

CURRICULUM VITAE

Anwar A. Aly, *Ph.D.*

Current: Assistant Professor, Soil Science Department,
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Biographical Sketch

Dr. Anwar A. Aly is a development expert, educator and a researcher with wide research and teaching experiences, particularly in the fields related to the sustainable management of land and water resources. He currently occupies the position of assistant prof. of soil science in the University of King Saud in the Kingdom of Saudi Arabia, and associate prof. of soil and water science dept. in the University of Alexandria in Egypt. In 2009 Dr. Anwar collaborate with EU-TEMPUS Programme on developing an "International MSc in Environment and water Resources Management". Between 2002- 2008, Dr. Anwar has been a member on the local council of Marsa Matrouh governorate (located in the western desert of Egypt), actively engaged in the area of policy-makers and planners for sustainable management of land and water resources in arid ecosystem. Dr. Anwar is strongly recommended to use the holistic ecosystem management approach that employs participatory, multidisciplinary and equitable techniques to develop the interventions and policies required to restore the ecosystem.

Dr. Anwar also believes that the **WATER** will be the oil of the twenty-first century. Successful water management will be the key to future economic growth and social wealth in both developed and developing countries.

Full Name: Anwar Abd El-Rahman Aly Ahmed

Date of Birth: November 19th 1975

Place of Birth: Siwa, Matrouh, Egypt

Marital Status: Married

Permanent Address: 21545 Aflaton Street, Soil and Water Science Department, Faculty of Agriculture (El-Shatby), Alexandria University, Alexandria, Egypt.

Education: **B.Sc.** in Soil and Water Science (very good, honor) June 1997, Faculty of Agriculture, Alexandria University, Alexandria, Egypt.

MS in Water Quality Evaluation for irrigation 2001, Faculty of Agriculture, Alexandria University, Alexandria, Egypt. Title: *Spatiotemporal Monitoring and Assessment of water resources in Siwa Oasis.*

PhD in Sustainable Ecosystem Management, 2007, Faculty of Agriculture, Alexandria University, Alexandria, Egypt. Title: *A Holistic Ecosystem Approach for Sustainable Management of Land and Water Resources in Siwa Oasis*.

Position Held:

1997-2001 Demonstrator in Soil and Water Science Department, Faculty of Agriculture, Alexandria University, Alexandria, Egypt.

2001-2007 Teaching Assistant Soil and Water Science Department, Faculty of Agriculture, Alexandria University, Alexandria, Egypt.

2007-2011 Assistant Prof. Soil and Water Science Department, Faculty of Agriculture, Alexandria University, Alexandria, Egypt.

2011-now Assistant Prof. Soil Science Department, College of Food and Agriculture Sciences, King Saud University, Riyadh, Saudi Arabia.

2014-now Associate Prof. Soil and Water Science Department, Faculty of Agriculture, Alexandria University, Alexandria, Egypt.

Duties and Responsibilities:

Teaching and lecturing in:

Soil Sciences 101: Soil characteristics

Soil Sciences 406: Soil, Plant, and fertilizers analysis

Soil Sciences 302: Properties of colloids

Water Sciences 123: Water quality evaluation for irrigation

Soil Sciences 404: Clay Mineralogy

Soil Sciences 13501: Land and water environmental pollution

Soil Sciences 311: Land reclamation

Agriculture 304: Agriculture and environment

Public Societies

Member in the Egyptian Environmental change societies

Member in the Egyptian soil science societies

Scientific Meetings and Conferences

1. Participate in the first Saudi conference of environment. King Khaled University, Saudi Arabia, 7-9 March 2016.
2. Participate on Geographic information system training course held at King Saud University, Deanship of skills development, during the period of 16-17/4/2015.
3. The 2nd Saudi International Environmental Technologies Conference. 10th-12th November, 2014 at KACST Headquarters – Conference Hall – Building 36 – King Abdullah Road – Riyadh, KSA.
4. Matra South Water management hold in Rotterdam, The Netherlands between 24th – 28th of June 2013, and Tunis, Tunisia from 16th – 22st of February 2014.

5. The first International Conference Climate Changes and Sustainable Development of Natural Resources 5-8 May 2014, Organized by: Scientific Society for Environmental Development (SSED), Kafrelsheikh University, Egypt.
6. Saudi Society for the Life Sciences conference, Dammam, Saudi Arabia, March, 2014.
7. One of Scientific Committee in the International Conference for Water Resources & Environment (ICWRE). hold on Marrakesh, Morocco 20-24 November 2011 <http://en.icwre.com/>
8. The Wageningen Conference on Applied Soil Science. hold on Wageningen, Holland, 18-22 September, 2011
9. ADVANCED RESEARCH WORKSHOP ((ARW)): Environmental Security: Panel on Water Security, Management and Control. Hold in Marrakech, Morocco. 31 May - 2 June 2010
10. The International Conference on Water Conservation in Arid Region" 12-14 Oct, 2009, Jeddah - Kingdom of Saudi Arabia
11. One of the Organizational Team on the 2nd International Symposium & Field Workshop on Living with Landscapes "Adaptation with Coasts and Arid Lands". Marsa Matruh and Siwa. 1-5 November 2009.
12. The Mediterranean Sea Basin ENPI CBC –Partner Forum, Amman 30 July, 2009.
13. The Geography and Global change **Conference**, Hold on the Geography and GIS dept., Faculty of Arts, Alexandria University, Alexandria, Egypt. 25 July 2009.
14. Land and water resources conservation from deterioration for sustainable development **workshop**, Hold on Soil and Water Science Dept., Faculty of Agriculture, Alexandria University, Alexandria, Egypt. 17 July 2009.
15. Attended **Scientific Meetings and** Visited the Aristotle University of Thessaloniki, Greece. In the Frame of the EU-TEMPUS Programme on developing an "MSc in Environment and water Resources Management at Alexandria University". February 2009.
16. International Eco-Health **Forum** 2008, Hold on Merida, Mexico. 1-5 December 2008.
17. Ninth International **Conference** on Dry-land Development (IDDC), Hold on the Bibliotheca Alexandrina, Alexandria, Egypt. 7-10 November 2008.
18. Egypt available water resources and future constrain **Conference**, Hold on the Geography and GIS dept., Faculty of Arts, Alexandria University, Alexandria, Egypt. 17 July 2008.
19. Attended FP7 Proposal Writing Workshop, Alexandria – April 2008.

Publications:

1. **Aly, A. A.**, Al-Omran, A. M., Sallam, A. S., Al-Wabel, M. I., and Al-Shayaa, M. S. (2016) Vegetation Cover Change Detection and Assessment in Arid Environment Using Multi-temporal Remote Sensing images and Ecosystem Management Approach. *Solid earth*, 7: 713-725. [doi:10.5194/se-7-713-2016](https://doi.org/10.5194/se-7-713-2016).
2. Fahad N. Al-Barakah, Abdurahman M. Gassas, **Anwar A. Aly** (2015). Water Quality Assessment and Hydrochemical Characterization of Zamzam Groundwater, Saudi Arabia. Under review in *Arabian Journal of Geosciences*.
3. Abdulrasoul M. Al-Omran, **Anwar A. Aly**, Mohammad I. Al-Wabel, Abdulazeam S. Sallam, Mohammad S. Al-Shayaa (2016). Hydrochemical Characterization of Groundwater under Agricultural Land in Arid Environment: a Case Study of Al-Kharj, Saudi Arabia. *Arabian Journal of Geosciences* 9: 68-85. DOI: 10.1007/s12517-015-2136-5.
4. **Aly A.A.**, H.M. Gaber, F. M. Kishk, and Abdulrasoul M. Al-Omran (2016) Long-term detection and hydrochemistry of groundwater resources in Siwa Oasis, Egypt. *Journal of the Saudi Society of Agricultural Sciences*. 15(1): 67-74. DOI: <http://dx.doi.org/10.1016/j.jssas.2014.04.003>.
5. **Aly A.**, A.M. Al-Omran, A. Khasha (2015). Water management for cucumber: Greenhouse experiment in Saudi Arabia and modeling study using SALTMED model. *Journal of soil and water conservation*. 70(1): 1-11. [doi: 10.2489/jswc.70.1.1](https://doi.org/10.2489/jswc.70.1.1)
6. Abdulrasoul Al-Omran, Fahad Al-Baraka, Abdullah Altuquq, and **Anwar Aly** (2015) Drinking Water Quality Assessment and Water Quality Index of Riyadh, Saudi Arabia. *Water Quality Research Journal of Canada*. 50(3): 287-296. [doi:10.2166/wqrjc.2015.039](https://doi.org/10.2166/wqrjc.2015.039)
7. Mohammad Al-Wabel, Adel Usman, Ahmed El-Naggar, **Anwar A Aly**, Hesham A Ibrahim, Salem Elmaghraby, Abdulrasoul Alomran. (2015). Conocarpus biochar as a soil amendment for reducing heavy metals availability and uptake by Maize Plants. *Saudi Journal of Biological Sciences* 22: 503–511. <http://dx.doi.org/10.1016/j.sjbs.2014.12.003>.
8. Abdulrasoul M. Al-Omran, Abdulazeam Sallam, **Anwar A. Aly**. (2014). Spatial monitoring and assessment of Al Kharj groundwater, Saudi Arabia. *Egyptian soil Science Society (ESSS, the 11th int. conf.)*. The first International Conference Climate Changes and Sustainable Development of Natural Resources, Kafrelsheikh University, Egypt 5-8 May 2014 (Abstract).
9. **Anwar A. Aly**, Yousef N.Y. Hasan, Abdullah S. Al-Farraj (2014). Olive mill wastewater treatment using a simple zeolite-based low-cost method. *Journal of Environmental Management*. 145: 341-348. <http://dx.doi.org/10.1016/j.jenvman.2014.07.012>
10. **Anwar A. Aly** (2014). Impact of irrigation management on shallow groundwater fluctuation and soil salinity: The Saltmed model. *Egypt J. of Soil Sci*. 54(4): 355-371. http://journal4.js.iknito.com/article_183_47.html
11. **Anwar Aly** (2015). Hydrochemical characteristics of Egypt western desert oases groundwater. *Arabian Journal of Geosciences*. 8 (9):7551–7564. [DOI 10.1007/s12517-014-1680-8](https://doi.org/10.1007/s12517-014-1680-8)

12. **Anwar A. Aly**, Abdulrasoul M. Al-Omran, and Mezal M. Alharby (2015) The water quality index and hydrochemical characterization of groundwater resources in Hafar Albatin, Saudi Arabia. Arab J Geosci. 8(6): 4177-4190 [DOI 10.1007/s12517-014-1463-2](https://doi.org/10.1007/s12517-014-1463-2).
13. Abdulrasoul M. Al-Omran, Abduazeam Sallam, **Anwar A. Aly** (2014) Spatial monitoring and assessment of Al Kharj groundwater, Saudi Arabia. The first International Conference Climate Changes and Sustainable Development of Natural Resources 5-8 May 2014, Organized by: Scientific Society for Environmental Development (SSED), Kafrelsheikh University. (Abstract).
14. **Anwar A. Aly**, Abdulrasoul M. Al-Omran, and Arafat A. alkhasha. (2013). Saltmed Model in Sustainable Irrigation Management in Saudi Arabia. Soil Science Society of America (SSSA). The ASA, CSSA, and SSSA International Annual Meetings. 3-6 Nov. Tampa, Florida, USA. (Abstract).
15. **Anwar A. Aly**, Abdulrasoul M. Al-Omran (2013). The Water Quality Index and Hydrochemical Characterization of Groundwater Resources in Al-Ahsa Oasis, Saudi Arabia. 4^{eme} édition du congrès international: Eau, Déchets et Environnement. Agadir, 18- 20 Décembre 2013.
16. Abdulrasoul M. Al-Omran, Ibrahim Louki, **Anwar A. Aly**. 2013. A Comparative Study of the Impact of Deficit Irrigation on Cucumber Yield planted on Greenhouse and Open Field under Arid Environment. Sustainable water use for securing food production in the Mediterranean region under changing climate conference. Agadir, Morocco, 10-15 March, 2013.
17. AL-Farraj A.S.; M.S .Al- Sewailem; **Anwar A. Aly**; M.I. Al – Wabel1; S.E. El-Maghraby. 2013. Assessment and heavy metals behaviors of industrial waste water on Riyadh City, Saudi Arabia. **The Proceedings of the International Academy of Ecology and Environmental Sciences**, 3(3): 266-277
18. **Anwar Aly**, Abdulrasoul Alomran, Mohamed Alwabel, Abdullah Almahaini. Mohammed Alamari. 2013. Hydrochemical and Quality of Water Resources in Saudi Arabia Groundwater: A Comparative Study of Riyadh and Al-Ahsa Regions. The Proceedings of the International Academy of Ecology and Environmental Sciences. 3(1): 42-51.
19. A.M. Al-Omran, S.E. El-Maghraby, **A.A. Aly**, Z. Al -Asmari, and M.E.A. Nadeem. 2012. Quality Assessment of Various Bottled Water Marketed in Saudi Arabia. J. of Environ. Monito. Asses. 185 (8): 6397-6406. [DOI: 10.1007/s10661-012-3032-z](https://doi.org/10.1007/s10661-012-3032-z).
20. Al-Omran A.M., I.I. Louki1, **A. A. Aly**, A. Al-Harbi, and M. Nadeem. 2012. Cucumber Yield Response to Deficit Irrigation at Open Field experiments on Riyadh, Saudi Arabia. Egypt J. Soil. Sci. 52 (3): 403-415.
21. Alomran M., I. I. Louki, **A. A. Aly**, M.E. Nadeem. 2013. Impact of Deficit Irrigation on Soil Salinity and Cucumber Yield under greenhouse condition in arid environment. **J. Agr. Sci. Tech.** 15: 1247-1259.
22. Abdulrasoul M. Al-Omran, and **Anwar A. Aly**. 2012. Status and New Developments on the Use of Brackish Water for Agriculture Production in the Near East Case study: [Saudi Arabia]. A report submitted to FAO, Cairo, Egypt.

23. Fawzy M. Kishk, **Anwar A. Aly**, and Hesham M. Gaber. 2011. Impact of irrigation management on water table fluctuation and soil salinity in Siwa Oasis. The Wageningen Conference on Applied Soil Science, September 18-22, 2011 (Abstract).
24. **Anwar A. Aly**, and Mohamed E. Badawy. 2011. Adsorption of Cu (II), Ni (II) and Pb (II) Ions in Aqueous Solutions by a Biopolymer Chitosan at Different Molecular Weights. *Journal of Environmental Science and Engineering*. 1(4): 421-427. Available online at: http://www.davidpublishing.org/journals_info.asp?jId=807
25. **Aly A.A.** & L. Benaabidate, 2010. Salinity of water resources in the Siwa Oasis: Monitoring and diagnosis. *Water-Rock Interaction*. Brikle & Torres Alvaro (eds). Taylor & Francis Group, London, pp: 363-365.
26. **Aly, Anwar A.**, Abdelsalam A. Abbas, and Lahcen Benaabidate. "Hydrochemistry and Quality of Groundwater Resources in Egypt: Case Study of the Egyptian Southern Oases." *Water Security in the Mediterranean Region*. Springer Netherlands, 2011. 239-254. DOI: [10.1007/978-94-007-1623-0_17](https://doi.org/10.1007/978-94-007-1623-0_17).
27. **Aly A.A.** 2009. A comparative study of groundwater quality of different groundwater sources in some western desert oases in Egypt. The International Conference on Water Conservation in Arid Regions (ICWCAR'09). Hold on Water Research Center - King Abdulaziz University. Jeddah – Saudi Arabia, October 12 – 14, 2009.
28. Ismail H. A., I. M. Moharam, O. Abde Kawy, and **A.A. Aly**. 2009. Integrated Management for Sustainable Use of El Moghra Land in Western desert of Egypt using GIS, RS and modeling. The Geography and Global Change Conference. Hold on the Geography and GIS dept., Faculty of Arts, Alexandria University, Alexandria, Egypt. 25 July 2009.
29. **Aly A.A.**, F. M. Kishk, H.M. Gaber and H.M. El-Sheemy. 2009. The changes detection of Siwa oasis ecosystem land covers using Remote Sensing. The Geography and Global Change Conference. Hold on the Geography and GIS dept., Faculty of Arts, Alexandria University, Alexandria, Egypt. 25 July 2009.
30. **Aly A. A.**, F. M. Kishk, and H. M. Gaber. 2009. Addressing the problem of water logging in the Siwa oasis. 2nd International Symposium & Field Workshop on Living with Landscapes “Adaptation with Coasts and Arid Lands”. Marsa Matruh and Siwa. 1-5 November 2009 (Abstract).
31. **Aly A. A.**, F. M. Kishk, and H. M. Gaber. 2008. A Holistic Ecosystem Approach for Sustainable Management of Land and Water Resources in Siwa Oasis. International Ecohealth Forum 2008. Hold on Merida, Yucatan, Mexico. December st, 2008.
32. **Aly A.A.**, H.M. Gaber, and F. M. Kishk. 2008. Long term change detection and assessment of groundwater quality in Siwa Oasis. Egypt available water resources and future constrain conference, Hold on the Geography and GIS dept., Faculty of Arts, Alexandria University, Alexandria, Egypt. 17 July 2008. PP. 19.

Training course:

Supervision and teaching the water quality training course held in King Saud University between 13 October and 17 November 2015.

Reviewer in the journals of:**AGWAT: Agricultural Water Management**

1. Manuscript Number: AGWAT7585 Title: Assessment of soil and nutrient losses by runoff under different soil management practices in an Italian hilly vineyard (2015).
2. Manuscript Number: AGWAT5779 Title: Time-course of photosynthesis and non-structural carbon compounds in the leaves of tea plants (*Camellia sinensis* L.) in response to deficit irrigation (2015).

HAZMAT: Journal of Hazardous Materials

Manuscript Number HAZMAT-D-11-02525 and titled "Schiff base ligands immobilized on a $\text{SiO}_2\text{-Al}_2\text{O}_3$ mixed-oxide as adsorbents for heavy metals" for Journal of Hazardous Materials on July 1, 2011.

JSSAS: Journal of the Saudi Society of Agricultural Sciences**Books and Literature by Anwar**

1. Land Reclamation, Drainage and Irrigation, 2009. Elfath, Alexandria (*in Arabic*).
2. Desert and Agriculture, 2010. Elfath, Alexandria (*in Arabic*).

Projects carried out:

1. C-PI on: Sustainable Development of Fragile Agro-ecosystems: The case of the Siwa Oasis Funded by ARDF, Egypt. 2009-2010.
2. C-PI on: The impacts of Lake Mariut deterioration on GHGs emissions and carbon sequestration: Implications for its sustainable development. Funded by Alexandria University, Alexandria, Egypt. 2009-2011
3. Partner on: The Affect of Selenium addition on increasing wheat yield. Funded by the ministry of Agriculture, Egypt. 2008-2009
4. Partner on: Developing "MSc in Environment and water Resources Management at Alexandria University" Funded by EU-TEMPUS Programme. 2008-2009.

Current Projects:

1. Co-PI on: A Holistic Ecosystem Approach for the Sustainable Development of Fragile Agro- ecosystems: A case study of the Al-Kharj Ecosystem, Saudi Arabia. Funded by King Abdulaziz City for Science and Technology 2012.
2. PI on: Sustainable Irrigation Water Management Using Regulated Deficit Irrigation and the Partial Root-Zone Drying Method: the SALTMED Model Application. Funded by King Abdulaziz City for Science and Technology 2013.

Project Reviewer and Evaluation:

Evaluated Project titled: Study ways to activate the use of gray water and drainage water in homes and small facilities. King Saud University, Saudi Arabia, 2 October 2010.