

CURRICULUM VITAE

I- Personal Information:

Name: Prof. Adel H. I. El-Afandy

Work: Ex. Vice President of Nuclear Materials Authority (NMA).

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Present Address: 10 Sherif Street, El-Taawon, Pyramid, Egypt.

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Recent Post: Prof. Emeritus of Geology since 2013.



II- Post Held:

- 1- Bachelor of Science, Geology Dept., Fac. Sci., Mansoura Univ., Good Grade, 1976.
- 2- M.Sc., Geology, Fac. Sci., Assuit Univ., 1986.
- 3- Ph.D., Geology, Fac. Sci., Assuit Univ., 1994.
- 4- Associate Professor of Geology, 1999.
- 5- Professor of Geology, 2004.

III- Experiences:

- 1- Field Geologist, NMA since Nov., 1977.
- 2- Head of Geologic Expedition, South Western Desert Development Dept. from 1984 to 1989 resulted in discovery of uranium mineralizations in many areas especially Um Ara area.

- 3- Vice Head of Radioactive Resources Development of Um Ara area from 1989 to 1995.
- 4- Head of Geologic Expedition of Geological Detection for Uranium in the Central Eastern Desert, from 1996 to 1998.
- 5- Head of Geologic Expedition of Granite Project, one of the cooperation projects with IAEA for uranium exploration in Central and South Eastern Desert, from 1998 to 2000.
- 6- Head of Geologic Expedition of Geological Detection for Uranium in the South Eastern Desert, from 2000 to 2001.
- 7- Head of Radioactive Granitic Deposits Dept., Research Division, NMA, from 2000 to 2004.
- 8- Head of Geochemical Detection Project, from 2001 to 2007.
- 9- Vice President of Research Division for Geochemical Affairs, from 2005 to 2008.
- 10- Head of Geological Detection Project, from 2007 to 2009.
- 11- Head of Uranium Evaluation and Development Project in Sela area, South Eastern Desert, from 2007 to 2009.
- 12- Vice President of Research Division for Geological Affairs, from 2008 to 2009.
- 13- Head of Contracts and Agreements Division, NMA, from 2009 to 2011.
- 14- Vice President of NMA, from 2011 to 2013.
- 15- Acting President of NMA, from 12 / 6 / 2013 to 1 / 10 / 2013.
- 16- Consultant of Sela Project, from 2013 till now.

IV- Scientific Activities:

- 1- Membership of Egyptian Geologic Society.
- 2- Membership of Egyptian Mineralogist Society.
- 3- Membership of Egyptian Society of Nuclear Sciences and its Applications.
- 4- Membership of Egyptian Academy Magazine.
- 5- Participant member of Scientific Exchange of Annals of Geological Survey Bulletin.
- 6- Membership of Mining and Quarrying Division.
- 7- Membership of National Committee of Mineralogy.

8- Referee of many M.Sc. and Ph.D. Theses for most Faculties of Science in Several Universities.

9- Referee of many Scientific Papers of most of Egyptian and International Magazines.

V- Thesis Supervision:

Supervision of more than 30 M.Sc. and Ph.D thesis for students in NMA and several Universities, among them:

1- M.Sc. Thesis (Geologic and radiometric studies on the basement rocks of Gabal Abu Brush area, South Eastern Desert, Egypt).

2- M.Sc. Thesis (Geology and uranium potentialities in Um Naggat area, Central Eastern Desert, Egypt).

3- Ph.D. Thesis (Geology, Petrology, Geochemistry and Radioactivity of Kadabora district, Central Eastern Desert, Egypt).

4- Ph.D. Thesis (Geological, Petrological, Structural and Geochemical studies of the Pan African Rocks at Wadi El Qulieb area, Southeastern Eastern Desert, Egypt).

5- Ph.D. Thesis (Comparative studies of the geology, mineralogy and geochemistry of some U-mineralizations in the Eastern Desert, Egypt).

6- Ph.D. Thesis (Geology, Geochemistry and radioactivity of Wadi Gemal-Gabal Mesmet area, Southeastern Desert, Egypt).

7- M.Sc. Thesis (Geology and geochemistry of Gabal Agib ring complex, Southeastern Desert, Egypt).

8- M.Sc. Thesis (Geology, and Geochemistry of pegmatites in some granitic rocks, Southeastern Desert, Egypt).

9- Ph.D. Thesis (Geology, and Geochemistry of the Pan-African rocks at Road El Bil area, Southeastern Desert, Egypt).

10- Ph.D. Thesis (Geology, Geochemistry and radioactive potentiality of Wadi Kharit area, Southeastern Desert, Egypt).

11- M.Sc. Thesis (Geology, Geochemistry and radioactivity of some younger granites southeast Aswan, Southeastern Desert, Egypt).

12- M.Sc. Thesis (Geology, geochemistry and age dating of Gabal Um Risha and Gabal Hadayib ring complexes, Southeastern Desert, Egypt).

13- M.Sc. Thesis (Geology, geochemistry and mineralogical studies on granitic rocks of Safaga-North Um Hoyatat area, Eastern Desert, Egypt).

14- M.Sc. Thesis (Geological and environmental studies on Wadi El Natrun Solar Salinas).

- 15- M.Sc. Thesis (Studying on application of displacement chromatography technique in purification and concentration of REE from REEs concentrate).
- 16- M.Sc. Thesis (Lanthanides as environmentally friendly corrosion in hiatus of iron in NaCl Solution).
- 17- M.Sc. Thesis (Geological and radiometrical environmental studies on some basement quarries, Central Eastern Desert, Egypt).
- 18- M.Sc. Thesis (Geology, geochemistry and mineralogical studies on sedimentary rocks of Um Bogma formation in El Aluga area, Southern Sinai, Egypt).
- 19- M.Sc. Thesis (Geology, geochemistry and mineralogical studies on some basic rocks, Central Eastern Desert, Egypt).
- 20- Ph.D. Thesis (Geology, Geochemistry and radioactive studies of granitic rocks in Abu Marw area, Southeastern Desert, Egypt).
- 21- Ph.D. Thesis (Geological and Geochemical studies on the basement rocks of Road Abu Naserl area, Southeastern Desert, Egypt).
- 22- M.Sc. Thesis (Studies and evaluate the heavy economic minerals in the shore plane of Wadi El Gemal , Red Sea Coast, South Eastern Desert, Egypt).
 - Ph.D. Thesis (A contribution to the geology of Gabal Batuga are with emphasis on granitic rocks-south west of Berenice, South Eastern Desert, Egypt).
- 24- Ph.D. Thesis (Geology and geochemistry of travertine deposits, Southwest Turkia).
- 25- M.Sc. Thesis (Geochemical constrain of rare metals mineralization in the granitoids of Sela area, South Eastern Desert, Egypt).
- 26- Ph.D. Thesis (Geological and mineralogical studies on the rocks West of Gabal Manqul area, North Eastern Desert, Egypt).
- 27- Ph.D. Thesis (A genetic model for Molybdenum and uranium mineralizations in Gabal Gattar granite, North Eastern Desert, Egypt).
- 28- Ph.D. Thesis (Geology, geochemistry and radioactivity of the younger granites of Wadi Murrah area, South Eastern Desert, Egypt).
- 29- Ph.D. Thesis (Evaluation and mineralogy of beach economic minerals in the Egyptian black sand, east Rosetta, Egypt with emphasis on ilmenite).
- 30- Ph.D. Thesis (Stratigraphy, hydrogeological and chemical studies on mineralizations in some localities, South Sinai, Egypt).
- 31- M.Sc. Thesis (Mineralogy of beach economic minerals in the Egyptian black sand, west New Damietta, Egypt).
- 32- Ph.D. Thesis (Geology, geochemistry and mineralogical studies on some basic-ultrabasic rocks, with emphasis to sulphides, Central Eastern Desert, Egypt).

VI- Publications:

Publication of 50 Scientific paper in National and International journals, among them:

- 1- El Amin, H., El Reedy, M.W. and El Afandy, A.H., 1987. Field Radiometric investigation and uranium, thorium potentialities of some late Proterozoic rock varieties in El Hudi Area, Southeast Aswan, Egypt. *Asw. Sci. Tech. Bull.*, 8, 397-421.
- 2- El Reedy M.W. , El Amin, H. and El Afandy, A.H., 1988. Petrochemical investigation of the main granitic occurrences of El Hudi-Abu Agag area, Southeast Aswan, Egypt. *Asw. Sci. Tech. Bull.*, 9, 324-351.
- 3- Abdel Monem, A.A., Mohamed, H., El Amin, H., Mansour, S.I. and El Afandy, A.H., 1991. Contribution to the geochemistry and petrogenesis of Umm Risha ring complex, Southeastern Desert, Egypt. *Asw. Sci. Tech. Bull.*, 12, 224-245.
- 4- Abdel Monem, A.A., Mohamed, H., El Amin, H., Hussein, H.A. and El Afandy, A.H., 1991. Contribution to the geology, geochemistry and petrogenesis of Abou Marw-Um Araka batholith, Southeastern Desert, Egypt. *Asw. Sci. Tech. Bull.*, 12, 165-193.
- 5- Mansour, S.I., Ghazaly, M., El Amin, H., El Afandy, A.H. and Ahmed, A.A., 1995. Geologic and Radiometric Studies on the basement rocks of Gabal Abu Brush area, Southeastern Desert, Egypt. *Mans. Sci. Bull. (C Nat. Sci.)*, 22 (2), 71-88.
- 6- Hussein A. H., Mansour, S.I., El Afandy, A.H. and Abdel Wahed. A.A., 1996. Geology and radioactivity of Gabal Naag area, Southeastern Desert, Egypt. *Proc. Egypt. Acad.*, 46, 295-311.
- 7- El Afandy, A.H. and Mansour, S.A., 1996. Geology, geochemistry and radioactivity of some basement rocks in Um Krush area, Southeastern Desert, Egypt. *Proc. Egypt. Acad.*, 46, 537-552.
- 8- El Afandy, A.H., 1996. Geology and Geochemistry of the metavolcanics in Abu Brush area. General Emphasis to the magmatic fractionation. *Egyptian Mineralogist*, 8, 107-127.
- 9- El-Metwally, A.A., Abdel-Meguid, A.A. and El Afandy, A.H., 1997. Ophiolite ultramafic-mafic rocks: Constraints on their geochemistry and petrogenesis. *Proc. Egypt. Acad. Sci.*, 47, 347-369.
- 10- Assaf, H.S., Mahdy, M.A. and El Afandy, A.H., 1997. Egyptian younger granites, An Approach to define parameters favouring formation of uranium deposits. The third conference on geochemistry, Alex. Univ. Faculty of Sci. Alex. Egypt., 1, 409-420.
- 11- Abdel Monem, H.M. and El Afandy, A.H., 1997. Geochemistry and beneficiation studies of U-Th bearing minerals of Um Risha ring complex, Eastern Desert, Egypt. *Egyptian Mineralogist*, 9, 43-58.

- 12- Abdel Monem, A.A., El Amin, H., El Afandy, A.H., Hussein, H.A. and Abdel Aty, M.A., 1998. Petrological and geochemical characteristics of some younger granites bearing U-mineralization: Recognition criteria of uranium province in Egypt. *Proc. Egypt. Acad. Sci.*, 48, 213-270.
- 13- El Afandy, A.H., 1998. Geology, Geochemistry and radioactivity of the granitoid rocks in Wadi Shilman, South Eastern Desert, Egypt. *M. E. R. C. Ain Shams Univ. Earth Sci. Ser.*, 12, 123-136.
- 14- Abdel Monem, A.A., Hussein, A.H., El Amin, H.M., Mansour, S.I. and El Afandy, A.H., 1996. Petrography, and geochemistry of some basement rocks in Wadi Hadayib area, Southeastern Desert, Egypt. *Egyptian Mineralogist*, Accepted.
- 15- Abdel Monem, A.A., Hussein, A.H., El Amin, H.M., Mansour, S.I. and El Afandy, A.H., 1998. Contribution to the geology and geochemistry of Hadayib ring complex, Southeastern Desert, Egypt. *Egyptian Mineralogist*, 10, 249-264.
- 16- Abu Enain, F.M., El Afandy, A.H. and El Kholy, D.M., 1998. Mineralogy and geochemistry of Red Sea phosphates, Safaga-Qusier area. *Al Azhar Univ. Al Azhar Sci. Tech. Bull.*, 9 (2), 793-808.
- 17- El Afandy, A.H., Abdallah, Ali., M.M., and Ammar, F., 2000. Geochemistry and radioactive potentiality of Um Naggat apogranite, Central Eastern Desert, Egypt., 50 (1), 39-51.
- 18- Yonan, A.A., and El Afandy, A.H., 2001. Contribution to the geochemistry and petrogenesis of fluorite barite bearing A-type granites of Urf Abu Hamam area, South Eastern Desert, Egypt., *Bull. NEC, Egypt*, 26 (4), 541-566.
- 19- Bakhit, F.S., Takla, M.A., El Afandy, A.H., El Mansy, M.M., and Arbab, A., 2001. The geology, geochemistry and radioactivity of the basement rocks of Gabal Umrah area, Eastern Desert, Egypt., *Egyptian Journal of Geology*, 45 (1), 213-237.
- 20- Abdallah, H.M., El Sayed, A.A., and El Afandy, A.H., 2001. Geochemical and mineralogical investigation of Wadi Ghazala beryl occurrence, SE Sinai, Egypt: An example of Abyssal Be-pegmatites., *Egyptian Journal of Geology*, 45 (1), 151-168.
- 21- El Afandy, A.H., and Yonan, A.A., 2001. Petrology, radioactivity and REEs significance of the metavolcanic of Gabal Dahis area, South Eastern Desert, Egypt. *Journal of Environmental Research*, El Zagazig University, in press.
- 22- Abdel Monem, A.A., Mohamed, A.H., El Afandy, A.A., and Ahmed, A.A., 2002. Geology and tectonic evolution of Kadabora area, Central Eastern Desert, Egypt., *Egyptian Journal of Geology*, Accepted.
- 23- El Afandy, A.H., Bakhit, F.S., Yonan, A.A., and Saleh, G.M., 2002. Geology, geochemistry and radioactivity of Sila-Qash Amir granites, Southeastern Desert, Egypt., *The Mineralogical Society of Egypt*, 14, 187-210.
- 24- El Afandy, A.H., and Abdalla, H.M., 2002. Geochemistry of radioactive mineralization at Abu Khruq ring complex, Southeastern Desert, Egypt: Metallogenic Constraints, *The Mineralogical Society of Egypt.*, 14, 211-244.

- 25- El Afandy, A.H., 2003. Geology, Geochemistry and radioactivity of Agib ring complex, South Eastern Desert, Egypt, The Mineralogical Society of Egypt, 15, 185-212.
- 26- Bakhit, F.S., El Nisr, S.A., El Afandy, A.H., and Saleh, G.M., 2003. Geology, Geochemistry and radioactivity of Gabal Kilkbob area, Southeastern Desert, Egypt, The Mineralogical Society of Egypt., 15, 213-236.
- 27- Abdalla, H.M. and El Afandy, A.H., 2003. Contrasting Mineralogical and Geochemical Characteristics of Two A-type Pegmatite Fields, Eastern Desert, Egypt., The Mineralogical Society of Egypt, 15, 287-328.
- 28- El Afandy, A.H., Assran, H.M. and Embaby, A., 2003. Geology, geochemistry and radioactivity of Wadi Gemal granitic rocks, Southeastern Desert, Egypt., Al Azhar Bull. Soc., 14 (1), 85-106.
- 29- Abdalla, H.M. and El Afandy, A.H., 2004. Geochemistry and Genesis of uranium mineralization at Misikat - Erediya area, Central Eastern Desert, Egypt, Mineral. Soc. Egy., Accepted.
- 30- El Afandy, A.H., and Bakhit, F.S., 2004. Geology, geotectonics and geochemistry of uranium bearing alkaline bostonites, Mineral. Soc. Egy., Accepted.
- 31- Fawzy, KH.M. and El Afandy, A.H., 2005. Geological studies and geochemistry of the rare earth bearing syenite in Abu Khruq ring complex, South Eastern Desert, Egypt, Mineral. Soc. Egy., Accepted.
- 32- El Afandy, A.H., El Mezayen,, Abdel Rahman, E.M., Ammar, F.A. and Ahmed A.A., 2007. Geological and geochemical studies of the Pan African rocks At Wadi El Qulieb area, South Eastern Desert, Egypt. Scient. Jour. Fac. Sci., Minoufia Univ., XXI, 159-195.
- 33- El Afandy, A.H., Abu Halawa, A. and Kandil, K.M., 2010. Heavy mineral potentiality of beach deposits of South Ras Banas, Red Sea Coast, Egypt, Jour. Sed., Accepted.
- 34- Fouda, A.S., El Afandy, A.H., Helmy, M. and Ead, D.M., 2010. Lanthanides as environmentally friendly corrosion inhibitors of iron in 3.5% NaCl solution. Fac. Sci., Zagazig Univ., Accepted.
- 35- Ghazaly, M.K., El Afandy, A.H., Fawzy, KH.M. and Hahmy, M.A., 2010. Genesis and mineralogy of the pegmatitic rocks in El Hudi and Um Hebal areas, Southeastern Desert, Egypt. The ninth conference on geochemistry, Alex. Univ. Faculty of Sci. Alex. Egypt. Accepted.
- 36- Abdel Karim, A.M., El Awady, A.A., Helmy, H.M., El Afandy, A.H., and Abdallah, Sh., 2011. Younger Gabbros from Egypt: A transition from tholeiitic to alkaline basaltic magma and from arc to within plate rifting regime. The sixth Conference on Geochemistry, Faculty of Sci., Alex. Univ., Egypt.

- 37- Sak, S., El Afandy A.H., Abu Halawa, A.F., and Awad M.E., 2011. Heavy mineral diagnosis of ras Bagdady black beach sand: Accumulations and significance, *Azhar Bull. Sci.*, 22 (2), 81-108.
- 38- El Afandy, A.H., Embaby, A.A., Khalil, M.M., Rakha, A.E. and Zahir, E.E., 2012. Geological and Environmental Studies on Wadi El Natrun Solar Salines, *Sed. Egy.*, 20, 111-121.
- 39- El Afandy, A.H., Abu Halawa, A. and Kandil, K.M., 2012. Heavy mineral potentiality of beach placer deposits of south Ras Banas, Red Sea Coast, Egypt *Sedim. of Egypt*, 21,165-177.
- 40- El Afandy, A.H., Shata, A.E. and Abdel Halim, K., 2012. Geochemistry and radioactivity of Abu Thora Formation,
- 41- El Afandy, A.H., 2012. Geochemistry, mineralogy and radioactivity of upper Cretaceous Abu Khruq ring complex, South Eastern Desert, Egypt, *Arab. Jour. Geosc.*, Published.
- 42- Yousif, A.M., El Afandy, A.H., Abdel Wahab, G.M., Mubark, A.M. and Ibrahim, A.I., 2014. Selective separation of uranium (VI) from aqueous solution using amine functionalized cellulose, *Jour. Radioanaly. Nucl. Chems.* Publish. Online.
- 43- Hassaan, M.M., El Afandy, A.H., El Desoky, H.M., Asran, H.M. and Soliman, O.S., 2015. Studies on ferrugination in Gabal Agib ring complex, South Eastern Desert, Egypt, *Nucl. Sci. Scin. Jour.*, 4, 1-19.
- 44- El Afandy, A.H., Embaby, A. and El Harairy, M.A., 2015. Geology, geochemistry and radioactivity of the granitoid rocks of abu Marw area, South Eastern Desert, Egypt, *Nucl. Sci. Scient. Jour.*, 4, 61-83.
- 45- El Afandy, A.H., Shalaby, M.H., El Kalioubi, B.H., Abu Zeid, E.K. and Mahdy, N.M., 2016. Tracing the ore metal behavior of U- and Mo- deposits after granitic magma crystallization, north of the Gattar batholith, Eastern Desert, Egypt, using mineral selvages: Implications for the evolution of ore-forming fluids.
- 46- Mahdy, N.M., El Kalioubi, B.A., Cora C. Wohlgemuth-Ueberwasser, Shalaby, M.H. and El-Afandy, A.H., 2015. Petrogenesis of U- and Mo-bearing A2-type granite of the Gattar batholiths in the Arabian Nubian Shield, Northeastern Desert, Egypt: Evidence for the favorability of host rocks for the origin of associated ore deposits, *Ore Geology Reviews*, 71, 57-81.
- 47- El Afandy, A.H., Mohamed, H., Geriesh, Shehta, A., Eweda, 2016. Hydrogeochemistry and radioactivity of groundwater in Baba- Sidri Basinsm Southwest SinaiI, Egypt. (accepted).
- 48- El Afandy, A.H., Mohamed, H., Geriesh, Shehta, A., Eweda, Alshami, A.S., 2016. Radiometry and mineralogy of Paleizoic Formations, South West Sinai, Egypt. (Accepted).
- 49- El Afandy A.H., Moustafa, M.I., El Nahas, H.A., Abdou, A.A. and Barakat, M.G., 2016. Evaluation, radioactivity and mechanical analysis of the top meter

black sands North East of Motobas Industrial Sector, Kafr Al-Sheikh Governorate, Egypt.

50- El Afandy, A.H., Moustafa, M.I., El Nahas, H.A., Abdou, A.A. and Barakat, M.G., 2016. Geomorphology and mineralogy of the top meter black sands North West of Motobas Industrial Sector, Kafr Al-Sheikh Governorate, Egypt.

VII- Reports:

Sharing in more than 20 scientific reports of NMA's National Projects, among them:

1- Geology and radioactivity of Abu Aggag Nubian sandstones, South Eastern Desert, Egypt, (1980-1981).

2- Geology and radioactivity of Um Hebal area, South Eastern Desert, Egypt, (1982-1983).

3- Geological and radiometrical studies of El Hudi area, South Eastern Desert, Egypt, (1984).

4- Geology and radioactivity of Um Ara area, South Eastern Desert, Egypt, (1985).

5- Geology and structures and their relation to radioactivity in Magal Gbriel area, South Eastern Desert, Egypt, (1986).

6- Geology and radioactive distribution of Abu Tartour phosphate, South Western Desert, Egypt, (1980-1987).

7- Geology and radioactivity of Abu Marw area, South Eastern Desert, Egypt, (1988).

8- Geology and radioactivity of Gabal Felat area, South Eastern Desert, Egypt, (1989).

9- Geology and radioactivity of Um Dewala microgranitic dyke, South Eastern Desert, Egypt, (1990).

10- Evaluation of Um Ara uranium deposits, South Eastern Desert, Egypt, (1989-1995).

11- Geological and radiometrical studies of Kadabora granitic and pegmatitic rocks, Central Eastern Desert, Egypt, (1996-1997).

12- Geological and radiometrical studies of Um Naggat granitic rocks, Central Eastern Desert, Egypt, (1998).

13- Geological, geochemical and radioactivity studies of Gebel Homret Akarem and its environs. South Eastern Desert, Egypt, (2002).

14- Geological, geochemical and U-Th distribution of El Farayed and Homra dome areas, South Eastern Desert, Egypt, (2002).

15- Uranium potentiality of Um Ara area, Southeastern Desert Egypt, (2003)

16- Geological, petrography and geochemistry report on the exploration works for radioactive minerals at some granitic masses south Idfu-Mersa Alam road, Egpt, (2004).

17- Geochemical exploration for radioactive and nuclear mineralizations at selected targets, Central and Southern Eastern Desert, Egypt, (2005).

18- Evaluation of placer deposits of radioactive and nuclear elements at Wadi Abu Rusheid area, Southern Eastern Desert, Egypt, (2006-2007).

19- Geological Exploration project: Uranium Resources Development , El Sela area, Egypt, (2008).

20- Exploration of radioactive materials within Kom Ombo Basin, South Eastern Desert, Egypt , (2009).