

Name : Medhat Saad Aziz
Date of Birth : 11/11/1961
Place of Birth : Cairo, Egypt
Occupation : Director, Nile Research Institute, National, Water
Research Center
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Academic Qualifications:

Professor, National Water Research Center, June, 2004.

Associate Professor, National Water Research Center, June, 1999

Ph.D., March, 1994, Dam Breaching Model, Utah State University, USA

Ms.C, Dynamic Stability of Earth Dams, Utah State University, USA

Bs.C. Civil Engineering, Assiut University, 1984, Egypt

Phi Kappa Phi Honor membership which is given for the top USA students.

Employment Record:

2009-now : Director, Nile Research Institute, National Water Research Center

2008-2009 : Director, Survey Research Institute, National Water Research Center

2003-2008 : Deputy Director, Nile Research Institute, National Water Research
Center

2001-2003 : General Secretary, Nile Research Institute, National Water Research
Center

1994-2003 : Head of Hydraulic Structure Protection Department, Nile Research

Institute, National Water Research Center

1984-1994 : Researcher, Nile Research Institute, National Water Research Center

National & International Membership

- National delegates to International Federation of Surveyors (FIG) Commission 4
- Committee Member of the proposed “Unified Nile Law”.
- Committee Member of the National Hydrology Branch Committee.
- Committee Member of the National Water Research Directors Board.
- Scientific Organizing Committee member for the Waterfront Symposium, Cairo, 1994.

Scientific Experiences:

- Consultant for Sweeko Firm for Watershed Management Project, Eastern Nile Projects, 2007.
- Creating and supervising Nile River Gauging Stations Re-Evaluations Project. This Project is funded by the Ministry of Water Resources and Irrigation starting January 2009.
- Supervising Sea Water Level Measuring Project along the Egyptian Coasts through a protocol with Egyptian Navy.
- Supervising Nile River Hydrographic and topographic digital map production.
- Lake Nasser Sedimentation and flow simulation and Evaluations.
- Nile River water resources forecasting and evaluation.
- Hydraulic structures safety analysis and operation
- Nile River Banks Protection and waterfronts.
- Greater Cairo Metro Nile Crossing Project

- Developed many mathematical models for different Nile River and Lake Nasser Scientific Studies.
- Academic Supervising for Ms.C. and Ph.D. Thesis,
- Teaching Assistantship for Geotechnical Stability Analysis, College of Engineering, Utah State University, USA, 1994.
- Organizing and teaching for many training courses given for the Ministry of Water Resources and Irrigation engineers and held by Nile Research Institute.
- Teaching courses organized by DAAD Organization for the engineers graduated from German Universities.
- Organizing and teaching Dam Safety and Design Course given for the Ministry of Water Resources and Irrigation engineers, Isna, Egypt.

PUBLICATIONS

1. Aziz, Medhat. Dynamic Stability of Earthdams. M.Sc. Thesis. Utah State University, Utah, USA, 1993.
2. Aziz, Medhat. Dam Breaching Model. Ph.D. Dissertation. Utah State University, Utah, USA, 1994.
3. Aziz, Medhat, Magdy Samuel, and Ahmed Hamouda. Dynamic Analysis of EL-Walidia Waterfront. International Symposium on River Waterfront Development, Cairo, Egypt, 1994.
4. Aziz, Medhat. Soil Parameters Analysis for Nile River Banks. First International Conference on Civil Engineering, Helwan University, Cairo, Egypt, 1998.
5. Aziz, Medhat and M.Rafeek Abdelbary. Naga Hammadi Barrage Stability Analysis. First International Conference on Civil Engineering, Helwan University, Cairo, Egypt, 1998.
6. Aziz, Medhat. Nile River Banks Stability Analysis. First International Conference on Civil Engineering, Helwan University, Cairo, Egypt, 1998.
7. Ibrahim, Hossam, Medhat Aziz, and Khaled Mohamed. Effect Of Water Structure Height On Water Distribution System, Scientific Bulletin, Ain Shams University, Civil Engineering, Vol.33, NO.2, June, 1998.
8. Aziz, Medhat, Magdy Samuel, and M.Rafeek Abdelbary. Effect of Scour Holes on the Stability of Hydraulic Structures. Conference On Coping With Water Scarcity. IAHR, Hurghada, Egypt, 1998.
9. Aziz, Medhat. Nile River Bank Protection Stability Analysis Software. Conference On Coping With Water Scarcity. IAHR, Hurghada, Egypt, 1998.
10. Aziz, Medhat, Mohamed El-Moattasem, and M. Rafeek Abdelbary. Lake Nasser Bed Consolidation. Conference On Coping With Water Scarcity. IAHR, Hurghada, Egypt, 1998.
11. Aziz, Medhat. Comparison of Three Dimensional and Two Dimensional Stability Analysis Approaches for Nile River Banks. Eighth International Colloquium on Structural and Geotechnical Engineering. Ain Shams University. Cairo, Egypt, 1998.
12. Makary, Adel, Mohamed Abdelbary, and Medhat Aziz. Expected Nile Discharges and Water Levels Hydrographs After the Operation of El-Sheikh Zayed Canal (Toshka Project). International Conference on Integrated management of Water Resources in the 21th Century. 1999.
13. Aziz, Medhat. Comparison of The Probabilistic And Deterministic Stability Analysis Approaches For Nile River Banks. The Fourth

- International Geotechnical Engineering Conference, Cairo University, 2000.
14. Aziz, Medhat. Dam Breaching Model. ASCE Joint Water Resources Engineering and Planning & Management Conference, Minneapolis, USA, 2000.
 15. Makary, Adel, M. Rafeek Abdelbary, Medhat Aziz, and Gamal Abdel Monem, Upper Egypt Protection Works Against Flash Floods (CASE STUDIES). International Conference on Wadi Hydrology, Sharm El-Shikh, Egypt, 2000.
 16. Ismail, Sherine, M. Rafeek Abdel-Bary, Medhat Aziz, and Abd El-Mohsen El-Mongy. Effect Of High Floods On Assiut Barrage Scour Hole. International Conference on Wadi Hydrology, Sharm El-Shikh, Egypt, 2000.
 17. Aziz, Medhat. Effect Of Different Floods On Rosetta Branch. International Conference on Wadi Hydrology, Sharm El-Shikh, Egypt, 2000.
 18. Sadek, Nahla, Medhat Aziz, and Karima Attia. High Aswan Dam Impacts on Nile Wadi Morphology. International Conference on Wadi Hydrology, Sharm El-Shikh, Egypt, 2000.
 19. Ismail Sherine, Medhat Aziz, M. Rafeek Abdel-Bary, and Abde EL-Mohsen El-Mongy, "Probabilistic Model to Analyze Piping and Uplift Effects on Hydraulic Structures ", Scientific Bulletin, Ain Shams University, Civil Engineering, Vol.36, NO.1, March 31,2001.
 20. Mousa, Ahmed, Moustafa Soliman, and Medhat Aziz. Enviromental Evaluation for High Aswan Dam Since its Construction until Present. Sixth International Water Technology Conference. Alexandria, Egypt, March 2001.
 21. Ismail, Sherine, Medhat Aziz, Rafeek Abdel-Bary, and Abde EL-Mohsen El-Mongy. Effect of Different Floods on Nile River. Sixth International Water Technology Conference. Alexandria, Egypt, March 2001.
 22. Sadek, Nahla, Aly Talaat, Ahmed Aly, Rafeek Abdel Bary, and Medhat Aziz. High Floods Impacts on Nile River. Sixth International Water Technology Conference. Alexandria, Egypt, March 2001.
 23. Sadek, Nahla, M. Abdel Bary, Aly Talaat, Ahmed Aly, and Medhat Aziz. 2001. Morphological Changes Impact on Water Surface Profile Predicted for the River Nile. Eighth International Symposium on River Sedimentation, (ISRS 8), Cairo Egypt.
 24. Attia, Karima and Medhat Aziz. 2001. Flood Simulation for Damietta Branch. Eighth International Symposium on River Sedimentation, (ISRS

- 8), Cairo Egypt.
25. Makary, Adel, Magdy Samuel, and Medhat Aziz. 2001. Lake Nasser Sedimentation Analysis. 2001. Eighth International Symposium on River Sedimentation, (ISRS 8), Cairo Egypt.
 26. Aziz, Medhat, Ibrahim Hossam, and Nahla Sadek. 2001. Lake Nasser Flood and Sediment Analysis. Eighth International Symposium on River Sedimentation, (ISRS 8), Cairo Egypt.
 27. El-Sersawy, Hossam, and Medhat Aziz. 2001. Modeling of the hydraulic and Morphological Changes in Lake Nasser (in front of Toshka Pump Station Intake). Eighth International Symposium on River Sedimentation, (ISRS 8), Cairo Egypt.
 28. Makary, Adel, Magdy Samuel, and Medhat Aziz. 2001. River Nile Bank Erosion. 2001. Eighth International Symposium on River Sedimentation, (ISRS 8), Cairo Egypt.
 29. Moussa, Ahmed, medhat Aziz, and Ahmed Fahmy. 2002. Numerical Simulation for Reach Four Flood Response. Third International Symposium on Environmental Hydrology- Ain Shams University, Cairo, Egypt
 30. Hekal, Nasr, Ahmed Fahmy Abdel Kawi Khalifa, Ahmed Ali, and Medhat Aziz. 2002. A Proposed Framework For Management of The River Nile Floodplains. Third International Symposium on Environmental Hydrology- Ain Shams University, Cairo, Egypt
 31. Ismail, Sherine, Medhat Aziz, and Ahmed Fahmy. 2002. Analysis of Piping and Uplift Effects on Assiut Barrage Using Probabilistic Approach. Third International Symposium on Environmental Hydrology- Ain Shams University, Cairo, Egypt
 32. Samuel, Magdy, and Medhat Aziz. 2002. Analysis of Local bed Scour Due to the Construction of Aswan Bridge. Third International Symposium on Environmental Hydrology- Ain Shams University, Cairo, Egypt
 - Aziz, Medhat. 2002. Water Level Fluctuation Effect on Nile River Bank Stability. Third International Symposium on Environmental Hydrology- Ain Shams University, Cairo, Egypt
 35. Aziz, Medhat, and Mohamed El-Mottassem. 2002. Lake Nasser Bed Consolidation Effects on Lake Water Storage. First Regional Conference on Perspective of Arab Water Cooperation. National Water Research Center. Cairo, Egypt.

36. Aziz, Medhat. 2003. Effect of Seepage Forces on Nile River Bank Stability. Seventh International Water Technology Conference (IWTC VII). Cairo, Egypt.
37. Sallam, Gamal, and Medhat Aziz. 2003. A Study of Local Scour at Bridge Piers of El-Minia. Seventh International Water Technology Conference (IWTC VII). Cairo, Egypt.
38. Aziz, Medhat, and Sherine Ismail. 2003. Nile River Low Discharge Effects on Pump Station Water Supply. Seventh International Water Technology Conference (IWTC VII). Cairo, Egypt.
39. Aziz, Medhat. 2003. Effect of Soil Liquefaction on Nile River Bank Stability. Seventh International Water Technology Conference (IWTC VII). Cairo, Egypt.
40. El-Sersawy, Hosam, Medhat Aziz, and Ahmed Fahmy. 2003. GIS Application for Developing Digital Floodplain Maps of the Nile River. First International Engineering Conference. El-Azhar University. Cairo, Egypt.
41. Aziz, Medhat and Nahla Sadek 2003. The Proposed Operation for the New Toshka Barrage. Engineering Journal Volume 89. C 85-C 101, October 2003. Helwan University, Faculty of Engineering. Materica Cairo.
42. Ismail Sherine and Medhat Aziz 2005. Toshka Spillway Barrages Stability Analysis. Ninth International Water Technology Conference, Sharm El-Sheikh, Egypt, March 17-20, 2005
43. Aziz Medhat and Sherine Ismail, 2006. Nile River Water Resources Analysis, Tenth International Water Technology Conference, Alexandria, Egypt, March, 2006
44. Moussa Ahmed and Medhat Aziz, 2007. Nile River Sediment Transport Simulation
45. (Case Study: Damietta Branch), Eleventh International Water Technology Conference, Sharm El-Sheikh, Egypt, March 15-18, 2007
46. Zaki Maha, Noha Donia Medhat Aziz And Iman El-Azizy 2008. River Nile Banks Stability Analysis Model Case Study (Beni-Mazar Reach-Egypt), Twelfth
47. International Water Technology Conference, Alexandria, Egypt, March 27-30, 2008
48. Ebaid, Hala and Medhat Aziz. 2009. Integrated LANDSAT ETM+ and Remote Sensing Techniques for Environmental Change Monitoring. The International Conference on Water Conservation in Arid Regions. Jeddah, Saudi Arabia. 12-14 October, 2009.
49. Mina Ehab, Medhat Aziz, 2009. The Networked RTK - Changing

Techniques For GPS Surveying, ASPRS. Fall Conference November 16-19, 2009, San Antonio, Texas.