

Curriculum Vitae

Name : **Osama Mohamed Kaoud Kassem**

Family name : **Kassem**

Nationality : **Egyptian**

Marital status : **Married, Four children**

Languages : **Arabic (mother tongue), English (very good), German (very good)**

Profession : **Associate Professor**

Address in Egypt : **Geology Department, National Research Center,
EL-Tahrir St., Dokki, Cairo, Egypt.**

Address in Saudi Arabia: **King Saud University, College of Sciences,
Geology and Geophysics Department**

Tel., in Egypt : **++2 - 02- 25596001**

Fax, in Egypt : **++2 - 02- 33370931**

Tel., in Saudi Arabia : **++96-01-4676351**

Fax, in Saudi Arabia : **++96-01-4670389**

E-mail : Kassemo1@yahoo.com & Kassemo@uni-mainz.de
& okassem@ksu.edu.sa

Educational Career:-

1. 1976-1981: EL Komea Prep- School, Tahta, Souhag, Egypt
2. 1981-1984: EL Islamia Primary School, Tahta, Souhag
3. 1984-1987: Rephaa EL Tahtawy Secondary School, Tahta, Souhag
4. 1987-1991: Department of Geology, Faculty of Science, University of Assuit, Souhag
5. 1991: B.Sc. in Geology with grade "Very Good", Assiut University, Souhag
6. 1991-1993: Military service
7. 1993-1995: Pre Master Studies (Diploma), Assiut University, Egypt.
8. 1995-1998: M.Sc. in Geophysics, Assiut University.
9. 1998-2001: Assistant Researcher, Geophysics Lab, Geology & Geophysics Sciences Department, National Research Center.
10. 2001-2005: Doktorand, Institute of Geosciences, Faculty of Natural Sciences, University of Mainz, Mainz, Germany

11. 2005- 2008: Researcher, Geotechnology Lab., Geology department, National Research Center.
12. 2008- till date: Assistant Professor, King Saud University, Science College, Geology Department.

Training & courses in the Faculty of Nature Science in University of Mainz (in Germany):

1. Tectonics I (Winter Semester 2001/2002, with Prof. Dr. Cees W. Passchier).
2. Tectonics II (Summer Semester 2002, with Prof. Dr. Cees W. Passchier).
3. Microtectonics (Winter Semester 2001/2002, with Prof. Dr. Cees W. Passchier).
4. Geology of Alps (Winter Semester 2001/2002 and 2002/2003, with Prof. Dr. Uwe Ring).
5. Geodynamics (Winter Semester 2001/2002, with Prof. Dr. Wolfgang Jacoby).
6. Introduction for GIS (W S 2003/2004, with Dr. Dirk Schaefer, Geography Institute).
7. Methoden der digitalen Photogrammetrie (W. S. 2003/2004, with Dr. P. Spehs, Geography Institute).
8. Geology of Africa (Summer Semester 2004, with Prof Dr. Alfred Kröner).
9. Oceans and continents (Summer Semester 2002, with Prof Dr. Alfred Kröner)
10. Petrology and metamorphic rocks (Summer Semester 2004, with Dr. Holger Sommer).
11. Geologische Arbeitsmethoden (Winter Semester, 2003/2004 with Dr. Jens K. Becker)
12. Workshop about Microtectonics (2005, with Prof. Dr. Cees W. Passchier)

Training (in Egypt):-

- 1- Training in oil exploration field with General Oil Company.
- 2- Training at National Research Institute Astronomy and Geophysics for the measurements of the magnetic properties and preparation of samples for investigation, using advanced equipments like Spinner, thermal demagnetization circuit.
- 3- Measurements of electrical properties for rock samples using Q-meter and Bridge Circuit in the National Research Center.

Research experience:-

1. Geology Department, King Saud University, Riyadh, Saudi Arabia. 8/2012 to till date, Associate Professor
2. Geology Department, King Saud University, Riyadh, Saudi Arabia. 10/2008 to 8/2012, Assistance Professor
3. Geology Department, National Research Centre, Cairo, Egypt. 5/2005 to 10/2008, Researcher (Assistance Professor), I am a coordinator about the Geotechnology Division.
4. Institute of Geosciences, University Mainz-Germany. 5/2001 to 5/2005, Doctorand, Work carried

out for the degree of Doctor of Philosophy (Ph.D.) in the subject of Structural Geology. Research topic: "Finite strain analysis orthogneiss of the Gran Paradiso massif, Western Alps, Northern Italy".

5. Department of Geology, Faculty of Science, Assuit University, Assuit. 1995 to 1998, Assistant Researcher (Lecturer) in National Research Centre, Work carried out of M.Sc degree, Research topic: "Magnetic and Electric properties of some Chromites with their relation to mineralogical composition, Eastern Desert-Egypt".
6. Department of Geology, Faculty of Science Assuit University, 1993 to1995, Pre Master studies (Diploma), in the subject of Geophysics, Researcher Assistant in National Research Centre.
7. Department of Geology, Faculty of Science Assuit University (Souhag branch), Souhag, B.SC, 1991 with the very good grade - in Geology.

Research Interests:

- 1- Microstructural and deformation history
- 2-Strain determination (R_f/ϕ , Fry methods)
- 3- Finite strain determination and associated volume strain
- 4- Exhumation of high pressure rocks
- 5- X-ray diffraction, X-ray fluorescence
- 6- Microprobe analysis
- 7- Rotation analysis
- 8- Structural geology for Subsurface.
- 9- Using Remote Sensing and GIS tools
- 10- Structural Geology and its relationship with the evaluation of ore deposits.
11. Geophysical and Geological assessment of natural hazards.
12. Evaluation of Groundwater Aquifers.

Scientific affiliations:

- Egyptian Society of Applied Petrophysics (ESAP)
- Egyptian Geological Society
- Arabian of Geosciences
- Associate Editors in Journal on Geological and Earth Sciences (JGES)

- A peer-reviewer for many of the International journals and projects

Teaching experience:

- Supervising master students.
- Supervising PhD students.
- Teaching for undergraduate and graduate student in King Saud University.

Thesis Supervision

1. **Labdan N.H. Alqahtani 2012: STRUCTURAL CONTROLS ON GOLD MINERALIZATION AT AL AMAR MINE, EASTERN ARABIAN SHIELD, SAUDI ARABIA. M.Sc. Thesis, (Main Supervisor).**

***لبدان نجر حنتوش القحطاني 2012 : التحكم البنائي لتمدن الذهب فى منجم الامار- شرق الدرع العربى- المملكة العربية السعودية.**

2. **Majed B. R. AlMutairi 2015: PETROLOGY AND STRUCTURAL ANALYSIS OF THE JABLE TAYS OPHIOLITE COMPLEX, EASTERN ARABIAN SHIELD, SAUDI ARABIA. M.Sc. Thesis, (Main Supervisor).**

***ماجد بركى المطيرى 2015: بترولوجية و التحاليل البنائية لمعقد الأفيوليت فى جبل تيس، شرقي الدرع العربى، المملكة العربية السعودية.**

3. **Abdullah Lafi Awdh AlMutairi 2015: MICROSTRUCTURAL ANALYSIS FOR ABT SCHIST ROCKS IN AR-RUWAYDAH AREA, EASTERN ARABIAN SHIELD- SAUDI ARABIA. M.Sc. Thesis, (Main Supervisor).**

***عبدالله لافى المطيرى 2015: تحليل التراكيب الدقيقة لصخور ابت شيست لمنطقة الرويضة، شرق الدرع العربى، المملكة العربية السعودية.**

4. **Lami Abdel Kareem Numman 2016: GEOLOGY AND GEOCHEMISTRY OF AL AMAR AREA, EASTERN ARABIAN SHIELD, SAUDI ARABIA. M.Sc. Thesis, (Main Supervisor).**

***لامى عبدالكريم نعمان 2016: جيولوجية وجيوكيميائية منطقة الأمار، شرق الدرع العربى ، المملكة العربية السعودية.**

5. **Youssef Al Amary 2016: STRUCTURAL ANALYSIS AND MINERALOGY OF HALABAN AREA, EASTERN ARABIAN SHIELD, SAUDI ARABIA. M.Sc. Thesis, (Main Supervisor).**

*يوسف علي عبدالله ال عايش العمري 2016: التحاليل البنائية و المعدنية لمنطقة حلبان- شرق الدرع العربي-المملكة العربية السعودية.

6. Nasser El Sabai 2016: STRUCTURAL AND MECHANICAL CONTROLS FOR NEOPROTEROZOIC ROCKS IN NAKHYILAN AREA, EASTERN ARABIAN SHIELD, SAUDI ARABIA.

*ناصر السبيعي 2016: التحكم البنائي والميكانيكي للصخور النيوبروتوزويك بمنطقة نخيلان – شرق الدرع العربي - المملكة العربية السعودية

Research Projects:

- 1- Title: The Neoproterozoic Pan-African Orogen, Egypt. - **Donor:** MENA-Swedish Research – **Egyptian Coordinator (PI):** Dr. Osama Mohamed Kaoud - **Budget:** 75,000 SEK - **Duration:** One year 2006-2007.
- 2- Title: The Jordanian and Egyptian Basement Evolution. - **Donor:** MENA-Swedish Research - **Egyptian Coordinator (PI):** Dr. Osama Mohamed Kaoud - **Budget:** 600,000 SEK - **Duration:** three years 2007-2010.
- 3- Title: Use of some application of structural geology for re-evaluation of Gold deposits in Atud and Dungash mines, Eastern Desert, Egypt. - **Donor:** National Research Center - **PI:** Dr. Osama Mohamed Kaoud - **Budget:** 56,400 EP - **Duration:** three years 2007-2010. **Code No.:** W.N2.0801.
- 4- Title: Dams Project in Saudi Arabia Kingdom. - Donor: Ministry of water and electricity and King Saud University- **Budget:** 22.5 million SR - **Duration:** three years 2008-2011.
- 5- Title: Impact of Gold mining on the Hydrological Regime in the Mahd Ad Dhahab region of Saudi Arabia. - **Donor:** King Adbulaziz City for Science and Technology - **Budget:** 1,824,000 Saudi Riyal - **Duration:** two years 2010-2012. **Code No.:** 09-ENV661-02.
- 6- Title: Evaluation of Groundwater Aquifers in Al-Kharj area, Southeastern Riyadh, using Magnetic, Geoelectric and Remote Sensing Data. - **Donor:** National Applied Research Fund - **Budget:** 475,000 Saudi Riyal - **Duration:** Six month- 2011-2012. **Code No.:** 0/1.
- 7- Title: Impact on Groundwater due to MTBE contamination from underground fuel storage tanks in parts of Riyadh City. - **Donor:** National Applied Research Fund - **Budget:** 500,000 Saudi Riyal - **Duration:** Six month- 2011-2012. **Code No.:** 0 /10/1.
- 8- Title: Geophysical and Geological assessment of natural hazards in Riyadh area, Saudi Arabia. - **Donor:** Ministry of Higher Education, King Saud University - **Budget:** 150,000 Saudi Riyal - **Duration:** Six month- 2011-2012. **Code No.:** 253/2/14.
- 9- Title: Geophysical assessment of natural hazards in Qasium area, Saudi Arabia. - **Donor:** Ministry of Higher Education, King Saud University - **Budget:** 150,000 Saudi Riyal - **Duration:** Six month- 2011-2012.

10- Title: Evaluation of ore deposits in the Al-Amar Region, Eastern Arabian Shield, Saudi Arabia: An Implication of Structural and Remote Sensing Techniques. - **Donor:** King Abdulaziz City for Science and Technology - **Budget:** 1873600 Saudi Riyal - **Duration:** two years 2016-2018. **Code No.:** 16-SPA154-02.

Workshops and symposiums Organization:

- 1- A coordinator for International Workshop about the Neoproterozoic Pan-African Orogen, Eastern Desert, Egypt; Feb., 18-23, 2007.
- 2- A coordinator for Egyptian-German Workshop, “Materials Based Manufacturing Technologies”; May, 7-9, 2007.
- 3- A vice of chairman for symposium under theme: “Structural Geology and its relationship with the Mineralization and ores deposits” Thursday 17 Jun. 2008.
- 4- A coordinator for symposium under theme: “A promising Future for ores deposits in Egypt” Wednesday 20 Feb. 2008.

Computer experience:-

- 1- ICDL
- 2- Surfer and Grapher.
- 3- GMAP program for palaeomagnetism.
4. Arc GIS and Arc Explorer
5. Erdas Program for Photogrammetry
6. Finite Strain and Exhumation Programs
7. Corel Draw and Photoshop programs
8. MapInfo professional Program
9. Syscal System program for hydrogeology

Conferences:

- 1- Al Hussaini, A. H., Wassif, N.A., Ibrahim, H. A. & **Osama M. K. Kassem**, 1999: Plaeomagnetic and Mineralogical studies of some chromite ores from the Eastern Desert of Egypt. **Proc.1st. International Symposium on Geophysics, Tanta, pp 106-118.**
- 2- **Osama M. K. Kassem** & Ring, U. 2006: Influence of the heterogeneous ductile deformation and nappe contact in the Gran Paradiso massif, Western Alps, Italy, **the 3rd International Conference of Applied Geophysics (18-20 March 2006).**
- 3- **Osama M. K. Kassem** & Ring, U. 2006: Ductile Strain and Exhumation history for the Metamorphic Rocks of the Gran Paradiso Massif, Western Alps, Italy, **the International Conference on the role of Applied Geology in Environmental Development, (3-4 April 2006).**
- 4- Faisal K. Zaidi, **Osama M. K. Kassem**, Abdulaziz Al-Bassam and Mohammed Tahir Hussein 2010: Application of Ert Survey for Delineating the Wet/dry Zones in the Qassim Province of Saudi Arabia. **4th International Conference on Water Resources and Arid Environments (ICWRAE 4): 281-289, 5-8 December 2010, Riyadh, Saudi Arabia.**
- 5- Faisal K. Zaidi, **Osama M. K. Kassem**, 2010: Application of ERT survey for exploring groundwater potential in the Diriyah region of Riyadh, Saudi Arabia. **4th International Conference on Healthy Water in Arab World (Water for Healthy Arab Citizens) which will be held in 21-22 June 2010, Cairo International Conference Center, Nasr City, Cairo, Egypt.**
- 6- **Osama M. K. Kassem**, Said H. Abd El Rahim & EL Said R. El Nashar 2011: Microstructural, Finite Strain and strain variation of Neoproterozoic rocks of Wadi El Falek, Central Eastern

Desert, Egypt. **9th Meeting of the Saudi Society of Geosciences, 26-28 April, 2011, Riyadh, Saudi Arabia.**

- 7- **Osama M. K. Kassem**, Abdel Aziz M. Al Bassam, Faisal K. Zaidi, and Mohammad T. Hussein **2012**: Structural and mechanical controls on intrusion related to Mahd ad Dahab Gold deposits, Arabian Shield, Saudi Arabian. **Annual International Conference on Geological and Earth (GEOS 2012) to be held on 3rd– 4th December 2012 in Singapore.**
- 8- Faisal K Zaidi, A. M. Bassam, M. T. Hussein, and **Osama M.K. Kassem 2013**: Integrated Use of Meteorological Information and Drainage Basin Characteristics for Identifying the Probable Zones of Contamination from Gold Mining Activities, Mahd Ad Dahab, Saudi Arabia. **5th International Conference on Water Resources and Arid Environments, Riyadh 7- 9/1 /2013.**
- 9- **Osama M. K. Kassem 2013**: Strain analysis and deformation in the Tunouma area, Arabian Shield, Saudi Arabia. **10th Meeting of the Saudi Society of Geosciences, 15-17 April, 2013, with King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia.**
- 10- Al Bassam, A. M., Khalil, A. R., and **Kassem, O. M. K., 2014**: Using Updated DurovPwin Program for Hydro-Chemical Data Processing: Case study of Al-Ula area, Saudi Arabia. **Proceedings of the 2014 International Conference on Environmental Science and Geoscience (ESG '14) Venice, Italy March 15-17, 2014**
- 11- **Osama M. K. Kassem 2014**: Structural Evolution for Jabal Tays Ophiolite in Eastern Arabian Shield: Implications For evidence of active ocean---floor magmatism. **6th International Conference on Orogenic Lherzolites and Mantle Processes, at Marrakech, Morroco, 8--11 May 2014.**
- 12- **Osama M. K. Kassem 2014**: Microstrucural and Strain Analysis in the Tanumah area, Arabian Shield, Saudi Arabia. **The 67 Geological Congress of Turkey, at Ankara, Turkey, 14 - 18 April, 2014.**

- 13- Zakaria Hamimi and **Kassem, O. M. K.** 2014: Application of Kinematic Vorticity Tecchniques for Mylonitized rocks of Al-Amar Suture, Eastern Arabian Shield, Saudi Arabia. **25th Colloquium of African Geology (CAG25), Julius Nyerere International Convention Centre (JNICC), Tanzania 14th – 16th August 2014.**
- 14- **Osama M. K. Kassem** and Abdel Aziz M. Al Bassam, 2014: Application of Kinematic analysis and deformation history in the Tanumah area, Arabian Shield, Saudi Arabia. **3rd International Conference on Geological and Earth (GEOS 2014) to be held on 22nd– 23rd September 2014 in Singapore.**
- 15- Faisal K. Zaidi, **Osama M. K. Kassem**, Abdulaziz M. Al-Bassam, Saad Al-Humidan 2014: Factors governing groundwater chemistry in Paleozoic sedimentary aquifers in an arid environment; a case study from Hail Province in Saudi Arabia, **6th International Conference on Water Resources and Arid Environments, Riyadh 16- 17/12 /2014.**
- 16- Majed B. R. AlMutari and **Osama M. K. Kassem**, 2015: Structural analysis of the Jable Tays ophiolite complex, Eastern Arabian Shield, Saudi Arabia., **SEG Middle East Young Professionals and Student events 12- 14/4 /2015 (Poster).**
- 17- **Lami A. N. Mohammed** and **Osama M. K. Kassem**, 2015: Geology and Geochemistry of Al Amar area Eastern Arabian Shield, Saudi Arabia., The **11 International Geological Conference of the Saudi Society of Geosciences, 12-14 May, 2015, Riyadh, Saudi Arabia (Poster).**
- 18- **Osama M. K. Kassem**, **Zakaria Hamimi**, Abdel Aziz M. Al Bassam, and Saad Al-Humidan, 2015: Tectonic setting and quantitative strain analysis of Al Amar Suture separating Ad Dawadimi and Ar Rayn Terranes in eastern Arabian Shield., The **11 International Geological Conference of the Saudi Society of Geosciences, 12-14 May, 2015, Riyadh, Saudi Arabia.**

- 19- Saad. Alhumidan, Osama M. K. Kassem and M. Almutairi 2016: Mineral Deposits Assessment of the Jabal Tays Ophiolite Complex, Eastern Arabian Shield, Saudi Arabia. 22nd European Meeting of Environmental and Engineering Geophysics, 4-8 September 2016 Barcelona, Spain.

Publication list

- 1- Kassem, O. M. K., 1998: "Magnetic and Electric properties of some Chromites with their relation to mineralogical composition, Eastern Desert-Egypt". M. Sc. Thesis, Assuit University, Egypt, 126-pp.
- 2- Al Hussaini, A. H., Wassif, N.A., Ibrahim, H. A. & Kassem, O. M. K., 1999: Plaeomagnetic and Mineralogical studies of some chromite ores from the Eastern Desert of Egypt. **Proc.1st. International Symposium on Geophysics, Tanta, pp 106-118.**
- 3- Kassem, O. M. K., & Ring, U. 2004: Underplating-related finite-strain patterns in the Gran Paradiso massif, Western Alps, Italy: heterogeneous ductile strain superimposed on a nappe stack. **Journal of the Geological Society, London, Vol. 161, pp. 875–884.**
- 4- Kassem, O. M. K., 2005: "Finite strain analysis orthogneiss of the Gran Paradiso massif, Western Alps, Northern Italy". Doctoral Dissertation, Institute of Geosciences, **University of Mainz, Germany, 103pp.**
- 5- Ring, U., Collins, A. S., & Kassem, O. M. K., 2005: U-Pb SHRIMP data on the crystallization age of the Gran Paradiso augengneiss, Italian Western Alps: Further evidence for Permian magmatic activity in the Alps during break-up of Pange, **Eclogae geol. Helv. 98, 363–370.**
- 6- Kassem, O. M. K. & Ring, U. 2006: Influence of the heterogeneous ductile deformation and nappe contact in the Gran Paradiso massif, Western Alps, Italy, **the 3rd International Conference of Applied Geophysics (18-20 March 2006).**

- 7- **Kassem, O. M. K.** & Ring, U. **2006:** Ductile Strain and Exhumation history for the Metamorphic Rocks of the Gran Paradiso Massif, Western Alps, Italy, **the International Conference on the role of Applied Geology in Environmental Development, (3-4 April 2006).**
- 8- Ring, U. & **Kassem, O. M. K.**, **2007:** The nappe rule: Why does it work? **Journal of the Geological Society, London, Vol. 164, pp. 1109–1112.**
- 9- **Kassem, O. M. K.** **2008:** Strain analysis and heterogeneous deformation in the Migif area, Eastern Desert, Egypt. **Annals of Geological Survey of Egypt. Vol. 30, pp. 103-119.**
- 10- **Kassem, O. M. K.** **2008:** Vorticity analysis technique for porphyroclasts in the metamorphic rocks: An example from the augengneisses of the Gran Paradiso massif, Western Alps, Italy. **Bull. NRC, Egypt, Vol. 33, No.6, pp. 605-620.**
- 11- **Kassem, O. M. K.** & Abdel Raheim, S. **2010:** Finite -strain analysis for the metavolcanic-sedimentary rocks in the Gabel El- Mayet area, Central Eastern Desert, Egypt. **Journal of African Earth Science, Vol. 58, pp. 321-330.**
- 12- Faisal K. Zaidi, **Kassem, O. M. K.**, Abdulaziz Al-Bassam and Mohammed Tahir Hussein **2010:** Application of Ert Survey for Delineating the Wet/dry Zones in the Qassim Province of Saudi Arabia. 4th International Conference on Water Resources and Arid Environments (ICWRAE 4): 281-289, 5-8 December 2010, Riyadh, Saudi Arabia. -0229-8) (**Accepted on 19 /10/ 2010**).
- 13- **Kassem, O. M. K.** **2011:** The Effect of Microstructural and vorticity analysis for the Metavolcano-sedimentary rocks. **Annals of Geological Survey of Egypt, Vol. 31, pp. xx-xx.**
- 14- **Kassem, O. M. K.** **2011:** Determining Heterogeneous deformation for Granitic rocks in the Northern thrust in Wadi Mubark belt, Eastern Desert, Egypt. **Geotectonics, V.45. No. 3 – pp. 244-254.**
- 15- **Kassem, O. M. K.** **2012:** Kinematic Vorticity Technique for Porphyroclasts in the Metamorphic Rocks: An Example from the Northern thrust in Wadi Mubarak belt, Eastern Desert, Egypt. **Arabian Journal of Geosciences, Vol. 5, No. 1, 159–167.**

- 16- Faisal K. Zaidi & **Kassem, O. M. K.**, 2012: Use of Electrical Resistivity Tomography in delineating zones of groundwater potential in arid regions: A case study from Diriyah Region of Saudi Arabia. **Arabian Journal of Geosciences**, Vol. 5, No. 3 pp. 327-333.
- 17- Faisal K. Zaidi, & **Kassem, O. M. K.**, Abdulaziz Al-Bassam and Mohammed Tahir Hussein 2012: Application of Ert Survey for Delineating the Wet/dry Zones in the Qassim Province of Saudi Arabia. **International Journal of Geosciences**, 3, 726-736.
- 18- **Kassem, O. M. K.**, Abd El Rahim S. H. & El Nashar E. R., 2012: Strain analysis and Microstructural evolution characteristic of Neoproterozoic rocks associations of Wadi El Falek, Centre Eastern Desert, Egypt. **Geotectonics**, Vol. 46, No. 5, 379-388.
- 19- Al-Saleh A. M., & **Kassem, O. M. K.**, 2012: Microstructural, Strain Analysis and $^{40}\text{Ar}/^{39}\text{Ar}$ Evidence for the Origin of the Mizil Gneiss Dome, Eastern Arabian Shield, Saudi Arabia. **Journal of African Earth Science**, 70, 24-35.
- 20- Ibrahim E.H., **Kassem, O. M. K.**, & Al Bassam A. M., 2012: Aeromagnetic data interpretation to locate buried faults in Riyadh Region, Saudi Arabia. **Scientific Research and Essays**, Vol. 7 (22), pp. 2022-2030.
- 21- Faisal K. Zaidi, Abdulaziz Al-Bassam Mohammed Tahir Hussein & **Kassem, O. M. K.**, 2012: Hydrologic characterization of Mahd Ad Dahab Gold Mine, Saudi Arabia. **International Journal of Physical Sciences**, Vol 7(22), pp. 2935-2943.
- 22- **Kassem, O. M. K.**, Al Bassam, A. M., and Zaidi, F. K. 2013: Structural and mechanical controls on intrusion related to Mahd ad Dahab area, Arabian Shield, Saudi Arabian. **GSTF, Journal of Geological Sciences**, Vol. 1, N. 1, PP. 63-72.
- 23- Al Bassam, A. M., Khalil, A. R., and **Kassem, O. M. K.**, 2013: Automatic Analysis Reporting for Hydro-Chemical Data Using Updated DurovPwin Program. **Journal of Acricultural Science and Technology A and B**, B 3, 757-768.

- 24- **Kassem, O. M. K.**, Al Bassam, A. M., and Zaidi, F. K. **2013**: Structural analysis for Metavolcanics and their Metapyroclastics at Gold deposit of the Mahd ad Dahab area, Arabian Shield, Saudi Arabian, **Geology of Ore Deposits, Vol. 55, No. 6, pp. 482–493.**
- 25- **Kassem, O. M. K.** and Zakaria Hamimi **2014**: Application of Finite Strain Technique for deformed Lithologies in Al Amar suture, Eastern Arabian Shield. **The Open Geology Journal, Vol. 8, (Suppl 1: M7) pp. 97-106.**
- 26- **Kassem, O. M. K.** **2014**: Kinematic analysis of the Migif area in the Eastern Desert of Egypt. **Journal of African Earth Science Vol. 90, pp. 136-149.**
- 27- **Kassem, O. M. K.** and Abdel Raheim, S. **2014**: Finite -strain analysis of the metavolcanics and metapyroclastics in Gold-bearing shear zone of the Dungash Area, Central Eastern Desert, Egypt. **Geotectonics, Vol. 48, No. 6, 484-497.**
- 28- Al Bassam, A. M., Khalil, A. R., and **Kassem, O. M. K.**, **2014**: Using Updated DurovPwin Program for Hydro-Chemical Data Processing: Case study of Al-Ula area, Saudi Arabia, **Proceedings of the 2014 International Conference on Environmental Science and Geoscience (ESG '14) Venice, Italy March 15-17, 2014**
- 29- **Kassem, O. M. K.** **2015**: Strain analysis and deformation in the Tanumah Area, Arabian Shield, Saudi Arabia, **Arabian Journal of Geosciences, Volume 8, Issue 6, Page 4127-4138.**
- 30- Oumar A. Loni, Faisal K. Zaidi, Mansour S. Alhumimidi, Obaid A. Alharbi, Mohammed T. Hussein, Muawia Dafalla, Khaled A. AlYousef & **Kassem, O. M. K.**, **2015**: Evaluation of groundwater quality in an evaporation dominant arid environment; a case study from Al Asyah area in Saudi Arabia. **Arabian Journal of Geosciences Volume 8, Issue 8, Page 6237-6247.**
31. Faisal K. Zaidi, **Kassem, O. M. K.**, Abdulaziz M. Al-Bassam, Saad Al-Humidan **2015**: Factors governing groundwater chemistry in Paleozoic sedimentary aquifers in an arid environment; a case study from Hail Province in Saudi Arabia, **Arabian Journal for Science and Engineering, DOI 10.1007/s13369-014-1534-4.**

- 32- **Kassem, O. M. K. 2015:** Investigation of Kinematic analysis in the Tanumah area, Arabian Shield, Saudi Arabia, **Journal of Tethys, Vol. 3, No. 1, 16–30**
- 33- Zakaria Hamimi, **Kassem, O. M. K.** and El-Sabrouty, M. N., **2015:** Kinematic analysis Technique for deformed Lithologies in Al Amar suture, Eastern Arabian Shield. **Geotectonics, Vol. 49, No. 5, pp. 439–450.**
- 34- **Kassem, O. M. K.,** Habes A. Ghrefat, Haider Zaman, Awni T. Batayneh, Saad Almogren, Yousef Nazzal, and Eslam Elawadi **2016:** Integrated remote sensing and Structural analysis studies of Tayyib Al-Ism area, Northwestern Arabian Shield, Saudi Arabia, **Indian Remote sensing Journal, vol. 44, No. 1, pp 91-99.**
- 35- **Kassem, O. M. K.,** Abd El Rahim S. H., El Nashar E. R., & Kaled M.AL-Kahtany, **2016:** Application of Kinematic vorticity for the wall rock alterations of Shear Zone in metavolcanic-Sedimentary rocks at Dungash gold mining, Central Eastern Desert, Egypt. **Geology of Ore Deposits, Vol. 58, No. 6, pp 533-549.**
- 36- **Kassem O. M. K.,** Abdullah L.A. Almutairi, Abdel Aziz M. Al Bassam, **2016:** Relationship between finite Strain and tectonic setting IN the Ar-Ruwaydah area, eastern Arabian Shield, Saudi Arabia. **Arabian Journal of Geosciences, Accepted in 3/11/2016.**
- 37- **Kassem O. M. K.,** Saad Al-Humidan, Majed Almutairi, **2016:** Petrology and microstructural investigation of the Jabal Tays ophiolite complex, Eastern Arabian Shield, Saudi Arabia, **Arabian Journal for Science and Engineering, in press.**
- 38- **Kassem, O. M. K.** and Zakaria Hamimi **2016:** Finite strain analysis of Fatima Shear Zone in Western Arabia. **Journal of African Earth Science, in press.**
- 39- Yousef A. Al-Amri and **Kassem, O. M. K. 2016:** The effect of finite strain and deformation history of Halaban area, eastern Arabian Shield, Saudi Arabia. **Arabian Journal of Geosciences, in press.**

- 40- **Kassem, O. M. K., & Al-Saleh A. M., 2016:** Vorticity analysis and Deformation history of the Mizil Gneiss Dome, Eastern Arabian Shield, Saudi Arabia. **Journal of Asian Earth Science**, in press.