1-MU_FSCI_GEOL_DATA_Ahmed.El-Baghdady

CV/resume Dr/Ahmed A. Al-Boghdady

1- Personal Data

Name: Ahmed Abdel Hameid AL-BOGHDADY

Title: Professor of Mineralogy, Petrology & Ore Geology. (Fluid Inclusions In Ore Genesis and Exploration)

Date and place of birth: April 20, 1965, Minufiya, Egypt

Maritial Status: Married + 3 Childern.

Nationality: Egyptian **Languages Skilled:**

a) Mother Tongue: Arabic.

b) Others: English.

Affiliation and address: Geology Department, Faculty of Science, Minufiya

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2- Teaching Experiences

- a) <u>Undergraduate Courses</u>: Field geology; Crystallography, Mineralogy; Rockforming minerals; Igneous rocks; Metamorphic rocks, Economic geology; Mining geology; Photo geology; Survey and the corresponding practical parts of these courses. In addition, I can teach, develop and modernize most other ore and economic geology courses including courses contents and teaching methods.
- b) <u>Postgraduate Courses</u>: Applications Of Fluid Inclusions investigations in minerals and rocks; Advanced Igneous rocks; Advanced Metamorphic rocks; Ore geology; Advanced Photo geology.

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3- Research Interests

- Field geology.
- Mineralogy & Petrology of igneous and metamorphic rocks.
- The applications of fluid inclusions investigation and Raman analysis for Ore genesis, and using fluid inclusions data as a tool for the exploration of economic minerals such as gold, silver and others

General Back Ground:-

A short essay about my scientific background in the field of Mineralogy and Petrology. I got my M.Sc. in the field of Mineralogy & Petrology on 1992 entitled "Geological studies on Wadi Dahab area, Southeast of Sinai, Egypt". I continued my Ph.D. in the same field in addition to the study of fluid inclusions in ore genesis (notably gold), through a scientific cooperation system between Egypt and The Netherlands, under the supervision of Prof. Dr. J.L.R. TOURET, Institute of Earth Science, Free Univ., Amsterdam. I awarded my Ph.D. degree on 1996, entitled "The basement rocks of Wadi Safaga area, Central Eastern Desert, Egypt". The important outcome of my Ph.D. study was the accurate and detailed geological mapping and geochemical characterization of an critical mineralized area from the Precambrian terrain of Egypt; also the discovering of a new ancient (Pharaonic) gold mine at granite/gabbro contact at Wadi Safaga.

In a number of my recent publications, I was able to characterize the source of some mineral deposits and the origin of the mineralizing fluids that responsible for mineral deposition; for examples: 1) Gold deposits of Wadi Mahasin and Wadi Sodmein, Central Eastern Desert, Egypt; where the source of gold was mafic/ultramafic and metavolcanic rocks, while the origin of the mineralizing fluids (CO_2 - $H_2O\pm NaCl$) were magmatic and metamorphic reactions. 2) Chromites deposits of the Pindos ophiolite complex, Greece, where the source of the mineralizing fluids (CO_2 , H_2O and N_2) is the hydrous magma of sub ducted oceanic slap at depth. 3) Barite mineralization which associated with iron ores of Bahariya Oasis, Western Desert, Egypt; where it is leached and deposited by hydrothermal saline H_2O during karstification of Upper Cretaceous carbonates. 4) Calcite filling vugs in the Bahariya Oasis, Western Desert, Egypt; where calcite was deposited in vugs by meteoric water.

4- The Experiences in the field of Industrial Minerals and Rocks

This experience includes the follows:-

- a) Investigations of field geology, mineralogical & chemical compositions of different ores constituting the cement industry.
- b) Investigations of field work to select the most suitable constituents of flint-sand-cement mixture for building (could be flint or crushed granites and limestone).
- c) Investigations of field geology and laboratory studies to select the best types of basic rocks which used in the asphalt industry for roads, bridges and airports.
- d) Define the physical properties and mineralogical composition to select the best suitable rocks which used in the fixation of rails of the railroads.
- e) Research investigations and evaluations of iron ores regarding to the geological setting, mineralogical and chemical composition, detecting the iron content ratio,

explore the content of trace elements such as gold and others in iron ores and evaluate the economic important of iron ores for exploration and extraction.

- f) Investigations of mineralogical and chemical compositions of copper ores to detect its economic importance.
- g) Investigations of field and laboratory studies to explore, select and extract the important industrial minerals such as barite, talc, white and black sands, quartz, minerals of ceramics industry and economic minerals (gold, platinum, cromite and silver).
- h) Define the grade of ore diamond and its price according to know the content of fluid inclusions in the square centimeter of the diamond mineral.
- i) Studying the field geology to select the best suitable locations on wadies to construct the dames for protection of coast cities, airports, roads, tourism buildings against rainfall and mud flow. Select the most suitable rocks for dames building from the same region to minimize the coasts. Select the most suitable place in the wadi for drilling wells to extract the hydrological water based on the field geological concepts.
- k) Investigation of the petrographical studies for extracted rock samples from drilled oil and gas wells to define its mineralogical compositions and its content from hydrocarbons fluids.

5- Scientific Instruments Experience

I can use the following scientific instruments:

- a) All types of microscopes (Normal, Cross Nicols, Reflected) even though they simple or prepared by a photography unit.
- b) Analyses units by XRD and XRF.
- c) Heating/Freezing stages for micro thermometric measurements of fluid inclusions micro thermometry in minerals.

6- The Experience in the Field Of Training as professional trainer

- a) I have passed the first training level of trainers (TOT₁) which given by the Egyptian National Center for Faculty and Leadership Development (NCFLD), at study and research center of commerce, Cairo University, 16-21/10/2007.
- b) I have passed the second training level of trainers (TOT₂) which given by the Egyptian National Center for Faculty and Leadership Development (NCFLD), at study and research center of commerce, Cairo University, 3-13/2/2008.
- c) I have passed the third training level of trainers CT (Certified Trainer) from the IBCT (International Board for Certified Trainers), which supervised by the Egyptian National Center for Faculty and Leadership Development (NCFLD), at the period from 3/3/2008 to 27/5/2008.

7- Academic Degrees

Date	Degree	Grade	University/Place,
			Country
1987	B.Sc. (Geology)	Very good	Minufiya
			Univ./Minufiya,
			Egypt
1992	M.Sc (Mineralogy		Minufiya
	& Petrology)		Univ./Minufiya,
			Egypt
1996	Ph.D. (Mineralogy		Minufiya
	& Petrology)		Univ./Minufiya,
			Egypt

2001	Assistant Professor	 Minufiya
		Univ./Minufiya,
		Egypt
2006	Professor of	 Minufiya
	Mineralogy and	Univ./Minufiya,
	Petrology	Egypt

8- Educations Stages

Date	Degree	University/Place,	Subject
		Country	
1983-1987	B.Sc.	Minufiya	Geology (Special)
		Univ./Minufiya,	
		Egypt	
1989-1992	M.Sc.	Minufiya Univ./	Mineralogy and
		Minufiya, Egypt	Petrology
1993-1996	Ph.D.	Minufiya	Mineralogy and
		Univ./Minufiya,	Petrology
		Egypt	

9- Professional Background

Date	Position	Institution/Place,	
		Country	
10/1987 – 11/1988	Military Service	Air Forces/Egypt	
12/1988 - 6/1992	Demonstrator	Minufiya	
		Univ./Minufiya, Egypt	
7/1992 – 1/1996	Assistant Lecturer	Minufiya	
		Univ./Minufiya, Egypt	
2/1996 – 3/2001	Lecturer	Minufiya	
		Univ./Minufiya, Egypt	
2/1997 – 5/1997	Reseacher	Gottingen	
		Univ./Gottingen,	
		Germany	
10/2001 - 3/2002	Reseacher	Athens univ./Athens,	
		Greece	
3/2001 – 6/2006	Assistant Professor	Minufiya	
		Univ./Minufiya, Egypt	
6/2006 – Till date	Professor	Minufiya	
		Univ./Minufiya, Egypt	

10- Study and Research Abroad

Date	Institution/Place	Purpose	Financed By
10/1993 – 10/1995	Free	Ph. D. Work	Egypt
	Univ./Amsterdam,	(Study and	
	The Netherlands	Research)	
2/1997 – 5/1997	Gottingen Univ./	Research	Egypt

	Gottingen,	Cooperation	
	Germany		
10/2001 - 3/2002	Athens Univ./	Research	Greece
	Athens, Greece	Cooperation	

11-Fellowships Awards

- a) Scholarship Awardee from the Egyptian Government to complete my Ph. D. degree at the Faculty of Earth Science, Free University, Amsterdam, The Netherlands (10/1993 10/1995).
- b) Research Fellowship Awardee from the Egyptian Government for a research cooperation at Institute of Geology and Dynamics of the Lithosphere, George August University, Gottingen, Germany (2/1997 5/1997).
- c) Research Fellowship Awardee from the IKY-Scholarship, Greece for a research cooperation at Section of Economic Geology and Geochemistry, Geology Department, Faculty of Sciences, Athens university, Athens, Greece (10/2001 3/2002).

12-Contribution to International Academic Conferences

- a) Third International Conference on Geochemistry, Alexandria University, Alexandria-Egypt, September 3-4, 1997.
- b) Fourth International Conference on Geochemistry, Alexandria University, Alexandria-Egypt, September 15-16, 1999.
- c) Fifth International Conference on Geochemistry, Alexandria University, Alexandria-Egypt, September 12-13, 2001.
- d) Fourth International Conference On the Geology of the Arab World (GAW 4), Cairo University, Cairo-Egypt, February, 1999.
- e) Fifth International Conference On the Geology of the Arab World (GAW 5), Cairo University, Cairo-Egypt, February, 2000.
- f) Ethical and Social Responsibilities in Science and Technology, An International Conference Organized by the BA and MURS International at the Bibliotheca Alexandria, Alexandria-Egypt, October 19-21, 2002.
- g) Fifth International Conference On the Geology of the Middle East, Ain Shams University, Cairo-Egypt, January, 2003.
- h) Third International Conference On the Geology of Africa, Assiut University, Assiut-Egypt, December, 2003.
- i) Seventh International Conference On the Geology of the Arab World (GAW 7), Cairo University, Cairo-Egypt, February, 2004.
- j) Sixth International Conference on Geochemistry, Alexandria University, Alexandria-Egypt, September 15-16, 2004.
- k) First International Conference on the Geology of the Tethys, Cairo University, Cairo-Egypt, November, 2005.
- 1) The Fourth International Conference On the Geology of Africa, Assiut University, Assiut-Egypt, November, 2005.
- m) Second International Conference on the Geology of the Tethys, Cairo University, Cairo-Egypt, March, 2007.
- n) Third International Conference on the Geology of the Tethys, South Vally University, Asawn-Egypt, January, 2008.

13-References

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14- List of publications

Published Articles:

- (1) Khalaf, I.M., Dardir, A.A. and <u>Al-Boghdady, A.A.</u> (1994): The basement rocks around Wadi Dahab, Southeastern Sinai, Egypt. Egyptian Journal of Geology, 38-1, p. 35-54.
- (2) Takla, M.A., Khalaf, I.M., Helmers, H. and <u>Al-Boghdady, A.A.</u> (1997): The shield rocks of Wadi Safaga area, Central Eastern Desert, Egypt. The Thired International Conference on Geochemistry, Alexandria University-Egypt, I, p. 17-31.
- (3) Al-Boghdady, A.A. (1998): Fluid Inclusions in quartz from granodiorite, Gabbro and related quartz veins at Wadi Safaga area. Egyptian Mineralogist, 10, p. 15-30.
- (4) <u>Al-Boghdady</u>, A.A. and Abu El-Hassan, M.M. (1999): Nature of occurrence and origin of the barite at El-Gedida iron ore mines, Bahariya Oasis, Egypt. Geochemistry, N0. 5, p. 536-548.
- (5) Wanas, H.A., Abu El-Hassan, M.M., <u>Al-Boghdady, A.A.</u> and Martinez, M.P. (1999): Origin of calcites filling vugs in the dolostones of the Upper Cenomanian El-Heiz and Lower Middle Eocene Naqab Formations, Bahariya Oasis, Western Desert, Egypt: Fluid Inclusions, Stable Isotope and Elemental Chemistry evidences. Scientific Journal of Faculty of Science, Minufiya University, XIII, p. 63-90.
- (6) Al-Boghdady, A.A., Khalaf, I.M. and van den Kerkhof, A.M. (1999): Fluid inclusions in psammitic gneisses of Gabal Hafafit, South Eastern Desert, Egypt. Fourth International Conference on the Geology of The Arab World (GAW 4), 1, p. 376-390.
- (7) <u>Al-Boghdady</u>, A.A. (1999): The Shield rocks of the area between Gabal Atshan and Gabal Hamadat, Eastern Desert, Egypt. Fourth International Conference On Geochemistry, Alexandria University-Egypt, p. 123-135.
- (8) Dawoud, M., Eliwa, H.A. and <u>Al-Boghdady, A.A.</u> (2000): Geochemical characterization and magma sources of I- and A-type granites from Southeastern Sinai, Egypt. Scientific Journal of Faculty of Science, Minufiya University, XIV, p. 89-121.
- (9) <u>Al-Boghdady, A.A.</u> and van den Kerkhof, A.M. (2000): Fluid inclusions and mineral chemistry of the Wadi Mahasin gold deposit, Central Eastern

- Desert, Egypt. Annals of the Geological Survey of Egypt, XXIII, p. 235-259.
- (10) Al-Boghdady, A.A., van den Kerkhof, A.M. and Khalaf, I.M. (2000): Composition and origin of fluid inclusions in gold-bearing quartz veins at Wadi Sodmein area, Central Eastern Desert, Egypt. Fifth International Conference on the Geology of the Arab World (GAW 5), I, p. 305-312.
- (11) Bishady, A.M., Eliwa, H.A., <u>Al-Boghdady, A.A.</u> and Dawoud, M. (2000): Petrography and geochemistry of Gabal El-Zeit granitoids, Northern Eastern Desert, Egypt. Fifth International Conference on the Geology of the Arab World (GAW 5), I, p. 113-132.
- (12) <u>Al-Boghdady, A.A.</u> (2001): Fluid inclusions as a tool for gold exploration in Egypt. Fifth International Conference on Geochemistry, Alexandria University, Egypt, p. 523-541.
- (13) Al-Boghdady, A.A., Bishady, A.M., Shalaby, M.H. and Bassiouni, M.I. (2003): Copper mineralization of Wadi Dara area, North Eastern Desert, Egypt: Fluid inclusions and mineral chemistry evidences. Fifth International Conference on the Geology of the Middle East, p. 643-658.
- (14) <u>Al-Boghdady, A.A.</u> (2003): Association of apatite with magnetite in some banded iron formations of Central Eastern Desert-Egypt: A comparative mineralogical and geochemical studies. Annal of the Egyptian Geological Survey, XXVI, p. 183-197.
- (15) Al-Boghdady, A.A., Khalaf, I.M. and Awad,N.T. (2003): The occurrence of quartz-kyanite segregation at Wadi Nugrus, South Eastern Desert-Egypt: Mineralogy and fluid inclusions. The Third International Conference on the Geology of Africa, 1, p. 427-440.
- (16) <u>Al-Boghdady, A.A.,</u> Stamatakis, M.G. and Dawoud, M. (2004): Mineralogy, chemistry and origin of talc deposits at Wadi Marahiq, South Eastern Desert, Egypt. Geochemistry International, No. 9, c. 1-8.
- (17) <u>Al-Boghdady</u>, A.A., (2004): Geology, opaque mineralogy, geochemistry and genesis of I-type granites from Central Eastern Desert of Egypt. Sixth International Conference on Geochemistry, Alexandria University, Egypt, I-A, p. 225-245.
- (18) <u>Al-Boghdady, A.A.</u> and Economou-Eliopoulos, M. (2005): Fluid inclusions in chromite from a pyroxenite dike of the Pindos ophiolite complex. Chemie der Erde Geochemistry, 65, p. 191-202.
- (19) Al-Boghdady, A.A. (2005): On the magmatic origin of Gabal Kamel BIF, South Eastern Desert, Egypt. Annal of the Egyptian Geological Survey, V. XXVIII, p. 245-262.
- (20) Al-Boghdady, A.A., Omar, S.A. and Bayoumi, M.M. (2005): Geological and petrological investigations on Gabal Abu Hawis area, Central Eastern Desert, Egypt. Fourth International Conference on the Geology of Africa, November 15-16, Assiut-Egypt, 1, p. 267-287.
- (21) <u>Al-Boghdady, A.A.</u>, Dawoud, M. and Eliwa, H.A. (2005): Mineralized quartz veins at some localities in the North Eastern Desert of Egypt. First International Conference on the Geology of the Tethys, November 11-14, Cairo University, Egypt, p. 29-38.

Accepted articles for publication:

(22) Ammar, S.E., Omar, S.A., <u>Al-Boghdady, A.A.,</u> Gaafar, I.M. and Mostafa, M.B. (2007): Investigation of ground gamma ray spectrometric patterns in Abu

Hawis granites, Central Eastern Desert, Egypt. Second International Conference on the Geology of the Tethys, Cairo University, Cairo, Egypt (Accepted).

(23) Al-Boghdady, A.A., Dawoud, M., Luis Villa Iglasis, Ramon R.Diez and José Torres-Ruiz (2008): A comparative study for Geological, mineralogical and industrial characters of some talc deposits form Eastern Desert of Egypt. Third International Conference on the Geology of the Tethys, South Vally University, Asawn, Egypt. (Accepted).