

Curriculum Vitae

Prof. Dr. Noha Samir Donia

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EDUCATION

Sep 2002- Jan 2005 Completion of the professional Program in Environmental Engineering. American University, Cairo, Egypt.

July 1999- April 2002 Awarded PhD degree in Environmental Engineering.

Institute of Environmental Studies and Research. Ain Shams University.
Thesis title: Study of Water Quality Control of Rosetta Branch, Nile River, Egypt.

Sept 1997- May 1998 Awarded Degree of Master of Science with grade distinction
International Institute for Aerospace Survey and Earth Sciences
Enschede, Holland.

Specialization: Environmental systems analysis and monitoring
Thesis title: Integration of GIS and Computer Modeling to
Study the Water Quality of Lake Naivasha, Kenya.

Sept 1996- Aug 1997 Awarded Post Graduate Diploma
International Institute for Aerospace Survey And Earth Sciences
Enschede, Holland.

Specialization: Water Resources Surveys.

Sept 1995- Dec 1995 Awarded Post Graduate Diploma
Maastricht School of Management (RVB/MSM)
Maastricht, Holland

Specialization: Management of the Environment.

Sept 1988- June 1993 Awarded B.Sc. of Engineering

Grade: Very Good With Honour Degree

Ain Shams University, Cairo, Egypt.

Major: Electrical Engineering

Minor: Automatic Control and Computer Systems

Graduation Project: Building a General Expert System Shell with
Application In Agriculture Domain with Grade Excellent.

WORK EXPERIENCE

- Jul 2014- now** **Head of** Environmental Engineering Department,
Institute of Environmental Studies and Research,
Ain Shams University
- Dec 2013- now** **Environmental Hydraulics Professor**
Environmental Engineering Department,
Institute of Environmental Studies and Research,
Ain Shams University
- Sep 2008 - Sep 2013** **Associate Professor**
Environmental Engineering Department, Institute of
Environmental Studies and Research, Ain Shams University
- June 2002 – Sep 2008** **Lecturer**
Environmental Engineering Department, Institute of
Environmental Studies and Research, Ain Shams University
- July 1999 – June 2002** **Assistant Lecturer**
Engineering Department, Institute of Environmental Studies
and Research, Ain Shams University.
- Sep 95 – July 1999** **Instructor**
Engineering Department, Institute of Environmental Studies
and Research, Ain Shams University.
- Sep 1993- Sep 1995** **Software Programmer**
Responsible for Developing Applications Using Informix
Database under Unix Operating System.

CAREER RELATED EXPERIENCE

Teaching Experience:

Teaching the following courses: Water Quality Assessment, Water Quality Modelling, Water Pollution Control, Environmental Pollution, Environmental Modelling, Environmental Impact Assessment, Environmental Management, Cleaner Technology and Pollution Prevention, Environmental Applications of GIS techniques.

Research Areas:

- Water resources management
- Water Quality modeling
- Environmental impact assessment
- Remote sensing and GIS applications is in water resources
- Wastewater Reuse

Administrative Experience: Manager of information technology unit and management information system project (MIS) in the institute of environmental studies and researches, Ain Shams university.

Years of Experience in Environmental Field: 15 years

Working with international organizations in Environmental Field:

World Bank- European Union and UNESCO Organizations.

Projects related to field of environment :

- From 2003 to 2005,
Water Quality Modeling expert in the project of " **Melmarina (Monitoring and modelling coastal lagoons: making management tools for aquatic resources in North Africa)** in coordination with NARSS and UNESCO organizations to fulfill the following tasks:
 1. Prototype Geographical Information System of the Lake Manzala.
 2. Eutrophication Assessment of lake Manzala using GIS Techniques.
 3. Determination of the water quality index of Manazala lagoon using GIS's Trend Analysis of water quality of Lake Manzala.
 4. Water Quality Modeling of Lake Manzala using MIKE 3 model.
- From 2006 to 2007,
Water Quality Modeling expert in the project of **Nubaria Canal Water Pollution, Mitigation of Problems Related to Use and Recycling of Drainage Water of Nubaria Canal for Treated Potable Drinking Water** in coordination with The Commission of the European Union and the water company to fulfill the following tasks:
 1. Review reports, studies, monitoring data, interview stakeholders, conduct field investigations to assess the present situation of water quality. Design a sampling program for water quality assessment at drinking water intakes. Analyze for all pollution parameters that may affect drinking water quality. Take samples of treated drinking water and analyze for suitability as drinking

water. Samples shall also be taken from any water bodies affecting at present or expected to affect in the future, the water quality of Nubaria Canal.

2. Conduct an analysis to predict future water quality at drinking water intakes taking into consideration government's plans for increased water reuse of drainage water and for supplemental supply to Nubaria Canal from Rosetta Branch.
 3. Identify adequate treatment techniques and methods to guarantee safe drinking water according to Egyptian Health and WHO Standards.
- From 2008- 2009,
Water Quality Modeling expert in the Environmental and social impact assessment of the Integrated Sanitation & Sewerage Infrastructure Project (ESIA) that is launched for providing sanitation services to selected villages in the Nile Delta Region – specifically in the three Governorates of Beheira, Gharbeya and Kafr El-Sheikh. Consultancy services agreement for this project was signed on between the Holding Company for Water & Wastewater (HCWW) as the institute of environmental studies and researches with a fund from the WorldBank. I was responsible for the following tasks as:
 1. Water quality Assessment of the canals, drains and groundwater.
 2. Water Quality Modeling of Gharbia Drainage system
 3. Participating in the Environmental Impact Assessment
 4. Participating in Environmental management plan
 5. Editing and Summarizing the whole document
 - From 2009- 2010,
Urban Water Modeling Consultant in SWITCH research programme, implemented and co-funded by the European Union in cooperation with CEDARE to fulfill the following tasks:
 1. Developing a detailed model for the urban water system of Alexandria city under study, based on secondary data available in reports and additional data provided by AWCO and WWDC.
 2. Validation and refinement of the current representation of the system in clusters;
 3. Collection and processing of the relevant cluster data with regard to: (a) water use, (b) network connections (water supply and wastewater), (c) land use characteristics, in order to refine the preliminary modeling approach and develop a more accurate representation of the urban water system under study.
 4. Use of the Aquacycle software for simulating the current situation of the urban water system;
 5. Verification of the representation of the current system and calibration of the model.
 6. Conducting on potential future scenarios concerning expansion of the current system and how these could be modelled through Aquacycle.

- From 2012- 2016

Modeling consultant for undertaking hydrodynamic and water quality modeling of Lake Mariout and supply models to beneficiary agencies funded by GEF in coordination with the Egyptian Environmental Affairs Agency Alexandria Coastal Zone Management project.

Publications

1. Donia Noha, Environmental impacts of Bhr El Baqar Drain on Manzala lake water Quality using Remote sensing, ICNEEE 2016, Faculty of Engineering and Technology, Future University, Cairo, Egypt.
2. Donia, N., ,Bahgat, M, Water quality management for Lake Mariout, Ain Shams Engineering Journal, may 2015
3. Donia Noha , lake maryut monitoring using remote sensing, Eighteenth International Water Technology Conference, IWTC18 Sharm ElSheikh, 12-14 March 2015
4. Donia Noha ,Aswan High Dam Reservoir management system, journal of hydroinformatics, may 2013.
5. Donia Noha, Eleni Manoli and D. Assimacopoulos, Modelling the urban water system of Alexandria using the Aquacycle model. Journal of Water Reuse and Desalination, Jan 2013.
6. Donia Noha Samir. Development of El-Salam Canal Automation System. Journal of Water Resource and Protection, 2012, 4, 597-604 doi:10.4236/jwarp.2012.48069 August 2012.
- 7 .Donia Noha and Hanan Farag, Monitoring burullus lake using remote sensing techniques Sixteenth International Water Technology Conference ,(IWTC16), Istanbul – Turkey, 7 – 10 May 2012
8. Donia. Noha Application of remotely sensed imagery to watershed analysis a case study of Lake Karoun, Egypt Arabian Journal of Geosciences ISSN 1866-7511 DOI 10.1007/s12517-012-0621-7, June 2012.
9. Donia. Noha Water quality management of lake Tamsah, Egypt using geographical information system (GIS) international journal of environmental science and engineering (ijese) Vol. 2: 1-8, June 2011
10. Donia Noha Apportionment of Pollution Sources of El Salam Canal Using Statistical Techniques, Nile water Science engineering journal, Vol 4, issue 4, pp. 71-82 December 2011,

11. Ghada Soliman , Mohamed Nour El-Din Eweis, Noha Donia , and Sherif Mohammady ElSayed A Java-based change detection application for environmental monitoring Malaysian Journal of remote sensing & gis Volume 2, June 2011
12. Donia, N.S and Ahmed M. A. Moussa Water Quality Changes Due to Al-Sukhna Power **Plant** in Shams Journal of Civil Engineering (ASJCE) Vol. 2. September 2010
- 13..Donia, N.S Modelling of Drainage Water Reuse in the Western Nile Delta, SIMHYDRO, NICE, 2-4 JUNE 2010.
14. Donia, N.S, Oil Spill Modelling as a tool for coastal pollution control, 6th International Symposium on Environmental Hydraulics, which will be held in Athens, Greece from June 23rd to June 25th, 2010.
15. Donia, **N.S.** and Farag, H. A., A Waste Load Model Analysis For El Noubariya Canal Drinking Water Abstraction, Egypt. Fourteenth International Water Technology Conference, IWTC 14 2010, Cairo, Egypt
16. Farag, H A.,El-Afandi, G S., **Donia, N.S.** Estimation of Evaporation Using A Weather Forecasting Model, Case Study: El-Manzala Lake, first international conference on coastal zone management of river deltas and lowland coastlines, March 2010, Cairo, Egypt
- 17 Donia, **N.S.**, Application of Remotely Sensed Imagery to Watershed Analysis; A Case Study of Lake Karoun, Egypt. Fourteenth International Water Technology Conference, IWTC 13 2009, Cairo, Egypt.
- 18. Donia N. S**, Decision Support System for Water Quality Control of El Salam Canal, Journal of Faculty of Engineering, Ain Shams University, Vol. 43, No. 2, June 2008.
- 19.. Maha Adel Zaki , **Noha Samir Donia** , Medhat Saad Aziz and Iman Mahmoud El-Azizy, River Nile Banks Stability Analysis Model Case Study (Beni-Mazar Reach - Egypt), Twelfth International Water Technology Conference, Alexandria, Egypt, March 27-30, 2008.
20. B. M. Heza, M. El-din, **N. S. Donia** and A. M. Refaat , "Water Quality Improvement of Drains Polluted by Wastewater using Conventional Weir" Y., Twelfth International Water Technology Conference, Alexandria, Egypt, March 27-30, 2008.
21. **Noha Donia**, Water Quality Management Of Lake Tamsah Using Geographical Information System (GIS).V International Symposium On Environmental Hydrology September (3rd - 5th) , 2007 : Cairo, Egypt
- 22 Hanan Farag and **Noha S. Donia.**, Monitoring lake karoun using remote sensing and

GIS techniques V International Symposium On Environmental Hydrology September (3rd - 5th) , 2007 : Cairo, Egypt.

22 Ahmed M. and **Donia N. S.**, Spatial Investigation of the Water Quality in Lake Manzala Using GIS Techniques. The Egyptian Journal of Remote Sensing and Space Sciences, ISSN 110-9823, Volume 10, p.p 63-86, April 2007.

23. Mahmoud H. Ahmed, Belal M. El-leithy and **Noha S. Donia**, A Remote Sensing Approach for Detecting Ecological Changes of Lake Manzala, Egypt, Journal of Al Azhar University, Engineering Sector (JAUES), ISSN 1110-6409, Volume 2, Number 3, April 2007.

24 **Donia N. S.**, Ahmed M. and Eric Kock Rasmussen, Water Quality Modeling of Manzala Lake, Egypt, Second Ain Shams University International Conference on Environmental Engineering , April 2007, Faculty of Engineering, Cairo, Egypt.

25 Mohamed E. Abdel Naby, Mohamed T. Abdel-Aziz., Iman M. Elazizy and **Noha S. Donia**, Modeling The Sedimentation And Erosion For River Nile (Kasr El-Nile Area), Journal of Faculty of Engineering, Vol. 42, March 2007, Ain Shams University.

26. **Donia N. S.**, Survey of Potable Water Quality Problems in Egypt, 11 th International Conference of Water Technology (IWTC 2007), March 2007.

27. **Donia N. S.**, W. Fayez, Mostafa S. and Salem A., The Influence of Using Information Technology In Upgrading Learning Strategy in Ain Shams University, the First Pan Arab Conference on Current and forthcoming Environmental issues in the Arab region”, IESR, February 24-26, 2007.

28 Heikal M. T., **Donia N. S.** and Yousry M. M., Development of A Numerical Model For Prediction Relationships Between Water Quality And Water Quantity In Nile River, The First Pan Arab Conference On Current And Forthcoming Environmental issues in the Arab region”, IESR, February 24-26, 2007.

29 Hosny, A. H. H. ; El Mikawi, M. A. , Donia, N. S., Mohamed A. S. and Hassan, A. M. Implementation Of The Environmental Management Systems In The Construction Industry In Egypt, the First Pan Arab Conference on Current and forthcoming Environmental issues in the Arab region”, IESR, February 24-26, 2007.

30. Misbah, A. A., Donia, N. S., Yehia, M. M., and Mohamed, H. E., Evaluation of Agricultural Drains And Related Impacts On The Suitability of Rosetta Branch Water For Irrigation, the First Pan Arab Conference on Current and forthcoming Environmental issues in the Arab region”, IESR, February 24-26, 2007.

31. Farid M. N., Donia N. S and Gamal H., Drainage Water Quality assessment in the Middle Delta. Journal of Al-Azhar University, Engineering Sector, Published by the Faculty of Engineering, Al-Azhar University, Vol. 2, No. 2, p.p. 171-182, Jan 2007.

32. El Bahrawy A, N., Refaat A. M., Donia N. S., Tawfic T. A., Heza Y. B. and Hamed M. A., Improvement of Water Quality in Rahawy Drain by using Aeration Weirs. Journal of Environmental Science, Institute of Environmental Studies and Researches, Ain Shams University, Vol (12), No 2, p.p. 101-122, June 2006, ISSN 1110-0826.
33. Ebeid M. E , A. N. Hassan, **N. S. Donia**, A. A. Abdel-Sattar and S. M. Abdel-Wahab Prediction of Malaria Risk Using Remote Sensing and GIS Techniques, Case study : Fayoum Area, ,Egypt. Workshop on Remote Sensing and GIS: Techniques and Applications. 25-28 November 2006. Arab School of Science and Technology (ASST), State of Kuwait.
- 34 **Donia Noha**, Mapping of Water Quality Index (WQI) using Geographical Information System (GIS) as Decision Supporting System Tool, 6th (AARSE 2006), ISBN Number 1-920-01710-0, 30 October-2 November 2006.
35. **Donia N. S.** and Ahmed M., Remote Sensing for Water Quality Monitoring of Lakes. Case study: Lake Manazla, 7th international Conference of Hydroinformatics (HIC 2006), Nice, France, 4-8 September 2006.
36. Khalifa A., El Bahrawy A., **Donia N. S.** and Gamal H., Evaluation of the reuse of drainage water using Modelling techniques case study: Gharbia Drain, Egypt., 7th international Conference of Hydroinformatics (HIC 2006), Nice, France, 4-8 Sep 2006.
37. **Donia N. S.** and Ahmed M., Remote Sensing for Water Quality Monitoring of Lakes. Case study: Lake Manazla, 7th international Conference of Hydroinformatics (HIC 2006), Nice, France, 4-8 September 2006.
- 38 Ebaid M. E., Hassan A. N., Abdel- Wahab S. M. Amal. **Donia N. S.** and Abdel-Sattar A. A., Relationship Between Satellite Derived Data Built Environment And Malaria In Fayoum, Egypt, , Journal of Environmental Science, Volume (12), No. (2), ISSN 1110-0826, June 2006.
- 39 El Azizy I. M., Abdel Aziz T. M., **Donia N. S.** and Abel Naby M. E., Environmental Impacts of Morphological Changes in Kasr El-Nile Area, Cairo. , Journal of Environmental Science Volume(12), No (1), ISSN 1110-0826, June 2006.
- 40 H. Farag and **N. Donia**, Spatial Modeling Approach to Water Pollution Monitoring of Drainage System (El-Fayoum), 10 th International Conference of Water Technology, IWTC, March 2006.
- 41.. **Donia N. S.**, and H. Farag, Modeling Karoun Lake Watershed Using A GIS Linked Water Quality Model, 1st Inter. Conf. on Envir. Change of Lakes, Lagoons and Wetlands of the Southern Mediterranean Region (ECOLLAW, 2006), 3-7 January, 06, Cairo, Egypt.

42 M. H. Ahmed, B. M. El-leithy, **N. S. Donia** and S. M. Arafat, Monitoring The Historical Changes of Lake Manzala Ecosystems During The Last Three Decades Using Multidates Satellite Images, 1st Inter. Conf. on Envir. Change of Lakes, Lagoons and Wetlands of the Southern Mediterranean Region (ECOLLAW, 2006), 3-7 January, 06, Cairo, Egypt.

43 M.A. Ahmed, **Noha Donia** and Mamdouh A. Fahmy, Eutrophication Assessment of Lake Manzala using GIS Techniques, Journal of Hydroinformatics, 8.2, ISSN 1464-7141 International Water Resources Association IWA, April 2006.

44.. El Khouly M.S., El Nadi M. H., Zahran M. F., **Donia N. S.** and Ibrahim M. S., Reuse of Produced Wastewater from Natural Gas Industry in Irrigation, Journal of Environmental Science, Vol (10), No (4), ISSN 1110-0826, June 2005.

45.. **Donia N. S.**, Assesment and Re-Allocation of drinking water intakes along Rosetta Branch, IV International Symposium on Environmental Hydrology, ASCE-EGS, June 2005.

46 **Donia N. S.** and Farag H., Development of River Nile Water Quality Information System. ASCEE-1, First Ain Shams University International Conference on Environmental Engineering , April 2005, Faculty of Engineering, Ain Shams University, Cairo, Egypt.

47 **Donia N. S.**, Rosetta Branch Waste Load Allocation Model, 9 th International Conference of Water Technology, IWTC, March 2005.

48 **Donia N. S.**, Water Quality Assessment of Temsah Lake, Egypt. Al-Azhar Engineering Eighth International Conference, Dec 2004 and AL-AZHAR University Engineering Journal, AUEJ, Vol 8, No 1, Jan 2005.

49 Hussein M., **Donia N. S.** and EL-Leithy B., Using Remote Sensing Data for Assessing the Optical Characteristics of Alexandria Coastal Water, Egypt, XXth ISPRS Congress "Geo-Imagery Bridging Continents", Vol XXXV, Part B7, p.p. 1295-1300, ISSN 1682-1750, 12-23 July 2004, Istanbul, Turkey.

50 El Adly R. A., Abdel-Aziz A. G., **Donia N. S.** and Ibrahim Helal, A study on the Recovery of Used Transformer Oil by Acid/Kiln Dust Treatment, Journal of Environmental Science, Volume (8), No.(3) ISSN 1110-0826, June 2004.

51. **Donia N. S.**, Azizi I. and Khalifa A.K., "Industrial Pollution Control of Rosetta Branch, Nile River, Egypt", 7 th International Conference for Water Technology, June 2003, Cairo, Egypt.

52. **Donia N. S.**, "Environmental Management As An Instrument For Sustainable Development In Developing Nations", 13th International Environmental Conference on:

“Environmental Protection is a Must”, May 2003, Alexandria, Egypt.

53 **Donia N. S.**, Azizi I. and Khalifa A.K., “Water Quality Management of Agricultural Drains, Rosetta Branch, Nile River, Egypt, 7th National Conference on Environmental Studies and Research: Towards A Better Environment: The Present and The Future, April 2003, Cairo, Egypt.

54. **Donia N. S.**, “A Study of Water Quality Control of Rosetta Branch”, the 4th International Conference on Role of Engineering Towards a Better Environment, Dec 2002, Alexandria, Egypt.

55. **Donia N. S.**, “Evaluation of Using DUFLOW Model for Rosetta Branch, River Nile, Egypt”, Journal of Environmental Science, Vol: 3, P.15-25, ISSN 1110-0826, Dec 2001.

56 **Donia N. S.**, “Integration of GIS and Remote Sensing Techniques for Water Quality Assessment – Case Study: Lake Naivasha, Central Rift Valley, Kenya”, International Conference on Integrated Management of Water Resources in the 21st century, Nov 1999, Cairo, Egypt.

57. **Donia N. S.**, “Integration of GIS and Computer Modeling to Study the Water Quality of Lake Naivasha, Central Rift Valley, Kenya”, ASCE Middle East Regional Conference and the 2nd International Symposium on Environmental Hydrology, May 1999, Cairo, Egypt.

58. **Donia N. S.**, “Ecosystem Approach to Management of Tamsah Lake in Egypt”, Vth National Conference for Environmental Studies and Research on Egyptian Desert Environmental Development, May 1998, Cairo, Egypt.

HONORS, AWARDS, GRANTS RECEIVED

Research Fellowships:

Awarded a research fellowship for funded by Ain Shams University and National Organization of Fishery for the Water Quality Assessment of Tamsah lake with these specific objectives:

1. to assess the present water quality status of the lake,
2. to identify the major pollution sources affecting the lake,
3. and to investigate the change of water quality of the lake during the last 10 years

Awards:

The best PhD thesis in the institute of environmental studies and researches, Ain Shams University, for year 2002

Traineeship

April 7-10, 2003 Participation In The First ICAMS Nile Delta Workshop on "Information Technology For Coastal Zone Management of The Nile Delta: Stakeholder Priorities And Needs", Ismailia, Egypt.

Oct 4-15, 1998 Completion of Training Course On The Pollution of Marine Environment And Fresh Water With oil and Treatment Techniques, National Research Center, CAIRO, Egypt.

May 11-14,1996 Participation in the Seminar and Workshop on Information Systems Technology held in Cairo, Egypt.

Sep 25- 29, 1994 Attendance of "Fast Track To Sybase" course in OpenSoft company.

Aug – Sept, 1992 Maintenance & Sales Engineer for Radio equipment, Suez Electronics Company.

July– Aug, 1991 Work Experience On Basic Programming for a Microcontroller,Data Communication–Protocol For Car Navigation, Logic Circuits In Radio Holland Group, Research & Development Department, Holland.

SPECIAL SKILLS

Computer Skills - Microsoft Office and SPSS programs
-Working Experience of GIS Software .
- Proficiency in Standard and Relational Databases Programs
- Proficiency in Water Quality models and Software Programs

Languages Proficiency in spoken & written Arabic (Mother –tongue),
Excellent in spoken & written English, French (Alliance Francaise).