Prof. Anas Malek El-Sherif

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I. Personal Data



Date of Birth: 5th of October 1968
Nationality: Egyptian
Religion: Moslem
Marital Status: Married and has two daughters

II. Education

Bachelor of Science, Geology and Geophysics, May 1989 (Very Good Degree)
Faculty of Science, Ain Shams University, Egypt.

III. Professional Certificates & Diplomas

- Pre-master courses of Science in Geology (Mineralogy and Petrology Section), Faculty of Science, Menoufia University, 1995.
- Master degree of Science, (M.Sc.) in Geology, (Mineralogy and Petrology), Faculty of Science, Menoufia University, 1998. Thesis title: "Mineralogy, geochemistry and radioactivity of Gabal Tarbush El-Masiri, Eastern Desert, Egypt". Thesis supervisors: Abdel Monem, A.A., Bishady, A.M. and Attawiya, M.Y.
- Doctor of Philosophy degree of Science, (Ph.D.), in Geology (Mineralogy and Petrology), Faculty of Science, Ain Shams University, 2005. Thesis title: "Geology, geochemistry and radioactivity of the basement rocks, Wadi El-Ghozah area, Eastern Desert, Egypt". Thesis supervisors: Hilmy, M.E., Abdel Monem, A.A., Attawiya, M.Y. and Moussa, E.M.

IV. Present Position

Professor of Mineralogy, Mining Program, Engineering College, Northern Border University, Arar, Saudi Arabia.

V. Work Experience

Professor of Mineralogy **May, 2018 – Now**
Faculty of Engineering, Northern Border University
Kingdom of Saudi Arabia

Responsible for:

- Head of X-ray Labs., Mining Research Unit.
- Teaching Specialized Courses.

Professor of Mineralogy **Aug., 2016 – May, 2018**

Nuclear Materials Authority

Responsible for:

- Head of Minerals Dept., Research Division, NMA. **Jan., 2017 – May, 2018**
- Supervisor of Ph.D. Theses.
- Supervisor of M.Sc. Theses.

Assistant Professor of Mineralogy **March, 2011 – Aug., 2016**

Nuclear Materials Authority

Responsible for:

- Supervisor of Ph.D. Theses.
- Supervisor of M.Sc. Theses.
- Supervisor of X-ray Fluorescence Lab.
- Sharing in the development of X-ray Fluorescence Lab to improve the obtained analysis.
- Sharing in finishing the chemical analyses of many internal reports, M.Sc. and Ph.D. Theses as well as scientific papers.
- Training many undergraduate students in the XRF technique in their summer training period at NMA.
- Training many specialists of another authorities, research centers and Universities from Egypt and Arab Countries.

Lecturer of Mineralogy **Nov., 2005 – March, 2011**

Nuclear Materials Authority

Responsible for:

- Internal supervisor of Ph.D. Theses.
- Internal supervisor of M.Sc. Theses.
- X-ray Fluorescence Lab. routine work.
- Supervisor of Water's Analysis Lab. of Mineralogy Dept. from 2007 to 2009.

Assistant Lecturer **Jan., 1999 – Nov., 2005**

Nuclear Materials Authority

Responsible for:

- X-ray Fluorescence Lab. routine work.

Demonstrator **Jan., 1996 – Jan., 1999**

Nuclear Materials Authority

Responsible for:

- X-ray Fluorescence Lab. routine work.

Geologist **March, 1991 – Jan., 1996**

Nuclear Materials Authority

Responsible for:

- X-ray Fluorescence Lab. routine work.

VI. Important Courses taken and Workshops

- X-ray fluorescence (XRF) course at Philips Co., Almelo, The Netherlands, 1998.
- Workshop in Applications of X-ray fluorescence in Industry and Research, organized by The Egyptian Society of Crystallography and Its Application (ESCA) and Panalytical BV., Ain Shams Univ., Egypt, 2007.
- Workshop in Uses of X-ray fluorescence and diffraction in the different of the scientific research, organized by Bruker EXS International, Meridian Heliopolis Hotel, 2010.
- Workshop in Macro-molecular structure of biological and non-biological materials, organized by The Egyptian Society of Crystallography and Its Application (ESCA) and Panalytical BV., Azur Hotel, Hurghada, Egypt, 2012.
- Interregional workshop on policy and regulatory framework for uranium and other naturally occurring radioactive materials (NORM) in energetic industries, Arosha, United Republic of Tanzania, 29 Jan. - 2 Feb., 2018, hosted by The United Republic of Tanzania through the Tanzanian Atomic Energy Commission (TAEC).
- XRF & Sample Preparation Workshop on 28th November 2018, Held by Karan Hotel, Jubail, Saudi Arabia.
- XRF & Sample Preparation Seminar on 08th April 2019, Held at Ma'aden Wa'ad Al-Shamal Company Training Center, Turaif, Saudi Arabia.

VII. Experiences

- Member of X-ray Fluorescence Lab., Minerals Department from 10/ 1990.
- Head of Water's Analysis Lab. of Minerals Dept. from 2007 to 2009.
- Head of X-ray Fluorescence Lab. of Minerals Dept. from 2015.
- Head of Minerals Dept., Research Division from Jan., 2017 to May, 2018.
- Sharing in the development of the X-ray fluorescence unit to improve the obtained analysis.
- Sharing in finishing the chemical analyses of many internal reports, M.Sc. and Ph.D. Theses as well as scientific papers.
- Sharing in the trace elements analysis and the geochemical studies of all of the national scientific projects.
- Sharing in many conferences and workshops in X-ray fluorescence analysis in Egypt and abroad.
- Training many undergraduate students in the XRF technique in their summer training period.
- Training many specialists of another authorities, research centers and universities from Egypt and Arab Countries.

- Sharing in increasing the financial resources of the Authority's Research Financing Fund by XRF analysis of the samples belonging to researchers from another scientific research centers and universities as well as commercial companies.
- One of the founding members of The Scientific Society of Nuclear Materials Authority (SSNMA).
- The Secretary General of the Editorial Board of The Nuclear Sciences Scientific Journal (NSSJ) (from 2012 till now).
- Decision of Standing Committee for Scientific Promotions of Northern Border University, KSA (from 2021 to 2023).
- Head of The Exams' Tables Committee, College of Engineering, Northern Border University, KSA (from 2019 till now).

VIII. Memberships (Affiliations)

1- The Geological Society of Egypt.

2- The Mineralogical Society of Egypt.

3- The Egyptian Society of Crystallography.

4- The Egyptian Syndicate of Scientific Professions.

5- The Atomic Energy Authority Staff Club (Board Member).

6- The Scientific Society of Nuclear Materials Authority (Board Member).

7- The Egyptian Society of Radiation Technology.

8- The Egyptian Society of Sedimentology.

IX. Thesis Supervision

1. M.Sc. Theses:

1.1. Candidate Name: Mahmoud Othman Abdel Maguid Mekhemar
Title: "Removal of U (VI) and Th (IV) From Their Aqueous Solutions Using Different Chelating Resins".
Status: Awarded, 2008
University: Faculty of Science, Menoufia University

1.2. Candidate Name: Fayrouz Atef Salem
Title: "Petrography, Mineralogy and Geochemistry of The Granitic Rocks, in The Area of Wadi Safaga-North of Gabal Um El-Huwaytat, Central Eastern Desert, Egypt".
Status: Awarded, 2011
University: Faculty of Science, Menoufia University

1.3. Candidate Name: Atia Rabea Atia Mohamed
Title: "Geological and Geochemical Exploration for Rare Metals, Wadi Wizr-Gebel El-Delihimi Area, Central Eastern Desert, Egypt".
Status: Awarded, 2018
University: Faculty of Science, Al-Azhar University

2. Ph.D. Theses:

2.1. Candidate Name: Khaled El-Hussieny Mohamed Saleh
Title: "Thermoelectrical Reduction of Ilmenite Ore".
Status: Awarded, 2010
University: African Studies and Researches Institute, Cairo University.

2.2. Candidate Name: Doaa Anwar Mostafa
Title: "Effect of The Mineralogical Composition and Geochemical Characteristics on The Radioactivity of Various Basement Rocks at Gabal El-Dob Area, Northern Eastern Desert, Egypt".
Status: Awarded, 2018
University: Faculty of Science, Tanta University

2.3. Candidate Name: Hamada Megally Ghanem Taher El-Oany
Title: "Geological and Geochemical Studies on Some Mineral Deposits and Their Associated Host Rocks, Wadi Khashir-Gabal Ras El-Kharit, South Eastern Desert, Egypt".
Status: Awarded, 2020
University: Faculty of Science, Al-Azhar University

X. NMA Projects Sharing Reports

1. Geochemical evaluation for trace elements associated with Abu Rusheid cataclastic rocks, South Eastern Desert, Egypt. (2008).
2. Geochemical isoconcentration contour maps for some trace elements associated with low-grade sandstone type uranium deposit, Wadi Skait, South Eastern Desert, Egypt. (2010).
3. Uranium potentiality of Abu Rusheid area, South Eastern Desert, Egypt. (2010).
4. Uranium reserve evaluation and rare metals of Abu Rusheid area, South Eastern Desert, Egypt. (2011).
5. Uranium showings deep trenches in El-Sela area, South Eastern Desert, Egypt. (2012).
6. Gabal El-Missikat Development Project. (2012).
7. Uranium mineralization and estimation of mineral resources in the cataclastic rocks of Abu Rusheid area, South Eastern Desert, Egypt. (2012).
8. Mineral resources estimations in the cataclastic rocks of Abu Rusheid area, South Eastern Desert, Egypt. (2013).
9. Gabal El-Missikat Uranium Prospect Development Project. (2013).
10. Uranium prospecting in Bir Safsaf-Atmur El Kibeish-Nusab El Balgum area, South Western Desert, Egypt. (2014).
11. El-Missikat- El-Erediya Uranium Development Project: El-Erediya area. (2014).

12. Development of a new uranium and thorium occurrence to the south of Wadi Abu Hadieda. (2015).

XI. List of Publications

1. **Agwa, A.M., Mesalam, Y.I., Hassan, M.H., El-Dabah, M.A., El-Sherif, A.M. and Kamel, S., 2022.** Improved gradient-based optimizer for modelling thermal and hydropower plants. *International Transactions on Electrical Energy Systems,* **2022,** Article ID: 3990226. DOI: 10.1155/2022/3990226

2. **Alrashidi, A., El-Sherif, A.M., Ahmed, J., Faisal, M., Alsaiari, M., Algethami, J.S., Moustafa, M.I., Abahussain, A.A.M. and Harraz, F.A., 2023.** A sensitive hydroquinone amperometric sensor based on a novel Palladium nanoparticle/porous silicon/polypyrrole-carbon black nanocomposite. *Biosensors*, **13**, **178**, 15p. DOI: 10.3390/bios13020178.

3. **Ammar, F.A., Haroun, Y.S., El-Sherif, A.M. and El-Sawey, E.H., 2009.** Characterization of Gabal El-Harra radioactive anomaly, Northwestern Desert, Egypt. *The Sedimentology of Egypt*, **17**, 227-244.

4. **Bishady, A.M., Abdel Monem, A.A., Attawiya, M.Y. and El-Sherif, A.M., 1998.** Petrographical, geochemical and radioactivity studies on Gabal Tarbush El-Masiri area, northern Eastern Desert, Egypt. *Al-Azhar Bulletin of Science*, **9 (2)**, 325-353.

5. **Bishady, A.M., El-Sherif, A.M. and Darwish, M.E., 2016.** Petrological and geochemical constraints on the evolution of El-Kahfa alkaline ring complex, South Eastern Desert, Egypt. *Journal of Geological Resource and Engineering*, **6**, 283-304. DOI: 10.17265/2328-2193/2016.06.004.

6. **Donia, A.M., Atia, A.A., Moussa, E.M., El-Sherif, A.M. and Abd El-Magied, M.O., 2009.** Removal of uranium (VI) from aqueous solutions using glycidyl methacrylate chelating resins. *Hydrometallurgy*, **95 (3-4)**, 183-189. DOI: 10.1016/J.hydromet.2008.05.037.

7. **El-Awny, H.M., Abdel Rahman, A.M., Abd El-Wahed, M., Hamed, H.G., Fahmy, W., El-Sherif, A.M., Csámer, A. and Shebl, A.R., 2026.** Litho-structural mapping using remote sensing, petrographic characterization and SEM/EDX mineralization analysis: Insights from the Arabian-Nubian Shield. *Scientific Reports*, DOI: 10.1038/s41598-026-52191-6.

8. **El-Desoky, H.M., El-Awny, H.M., Shahin, T.M., Abdel-Rahman, A.M., El-Sherif, A.M., Helal, M.H., Csámer, A. and Shebl, A.R., 2026.** Epidosite in ophiolitic rocks of the Arabian-Nubian Shield: Implications from remote sensing, ore mineralogy, petrology, and geochemistry. *Physics and Chemistry of The Earth, Parts A/B/C,* DOI:

10.1016/J.pce.2026.104801.

9. **El-Desoky, H.M., Shebl, A.R., Abdel Rahman, A.M., Fahmy, W., El-Awny, H.M., El-Sherif, A.M., El-Rahmany, M.M. and Csámer, A., 2022.** Multiscale mineralogical investigations for mineral potentiality mapping of Ras El-kharit Wadi Khashir district, Eastern Desert, Egypt. *The Egyptian Journal of Remote Sensing and Space Sciences,* **25(4),** 941-960**.** DOI: 10.1016/j.ejrs.2022.09.001.

10. **El-Desoky, H.M., Mohamed, W.H., Shebl, A., Fahmy, W., El-Sherif, A.M., Abdel-Rahman, A.M., Mira, H.I., El-Rahmany, M.M., Alshehri, F., Almadani, S. and El-Awny, H., 2025.** Integrating Remote Sensing and Aeromagnetic Data for Enhanced Geological Mapping at Wadi Sibrit-Urf Abu Hamam District, Southern Part of Nubian Shield**.** *Minerals,* **15, 657,** 32p. DOI: 10.3390/min15060657.

11. **El-Rahmany, M.M., El-Desoky, H.M., Afifi, A.A., El-Sherif, A.M. and El-Awny, H.M., 2020.** Characterization and technological behavior of metagabbro raw materials in Portland cement clinker production at Wadi Khashir District, Southern Eastern Desert, Egypt. *Annals of The Geological Survey of Egypt,* **XXXVII**, 177-193.

12. **El-Rahmany, M.M., El-Desoky, H.M., El-Sherif, A.M. and El-Awny, H.M., 2019.** Mineralogical and sedimentological studies of the placer deposits at Wadi Khashir - Wadi Ras El-Kharit, South Eastern Desert, Egypt. *The Sedimentology of Egypt*, **24**, 77-91.

13. **El-Sherif, A.M., 1998.** Mineralogy, geochemistry and radioactivity of Gabal Tarbush El-Masiri, Eastern Desert, Egypt. *M.Sc Thesis, Fac. Sci., Menoufia Univ., Egypt*, 159p.

14. **El-Sherif, A.M., 2005.** Geology, geochemistry and radioactivity of the basement rocks, Wadi El-Ghozah area, Eastern Desert, Egypt. *Ph.D. Thesis, Fac. Sci., Ain Shams Univ., Egypt*, 218p.

15. **El-Sherif, A.M., 2013.** Mineralogical characterization of the alteration facies at Gabal El-Missikat area, Central Eastern Desert, Egypt. *Nuclear Sciences Scientific Journal (NSSJ)*, **2**, 1-21. DOI: 10.21608/NSSJ.2013.30976.

16. **El-Sherif, A.M., 2015a.** Mineralogical and radioactive characterization of Gabal El-Urf pegmatites, Central Eastern Desert, Egypt. *Al-Azhar Bulletin of Science*, **26 (2-D)**, 85-96.

17. **El-Sherif, A.M., 2015b.** Contributions to the chemical modeling of some granitic masses in the Central Eastern Desert, Egypt. *Al-Azhar Bulletin of Science*, **26 (2-D)**, 97-110.

18. **Emam, A.A., Moghazy, N.M. and El-Sherif, A.M., 2011.** Geochemistry, petrogenesis and radioactivity of El-Hudi I-type younger granites, South Eastern Desert, Egypt. *Arabian Journal of Geosciences*, **4 (5-6)**, 863-878. DOI: 10.1007/s12517-009-0108-3.

19. **Hammad, M.A., Hussein, M.A., Darwish, M.E., El-Sherif, A.M. and Khalaf, M.A., 2008.** Contributions to physico-chemical characteristics of soils from South Sinai Peninsula, Egypt. *Scientific Journal of Faculty of Science, Minoufiya Univ.*, Egypt, **XXII**, 75-111.

20. **Hassaan, M.M., Sakr, S.M., El-Sherif, A.M., Saied, M., El-Shahat, O.R. and El-Naggar, A.R., 2018.** Genetic affiliations of Wadi El-Sherm El-Qibli alkali feldspar granite intrusion and the co-magmatic hydrothermal activity, Eastern Desert, Egypt. *The Egyptian Journal of Geology*, **62**, 217-232.

21. **Hilmy, M.E., Abdel Monem, A.A., Attawiya, M.Y., Moussa, E.M. and El-Sherif, A.M., 2004.** Geochemistry and petrogenesis of metavolcanics, Gabal Abu El-Hassan El-Ahmar - Wadi El-Ghozah area, North Eastern Desert, Egypt. *The 6th International Conference on Geochemistry*, Alexandria Univ., Egypt, 607-628.

22. **Khaleal, F.M., Kamar, M.S. and El-Sherif, A.M., 2017.** Geology, geochemistry and radioactivity of the monzogranite rocks, North Wadi Ghadir, South Eastern Desert, Egypt. *Nuclear Sciences Scientific Journal (NSSJ)*, **6**, 71-91. DOI: 10.21608/NSSJ.2017.30774.

23. **Mansour, G.M., Abu Diab, A.A. and El-Sherif, A.M., 2016.** Mineralogy and radioactivity of Wadi Hangaliya stream sediments, South Eastern Desert of Egypt. *Nuclear Sciences Scientific Journal (NSSJ)*, **5**, 49-67. DOI: 10.21608/NSSJ.2016.30824.

24. **Moustafa, D.A., Shalaby, M.H., Salem, I.A., Ali, S.M. and El-Sherif, A.M., 2020.** Effect of the mineralogical composition on the radioactivity of the younger granites and pegmatites at Gabal El-Dob area, northern Eastern Desert, Egypt. *Journal of The North for Basic and Applied Sciences (JNBAS)*, Northern Border Univ., KSA, **5 (2)**, 82-99. DOI: 10.12816/0056075.

25. **Moustafa, M.I., Tashkandi, M.A. and El-Sherif, A.M., 2022.** Detecting mineral resources and suggesting a physical concentration flowsheet for economic minerals at the Northern Border Region of Saudi Arabia. *Engineering, Technology and Applied Science Research (ETASR),* **12 (3)**, 8617-8627. DOI: 10.48084/etasr.4894.

26. **Raslan, M.F., Ammar, F.A., El-Shami, A.S. and El-Sherif, A.M., 2010.** Mineralogy of radioactive gibbsite bearing sediments from the Um Karasy area, Southwestern Sinai, Egypt. *The Sedimentology of Egypt*, **18**, 45-56.

27. **Sadek, A.A., Abbas, A.A. and El-Sherif, A.M., 2015.** Natural radioactivity measurements in local and imported commercial granites used as ornamental stones. *Nuclear Sciences Scientific Journal (NSSJ)*, **4**, 37-45. DOI: 10.21608/NSSJ.2015.30836.

28. **Saleh, G.M., Kamar, M.S., Rashed, M.A. and El-Sherif, A.M., 2015.** Uranium

mineralization and spectrometric prospecting along trenches of Um Safi area, Central Eastern Desert of Egypt. *Geoinformatics and Geostatistics*: *An Overview*, 3:1. DOI: 104172/2327-4581.1000128.

29. **Saleh, G.M., Oraby, F., Abu El-Hassan, E.A., Azab, M.S., Darwish, M.E., Mansour, G.M., Rashid, M.A. and El-Sherif, A.M., 2007.** Um Khors alkaline volcanics, Central Eastern Desert, Egypt: geochemical constraints, spectrometric prospecting and mineralization. *The 10th International Mining, Petroleum and Metallurgical Engineering Conference*, Fac. Eng., Assiut Univ., Egypt, 185-204.

30. **Shaaban, Sh.M., El-Sherif, A.M., Hammam, A.A., Attaalfadeel, H.M. and Mesalam, Y.I., 2025.** Petroleum well site selection using MCRAT integrated with rough set theory. *European Journal of Pure and Applied Mathematics,* **18 (2), 6049,** 21p. DOI: 10.29020/nybg.ejpam.v18i2.6049**.**

31. **Shebl, A.R., El-Desouky, H.M., Abdel Rahman, A.M., Fahmy, W., El-Awny, H.M., El-Sherif, A.M., El-Rahmany, M.M. and Csámer, A., 2023.** Impact of DEMs for improvement Sentinel 2 lithological mapping utilizing support Vector machine: A case study of mineralized Fe-Ti-Rich gabbroic rocks from the South Eastern Desert of Egypt. *Minerals,* **13, 826,** 35p**.** DOI: 10.3390/min13060826.

32. **Tashkandi, M.A., El-Sherif, A.M. and El Balakssy, S.S., 2026.** Identification of Economic Minerals in Sand Deposits from Northern Saudi Arabia's Border Region. *Engineering, Technology and Applied Science Research (ETASR),* **16 (3)**, **36632-36646**, 15p. DOI: 10.48084/etasr.17914.

XII. Community Service Field

- Member of Environment and sustainable development Committee, Faculty of Science, Northern Border University, KSA.
- Vice President of Community Service Committee, Civil Engineering Department, Faculty of Science, Northern Border University, KSA.