Personal information:

Full Name: Mostafa said Mostafa Barseem

Nationality: Egyptian **Date of Birth:** 26/5/1973

Martial State Married (Three children)

Present occupation: Head of geophysical exploration department

Place of work: Desert Research Center.

Department: Geophysical exploration

Field of specialization: Groundwater, Environmental and engineering

Geophysics.

Communication data:

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1st. Mathaf El Mataria, Cairo, Egypt. Geophysical Exploration Department,

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Academic record:

- **B.Sc.(1995),** Bachelor of Chemistry geology with grade "very good" Faculty of science Minufiya University.
- M.Sc. (2003), Master of Science in Geophysics Faculty of science Minufiya University, under Title:

"Geophysical study on the groundwater occurrence in deltas of some Wadis in the Gulf of Aqaba , Sinai"

• **Ph.D.** (2006), Philosophy doctorate in applied geophysics concerned with groundwater exploration - Faculty of science - Al Azahr University, under title:

"Geophysical contribution to groundwater exploration in carbonate rocks, West Sidi Barani area, Northwestern coast, Egypt."

Occupational graduation:

- **Researcher assistant,** Geophysical Exploration Department, Desert Research Center, 1997-2003.
- **Assistant researcher**, Geophysical Exploration Department, Desert Research Center, 2003 2006.

- **Researcher**, **Geophysical**, Exploration Department, Desert Research Center. 2006 2011.
- **Assistant prof.**, Geophysical Exploration Department, Desert Research Center, 2011 2017.
- **Prof. Dr.,** Geophysical Exploration Department, Desert Research Center, 2017 till now.

Language:

• Arabic: mother tongue

• English: very good (reading and writing)

Courses:

- ICDL certificate (2008).
- SPSS program (2013).
- Conversation English language course (2013).
- IT Essentials (2014).
- Training of trainers (TOT) for thirty hours (2014).
- Course in the principle of preparing scientific project and gain research calls (2014).
- Statistical (2015).
- Course from geologic survey of India concerned (ITEC program) on Geographic Information System (GIS) in (2015).
- Pass course in Matlab program in statistical institute in Cairo University (2018).
- There are many online courses in different fields as data science, business management, human development, program language and graphic design infamous educational platform web for example Rawaq, Edrak, udemy, coursera and Google skills.

Membership in scientific and social society:

Participating as a member in lectures, workshops, training, conferences and other scientific activities of the following:

- Egyptian Geophysical Society (EGS).
- The Geological Society of Egypt (GES).
- Egyptian Society of applied petrophysics (ESAP).
- A member management council of research staff desert research center club.
- There are many other activities like training students of different faculties and Administrative tasks. Also super vise on master and PhD thesis of researchers.

Membership in research for projects:

Participation in most of the research projects through the assignments of the Geophysical Exploration Department since 1997 funded from Desert Research Center or foreign funders. And it included participating as a member with the research teams by working in field measurements by different geophysical instruments (geoelectrical, electromagnetic seismic and magnetic), analyzing and interpreting data by different especial scientific program, and preparing final scientific reports for these projects as follows

Member of the team in the project of:

- Geophysical exploration for groundwater resource at Wadi El Hawashiya delta, Gulf of Sueze region (Desert Research Center and governorate, 2000 - 2001).
- Geological and geophysical studies for water resource developments, Esh El Mallaha area, eastern Desert (Scientific project by Desert Research Center, 92001 2002).
- Geological studies of Shalatein Abu Ramad area (scientific project by Desert Research Center, (2003).
- The development of the northern coast, Sidi Barrani and Sidi Abd El Rahman, western Desert (Scientific project as scholarship from UN, (2002 2005).
- Bedews settlement in the area from Ras Banas to Mersa Allam, Eastern Desert (FAW, 2003 2005).
- Geophysical exploration for groundwater resource at Ewinate area in western Desert (Scientific project by Desert Research Center, (2006 2008).
- The development of middle Sinai in Egypt (Wdi El Gerafi) (2009-2010).
- The research program for groundwater studies in El Nigila Basin at Northwestern coastal of Egypt (2010-2012).
- Newsland project at wadi Hebla in Northwestern coastal of Egypt (2013).
- Developments the desert back of el Menia (2014).
- The project in El galaba plan west Aswan (2015).
- Member of the research team to combat desertification for a year to complete the monitoring and evaluation of environmental sensitivity in Egypt (2017).
- Member of the Buwaiti team assigned to study the one and a half million acres project on Al Buwaiti- El Minya Road (2017).
- Member of the research team to prepar the groundwater atlas for the northwestern coast (EFAD) (2021).
- A member team to project "Hydrogeophysical contribution to the development of a new multidisciplinary approach to address the impact of

- climate change on the problems of soil salinization and waterlogging: a case study of Egypt's Future Project", (2022).
- A member team to project "Studying the effect of climate changes on shallow reservoirs in Ras Sidr and Jubail South Sinai Egypt", (2023)
- Participation in some private jobs in Sinai Peninsula, Eastern Desert and Nile Vally.

Publications:

Many applied researches have been conducted using different geophysical methods such as vertical, two- and three-dimensional geoelectrical tools, electrical monitoring of wells, and geomagnetic to groundwater exploration, evaluate the conditions of water presence, solving some hydrological problems, and clarify the impact of geological structures on the presence of groundwater. Also, Contribute to solving some environmental problems in the new urban areas and support decision makers by creating priority maps to develop many desert areas in Egypt and some research related to geoelectrical and hydrological parameters. The information about these research papers as follow:

- 1. Mabrouk M. A., Yousef A. A., Diab M. Sh. and <u>Barseem M. S.</u> (2004):"Geophysical study on the ground water occurrence in the delta of Wadi Kid, Gulf of Aqaba, Sinai", The 7th Conference geology of Sinai for development, Ismailia 11 December, pp. 27-288.
- 2. Hosny M. M. Ezz El Deen, Al Abaseiry Abd El Rahman and <u>Barseem M. S.</u> (2004): "Geophysical study on the groundwater occurrence in the area southwest of Sidi Barrani, northwestern coast, Egypt", Egyptian Geophysical Society EGS Journal, vol. 2, No. 1, 51 59.
- 3. <u>Barseem M. S.</u> and Ahmed N. El Sayed (2008): "Application of the geoelectrical method to study the factors affecting on the groundwater quality in the area to the west of Kilometer 117 along the Cairo Alexandria Desert road, West Nile Delta (Case study) "Egyptian Journal of Desert Research, vol. 58 No. (2), 229-242
- 4. Al Temamy A.M. M., Mohamed A. Khaled and <u>Barseem M.S.</u> (2008): "Use of geoelectrical techniques to determine the impact of facies changes on groundwater potentials and water logging in the area south of Lake

- Manzala, East Nile Delta, Egypt", Egyptian Journal of Desert Research, vol. 58 No. (2), 211-227
- 5. <u>Barseem M. S.</u> El Osta and M. M. (2008): "Empirical relationship between borehole resistivity and hydraulic parameters in El Awkaf area, East El Owinate, south western Desert", Assiut Univ. J. of Geology" 37(2), P-P.189-209.
- 6. A.M. M. Al Temamy and <u>Barseem M.S.</u> (2010): "Structural impact on the groundwater occurrence in Nubia sandstone aquifer using geomagnetic and geoelectrical techniques, Northwest Bir Tarfawi, East El Oweinat area, Western Desert", Egyptian Geophysical Society EGS Journal, vol. 8, No. 1, 47 63.
- 7. <u>Barseem. M. S.</u> Mohamed A. Sh. El Sabri and Ahmed G. Abdel Hmeed (2010): "Study of the environmental impact on the quaternary aquifer using geophysical, hydrological and geochemical techniques in El Sadat area, West Nile Delta, Egypt", Egyption Jurnal of Geology, Vol.54, ,79 97.
- 8. Al-Abaseiry A. Abdel Rahman, El Syed A. N. And <u>Barseem M. S.</u> (2010): "Geoelectrical Exploration to delineate the groundwater occurrence in Risan Unayzah area, North Sinai" Proc. 6th International Symposium on Geophysics, Tanta, Egypt, 144-152.
- 9. Al Temamy. A M., <u>Barseem, M.S.</u> and Ghoubachi S. U. (2010): "Evaluation of the Nubian Sandstone aquifer using geophysical and hydrogeological tools in the East of El-Dakhla Oasis, Western Desert, Egypt", Journal of applied Geophysics, vol. 9, No. 1 March, 59 77.
- 10. El Osta M. M., El Sheikh A. El., and <u>Barseem M. S.</u> (2010): "Comparative Hydrological and Geoelectrical Study on the Quaternary Aquifer in the Deltas of Wadi Badaa and Ghweiba, El Ain El Sukhna Area, Northwest Suez Gulf, Egypt", International Journal of Geophysics, Volume, Article ID 585243, 15 pages
- 11. <u>Barseem, M S.</u> (2011):"Delineating the conditions of groundwater occurrences in the area south Baloza Romana road North West Sinai Egypt", Egyptian Geophysical Society EGS Journal, vol. 9, No. 1, 135 143.

- 12. <u>Barseem M S.</u> (2012):" "Impact of the geologic setting on the groundwater occurrence in Berkash area west Nile Delta using the geoelectrical technique ", Egyptian Geophysical Society EGS Journal, vol. 10, No. 73 84.
- 13. Al-Abaseiry A. Abdel Rahman, <u>Barseem M. S.</u> and El Sayed A. N. (2011): "Delineation of the direction of fracture system and its impact on the groundwater possibility around Gebel El-Minsherah using geoelectrical methods 1d, 2d and 3d- Central Sinai EGYPT", Journal of applied Geophysics, vol. 10, No. 2 September, 201 218.
- 14. Al-Abaseiry, A. Abdel Rahman ,Ayman Al Temamy, A. M. and <u>Barseem, M.S.</u> (2011): "Exploring the groundwater resources using geoelectrical techniques for the development of the area of Wadi Lahmi, Southeast of the Eastern Desert, Egypt", Journal of applied Geophysics, vol. 10, No. 2 September, 219 234.
- 15. <u>Barseem M. S. El Tamamy</u>, A M.. and ^{2,3}Milad H.Z. Masoud (2013): "Hydrogeophyical Evaluation of water occurrences in El Negila area, Northwestern coastal zone Egypt", Journal of Applied Sciences Research, 9(4): 3244 3262,
- 15. Hosny M. Ezz El Deen, <u>Barseem M. S.</u> and Ahmed N. El Sayed (2103): "Groundwater exploration in Wadi El Shaghab using geophysical techniques East Idfu Eastern Desert Egypt ", Egyptian Journal of Geology, v. 57, p. 31-47.
- 17. <u>Barseem M. S.</u>, Ahmed N. El Sayed, Ahmed M. Youssef (2014): "Impact of geologic setting on the groundwater occurrence in wadis El Sanab, Hashem, and Khrega using geoelectrical methods—northwestern coast, Egypt", Arabian Journal of Geosciences 7:5127-5139.
- 18. Hosny M. Ezz El Deen & Ahmed N. El Sayed & <u>Barseem M. S.</u> (2014): "The impact of subsurface geological structure on the groundwater occurrence using geophysical techniques in wadi El Kallabiyyah and wadi As Sabil, East Esna, Eastern Desert, Egypt", Arabian Journal of Geosciences, June, Volume 7, Issue 6, pp 2151-2163.

- 19. Hussein H. Mahmoud, <u>Barseem M. S. & Ahmed M. Youssef</u> (2015): "Application of the two dimensional geoelectric imaging technique to explore shallow groundwater in wadi El Gerafi basin, Eastern Central Sinai Egypt", Arabian Journal of Geosciences: Volume 8, Issue 6, Page 3589-3601
- 20. <u>Barseem, M. S.</u>, Talaat Ali Abd El Lateef, Hosny Mahomude Ezz El Deen (2015): "Geoelectrical contribution for solving water logging in selected sites, kilometer 35, Cairo Ismailia Desert Rode, Egypt", Egyptian Geophysical Society EGS Journal, vol. 13, No.1, 67 82.
- 21. Mohamed A. Khaled, Ayman M. Al Temamy, Barseem M. S., Ahmed N. El Sayed and El Sayed A. El Abed (2015): "Geoelectrical and hydrogeological study to delineate the geological structures affect the groundwater occurrence in wadi El Khariq basin, northwest El Maghara, north Sinai, Egypt", Accepted for publication in EGS Journal.
- 22. <u>Barseem M. S.</u>, Talaat A.Abd El Lateef, Hosny M. Ezz El Deen and Al Abaseiry A. A, (2015): "Geoelectrical exploration in the south Al Qantara Shark area for supplementary irrigation purposes Sinai Egypt", NRIAG Journal of Astronomy and Geophysics 4, 163—178.
- 23. Elsheikh, A.E., Barseem M.S. and Sherbeni, W.M. (2015): "Susceptibility of shallow groundwater aquifers to water logging, case study Al Marashda area, West Nile Valley, Qena, Egypt", Mansoura Engineering Journal, (MEJ), Vol. 40, Issue 4 Part II C:1-28.
- 24. <u>Barseem M. S.</u>, Ahmed N. El Sayed and Nadia A. Abd El Fattah (2016):" Studying the groundwater resources in wadi El Khor by using remote sensing and geoelectrical techniques, northwestern coastal zone, Egypt", Egy. J. Appl. Geophysics., Vol. 15, No. 1, March, 171-195.
- 25. <u>Barseem M. S., (2016)</u>: "Geoelectrical investigation using 1D and 2D techniques to delineate groundwater occurrence condition on Al Gorah and its vicinities northeastern Sinai Egypt", Egyptian Journal of Geology, v. 60, p. 61-74.
- 26. <u>Barseem M. S.</u> (2016): "Groundwater exploration by using geophysical techniques in the area between Gable Abu Byan El Qibli and El Tamaneen

- village, Darb El arbian, Western Desert, Egypt", Egy. J. Appl. Geophys., Vol. 15, No. 2, September, 1-23.
- 27. <u>Barseem M. S.</u> (2016): "Geophysical contribution to site location of desalination and brine disposal groundwater wells in selected sites of Egypt", Assiut Univ. J. of Geology 45 (1), p-p 1- 34.
- 28. Ahmed N El Sayed1, <u>Barseem M. S</u>, Hosny M Ezz El Deen and Hesham A Ezz El Din (2017): "Using of Geo-electrical and Geochemical Techniques to Investigate the Change in Ground Water Quality-South West El Khtatbah City Cairo-Alexandria Desert Road, Egypt", Advances in Applied Science Research, 2017, 8(4):77-95.
- 29. Hussein H. Mahmoud, <u>Barseem M. S.</u> (2018): "Geophysical characterization of the coastal aquifer west El-Qasr area, northwestern coast, Egypt", Egyptian Geophysical Society EGS Journal, Vol. 6, No. 1, 145-158 (2018).
- 30. Adel D. M. Kotb, Mohamed A. Khaled, Barseem M. S. (2018): "Groundwater condition based on geoelectrical technique and Dar Zarrouk parameters between El Alamein and El Dabaa—Egypt", Arab J Geosci (2018) 11: 596. https://doi.org/10.1007/s12517-018-3947-y., Article:596.
- 31. Hamed, M., F., A., Barseem, M., S., M., and Mohamed Zaghloul (2018): "Groundwater Exploration for Sustainable Development of Some Western Desert Fringe Villages at El-Menia Governorate, Egypt". Egy. J. Appl. Geophys., Vol. 17, No. 2, September 2018
- 32. Ramadan G. A., Barseem M. S., Saffie El Deen M. M., Mohammed S. M. (2020): "Groundwater Exploration in Fractured Rock Using Transient Electromagnetic Technique (TEM), West El-Minia, Egypt.", Egyptian Geophysical Society EGS Journal, Vol. 18, No. 1, 145-154.
- 33. Zarif, F.M., Elshenawy, A.M., Barseem, M.S.M. et al. Evidence of geoelectrical resistivity values on groundwater conditions in Wadi El Natrun and its vicinities, West Delta, Egypt (cases studies). Sci Rep 12, 10745 (2022). https://doi.org/10.1038/s41598-022-12644-0

- 34. Mohamed F. Bedair, Rifai I. Rifai , Ahmed Gamal and Mostafa S. M. Barseem (2023): Application of Geoelectric Technique in Groundwater Protection of Quaternary Aquifer in Wadi El Natrun, Egypt, Journal of Geography, Environment and Earth Science International Volume 27, Issue 2, Page 29-48, 2023; Article no.JGEESI.97605 ISSN: 2454-7352, https://doi.org/10.9734/jgeesi/2023/v27i2669.
- 35. Elwan, A. A and Barseem, M.S. M. (2023): Soil origin and uniformity in dam-controlled watersheds across wadi El-Madamude using pedological and geoelectrical measurements, East Luxor, Egypt. Menoufia J. Soil Sci., Volume 8 Issue 6 (2023): 85 111.
- 36. Elwan, A. A and Barseem, M.S. M. (2023): Evaluation of Soil Resources and Groundwater Exploration for Precision Agriculture in Wadi El-Madamude, East Luxor, Upper Egypt. Alexandria Journal of Soil and Water Sciences (AJSWS) Volume: 8 (1).
- 37. Fardous Zarif1 · Mostafa Barseem1 · Ahmed Elshenawy1 · Emin U Ulugergerli2 (2024): 2D nonlinear inversion of DC resistivity measurements, a case study; southeastern part of Ras El Dabaa, Northwestern coast, Egypt ,Environmental Earth Sciences (2024) 83:599, https://doi.org/10.1007/s12665-024-11896-5.

Not: all these paper found in Google scholar, academia and researchgate that show citation and h-index

Experience:

A- In the filed:

- 1. Carrying out Geoelectrical measurements including:
- Vertical Electrical Sounding.
- imaging profiling.
- Geoelectrical Profiling.
- Imaging tomography.
- 2. Carrying out Seismic refraction measurements including:
- Seismic refraction profiling.
- 3. Carrying out ground magnetic survey.

B- In the office:

- 1. Qualitative and quantitative interpretation of geoelectrical measurements including Vertical Electrical Sounding, Geoelectrical profiling and Geoelectrical Tomography.
- 2. Interpretation of Seismic refraction measurements.
- 3. Identification of the parameters of the water bearing layers.
- 4. Exhibit the results by cross section, maps and table t
- 4. Participation of the projects reports.
- 5. Good experience in a lot of computer programs dealing with the mapping and interpretation of different geophysical and geological tools.

Information of three referees:

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- 3. Prof. Dr. Safi El Din Metwally Prof. in geophysics, Desert research Center **safwat_metwaly@yahoo.com**

ملخص عن النشاط العلمى و التطبيقى للاستاذ الدكتور/ مصطفى سعيد برسيم

: مصطفى سعيد مصطفى برسيم

الوظيفة الحالية : استاذ دكتور الجيوفيزياء التطبيقيه لاستكشاف المياه الجوفيه و رئيس قسم الاستكشاف الجيوفيزيائي بمركز بحوث الصحراء بالقاهرة

الوظيفة الحالية: استاذ دكتور الجيوفيزياء التطبيقيه لاستكشاف المياه الجوفيه و رئيس قسم الاستكشاف الجيوفيزيائي بمركز بحوث الصحراء بالقاهرة

النشاط العلمي:

<u>الإسم</u>

قام بإجراء العديد من البحوث التطبيقية باستخدام الطرق الجيوفيزيائية المختلفة مثل الجيوكهربية الرأسية و ثنائية و ثلاثية الأبعاد ، و الرصد الكهربي للآبار ، و المغناطيسية الأرضية للمساهمة في استكشاف المياه الجوفية و تقيم ظروف تواجدات المياه و تفسير بعض المشاكل الهيدرولوجيه و توضيح تاثير التراكيب الجيولوجيه على تواجد المياه الجوفيه و المساهمه في حل بعض المشاكل البيئية في المناطق العمرانيه الجديده و كذلك دعم متخذى القرار بإنشاء خرائط اولوية لقرارات التنمية في العديد من المشروعات البحثيه التي تختص باستكشاف و استغلال الموارد الطبيعيه في الصحاري المصريه بتمويل محلى و دولى . كما انه عضو في الكثير من الجمعيات العلمية المصرية و الدولية المهتمة بالنشر العلمي و ساهم في نشر العديد من البحوث التطبيقية هذا بالإضافة الى تحكيم الكثير من البحوث في ذات التخصص. كما انه اشرف على العديد من رسائل الماجستير و الدكتوراه في جامعات مصر المختلفة و شارك في العديد من المؤتمرات و ورش العمل و ساهم في تدريب و تاهيل العديد من الخريجين لسوق العمل.

العمل العام:

المشاركه فى مجلس ادارة نوادى اجتماعيه مثل نادى اعضاء هيئة التدريس بمركز بحوث الصحراء كعضو مجلس اداره و نائب مجلس ادارة جمعية الاسكان بمركز بحوث الصحراء و نائب رئيس الجمعيه العلميه المصريه للتنميه المستدامه و هذا فى الجانب الاجتماعى اما على الجانب السياسى فكانت المشاركه كعضو فى مجلس محلى القريه

و هناك اسهانات فى مجال النشاط الثقافى بنشر العديد من الكتب الثقافيه مثل حياتى لها معنى و البدايه و رسائل لمن يهمه الامر و البصيره و غيرها و هناك روايات مثل الصوره الاخيره و الاختيارات و رجله الى الكرامه و غيرها من الكتب العلميه ايضا مثل استكشاف المياه فى الدلتاوات و ايضا المياه الجوفيه فى الصخور الجيريه.