

CURRICULUM VITAE

MAHMOUD A. R. ELTOUKHY

Professor of Water Resources and Hydraulics,

Civil Engineering Department
Faculty of Engineering at Shoubra
Benha University
Cairo
Egypt



1. PERSONAL DATA

Name	: Mahmoud Ali Refaey Eltoukhy
Citizenship	: Egyptian
Date of Birth	: 27-02-1970
Marital Status	: Married
Children	: Two
Phone (Mobile)	: 002-01004623447
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2. EDUCATION

B.Sc.	in Civil Engineering on May 1993, Benha University, Cairo, Egypt, <i>with degree of Excellent with honor degree.</i>
M.Sc.	in Civil Engineering on Dec. 1999, Cairo University , Cairo, Egypt. M.Sc. Thesis title: <i>“Vortex Effect on Sand Beds”</i>
Ph.D.	in Civil Engineering on Dec. 2004, Cairo University , Cairo, Egypt Ph.D. thesis title: <i>“Modeling of Aeolian Sand Deposition at Porous Fences, (Physical and Mathematical Models)”</i>

3. MAJOR INTERESTS

- Hydraulics
- Fluid Mechanics
- Water Resources
- Sanitary Engineering
- Irrigation networks and structures
- Hydrology
- Harbor and Water Shore Engineering

4. ACADEMIC PROFILE

4.1 Academic positions

Position held	Dates	Department	Institution
<i>Demonstrator</i>	8/1995 - 12/1999	Civil Eng. Department, Shoubra	Benha University, Cairo, Egypt
<i>Assistant Lecturer</i>	12/1999 - 12/2004	Civil Eng. Department, Shoubra	Benha University, Cairo, Egypt
<i>Assistant Professor</i>	12/2004 - 01/2013	Civil Eng. Department, Shoubra	Benha University, Cairo, Egypt
<i>Assistant Professor</i>	2004 - 2009	Civil Eng. Department	Private 10th Ramadan Higher Institute (6 – October Branch)
<i>Assistant Professor</i>	2005 - 2009	Civil Eng. Department	Private Civil and Architectural Engineering Institute 15 – May City
<i>Assistant Professor</i>	Sept. – Dec, 2008	Course of Hydraulics for the Nile River countries Engineers	Hydraulic Research Institute – Alkanater Alkhairia - Egypt
<i>Assistant Professor</i>	09/2009 – 01/2013	Civil Eng. Department	Umm-Al-Qura University, Makkah, Saudi Arabia
<i>Associate Professor</i>	01/2013 – 06/2014	Civil Eng. Department	Umm-Al-Qura University, Makkah, Saudi Arabia
<i>Associate Professor</i>	2014 - present	Civil Eng. Department	Private Alslam Higher Institute for Eng., Cairo
<i>Associate Professor</i>	2014 - 2015	Civil Eng. Department	Private Alwady Higher Institute for Eng., Cairo
<i>Associate Professor</i>	Spring and Summer, 2015	Civil Eng. Department	Praivate Canadian International College
<i>Associate Professor</i>	2015 - 2016	Civil Eng. Department	Private Thebes Academy Higher Institute for Engineering
<i>Associate Professor</i>	06/2014 - 05/2019	Civil Eng. Department, Shoubra	Benha University, Cairo, Egypt
<i>Professor of Hydraulics</i>	05/2019 - present	Civil Eng. Department, Shoubra	Benha University, Cairo, Egypt

4.2 Languages

- Arabic : Mother Language
- English : Excellent

4.3 Scientific and academic training courses

Dates	Workshop Title and Institution
06 – 18 /04/2002	An academic training course in " Academic lecturer preparation Workshop ", Faculty and Leadership Development Project, (FLDP), Benha University
07 – 09 / 02 / 2006	An academic training course in " Legal Sides Workshop (L4) ", Faculty and Leadership Development Project, (FLDP), Benha University
13–16 / 02 / 2006	An academic training course in " Effective Teaching Workshop (T1) " Faculty and Leadership Development Project, (FLDP), Benha University
18-19 / 02 / 2006	An academic training course in " Course Design Workshop (T3) " Faculty and Leadership Development Project, (FLDP), Benha University
Sep., 2007	ICDL
10 – 16 / 06 / 2008	An academic training course in " Using Computers and Managing Files " Central Unit of LET Training, Benha University
14 - 20 / 06 / 2008	An academic training course in " Word Processing " Central Unit of LET Training, Benha University
23 - 25 / 06 / 2008	An academic training course in " Quality Control Workshop " Faculty and Leadership Development Project (FLDP), Benha University
08 –10 / 07 / 2008	An academic training course in " Examinations and Students evaluation ", Faculty and Leadership Development Project (FLDP), Benha University
06 -12 / 07 / 2008	An academic training course in " Concepts of IT " Central Unit of LET Training, Benha University
06 – 08 / 03 /2016	An academic training course in " Self-assessment and external revision ", Faculty and Leadership Development Center (FLDC), Benha University
13 – 15 / 03 / 2016	An academic training course in " Website Management ", Faculty and Leadership Development Center (FLDC), Benha University
20 – 22 / 03 /2016	An academic training course in " statistical analysis ", Faculty and Leadership Development Center (FLDC), Benha University
03 – 05 / 04 / 2016	An academic training course in " Laboratory Safety ", Faculty and Leadership Development Center (FLDC), Benha University
17 – 19 / 04 / 2016	An academic training course in " Financial and legal aspects ", Faculty and Leadership Development Center (FLDC), Benha University
19 / 05 / 2016	An academic training course in " Advanced Spreadsheets ", Information technology Center Training Project, (ICTP), Benha University

4.4 Contributions for Department and Faculty society

- Coordinator of the Civil Eng. Department graduate projects, Benha University, Egypt (2004 – 2006).
- Member of the ABET accreditation committee in the Civil Eng. Department in Umm Al-Qura University, KSA (2009 - 2014).
- Chair of the Exit Survey accreditation committee in the Civil Eng. Department in Umm Al-Qura University, KSA (2009 - 2014)
- . Chair of the accreditation committee, for preparing Chapter 6 in SSR, in the Civil Eng. Department in Umm Al-Qura University, KSA (2009 - 2014)
- Member and coordinator of the Faculty Curriculum Committee in Civil Engineering Dept., Umm Al-Qura University, KSA (2011 - 2014).

- Member of the *Faculty Accreditation Committee* in Civil Engineering Dept., Benha University, Egypt working for realizing accreditation requirements according to the Egyptian *National Academic Reference Standard* “NARS”.
- Chair of the Faculty Laboratory Accreditation Team in Civil Engineering Dept., Benha University, Egypt (till present).
- Member of the Department Committee for Semester Course Specs and Course Reports in Civil Engineering Dept., Benah University, Egypt (till present)
- Main organizer for Scientific Seminars in the department in Civil Engineering Dept., Benha University, Egypt (till present)
- Member of the Faculty Consultation and Research Engineering Center working for supervising various engineering projects in Civil Engineering Dept., Benha University, Egypt (till 2011)
- Member of the Civil Engineering Department committee in Civil Engineering Dept., Benha University, Egypt (till present)
- Member of the Faculty Undergraduate Curriculum Development Committee in Civil Engineering Dept., Benha University, Egypt (till present)
- Member of the Faculty Postgraduate Curriculum Development Committee in Civil Engineering Dept., Benha University, Egypt (till present)

5. COURSES OFFERED AND TEACHING EXPERIENCES:

- Hydraulics
- Fluid Mechanics
- Irrigation Networks Engineering
- Design of Irrigation Works
- Civil Drawings
- Computer Applications
- Ground Water Engineering
- Hydrology
- Water Resources
- Harbor Engineering
- Sanitary Engineering

5.1 Undergraduate Courses Offered

Course	Year	Institution
<i>Hydraulics , Design of Irrigation Works, Civil Drawings, and Computer Applications</i>	B.Sc. students Years: 2004-2009	Civil Eng. Dept., Shoubra Faculty of Engineering, Benha University, Egypt
<i>Hydraulics and Irrigation and Drainage Engineering</i>	2 nd and 3 rd Level Students Years: 2004-2009	Private 10th Ramadan Higher Institute (6 – October Branch), Egypt
<i>Fluid Mechanics, Irrigation and Drainage Engineering and Irrigation Structures Design I and II</i>	2 nd , 3 rd , 4 th year Students Years: 2005-2009	Private Civil and Architectural Engineering Institute 15 – May City, Egypt
<i>Fluid Mechanics, Hydraulics, Water Resources, Sanitary Engineering, Statics, Strength of Materials, and Technical Writing</i>	Civil Engineering Students Years: 2009-2014	Civil Eng. Dept., Faculty of Engineering, Umm Al-Qura Uni., Saudi Arabia
<i>Ports and Navigation Engineering and Coastline Engineering</i>	B.Sc. students Years: 2014 - 2015	Canadian International College, (CIC)
<i>Civil Drawings, and Hydraulics</i>	B.Sc. students Years: 2014 - 2015	Private Alwady Higher Institute for Engineering, Egypt

<i>Irrigation and Drainage Networks and Design of Irrigation Works</i>	3 rd and B.Sc. students Years: 2015-2016	Private Thebes Academy Higher Institute for Engineering
<i>Hydrology, Hydraulics, Irrigation and Drainage Networks, Design of Irrigation Works I and II, Sanitary Eng., and Harbor Eng.</i>	B.Sc. students Years: 2014 - present	Private Alslam Higher Institute for Eng., Cairo
<i>Hydraulics, Design of Irrigation Works, and Computer Applications</i>	1 st , 2 nd and 4 th year Civil Eng., students, 2014 - present	Civil Eng. Dept., Shoubra Faculty of Engineering, Benha University, Egypt

5.2 Laboratory Supervision

Course	Year	Institution
<i>Computer Lab.</i>	1 st year students Years: 2004-present	Civil Eng. Dept., Shoubra Faculty of Engineering, Benha University, Egypt
<i>Hydraulics Lab.</i>	B. Sc. Students Years: 2009 - 2014	Civil Eng. Dept., Faculty of Engineering, Umm Al-Qura Uni., Saudi Arabia
<i>Water Resources Lab.</i>	B. Sc. Students Years: 2009 - 2014	Civil Eng. Dept., Faculty of Engineering, Umm Al-Qura Uni., Saudi Arabia
<i>Hydraulics Lab.</i>	B.Sc. and research students Years: 2014 - present	Civil Eng. Dept., Shoubra Faculty of Engineering, Benha University, Egypt

5.3 Postgraduate Courses Offered

Course	Year	Institution
<i>Hydraulic Modeling</i>	M.Sc. students Years: 2014 - present	Civil Eng. Dept., Shoubra Faculty of Engineering, Benha University, Egypt
<i>Soil Hydraulics</i>	M.Sc. students Years: 2014 - present	Civil Eng. Dept., Shoubra Faculty of Engineering, Benha University, Egypt
<i>Hydrology</i>	Ph. D. students Years: 2014 - present	Civil Eng. Dept., Shoubra Faculty of Engineering, Benha University, Egypt

6. FIELD AND INDUSTRIAL EXPERIENCE

- Technical consultant for "General Authority for Reconstruction, Housing and Agricultural Development" -Al- Dokki (Egypt) from 2016 – present.
- Invited Lecturer at the Training Programs of Hydraulics, Hydraulic Research Institute, for Nile Countries Engineers, Cairo, Egypt. Appointed as Instructor for the following Courses:

7. RESEARCH PROFILE

Areas of Specialization

- Hydraulics.
- Irrigation and Drainage Networks.
- Irrigation Structures.
- Wind Tunnels.
- Water Resources.

7.1 Thesis Supervised

<i>Student Name</i>	<i>Degree</i>	<i>Topic</i>	<i>Graduation Date</i>
<i>Eng. Mohamed Abd Almotalb</i>	M.Sc	NAVIGATION EFFECTS DUE TO OUT FLOW WATER EXITS	2008
<i>Eng. Wael Ziada</i>	M.Sc.	The Impact of Manmade Interventions on the River Nile at Elrayramoun, Egypt	2009
<i>Eng. Ahmed Ali Ghareeb</i>	Ph.D.	Prediction of Local Scour Rate around Bridge Piers Using SSIIM Model	2017
<i>Eng. Maha Eid Almutairi</i>	M.Sc.	Water Management in Kuwait for Facing Future Challenges	2019

7.2 B.Sc. Supervised Graduation Projects

<i>Year</i>	<i>Project Title</i>	<i>Place</i>
2004/2005	Effect of Flow on the Bed Pattern	Civil Eng. Dept. Benha University
2005/2006	Effect of Froude's Number on Sand Beds	Civil Eng. Dept. Benha University
2006/2007	Characteristics of Hydraulic Jump	Civil Eng. Dept. Benha University
2007/2008	Traditional Irrigation Project	Civil Eng. Dept. Benha University
2008/2009	Traditional Irrigation Project	Civil Eng. Dept. Benha University
2008/2009	Traditional Irrigation Project	Civil Eng. Dept. Benha University
2010/2011	Storm Design in Gazan	Civil Eng. Dept., Umm Al-Qura Uni., Saudi Arabia
2011/2012	Culvert Design for transition of storm water	Civil Eng. Dept., Umm Al-Qura Uni., Saudi Arabia
2012/2013	Comparison between The different types of Culvert	Civil Eng. Dept., Umm Al-Qura Uni., Saudi Arabia
2015/2016	Effect of porous sills on hydraulic jump characteristics	Civil Eng. Dept. Benha University
2016/2017	Characteristics of hydraulic jump types	Civil Eng. Dept. Benha

		University
2017/2018	A Study of Hydraulic Jump Characteristics with Different Conditions	Civil Eng. Dept. Benha University
2018/2019	Hydraulic Jump Studies downstream Sluices Gate with Orifice	Civil Eng. Dept. Benha University

8. PUBLICATIONS

- [1] Abd Aal F., Wagdy A., and **Mahmoud A. Refaey** "Sand Bed Scour due to Vortices" Journal of Engineering and Applied Science, Vol. 47. No. 1, Feb. 2000, pp73 – 83, Fac. Of Eng. Cairo University.
- [2] Ahmad Wagdy, and **Mahmoud A. Refaey** "Vortex – Sediment Interaction in Vortex Chamber with Sand Bed and an Outlet Drain Pipe" Journal of Engineering and Applied Science, Vol. 52. No. 4, Aug. 2005, pp 681 – 696, Fac. Of Eng. Cairo University
- [3] **Mahmoud A. Refaey** "Time Scale Modeling of Aeolian Sand Deposition at Porous Fences" Journal of Engineering and Applied Science, Vol. 53. No. 2, Feb. 2006, pp 235 – 245, Fac. Of Eng. Cairo University.
- [4] **Mahmoud A. Refaey**, and Naser Saleh "Effect of Fluid Viscosity on the Clay Behavior" ASCE – EGS, V Middle East Regional Conference on Civil Engineering Technology and International Symposium on Environmental Hydrology 2007
- [5] **Mahmoud A. Refaey**, and Ashraf A. "Numerical Modeling of Velocity Distribution in Navigable Canals at Out Flow Water Exits" ASCE – EGS, V Middle East Regional Conference on Civil Engineering Technology and International Symposium on Environmental Hydrology 2007
- [6] Elsaheed G., M. Abd Almtelb, **Mahmoud A. Refaey**, and M. Abd Almtelb "Navigation Effects Due to Out Flow Water" Sci. Bull. Fac. Ain Shams Univ., ISSN 1110 – 1385, Vol. 43, No. 1, March 31, 2008
- [7] Elsaheed G., Magdy G., **Mahmoud A. Refaey**, and Wael Z. " The Impact of Manmade Interventions on the River Nile at Elrayramoun, Egypt" Journal of Applied Sciences Research, 5(9): 1088-1102, 2009, © 2009, INSInet Publication
- [8] **Mahmoud A. Refaey**, and G. Bassam "Role of Fluid Viscosity in Modifying Some Sand Properties at Construction Work Sites" Tenth International Congress of Fluid Dynamics (ICFD10), Dec. 16 – 19, 2010, Stella Di Mare Sea Club Hotel, Ain Soukhna, Red Sea, Egypt
- [9] **Mahmoud A. R. Eltoukhy** and Neveen B. Abdelmageed "Effect of Groin Geometry on Sand Bed Scouring of Rivers Having 180 Degree Bend" Journal of Alazhar University, 2012
- [10] **Mahmoud A. R. Eltoukhy** "Effect of Pipe Inclination on the Sand – Water Mixture Flow Hydraulic Gradient at Different Sand Concentrations" International Journal of Civil Engineering and Technology (IJCET), ISSN 0976 – 6308 (Print), ISSN 0976 – 6316(Online) Volume 4, Issue 3, May – June (2013), © IAEME
- [11] **Mahmoud A. R. Eltoukhy** "Effect of Discharge and Sand Bed Variations on scouring depth at a Groin of Rivers Having 180° Bend" Australian Journal of Basic and Applied Sciences, 7(13) November 2013, Pages: 24-31
- [12] **Mahmoud A. R. Eltoukhy** "Hydraulic Gradient of Sand-Water Mixture Flow for Different Sands and Pipes" Life Sci J 2013;10 (4):3490-3495]. (ISSN:1097-8135)
- [13] **Mahmoud A. R. Eltoukhy**, and Mohamed Ibraheem "Velocity Distribution downstream Compound weirs" Australian Journal of Basic and Applied Sciences, 9(1) January 2015, Pages: 238-245
- [14] Ahmad W. Abdeldayem, Gamal H. Elsaheed, **Mahmoud A.R. El Toukhy** and Ahmed A. Ghareeb "Prediction of Local Scour Rate around Bridge Piers Using SSIIM Model" Journal of Applied Science VOL 2 ISSUE 10 October 2015 Paper 2
- [15] **Mahmoud A. R. Eltoukhy** "Hydraulic Jump Characteristics for Different Open Channel and Stilling Basin Layouts" International Journal of Civil Engineering and Technology (IJCET), Vol. 7, Issue 2, March-April 2016, pp. 290–301

- [16] **Mahmoud A. R. Eltoukhy and Wael A. Fahmy** "Variations of Hydraulic Jump Characteristics Due to Different Sill with Slot Layouts" British Journal of Applied Science & Technology, 17(2): 1-8, 2016, Article no. BJASt .28221, ISSN: 2231-0843, NLM ID: 101664541
- [17] **Mamoud A. R. Eltoukhy**, and Alkashef A. "Field Experiments on Hydraulic Jump in a Sloped Triangular Channel" British Journal of Applied Science & Technology, 18(2): 1-7, 2016; Article no.BJASt.30033, ISSN: 2231-0843, NLM ID: 101664541
- [18] **Mahmoud Ali R. Eltoukhy** and Neveen B. Abdel-Mageed "Experimental Investigations on Hydraulic Jump Characteristics for Different Hydraulic and Geometric Conditions" Australian Journal of Basic and Applied Sciences, 2018 Aug.; 12(8): pages 98-104
- [19] **Mahmoud A. Refaey Eltoukhy**, Khalid A. Alkhuzai, and A.T. Elkashef "Head Losses Ratio Prediction for Hydraulic Sludge Transport in horizontal pipes for Different Concentrations and pipeline sizes" Australian Journal of Basic and Applied Sciences, 2018 November; 12(11): pages 92-101
- [20] Gamal H. Elsaheed, Ahmed W. Abdeldayem, **Mahmoud A.R. El Toukhy**, and Ahmed A. Ghareeb "Parametric Study for Prediction of Scour around Exposed Pile Group Consists of Two Circular Piles" Journal of Scientific and Engineering Research, 2018, 5(11):165-177
- [21] **Mahmoud A. Refaey Eltoukhy**, M. Hassan, Hany Mostafa, and Mostafa Aboelkhear "Multi Criterion Decision Making Techniques for Ranking Regional climate models Over Wadi El-Natron Catchment" Australian Journal of Basic and Applied Sciences, 2019 May; 13(5): pages 85-96

9. PREPARED LECTURE NOTES on:

- Computer Applications for first year Civil
- Hydraulics for Second Year Civil
- Design of Irrigation Works for Fourth Year Civil
- Civil Engineering Drawing for First Year Surveying
- Hydrology for Second Year Civil