

## Personal Information



H-index: 3  
RG score: 17.72

## Mabrouk Sami Mohamed Hassan

Name used in publications (**Mabrouk Sami**)

📍 Geology Department, Faculty of Science, Minia University, El-Minia 61519, Egypt

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🔗 ResearchGate: [https://www.researchgate.net/profile/Mabrouk\\_Sami2](https://www.researchgate.net/profile/Mabrouk_Sami2)

🔗 Google Scholar: <https://scholar.google.com.eg/citations?user=0KwKImEAAAAJ&hl=en>

🔗 Scopus: <https://www.scopus.com/authid/detail.uri?authorId=54389981300>

🔗 Orcid ID: <https://orcid.org/0000-0002-0567-6283>

Sex: Male | Date of birth: 14/03/1985 | Nationality: Egyptian

## Current Status

### Assistant Professor

Geology Department, Faculty of Science, Minia University, El-Minia, 61519, Egypt

<http://misdb.minia.edu.eg/miniaportal/ENGStaffCV.aspx?id=1168>

## Scientific Interests

- The geochemistry of magmatic rocks especially those host mineralization's such as rare metal granitoids, alkaline rocks, carbonatites, serpentinites, volcanic massive sulphides.
- Studying the relation between magmatic/hydrothermal processes and mineralization styles.
- Composition and textural features of economic ore minerals including columbite, tantalite, cassiterite, wolframite, gold, chromite, and platinum group elements mineralization's.
- Whole rock Sr-Nd isotopic composition and in situ isotopic analyses (e.g., U-Pb-Th, Lu-Hf) of REE minerals such as zircon, columbite, tantalite, monazite and cassiterite using SIMS, TIMS and LA-MC-ICP-MS.

## Education

04/2014 - 03/2018

### Dr. rer. Nat in Earth Sciences (Grade 1)

Department of Lithospheric Research, University of Vienna, Althanstrasse 14, 1090, Vienna, Austria.

- Rare Metal Granites, Central Eastern Desert, Egypt; Geochemistry and Economic Potentiality
- <http://othes.univie.ac.at/51141/>

09/2007 - 07/2011

### Master studies in Earth Sciences (Grade 1)

Geology Department, Faculty of Science, Minia University, El-Minia, Egypt

- Geochemical Exploration for Some Rare Metals, South Wadi Sharm El-Bahari Area, Central Eastern Desert Egypt
- [http://srv4.eulc.edu.eg/eulc\\_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=PublicDrawThesis&biD=11333891](http://srv4.eulc.edu.eg/eulc_v5/Libraries/Thesis/BrowseThesisPages.aspx?fn=PublicDrawThesis&biD=11333891)

09/2002 - 07/2006

### Bachelor studies in Earth Sciences (Very Good, Honour 84.83%)

Geology Department, Faculty of Science, Minia University, El-Minia, Egypt

## Expertise

### • Earth Sciences

Magmatic Petrology, Mineralogy, Geochemistry, Geochronology

### • International Reviewing

Reviewed several papers in various international peer reviewed journals such as **Lithos**, **Geological Journal**, **Ore Geology Reviews**, **Solid Earth Sciences**, **Acta Geochemica**, **Arabian Journal of Geosciences**, **Acta Geologica Sinica (English Edition)**, **African Earth Sciences**.

### ▪ Editorial

Currently act as editorial board for the Journal of Environmental and Earth Sciences (JEES).  
<https://ojs.bilpublishing.com/index.php/jees/about/editorialTeamBio/3541>

### ▪ Analytical Methods

Microprobe (very good), XRF (good), TIMS (good), (LA-/MC-) ICP-MS (good)

## Employment and Teaching Experience

2018- up till now

**Full time student loads and number of working years up till now: 14 years, illustrated from youngest to oldest as follows**

Associate Professor (Geology Department, Faculty of Science, Minia University, Egypt)

2014-2018

Researcher & Assistant Lecturer (Department of Lithospheric Research, University of Vienna, Austria)

2011-2014

Assistant Lecturer (Geology Department, Faculty of Science, Minia University, Egypt)

2006-2011

Demonstrator (Geology Department, Faculty of Science, Minia University, Egypt)

## Courses

I give lectures to the under-graduate students and post-graduate students to both Faculty of Science and Faculty of Education in the following courses:

- 1- Physical Geology (G101 for all 1<sup>st</sup> level students).
- 2- Economic Geology (G402 for 4<sup>th</sup> level students).
- 3- Ore microscopy (G416 for 4<sup>th</sup> level students).
- 4- Minerals and Rocks (G204 for 2<sup>nd</sup> level students).
- 5- Igneous and Metamorphic Petrology (G302 for 3<sup>rd</sup> level students)
- 6- Geochemistry (G303 for 3<sup>rd</sup> level students)
- 7- Exploration Geochemistry (for post graduate students).

## Membership in Scientific Organization

1. International association of young and early career Earth scientists- **Vice president 2019-2021**.
2. American Institution of Professional Geologist (AIPG)
3. European Association of Geochemistry (EAG)
4. International Association of GeoChemistry (IAGC)
5. European Geoscience Union (EGU)
6. The Geological Society of Egypt (GSE)
7. International Medical Geology Association (IMGA)
8. International Association of Promoting Geoethics (IAPG)
9. Arabian Geosciences Union (ArabGU)
10. Egyptian Syndicate of Scientific Professions.

## Awards and Scholarships

2020

Grant from the International Union of Geological Sciences to attend the International Geological Congress, New Delhi, India (2020).

2019

Travel grant to attend the 5th International YES Congress, Berlin, Germany (2019).

2019

Minia University prize for international publications in the Eighth Feast of Science and Fulfilment

2019

Best presentation award during the First Scientific Congress of Junior Geoscientists (SCJGE-1).

2018

Best presentation award during the annual meeting of Geological Society of Egypt (GSE2018).

2017

Postgraduate Travel Grant, University of Vienna to attend Geosymposium 2017, Silesia, Poland.

2017

PhD Student Research Grants by Elsevier and International Association of GeoChemistry (IAGC).

2017

Postgraduate Travel Grant, European Association of Geochemistry (EAG).

2013

Scholarship from Egyptian Ministry of Higher Education (EMHE).

2010

Faculty of Science, Minia University Postgraduate Publication Award.

## Publications

### Peer-reviewed articles

- 1- **Mabrouk Sami**, Nasser M. Mahdy, Theodoros Ntaflos, Douaa Fathy (2020). Composition and origin of Ti–Nb–Ta–Zr bearing minerals in the Abu Diab highly evolved granite from the Central Eastern Desert of Egypt. **Journal of African Earth Sciences** **165**. Doi: 10.1016/j.jafrearsci.2020.103808
- 2- Nasser M. Mahdy, Theodoros Ntaflos, Victoria Pease, **Mabrouk Sami**, Marek Slobodnik, Ahmed A. Abu Steet, Khaled M. Abdelfadil, Douaa Fathy (2020). Combined zircon U–Pb dating and chemical Th–U–total Pb chronology of monazite and thorite, Abu Diab A-type granite, Central Eastern Desert of Egypt: Constraints on the timing and magmatic-hydrothermal evolution of rare metal granitic magmatism in the Arabian Nubian Shield. **Geochemistry**. 10.1016/j.chemer.2020.125669
- 3- Abdel-Aal Abdel-Karim, Mokhles Azer, **Mabrouk Sami** (2020). Petrogenesis and tectonic implications of the Maladob ring complex in the South Eastern Desert, Egypt: new insights from mineral chemistry and whole-rock geochemistry. **International Journal of Earth Sciences**. 10.1007/s00531-020-01937-2.
- 4- Shehata Ali, Theodoros Ntaflos, **Mabrouk Sami** (2020). Geochemistry of Khor Um-Safi ophiolitic serpentinites, central Eastern Desert, Egypt: Implications for Neoproterozoic arc-basin system in the Arabian-Nubian shield. **Geochemistry**. 10.1016/j.chemer.2020.125690
- 5- **Mabrouk Sami**, Theodoros Ntaflos, Haroun A. Mohamed, Esam S. Farahat, Christoph Hauzenberger, Nasser M. Mahdy, Khaled M. Abdelfadil, Douaa Fathy (2020). Origin and Petrogenetic Implications of Spessartine Garnet in Highly Fractionated Granite from the Central Eastern Desert of Egypt. **Acta Geologica Sinica - English Edition** **94** (3). Doi : 10.1111/1755-6724.13883
- 6- Mona M. Fawzy, Nasser M. Mahdy, **Mabrouk Sami** (2020). Mineralogical characterization and physical upgrading of radioactive and rare metal minerals from Wadi Al-Baroud granitic pegmatite at the Central Eastern Desert of Egypt. " **Arabian Journal of Geosciences**. Doi : 10.1007/s12517-020-05381-z3.
- 7- **Mabrouk Sami**, Theodoros Ntaflos, Esam S. Farahat, Haroun A. Mohamed, Awaad F. Ahmed, Christoph Hauzenberger (2018). Petrogenesis and geodynamic implications of Ediacaran highly fractionated A-type granitoids in the north Arabian-Nubian Shield (Egypt): Constraints from whole-rock geochemistry and Sr–Nd isotopes. **Lithos** **304–307**: 329–346.
- 8- **Mabrouk Sami**, Theodoros Ntaflos, Esam S. Farahat, Haroun A. Mohamed, Awaad F. Ahmed, Christoph Hauzenberger (2017). Mineralogical, geochemical and Sr–Nd isotopes characteristics of fluorite-bearing granites in the Northern Arabian-Nubian Shield, Egypt: Constraints on petrogenesis and evolution of their associated rare metal mineralization. **Ore Geology Reviews**, **88**, 1–22.
- 9- Esam S. Farahat, Rafat Zaki, Christoph Hauzenberger and **Mabrouk Sami** (2011). Neoproterozoic calc-alkaline peraluminous granitoids of the Delehimmi pluton, Central Eastern Desert, Egypt: implications for transition from late- to post-collisional tectonomagmatic evolution in the northern Arabian–Nubian Shield. **Geological Journal**, **46**, 544–560.
- 10- Rafat Zaki, Mahmoud M. Hassaan and **Mabrouk Sami** (2011). Lithogeochemical exploration for Ore-Metals, El Sherm El-Qibli- Khor Abu Mureiwa, Central Eastern Desert, Egypt: Bed rock and stream sediments. **Egyptian Journal of Geology**, **55**, 447–473.

### Under Review

- 1- **Mabrouk Sami et al.** (2020) Isotopic and geochemical characteristic of the Abu Dabbab Sn and Ta-rich granites from the north Arabian-Nubian Shield: implications for understanding petrogenesis, economic significance and metallogenic processes.
- 2- **Mabrouk Sami et al.** (2020). Mantle source characteristics of Late Neoproterozoic post-collisional gabbroic intrusion of Wadi Abu-Hadieda from the north Arabian Nubian Shield (Egypt).

## Published Conference abstracts

- 1- **Mabrouk Sami**, Khaled M. Abdelfadil. Mineralogical and geochemical constraints on the genesis of Sn-Ta-Nb mineralization in the Abu Dabbab rare metal granite (Central Eastern Desert, Egypt). **5th International YES Congress 2019. Freie Universität Berlin, Berlin, Germany.**
- 2- **Mabrouk Sami**, Khaled M. Abdelfadil, Theodoros Ntaflos. Chemistry and origin of Nb-Ta-Sn mineralization in the Abu Dabbab peraluminous granite from the Central Eastern Desert of Egypt. **10<sup>th</sup> International Conference on The Geology of Africa (ICGA, Assuit, Egypt 2019).**
- 3- **Mabrouk Sami**, Theodoros Ntaflos, Haroun A. Mohamed, Esam S. Farahat, Christoph Hauzenberger, Nasser M. Mahdy, Khaled M. Abdelfadil and Douaa Fathy. Origin and petrogenetic implications of spessartine garnet in highly fractionated granite from the central Eastern Desert of Egypt. **First Scientific Congress of Junior Geoscientists in Egypt (SCJGE-1), Sohage, Egypt 2019.**
- 4- **Mabrouk Sami**, Theodoros Ntaflos, Haroun A. Mohamed, Esam S. Farahat, Christoph Hauzenberger, Awaad F. Ahmed and Douaa Fathy. Origin of spessartine-rich garnet and Nb-Ta- in highly fractionated peraluminous granites, north Arabian-Nubian Shield, Egypt; Evidence from whole-rock geochemistry and in situ EMPA and LA-ICP-MS data. **Annual meeting of the Geological Society of Egypt, Cairo, Egypt 2018.**
- 5- **Mabrouk Sami**, Theodoros Ntaflos, and Christophe Hauzenberger "Geochemical and Sr-Nd isotopes characteristics of Ediacaran rare metal granites in the Central Eastern Desert of Egypt. **EGU General Assembly Conference (Vienna, Austria)**, Geophysical Research Abstracts Vol. 20, EGU2018-402, Vienna, 2018.
- 6- **Mabrouk Sami**, Theodoros Ntaflos. "Petrogenesis of highly fractionated garnet bearing muscovite granites in the Central Eastern Desert, Egypt: Evidence from LA-ICP-MS of garnet and whole-rock geochemistry". **Geosymposium of Young Researches, Poland (Silesia) 2017. Sept. 2017.**
- 7- **Mabrouk Sami**, Theodoros Ntaflos, and Christophe Hauzenberger "Origin of spessartine-rich garnet in highly fractionated A-type granites of the north Arabian-Nubian Shield (Egypt): in situ EMPA and LA-ICP-MS evidences". **Conference on Accessory minerals CAM2017, Bratislava-Vienna, Sept. 2017.**
- 8- **Mabrouk Sami**, Theodoros Ntaflos "Petrogenesis of highly fractionated A-type granites in the North Arabian-Nubian Shield, Egypt: constraints from whole-rock geochemistry and Sr-Nd isotopes" **Annual Meeting of the Austrian Mineralogical Society (MinPet2017), Innsbruck, Austria.**
- 9- **Mabrouk Sami**, Theodoros Ntaflos, Awaad F. Ahmed, Haroun A. Mohamed and Esam S. Farahat, "Columbite and fergusonite in rare metal granitoids, Central Eastern Desert, Egypt." **EGU General Assembly Conference (Vienna, Austria)**, Geophysical Research Abstracts Vol. 19, EGU2017-280-1, 2017.
- 10- **Mabrouk Sami**, Theodoros Ntaflos, Haroun A. Mohamed, Esam S. Farahat and Awaad F. Ahmed "Late Neoproterozoic rare metal granitoids from Gabal El-Ineigi, Northern Arabian-Nubian Shield, Egypt: Geochemistry, mineral chemistry and Sr-Nd isotopic compositions". **EGU General Assembly Conference (Vienna, Austria)**, Geophysical Research Abstracts, Vol. 18, EGU2016-3075-1, 2016.
- 11- **Mabrouk Sami**, Theodoros Ntaflos, Esam S. Farahat, Awaad F. Ahmed, and Haroun A. Mohamed "Mineral chemistry and geochemistry of the Late Neoproterozoic Gabal Abu Diab granitoids, Central Eastern Dessert, Egypt: Implications for the origin of rare metal post-orogenic A-type granites." **EGU General Assembly Conference (Vienna, Austria)**, Geophysical Research Abstracts, Vol. 17, EGU2015-5393-3, 2015.
- 12- **Mabrouk Sami**, Esam S. Farahat, Christoph Hauzenberger, Zaki Rafat. Neoproterozoic calc-alkaline peraluminous granitoids of the Deleihimmi pluton, Central Eastern Desert, Egypt: implications for transition from late- to post-collisional tectonomagmatic evolution in the northern Arabian-Nubian Shield. **The 47th Annual Scientific Conference of the Egyptian Geological Society, Cairo, Egypt 2009.**

## Skills and Competences

- 1- Interpretation of geochemical data
- 2- Ore minerals identification and textural petrogenesis interpretation
- 3- Preparation of normal and polished thin sections. (Training at Assuit University and University of Vienna)
- 4- Preparation of fused beads and pressed pellet for XRF analysis (Training at University of Vienna)
- 5- Mineral separation (Training at Minia University and University of Vienna)

- 6- Familiar with EPMA equipment (Training at University of Vienna)
- 7- Familiar with LA-MC-ICP-MS equipment (Training at Graz University)
- 8- Familiar with SEM equipment (Training at University of Vienna)
- 9- More Than 26 Field trips to several Mountainous and geologic sites in Egypt, Austria, Slovakia and Poland

## Technology and Computer skills

- Applications**
- MS Office (Word, Excel, PowerPoint), Adobe (Photoshop, Illustrator), EndNote
  - International Computer Driving License (ICDL)
  - Professional Internet User
  - Graphic suite: CorelDraw, Canvas
  - MathWorks: Origin, MATLAB
  - Information & Communication Technology training (ICTP)

- Operating Systems**
- Mac OS X, Windows

- Geoscience applications**
- Igpet, GcdKit, Petrograph, SolvCalc, Minpet, AX2, PX-Nom, Norm4, mFeldspar Thermometers, XMapTool (basics)
  - Theriak/Domino, PTAX (TWQ), SUPCRT, PHREEQC, GSAS (basics), SpheriStat
  - Geochemist Workbench, WATCH
  - ArcGIS (basics)

## Presentations and Workshops

- 1- **Oral** presentation at the 5<sup>th</sup> International YES Congress, Berlin, **Germany (2019)**.
- 2- **Oral** and **Poster** presentations at the First Scientific Congress of Junior Geoscientists (SCJGE-1), Sohag, **Egypt (2019)**
- 3- **Oral** presentation in the annual meeting of the Egyptian Geological Society (GSE) Cairo, **Egypt (2018)**
- 4- **Poster** presentation in the European Geoscience Union (EGU) conference, Vienna, **Austria (2018)**
- 5- **Oral** presentation at the GeoSymposium of Young Researchers, Silesia, **Poland (2017)**
- 6- Give a **talk** at the conference of the Austrian Mineralogical Association (MinPet), Innsbruck, **Austria (2017)**
- 7- **Oral** presentation in the international Conference on Accessory Minerals (CAM), Vienna, **Austria (2017)**
- 8- Attending the Petrochronology international **course**, Vienna, **Austria (2017)**
- 9- **Poster** presentation in the European Geoscience Union (EGU) conference, Vienna, **Austria (2016)**
- 10- **Poster** presentation in the European Geoscience Union (EGU) conference, Vienna, **Austria (2015)**
- 11- Attending the Seventh International Conference on the Geology of Africa (ICGA), Assiut University, Assiut, **Egypt (2013)**.
- 12- **Oral** presentation in the annual meeting of the Egyptian Geological Society (GSE) Cairo, **Egypt (2010)**

## Languages

- 1- **Arabic** (Mother Tongue)
- 2- **English** (Very Good) ----- (Reading, Excellent - Writing, Excellent – Listening, very good – Spoken, very good)
- 3- **German** (Basic)

## For References

▪ **Prof. Dr. Theodoros Ntaflos**  
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 E-mail: [theodoros.ntaflos@univie.ac.at](mailto:theodoros.ntaflos@univie.ac.at)

▪ **Prof. Dr. Esam Farahat**  
 Vice-president for students' affairs  
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▪ **Prof. Dr. Christoph Hauzenberger**  
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<https://homepage.unigraz.at/de/christoph.hauzenberger/>

▪ **Prof. Dr. Abera Mogessie**  
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**▪ Prof. Dr. Hassan M. Helmy**

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**Declaration**

I assure the authenticity of the above-mentioned information is correct and true.

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Thank you for considering my candidacy. If you have questions about my candidacy, please do not hesitate to contact me.  
I look forward to hearing from you.

Place: El-Minia

Date: 28-11-2020

(Mabrouk Sami)

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