# *CURRICULUM VITAE*

**Mohamed Elsayed Ahmed Gabr**

**Assoc. Prof., Civil Engineering Department, Higher Institute for Engineering and Technology, New Damietta. Ministry of Higher Education, Egypt.**

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**ORCID ID: 0000- 0003-2448- 610X**

| | |
|---|---|
| **Date and place of birth** | **16 / 1 / 1969 – Port-Said, Egypt** |
| **Nationality** | **Egyptian** |
| **Religion** | **Muslim** |
| **Marital Status** | **Married** |

## EDUCATIONAL RECORD

| | |
|---|---|
| **University** | **Suez Canal University, Faculty of Engineering** |
| **Department** | **Civil Engineering** |
| **Location** | **Port Said, Egypt** |
| **Major field of study** | **Civil Engineering (Water resources and environment)** |
| **Degree** | **B. Sc** |
| **General grade** | **Very good** |
| **Years (from-to)** | **1986-1991** |
| **Location** | **Port Said, Egypt** |

| | |
|---|---|
| **Degree** | **M. Sc. Degree** |
| **Research title** | **“The Ideal Design for Lining and Protection of EL-Salam Canal”** |
| **Years (from-to)** | **1994-1997** |

| | |
|---|---|
| **Degree** | **Higher Diploma** |
| **University** | **Cairo University, Faculty of Engineering** |
| **Department** | **Irrigation and Hydraulics** |
| **Location** | **Giza, Egypt** |
| **Major field of study** | **Civil Engineering** |
| **Research title** | **“Shared water resources”** |
| **Years (from-to)** | **1999-2000** |

| | |
|---|---|
| **Degree** | **Ph.D.** |
| **Institution** | **Suez Canal University, Faculty of Engineering** |
| **Department** | **Civil Engineering** |
| **Location** | **Port Said, Egypt** |
| **Major field of study** | **Civil Engineering** |
| **Research title** | **“Generation and Transport of Sediments by Severe Flow Conditions** |
| **(from-to)** | **1999-2003** |

## Major Field of Research

1- Water supply and sanitary engineering
2- Water Resources management.
2- Environmental Engineering.
4- Water quality
3- Wastewater treatment
6- Constructed wetlands.
8- Groundwater modelling
9- Climate changes
10- Building constructions
11- Rain water harvesting.
12- Geology and soil mechanics
13- Soil mechanics and foundation
14-Irrigation and hydrology.
15 – Fluid mechanics
16- Harbor Engineering and coastal Engineering.
17- Open channel Hydraulics
18- Construction Engineering Drawings
19- Computer application in civil engineering.
20- Environmental pollution control

## Professional Activities

**Employment 4**

| | |
|---|---|
| Name of employer | Higher Institute for Engineering and Technology, New Damietta, Ministry of Higher Education, |
| Address of employer | New Damietta, Egypt. P.O. 42523 |
| Type of organization | Governmental |
| Activities | Educating under-graduates to be awarded the Engineering B. Sc. |
| Current Position | Associated Professor, Head Civil Engineering Department. |

**Employment 3**

| | |
|---|---|
| Name of employer | Ministry of Water Resources & Irrigation |
| Address of employer | North Sinai, Egypt |
| Type of organization | Governmental |
| Activities | Study problems facing the construction of the North Sinai development project to reclaim 400 thousand faddans regarding soil salinity, water quality, soil drainage. In addition, preparing the documents of tendering of irrigation and drainage works. |
| Positions | Senior Infrastructure Engineer (2009- 2015). |

**Employment 2**

| | |
|---|---|
| Name of employer | Sabha High Technical Institution, Department of Civil Engineering. |
| Address of employer | Sabha, Libya, P.O. 19078. Fax: 021.3602894 |
| Type of organization | Governmental. |
| Activities | Educating under-graduates to be awarded the Engineering B. Sc. |
| Positions | Assistant Professor in Civil Engineering Department (2004-2009). |

**Employment 1**

| | |
|---|---|
| Name of employer | Ministry of Water Resources & Irrigation, Water Resources, Irrigation, and national Infrastructure Sector in North Sinai |
| Address of employer | North Sinai, Egypt |
| Type of organization | Governmental |
| Activities | Construction of El-Sheikh Gaber Canal and its water structures in Sinai to reclaim 400 thousand faddans. |
| Positions | Supervisor Infrastructure Engineer (1994- 2003) |

## Professional Experience

Research Interest and Expertise

1- Water supply and sanitary engineering

2- water quality Wastewater treatment.

3- Water Resources management.

4- Soil mechanics and foundations

5- Irrigation and Drainage Engineering.

6- Environmental Engineering.

7- Harbor Engineering and coastal Engineering.

8- Construction Engineering Drawings

9- Waste management.

**Co-Supervised PhD Students**

1- Amira Mahmoud El Shorbagy " Utilizing the Harvesting of Rainwater to Provide Safe Road Transportation Efficiency and Increase Water Resources in the Context of Climatic Change", Civil Engineering Department, Faculty of Engineering, Minia University, Minia, 61519, Egypt

Status: ongoing.

Co-Supervised M. Sc. Students

1- Madlen Mohamed Salam "Treatment of Drainage wastewater using Floating wetland", Public Works Engineering Department, Faculty of Engineering, Mansoura University, Egypt.

Status: Awarded 2022.

2- Maha Yousef Alotaibi “Food security and sustainable management of water-energy-food nexus in Kuwait.” College of Graduate Studies, Environmental Sciences, Kuwait.

Status: Awarded 2022.

3- Ahmed Ali El Sayed Ahmed “Groundwater quality assessment for different uses in Wadi El Natrun city using GIS and water quality index” Irrigation and Hydraulics Department, Faculty of Engineering, Postgraduate Studies, Ain Sham University.

Status: ongoing.

**Research Projects**

Sustainable Agriculture Using Solar Desalination: A Pathway to Food Security in the State of Kuwait

Code CN18-35EM-05

Total Budget 33,000KD

Starting Date 2021/02/01

End Date 31/01/2024

## Research projects published papers

1. Alotaibi, M., Alhajeri, N. S., Al-Fadhli, F. M., Al Jabri, S., & Gabr, M. **(2023).** Impact of climate change on crop irrigation requirements in arid regions. Water Resources Management. http doi.org/10.1007/s11269-023-03465-5.

Gabr, M., Alhajeri, N. S., Al Jabri, S. **(2023)** Prospective and challenges of sustainable water resources for irrigation in Kuwait. The twenty-third International Water Technology Conference, IWTC23, that will be held in Port Said, Egypt 9-11 March 2023.

Gabr, M., Alhajeri, N. S., Al Jabri, S. **(2023)** Water, food, and energy: a nexus for advancing food security and sustainable agriculture. The twenty-third International Water Technology Conference, IWTC23, that will be held in Port Said, Egypt 9-11 March 2023.

**2- Joint Technical Commission Projects for Nile Water between Egypt and Sudan (January 2013 -December 2013)**

Activates:

Managing and supervising the works of the Joint Technical Commission for Nile Water between Egypt and Sudan: Measurement of water quality, water levels, and discharges in Juba, Malakal, Halat Dulayb, Milot, and Wow at South Sudan and carrying out the periodic maintenance for the water monitoring stations and measurements tools.

**3- Design, and Supervision of New Dairout Group of Regulators (NDGR), Ministry of water resources and irrigation (2015).**

Activates:

Following-up the study of the basic and detailed design of the New Dairout Group of Regulators (NDGR) project with the Japanese Sanyo Consulting Office, including surface and ground water quality and its environmental aspects.

Preparation of the consultancy services contract for the project of establishing the New Dairout Group of Regulators (NDGR) according to JICA standards.

North Sinai Development Project to reclaim and cultivate 400000 acres (1994-2012)

Activates:

Water resources management

Study water quality for irrigation purposes

Study soil salinity

Study crop water requirement

Solve drainage problems

Monitoring water levels and quality.

International training courses:

Participating in the training course about Water Quality Early Warning System for Nile River during the period from 22/11/2015 to 28/11/2015 in Delft Hydraulics Institute, Netherlands

## PUBLICATIONS

### Q1 Publications

1. **Gabr, M.E.,** Awad, A. & Farres, H.N. Irrigation Water Management in a Water-Scarce Environment in the Context of Climate Change. Water Air Soil Pollut 235, 127 **(2024).** https://doi.org/10.1007/s11270-024-06934-8.
2. Gabr, M.E., Soussa, H. Assessing surface water uses by water quality index: application of Qalyubia Governorate, Southeast Nile Delta, Egypt. Appl Water Sci 13, 181 **(2023).** https://doi.org/10.1007/s13201-023-01994-3.

3. **Gabr, M.E**.; El Shorbagy, A.M.; Faheem, H.B. Assessment of Stormwater Quality in the Context of Traffic Congestion: A Case Study in Egypt. Sustainability **2023**, 15, 13927. https://doi.org/10.3390/su151813927.

4. Gabr, M. E. **(2022).** Design methodology for sewage water treatment system comprised of Imhoff ‘s tank and a subsurface horizontal flow constructed wetland: A case study Dakhla Oasis, Egypt. Journal of Environmental Science and Health, Part A, 57(1), 52–64. https://doi.org/10.1080/ 10934529.2022.2026735.

5. Madleen Salem, Mohamed EL-Sayed Gabr, Mohamed Mossad, Hani Mahanna, Random Forest modelling and evaluation of the performance of a full-scale subsurface constructed wetland plant in Egypt, Ain Shams Engineering Journal, Volume 13, Issue 6, **2022,** 101778.

6. Gamal, G.; Abdeldayem, O.M.; Elattar, H.; Hendy, S.; Gabr, M.E.; Mostafa, M.K. Remote Sensing Surveillance of NO2, SO2, CO, and AOD along the Suez Canal Pre- and Post-COVID-19 Lockdown Periods and During the Blockage. Sustainability 2023, 15, 9362.

https://doi.org/10.3390/su15129362

7. Gabr, M.E.; Salem, M.; Mahanna, H.; Mossad, M. Floating Wetlands for Sustainable Drainage Wastewater Treatment. Sustainability 2022, 14, 6101. https://doi.org/ 10.3390/su14106101.
8. Gabr, M., Soussa, H., & Fattouh, E. (2021). Groundwater quality evaluation for drinking and irrigation uses in Dayrout city Upper Egypt. Ain Shams Engineering Journal, 12(1), 327–340. https://doi.org/10.1016/j.asej.2020.05.010.

9. Mohamed El-Sayed Gabr (2021) Proposing a constructed wetland within the branch drains network to treat degraded drainage water in Tina Plain, North Sinai, Egypt, Archives of Agronomy and Soil Science, 67:11, 1479-1494, DOI: 10.1080/03650340.2020.1799353.
10. Gabr, M., Soussa, H., & Fattouh, E. (2021). Groundwater quality evaluation for drinking and irrigation uses in Dayrout city Upper Egypt. Ain Shams Engineering Journal, 12(1), 327–340. https://doi.org/10.1016/j.asej.2020.05.010.

11. Mohamed El-Sayed Gabr (2021) Proposing a constructed wetland within the branch drains network to treat degraded drainage water in Tina Plain, North Sinai, Egypt, Archives of Agronomy and Soil Science, 67:11, 1479-1494, DOI: 10.1080/03650340.2020.1799353.

12. Mohamed Elsayed Gabr **(2023)** Land reclamation projects in the Egyptian Western Desert: management of 1.5 million acres of groundwater irrigation, Water International, 48:2, 240-258, DOI: 10.1080/02508060.2023.2185745.
13. Alotaibi, M., Alhajeri, N. S., Al-Fadhli, F. M., Al Jabri, S., & Gabr, M.E. **(2023).** Impact of climate change on crop irrigation requirements in arid regions. Water Resources Management. https://doi.org/10.1007/s11269-023-03465-5.

14. El-Rawy, M.; Fathi, H.; Zijl, W.; Alshehri, F.; Almadani, S.; Zaidi, F.K.; Aldawsri, M.; Gabr, M.E. Potential Effects of Climate Change on Agricultural Water Resources in Riyadh Region, Saudi Arabia. Sustainability 2023, 15, 9513. https://doi.org/10.3390/su15129513.

15. Gabr, M.E., El-Ghandour, H.A. & Elabd, S.M. Prospective of the utilization of rainfall in coastal regions in the context of climatic changes: case study of Egypt. Appl Water Sci 13, 19 **(2023).** https://doi.org/10.1007/s13201-022-01835-9

16. El-Rawy, M., Batelaan, O., Al-Arifi, N., Alotaibi, A., Abdalla, F., & Gabr, M. E. **(2023).** Climate change impacts on water resources in arid and semi-arid regions: A case study in Saudi Arabia. Water, 15(3), 606. https://doi.org/10.3390/w1503060.

17. Abduljaleel, Y.; Awad, A.; Al-Ansari, N.; Salem, A.; Negm, A.; Gabr, M.E. Assessment of Subsurface Drainage Strategies Using DRAINMOD Model for Sustainable Agriculture: A Review. Sustainability **2023**, 15, 1355. https://doi.org/10.3390/su15021355.

18. Gabr, M.E., Fattouh, E., Eltarabily, M.G. **(2023)** Design of subsurface drainage network with minimum overall cost using Lagrange multiplier optimization. Irrigation and Drainage, 1–14. Available from: https://doi.org/10.1002/ird.2886

19. Gabr, M.E.; El Shorbagy, A.M.; Faheem, H.B. Utilizing the Harvesting of Rainwater to Provide Safe Road Transportation Efficiency and Increase Water Resources in the Context of Climatic Change. Sustainability **2022**, 14, 9656. https://doi.org/10.3390/su14159656.

20. Gabr, Mohamed EL-Sayed (2021) Management of Irrigation Requirements Using FAO-CROPWAT 8.0 Model: A Case Study of Egypt." Modeling Earth Systems and Environment (2021): 1-16.

21. Gabr, M.E.; Fattouh, E.M.; Mostafa, M.K. Determination of the Canal Discharge Capacity Ratio and Roughness to Assess Its Maintenance Status: Application in Egypt. Water **2023,** 15, 2387. https://doi.org/10.3390/w15132387

22. Gabr, M., & Fattouh, E. (2021). Assessment of irrigation management practices using FAO-CROPWAT 8, case studies: Tina Plain and East South El-Kantara, Sinai, Egypt. Ain Shams Journal of Engineering, 12(2), 1623–1636. https://doi.org/10.1016/j.asej.2020.09.017.

23. Gabr, ME. (2021) Modelling net irrigation water requirements using FAO-CROPWAT 8.0 and CLIMWAT 2.0: a case study of Tina Plain and East South ElKantara regions, North Sinai, Egypt, Arch. Agron. Soil Sci. 2021. DOI: 10.1080/03650340.2021.1892650.

24. Ahmed Awad, Wan Luo, Nadhir Al-Ansari, Ahmed Elbeltagi, Mustafa El-Raw, Hesham N. Farres, Mohamed EL-Sayed Gabr. Farmers' Awareness in the Context of Climate Change: An

Underutilized Way for Ensuring Sustainable Farmland Adaptation and Surface Water Quality. Sustainability 2021, 13, 11802. https://doi.org/10.3390/su132111802.

**Q2 Publications**

25. Gabr, M.E.; Al-Ansari, N.; Salem, A.; Awad, A. Proposing a Wetland-Based Economic Approach for Wastewater Treatment in Arid Regions as an Alternative Irrigation Water Source. Hydrology 2023, 10, 20. https://doi.org/10.3390/hydrology10010020.

26. El-Ghandour H.A, Elbeltag E, Gabr, M. (2020) Design of irrigation canals with minimum overall cost using particle swarm optimization, case study: El-Sheikh Gaber, North Sinai Peninsula, Egypt. Journal of Hydroinformatics, Accepted article. DOI: 10.2166/hydro.2020.199.

**Q3, Q4, and non-Scopus Publications**

27. Faheem, H.B, El Shorbagy, A.M.; **Gabr, M.E**. Impact of Traffic Congestion on Transportation Syatems: Challenges and Remediation- A Review. Mansoura Engineering Journal **2024**, 49, 1-29. https://doi.org/10.58491/2735-4202.3191.

28. Gabr, M. (2020) Design Methodology of a New Surface Flow Constructed Wetland System, Case Study: East South EL-Kantara Region North Sinai, Egypt. Port-Said Engineering Research Journal, Vol. 24, No. 1, pp: 23-34.

29. Gabr, M. (2020) Study of reclaimed water reuse standards and prospects in irrigation in Egypt" Port-Said Engineering Research Journal, Vol. 24, No. 1, pp: 65-75.

30. Gabr, M., El-Ghandour, H., Elabd, S. Rainwater Harvesting from Urban Coastal Cities Using Recharging Wells: A Case Study of Egypt. Port-Said Engineering Research Journal, 2022; 26(3): 17-36. doi: 10.21608/pserj. 2022.103188.1151.

31. Gabr, M., Rageh, O. Strategic planning model for the construction and remediation of irrigation networks: A case study for Egypt. Delta University Scientific Journal, 2023; 6(1): 85-102. doi: 10.21608/dusj.2023.291016

32. Gabr, M.E. A Roadmap for Establishment of an Early Warning System for Nile Water Quality in Egypt. Port-Said Engineering Research Journal, 2020; 24(2): 40-51. doi: 10.21608/pserj.2020.18756.1014.

33. Gabr, M. (2019) Drainage management problems evaluation: case study Baloza and EL-Farama Drains, North Sinai, Egypt. Journal of Water Resource and Protection, Vol. 11, 675-689.

34. Gabr, M, and ELZahar, M. (2018) Study of the quality of irrigation water in South-East El-Kantara Canal, North Sinai, Egypt. International Journal of Environmental Science and Development, Vol.9, NO. 6, 142-146.

35. Gabr, M. (2018) Magnitude and characteristics of sand dunes encroachment towards El-Sheikh Gaber Canal, North Sinai, Egypt. Twenty-first International Water Technology Conference, IWTC21 Ismailia, pp. 43-55.

36. Gabr, M. (2018) Wastewater reuse standards for agriculture irrigation in Egypt. Twenty-first International Water Technology Conference, IWTC21 Ismailia, pp. 234-246.

37. Gabr, M. (2018) Study of lowlands drainage problems, case study Kamal El-Den Hessen reclaimed area, North Sinai, Egypt. Journal of Water Resource and Protection, Vol. 10, 857-869.

38. Gabr, M. (2018) Evaluation of irrigation water, drainage water, soil salinity, and groundwater for sustainable cultivation. Journal of Irrigation & Drainage Systems Engineering, Vol.7, No.3.

39. Gabr, M., ElSabhawy, M., Ali R., et.al (2008) Defects Asphalt Roads Fezzan Region and Ways to Repair and Maintenance, the first conference of the building in the desert areas, December 2008, faculty of engineering, Sabha University, Libya.

40. Gabr, M., and Yacoub, S. (2003) Effect of Dam on River Regime", the 8th International conference for river sedimentations, November 2003, Cairo, Egypt.

41. Gabr, M. (2003) A Numerical Model for Flow and Sediment Transport on Alluvial River Bends. The 8th International conference for river sedimentation November 2003, Cairo, Egypt.

## LANGUAGE PROFICIENCY

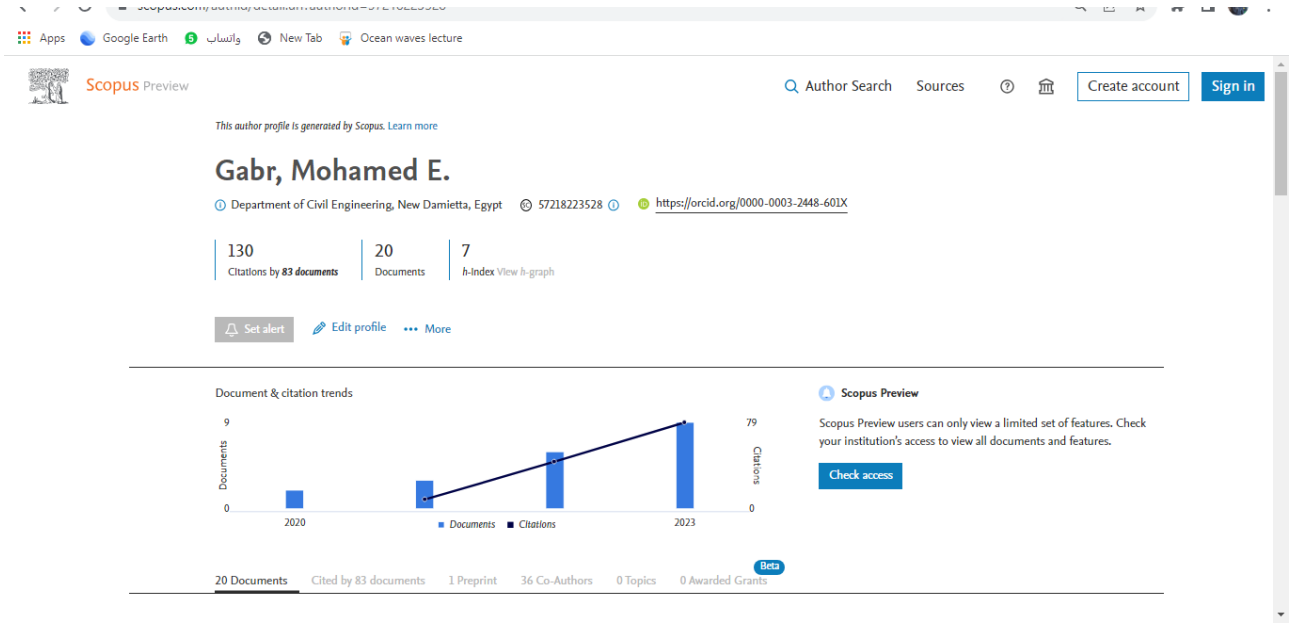
Arabic Mother tongue

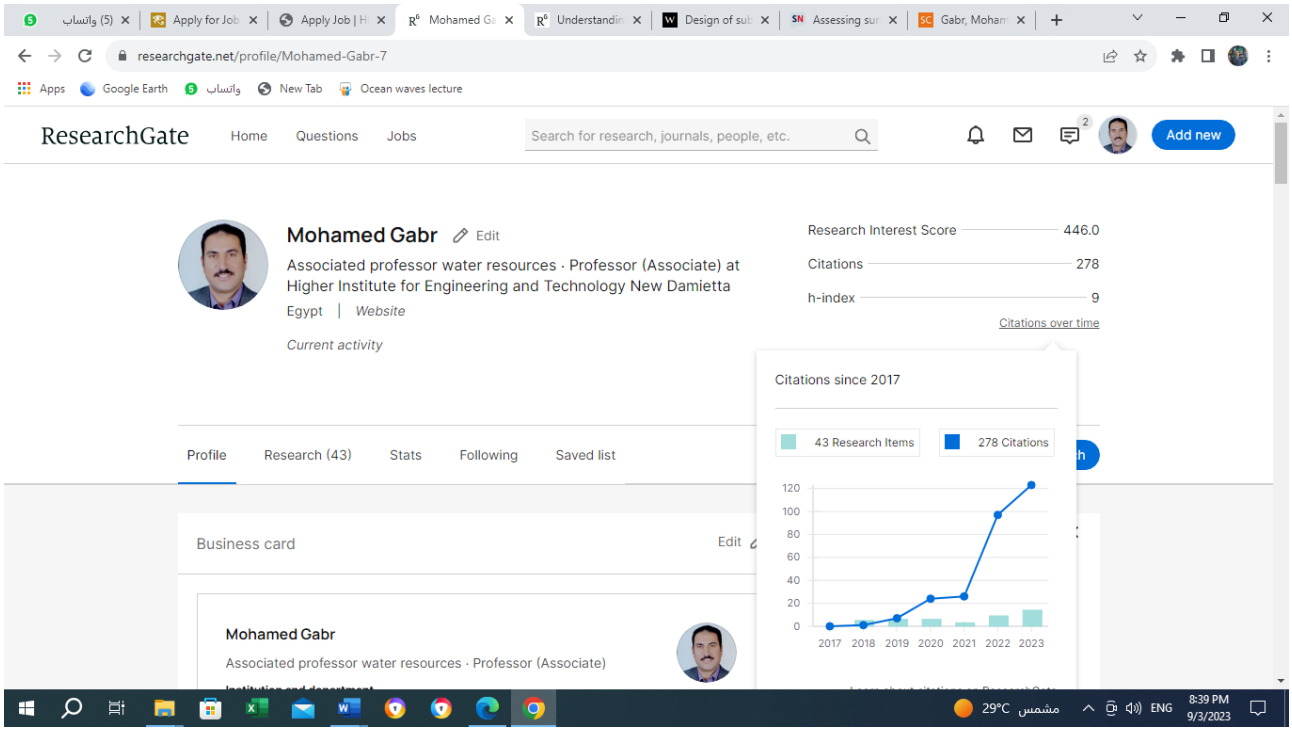
English Very Good

## COMPUTER SKILLS

large experience in internet research

High performance in using software (Auto Cad, SAP, WaterCAD, SewerCAD, MS Project, EPNET, Modflow …).



جـــامعة بورســـعيد
كليـــــة الهندســـة
قسم الدراســات العليا

# شهادة دكتوراه

تشهد كلية الهندسة جامعة بورسعيد بأن السيد المهندس/ محمد السيد أحمد جبر.

من مواليد : 1969/1/16 محافظة : بورسعيد الجنسية : مصرى

قد حصل على درجة دكتوراه الفلسفة فى الهندسة (الهندسة المدنية)

من جامعة قناة السويس فرع بورسعيد( سابقا).

عنوان البحث باللغة العربية

**" تولد وانتقال الرواسب بفعل حالات السريان الحرجة"**

عنوان البحث باللغة الإنجليزية

**"Generation and Transport of Sediments by Severe Flow Conditions"**

تاريخ موافقة مجلس الكليـــة : 2003/9/22م.

تاريخ موافقة السيد الأستاذ الدكتور رئيس جامعة قناة السويس بالتفويض عن مجلس الجامعة بتاريخ: 2003/9/29م.

وقد تحررت هذه الشهادة بناء على طلبه لتقديمها إلى من يهمه الأمر وذلك بدون أدنى مسئولية على الكلية أو الجامعة فيما يتعلق بحقوق الغير.

سددت الرسوم المقررة بقسيمة رقم : 0249111

الدراسات العليا

رئيس القسم

أمين الكلية

وكيل الكلية للدراسات العليا والبحوث

أ.د/ مؤمن محمد جعفرى

عميد الكلية

أ.د/ أيمن محمد إبراهيم

جمهورية مصر العربية

وزارة التعليم العالي

الوزير

# قرار وزاري

## رقم ٩٦١ بتاريخ ٢٨/٧/ ٢٠٢١م

وزير التعليم العالي والبحث العلمي:

بعد الاطلاع على القانون رقم ٥٢ لسنة ١٩٧٠ بشأن تنظيم المعاهد العالية الخاصة.

وعلى القانون رقم ٤٩ لسنة ١٩٧٢ بشأن تنظيم الجامعات ولائحته التنفيذية.

وعلى قرار رئيس جمهورية مصر العربية رقم ٢٧٠ لسنة ١٩٩٧ بتنظيم وزارة التعليم العالي.

وعلى القرار الوزاري رقم ١٠٨٨ لسنة ١٩٨٧ بإصدار لائحة المعاهد التابعة والخاضعة لإشراف وزارة التعليم العالي.

وعلى قرار اللجنة العلمية الدائمة لهندسة الموارد المائية رقم (١١٥) لوظائف الأساتذة والأساتذة المساعدين بالمجلس الأعلى للجامعات بتاريخ ٢٠٢٠/١١/٢٦م.

وعلى موافقة مجلس إدارة المعهد العالى للهندسة والتكنولوجيا بدمياط الجديدة بتاريخ ٢٠٢١/٤/١٤م.

وعلى تقرير اللجنة العلمية الثلاثية للمعاهد الصناعية والهندسية بتاريخ ٢٠٢١/٧/٧م.

وعلى ما عرضه السيد الأستاذ رئيس قطاع التعليم.

## قـــرر

مادة (١) تعيين السيد الدكتور/ محمد السيد أحمد جبر- المدرس بالمعهد العالى للهندسة والتكنولوجيا بدمياط الجديدة - فى وظيفة استاذ مساعد بقسم الهندسة المدنية بالمعهد.

مادة (٢) يلتزم المعهد بإخطار الوزارة بإقرار إستلامه العمل أو الرقم التأمينى خلال شهر من تاريخ إبلاغ المعهد بهذا القرار، وإلا يعتبر هذا القرار كأن لم يكن دون أدنى مسئولية على الوزارة طبقاً للقرار الوزارى رقم ٧٨٢ لسنة ٢٠١٤م الصادر فى هذا الشأن.

مادة (٣) على جميع الجهات المختصة تنفيذ هذا القرار.

وزير التعليم العالي والبحث العلمى

(أ.د/ خالد عبد الغفار)


رئاسة مجلس الوزراء
الهيئة القومية لضمان جودة التعليم والاعتماد
شهادة
تشهد الهيئة القومية لضمان جودة التعليم و الاعتماد أن :
د / محمد السيد احمد جبر
قد حضر
" المراجعة الخارجية لكليات ومعاهد التعليم العالى "
فى الفترة من ٢٤ يوليو ٢٠٢٣ إلى ٢٦ يوليو ٢٠٢٣
مدير ادارة التدريب
أد/ عطية السيد عبد العال
رئيس مجلس إدارة الهيئة
أد/ علاء كمال الدين عشماوى

## CERTIFICATE OF A CONSULTANT ENGINEER

Whereas the Decree of the Minister of Irrigation No. 1684/1972 providing for the establishment of the Consultant Engineers Registration Book and the establish of the Supreme Consulting Engineering Committee on **05/12/2023** and Council Supreme on **09/12/2023** of the works carried out by the Engineer, holder of the present Certificate, according to articles 2 & 3 of the above mentioned Ministerial Decision and its other items ,the present Certificate has been delivered to :-

Engineer / **Mohamed Elsayed Ahmed Gabr .**

Member of the syndicate No:- **2015/17** Consultant Engineer:- **7428/01** Engineering Branch : **Civil** in his Capacity as Consultant Engineer in the Field of :-

***{ Design Of Concrete Structures }***

**GENERAL SECRETARY**

M.H.Arafat

**Eng. / MAHMOUD HAMID ARAFAT**

Cairo in : 08/01/2024