

CURRICULUM VITAE

Name: Dr. Ali Yahay Kahal

CONTACT INFORMATION

Name: Ali Yahay Kahal

Address: Department of Geology, College of Science,
King Saudi University, P.O. Box 2455,
Riyadh, 11451, Saudi Arabia

Telephone: +966 11 4676901

Cell Phone: +966 552006354

Fax: +9664676214

Email: akahal@KSU.EDU.SA



EDUCATION:

- **Ph.D. Structural Geology** (2014), College of Earth Science - Royal Holloway, University of London - UK "***Tectonic Evolution of Eastern Otway Basin, Offshore Southeast Australia***".
- **M.Sc. Petroleum Geosciences** (2006), College of Earth Science- University of Manchester – UK "***Late Cretaceous and Tertiary Structural and Stratigraphic Evolution of Blocks 35/9 and 36/7, Norwegian, Northern North Sea***".
- **B.Sc. Geology** (2000), Geology Department, College of Science; King Saud University - Saudi Arabia.

EMPLOYMENT HISTORY:

- **June 2014 –Present:** **Assistant Professor**, Geology & Geophysics Dept., college of Science, King Saud University.
- **2000 – 2014:** **Demonstrator**, Geology & Geophysics Dept., college of Science, King Saud University, Riyadh.

TEACHING EXPERIENCE:

- ✓ Structural Geology
- ✓ Sedimentology and Stratigraphy
- ✓ Petroleum Geology
- ✓ Geology of Saudi Arabia

SCIENTIFIC INTERESTS

- Structural Geology, Tectonics, Petroleum Geology, Sedimentary and Stratigraphy, Seismo- stratigraphy, Geology of Saudi Arabia, Tectonics of the Arabian Plate and the Red Sea and Gulf of Aden using Seismic interpretation, remote sensing and analogue scale modelling.

CONFERENCES:

- Attendance of the 3rd, 4th,5th,6th,7th Meetings of Saudi Society of Geosciences, in different places.
- Three conferences of groundwater Conference of Science in King Saud University.
- 7th International Conference on water resources and arid environments, King Saud University, 4-6 December 2016, Riyadh, Saudi Arabia.
- 13th Middle East Geosciences conference and Exhibition in Bahrain, 16-19
- 1st conference of the Arabian journal of Geosciences (CAJG) 12-15 November 2018, Hammaet, Tunisia.
- 8th International Conference on Water Resources and Arid Environments (ICWRAE8) 22-24 January 2019, Riyadh, Saudi Arabia.
- THE 12TH INT'L. GEOLOGICAL CONFERENCE JAN 30, 2018

PUBLICATIONS

PUBLISHED

1. 1- Alfaifi, H., Albassam, A.; **Kahal, A.**, Ibrahim, E., Kamal Abdel Rahman, Zaidi, F., Alhumidan, S., Alarifi, N. and Loni, O. (2016): Hydrochemistry and Groundwater Quality Assessment along Wadi Al-Showat, Khamis Mushayt District, South-west Saudi Arabia. *7th International Conference on Water Resources and the Arid Environments (ICWRAE 7): 401-412, 4-6 December 2016, Riyadh, Saudi Arabia.*
2. **Ali Y. Kahal**, Abdelbaset S. El-Sorogy, Hussain J Alfaifi, Sattam Almadani & Habes A. Ghrefat (2018): Spatial distribution and ecological risk assessment of the coastal surface sediments from the Red Sea, northwest Saudi Arabia. *Marine Pollution Bulletin 137:198–208.*
3. **Ali Y. Kahal**, Essam Abd El-Motaal, Osama M. K. Kassem, Abed H. R. Al Ghoreiby (2019): Strain Analysis and Deformation History of Zalm Area, Arabian Shield, Saudi Arabia. *Journal of African Earth Science 150 :441–450.*
4. Mohammed Hail Hakimi, Abdulwahab S. Alaug, Ibrahim M.J. Mohialdeen, **Ali Y. Kahal**, Hesham Abdulelah, Yousif Taha Hadad, Madyan M.A. Yahya (2019): Late Jurassic Arwa Member in South-eastern Al-Jawf sub-basin, NW

Sabatayn Basin of Yemen: Geochemistry and basin modeling reveal shale-gas potential, *Journal of Natural Gas Science & Engineering* 64:133–151.

5. Alfaifi, H., **Kahal, A.**, Albassam, A., Ibrahim, E., Abdelrahman, K., Zaidi, F., Alhumaidan, S. (2019): Integrated geophysical and hydrochemical investigations for seawater intrusion: a case study in southwestern Saudi Arabia. *Arabian Journal of Geosciences* 12: 372
6. **Ali Y. Kahal**, Abdelbaset S. El-Sorogy, Hussain J. Alfaifi, Sattam Almadani, and Osama M. Kassem. Biofacies and diagenetic alterations of the Pleistocene coral reefs, northwest Red Sea coast, Saudi Arabia (2019). *Geological Journal* (1–11).
7. Mohammed Hail Hakimi, Adel M. Al-Matary b, Osama El-Mahdy, Baleid Ali Hatem, **Ali Y. Kahal** and Aref Lashin (2020): Organic geochemistry characterization of Late Jurassic bituminous shales and their organofacies and oil generation potential in the Shabwah depression, southeast Sabatayn, Yemen. *Journal of Petroleum Science and Engineering* (2020) 188.
8. Mohammed Hail Hakimi, Wan hasiah Abdullah, Aref Lashin, Khairul Azlan Mustaphah, **Ali Y. Kahal**, Hussain J. Al Faifi (2020): Source rock evaluation and hydrocarbon generation potential of Mid-Late Cretaceous sediments from Mintaq-01 well in the Wadi Hajar of Sabatayn Baaian, Yemen. *Petroleum Science and Technology*. VOL. 38, NO. 3, 216–224.
9. Hussain Jaber Alfaifi, **Ali Yahya Kahal**, Kamal Abdelrahman, Faisal Kamal Zaidi, Abdulaziz Albassam, Aref Lashin (2020): Assessment of groundwater quality in Southern Saudi Arabia: case study of Najran area. *Arabian Journal of Geosciences*. 13:101.
10. Maan Al-Gain, Kamal Abdelrahman, Ali Kahal, Saleh Al-Zahrani , Elkhedr Ibrahim, Naif Al-Otaibi (2020): Impact of 5D regularization and interpolation on subsurface imaging: A case study at Stratton Field, south Texas, United States of America. *Journal of King Saud University* 2733-2740.
11. **Ali Y. Kahal** (2020): Geological assessment of the Neom mega-project area, northwestern Saudi Arabia: an integrated approach. *Arabian Journal of Geosciences* 13:345.
12. **Ali Y. Kahal**, Abdelbaset S. El-Sorogy, Saleh Qaysi, Sattam Almadani, Osama M. Kassem and Ahmed Al-Dossari (2020): Contamination and ecological risk assessment of the Red Sea coastal sediments, southwest Saudi Arabia. *Marine Pollution Bulletin* 154:111125.

13. Bassem Nabawy; Elkhedr Hassan; **Ali Y. Kahal**; Hussain Alfaifi; Aref Lashin (2020): Impact of authigenic iron oxides, clay content and grain size on the aquifer quality properties of the Cambrian-Ordovician Wajid Sandstone, southwest Saudi Arabia. *Accepted in Journal of African Earth Science.*
14. Mohammed Hail Hakimi, **Ali Y. Kahal**, Adeeb Ahmed and Hussain J. Al Faifi (2020) Organic geochemistry of Late Cretaceous Mukalla shales from the Mukalla–Sayhut Basin, Southern Yemen– Terrestrial organic matter inputs and gas-resource potential. *Accepted in Journal: Arabian Journal of Geosciences.*

SUBMITTED

1. Ghazi Alqahtani; Nassir S. Al-Arifi; **Ali Y. Kahal** (2019) Seafloor Classification and Marine geohazards in the coastal and offshore area of Farasan Islands, southern Red Sea. *Submitted to the Arabian Journal of Geosciences.*
2. Habes Ghrefat, **Ali Y. Kahal**, Kamal Hassanein, Madyan Yahya & Hisham Jhlan (2018): Delineation of geological units using Landsat 8 OLI data: A case study in Sarat Abidah, Asir Province, Saudi Arabia. *Submitted to*
3. Mohammed Hail Hakimi, Adeeb Ahmed, **Ali Y. Kahal**, Osman Salad Hersi, Hussain J. Al Faifi, and Saleh Qaysi (2020) Organic geochemistry and basin modeling of Late Cretaceous Harshiyat Formation in the onshore and offshore basins in Yemen: Implications for effective source rock potential and hydrocarbon generation. *Submitted to*
4. **Ali Y. Kahal**, Abdelbaset El-Sorogy, Hussain J. Alfaifi, Saleh I. Qaysi and Ahmed Al-Dossari (2020). *Seawater pollution and sources of heavy metals in Jazan area, Red Sea coast, Saudi Arabia. Submitted to the Arabian Journal of Geosciences.*

ABSTRACT IN CONFERENCE

1. Hussain J. Alfaifi, **Ali Y Kahal**, El- Khedr E. Ibrahim, Kamal Abdel Rahman and Saad M. Alhumidan: (2016): Integrated geophysical investigation to assess seawater intrusion into the coastal aquifer in the southwest of Saudi Arabia. *AGU Fall Meeting, San Francisco, 12-16 December.*
2. Saad AlHumidan, Osama Kassem, Majed Almutairi, Hussain Al-Faifi, and **Kahal, A.** (2017): Tectonic Evolution of Jabal Tays Ophiolite Complex,

Eastern Arabian Shield, Saudi Arabia. Geophysical Research, Vol. 19, EGU2017-1867, 2017, *EGU General Assembly 2017*.

3. Osama M. K. Kassem, Esam Abd El-Mataal, **Kahal, A.**, Abed H. R. Al Ghoreiby (2017): Tectonic Evolution and Microstructural analysis of Zalm area, Arabian Shield Saudi Arabia. *Presented to 12th International Geological Conference in Jeddah, 2018*.
4. Hussain J. Alfaifi, **Ali Y Kahal**, El- Khedr E. Ibrahim, Kamal Abdel Rahman and Saad M. Alhumidan, Faisal Zaidi, Naif M Alotibi (2018): Groundwater Quality Assessment in Southern Saudi Arabia Using Physico-Chemical Water Analysis. *AGU Fall Meeting, Washington, D. C., 10-14 December*.

PROFESSIONAL EXPERIENCE

- General supervisor of the Geological summer trip to southern Saudi Arabia - 2015.
- Supervisor of the Geological summer trip to southern Saudi Arabia -2016.
- Supervisor of the Geological summer trip to southern Saudi Arabia -2017.
- Supervisor of the Geological summer trip to southern Saudi Arabia -2018.
- Field works covering many kinds of rocks in Saudi Arabia, UK, Spain, Egypt and Oman.
- Interpretation of dip seismic data using **GeoFrame software, Petrel software, Landmark software**.
- Many experiments using analogue scale modelling.
- Interpretation of geophysical data including seismic and magnetic data.
- Interpretation of various sets of the magnetic and gravity data.
- Remote Sensing capabilities to process the raster satellite Images using **TrapTester software and illustrator software**

SCIENTIFIC MEMBERSHIP:

- Member of Saudi Society for Earth Sciences, Saudi Arabia.
- Member of the Fault Dynamics Research Group, College of Earth Science - Royal Holloway, University of London – UK.

The University and Community Services

- Member of Geology and Geophysics Department Council, Faculty of Sciences - King Saud University.
- The secretary of Geology and Geophysics Department Council, Faculty of Sciences - King Saud University.
- Member of the Advisory Committee to the Head of Geology and Geophysics Department.
- Supervisor of graduate students of Geology and Geophysics, Department, Faculty of Sciences - King Saud University.
- Member of the Commission for Academic Accreditation, Geology and Geophysics Department, Faculty of Sciences - King Saud University.
- Member of the Commission Quality Management and Development, Geology and Geophysics Department, Faculty of Sciences - King Saud University.
- Member of the Commission of study plans, Geology and Geophysics Department, Faculty of Sciences - King Saud University.
- Member of the Committee affairs of Graduates, Geology and Geophysics Department, Faculty of Sciences - King Saud University.
- Member of the Committee teaching assistants and lecturers, Geology and Geophysics Department, Faculty of Sciences - King Saud University.
- Member of the Committee for Community Service, Geology and Geophysics Department, Faculty of Sciences - King Saud University.
- Member in the Committee of field trips in the College of Science, KSU.
- Member in the Committee of distinguished attracting faculty staff in the College of science, KSU.
- Member in the Committee of human resources in the college of Science, KSU.

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Geology & Geophysics Dept., college of Science,
King Saud University