, M., and Atallah, M.,** (2003) Magnitudes of the paleostresses at the eastern rim of the Dead Sea Transform Fault. **Dirasat, University of Jordan,, 30: 1-18.**
- 22- Batayneh, A., and Al-Diabat, A.** (2002) Application of a two-dimensional electrical tomography technique for investigating landslides along the Amman-Dead Sea highway, Jordan. **Environmental Geology, 42: 399-403.**
- 23- Al-Diabat, A. A.** (2002) Strain analysis of the Cretaceous rocks at the eastern margin of the Dead Sea Transform. **Dirasat, University of Jordan, 29: 159-172.**
- **Books, Technical Reports and Geological Maps:**
 - Engineering Geology. **Al Diabat, Abdullah Ali.** The deposit Number at the National library 575/1/2014, 225p (in arabic).
 - Earthquake Risk Assessment of Amman Municipality. Jaradat, R., Awawdeh, M., Al-Qaryouti, M., Fahjan, Y., Nuseir, O., **Diabat, A.,** Rawabdeh, A. 2008. UNDP Office, Amman.
 - Site Investigation and Site Evaluation for the Jordan Nuclear Power Plant (phase-1): structural analysis of the area east of Aqaba (stress- strain analysis). **Diabat, A.** 2010.
 - Geological Map of Amman, **scale: 1:50,000, Sheet No. 3152-I .,**(2004). Natural Resources Authority (**NRA**), Amman- Jordan. **Diabat, A.,** and Abdelghafoor, M.

PROJECTS:

- Influence of Mechanical stratigraphy and its relation to Karst development in Bani-Kanana District, Northern Jordan. 2011, Al al-Bayt University.
- Support to Building National Capacities for Earthquake Risk Reduction at Amman Municipality in Jordan, UNDP-project No. 00051485, 2007/2008. Member with Yarmouk University Group.
- Modeling the Hydro-Geochemical Conditions and Assessment of the Impacts of the Agricultural and Industrial Liquid Wastes in Sukhna Porous Aquifer in Zarqa, 2005, Al al-Bayt University. Member.

Activities:

- Dean of the Institute of Earth and Environmental Sciences, Al al-Bayt University, 29 Jan. 2012 to 8 Sept. 2013.
- Vice Dean of the Institute of Earth and Environmental Sciences, Al al-Bayt University, Sept. 2010 to 29 Jan. 2012.
- Dean Assistant, Institute of Earth and Environmental Sciences, Al al-Bayt University, Sept. 2008 to Sept. 2009.
- Member of the editorial board of **Jordan Journal of Earth and Environmental Sciences** (JJEES).
- The coordinator between the Institute and the Quality Assurance & Control Department in Al al-Bayt University, 2008 to 2010.
- Member of Al al-Bayt University council from Sept. 2003 to Sept. 2007.
- Member of the scientific research council, Al al-Bayt University from Sept. 2012 to Sept. 2013.
- Member of the national committee for Nomenclatures of Geological Formations, Jordanian Geologists Association.
- Member of the organizing committee for the second conference of Jordanian society for expanding and developing the natural resources, titled " Cultural, natural environmental resources and its role in developing the economical investment" October 23- 25, 2007 at Al al-Bayt University .
- Member of the organizing committee for the 10th Jordanian Geological Conference and the 7th international symposium of Eastern Mediterranean Geology, April 3-5, 2011.
- Member of the national team of the site selection for the nuclear power station eastern Gulf of Aqaba since 27 Oct., 2009 to 27 Jan., 2010.

SUPERVISED M. Sc. THESES:

- 1- **Shatnawi, Gh., 2006**, Determine the best sites for water harvesting projects(Dams & Hafirs) in Northeastern Badia using GIS Applications, M.Sc. thesis, Al al-Bayt Unisersity(in Arabic).
- 2- **Abu Salah, R., 2006**, Exploration of groundwater potentials in the unconsolidated sediments of Quaternary period to the East of Aqaba- South Jordan, Hydrogeophysical study, M.Sc. thesis, Al al-Bayt University (in Arabic).
- 3- **Ibrahim, H., 2007**, Evaluation of the groundwater situation in As- Salt area, and building digital spatial vulnerability maps against pollution using geoenvironmental variables, M.Sc.Thesis, Al al-Bayt University (in Arabic).
- 4- **Khateeb, N., 2007**, Paleostress analysis of the Cretaceous rocks in northern Jordan. M.Sc. Thesis, Yarmouk University (in English).
- 5- **Al Attal, L., 2007**, Evaluation of selected water harvesting schemes in Northern Badia. M.Sc. thesis, Al al-Bayt University (in English).
- 6- **Sabbaheen, M., 2007**, The effect of seasonal variations on groundwater quality in Amman- Zarqa basin (Al- Mafraq). M.Sc. thesis, Al al-Bayt University (in Arabic).
- 7- **Abu Tabanjah, H., 2007**, A comparative study between the quality of effluent wastewater treated in Mafraq and Al al-Bayt university wastewater treated Plants. M. Sc. Thesis , Al al-Bayt University (in Arabic).
- 8- **Assaqir, T., 2011**. Analysis of Mesostructures in the Upper Cretaceous Rocks in Jarash Area – Northern Jordan. M.Sc. thesis, Yarmouk University (in English).

THESES COMMITTEE EXAMINING MEMBER:

- **Al-Masalha, A., 2006**. Investigation of the sources, values and environmental impacts of the natural radioactivity in Al- Mafraq area. *M. Sc. Thesis, Al al-Bayt University (in Arabic)*.
- **Al-Suweity, M., 2007**. Artificial recharge of groundwater in the basaltic plateau of Northeast Jordan using natural caves. . *M. Sc. Thesis, Al al-Bayt University (in Arabic)*.
- **Al- Rawabdeh, A., 2007**. GIS- based approach to investigate the vulnerability of the Amman- Zerqa groundwater basin to contamination. *M. Sc. Thesis, Al al-Bayt University (in English)*.
- **Al- Dardour, W., 2007**. Evaluating impacts of liquid industrial waste from Al- Zarqa river on Sokhnaa alluvium aquifer and the quality of its agricultural products in Al- Zarqa Governorate. . *M. Sc. Thesis, Al al-Bayt University (in Arabic)*.
- **Al-Refaey, M., 2007**. A Concentration Study of Heavy Metals in Al-Mafraq Industrial Water and Its Effect on Ground Water Quality. *M. Sc. Thesis, Al al-Bayt University (in Arabic)*.

- **Al-Shawabkha, M., 2007.** Evaluating the Water System of Qnayya Spring (North West Zarqa). *M. Sc. Thesis, Al al-Bayt University (in Arabic).*
- **Al-Masry, M., 2008.** Geological and Engineering Study for Northeastern Area from Jerash City. *M. Sc. Thesis, Al al-Bayt University (in Arabic).*
- **Rabee, A., 2008.** Hydrological study of Burqu Dam project. *M. Sc. Thesis, Al al-Bayt University (in Arabic).*
- **Sheayb, L., 2008.** Detection of subsurface geological structures in Zarqa area by radon gas monitoring. *M. Sc. Thesis, Hashemite University (in English).*
- **Barakat, M., 2008.** An Integrated approach to groundwater exploration in Khan Ez Zabib area using remote sensing and GIS. *M. Sc. Thesis, Hashemite University (in English).*
- **Huseinat, M., 2007.** Structural analysis of Wadi Shueib fold belt. *M. Sc. Thesis, Yarmouk University (in English).*

UNIVERSITY TEACHING EXPERIENCE:

- General Geology
- Structural Geology
- Tectonics
- Field Geology
- Geology of Jordan
- Engineering Geology
- Geomorphology
- Petroleum Geology
- Stratigraphy
- Advanced structural geology: 641 at Yarmouk University, 2nd semester 2010
709 at Al al-Bayt University

LANGUAGES:

- Arabic (Mother Tongue).
- English (Spoken & Written).