### **CURRICULUM VITAE**

### **PERSONAL INFORMATION:**

Name: Walid Abdel Latif Attia

### **QUALIFICATIONS:**

- 1. Ph.D. in Structural Engineering Tokyo University, Japan, September 1991.
- 2. M.Sc. in Structural Engineering Cairo University, Egypt, August 1986.
- 3. B.Sc. in Civil Engineering Cairo University, Egypt, July 1983.

### **EMPLOYMENT HISTORY:**

- 1. From June 2012 till now, Professor of Structural Analysis and Mechanics at the Structural Engineering Department, Cairo University.
- 2. From October 2001 till June 2012, Associate Professor at the Structural Engineering Department, Cairo University.
- 3. From November 1993 till October 2001, Teacher at the Structural Engineering Department, Cairo University.
- 4. From November 1986 till November 1993, Teaching Assistant at the Structural Engineering Department, Cairo University.
- 5. From July 1983 till November 1986, Demonstrator at the Structural Engineering Department, Cairo University.

### **ACADEMIC ACTIVITIES**

- Vice Head, Structural Engineering Department, Faculty of Engineering, Cairo University, since September 2012 till now.
- Main instructor of the following undergraduate courses:
  - ♦ Structural Analysis I (STRN101) since 2010 till now.
  - ♦ Structural Analysis II (STRN102) since 2010 till now.
  - ♦ Structural Analysis & Mechanics (STR 201-A) since 1999 till now.
  - ♦ Structural Analysis & Mechanics (STR 201-B) since 1999 till now.
  - ♦ Computer Aided Analysis & Design (STRN417) since 2011 till now.
  - ♦ Structural Mechanics & Stability (STRN433) since 2012 till now.
- Teaching the following graduate courses:
  - ♦ Structural Mechanics.
  - ♦ Structural Analysis of Bridges.
- Supervising the Structural Analysis Graduation Projects for the undergraduate students.
- Supervising the Structural Analysis & Mechanics Projects for graduate students.
- Participating in establishing the Computer laboratory of the Structural Engineering Department.
- Participating in the activities of the exams main control room for undergraduate courses since 1997 till now.

### SCIENTIFIC RESEARCH ACTIVITIES

### Scientific Reviewer of the following:

- 1. Journal of Cultural Heritage, Elsevier.
- 2. Journal of the HBNRC, Egypt.
- 3. The Scientific Committee for promoting University Staff Members.
- 4. ACI Structural Engineering Journal.

### Main Supervisor of the following M.Sc. Thesis:

- 1. A COMPARATIVE STUDY ON LIVE LOADS AND SECTION DESIGN OF HIGHWAY BRIDGES IN DIFFERENT CODES.
  - By: Eng. Emad Marey, July 2000.
- 2. OPTIMAL ESTIMATION OF INITIAL CABLE FORCES IN CABLE-STAYED BRIDGES.
  - By: Eng. Sameh Rizkallah Ibrahim, January 2002.
- 3. AN EXPERT SYSTEM FOR RESTORATION OF INFRA-STRUCTURE OF HISTORICAL BUILDINGS.
  - By: Eng. Adel Abdel Mohsen, September 2003.
- 4. CRITICAL WIND VELOCITY INVESTIGATION OF LONG-SPAN CABLE-STAYED BRIDGES WITH ADDITIONAL STABILIZING CABLES.
  - By: Eng. Elham Negm, November 2003.
- 5. VESSEL IMPACT FORCE INVESTIGATION OF LONG-SPAN CABLE-STAYED BRIDGES.
  - By: Eng. Ashraf Ragab, April 2006
- 6. ESTABLISHING AN EXPERT SYSTEM TO ENCODE THE RESTORATION PRIORITIES OF MONUMENTS.
  - By: Eng. Mahmoud El-Raies, April 2006.
- 7. PROPOSED PROCEDURE FOR ESTIMATING MAXIMUM NORMAL FORCE IN CABLE-STAYED BRIDGES
  - By: Eng. Asmaa Abdel Aziz, January 2008.
- 8. COMPARATIVE STUDY IN CODES CONSIDERATIONS FOR WEB BUCKLING OF I-SHAPED PLATE GIRDERS
  - By: Eng. Abdallah Al-Kadamy, July 2008.

9. A COMPARATIVE STUDY ON WIND LOADS AND SECTION DESIGN OF TELECOMMUNICATION TOWER IN DIFFERENT CODES

By: Eng. Mohamed Atef Hasan, December 2008.

10. RESOURCE MANAGEMENT IN TELECOMMUNICATION INFRASTRUCTURE PROJECTS.

By: Eng. Mohamed Adel Abdel Monem, December 2008.

11.CRITICAL WIND VELOCITY INVESTIGATION OF LONG-SPAN SUSPENSION BRIDGES WITH MULTIPLE MAIN CABLES.

By: Eng. Ahmed Amin Bayoumy, November 2009.

12. COMPARATIVE STUDY OF STRUCTURAL SYSTEMS FOR TALL BUILDINGS.

By: Eng. Nermin El-Leithy, February 2010.

13.ECONOMIC STUDY OF WASTE MANAGEMENT IN CONSTRUCTION ENGINEERING.

By: Eng. Ahmed Abdallah El-Tawil, April 2011.

14.INVESTIGATING CABLE NET SYSTEM FOR LONG-SPAN CABLE-STAYED BRIDGES.

By: Eng. Ahmed Hasan Mousa, July 2011.

15.STUDY OF WIND TUNNEL TEST RESULTS OF HIGH-RISE BUILDINGS COMPARED TO INTERNATIONAL AND EGYPTIAN DESIGN CODES.

By: Eng. Abdel Monem Aly Badry, March 2012.

16. ANALYSIS OF STRENGTHENED RC SLABS WITH DIFFERENT PARAMETERS.

By: Eng. Hatem Kamal Abdel Gawad, March 2012.

17. COMPARATIVE STUDY OF STRUCTURAL SYSTEMS SUBJECTED TO SEISMIC LOADS CONSIDERING DIFFERENT CODES.

By: Eng. Nehal Ismail Attia, May 2013.

18. WEB BUCKLING OF I-SHAPED PLATE GIRDERS WITH OPENNINGS.

By: Eng. Saad Abu El-Ela Yehya, July 2013.

19.BEHAVIOR AND FLUTTER STABILITY OF LONG-SPAN CABLE-STAYED BRIDGES WITH CABLE NET.

By: Eng. Amin Abdel Monem Kotb, September 2014.

20.INVESTIGATING PROJECTILE PENETRATION IN CONCRETE BLOCKS REINFORCED BY CERAMICS.

By: Eng. Raed Ibrahim Shehata Tawadros, October 2014.

21.COMPARISON OF SEISMIC GAP DETERMINATION FOR R.C. BUILDINGS IN DIFFERENT DESIGN CODES.

By: Eng. Mohamed Mostafa Zoheir Fadl-Allah, January 2015

- 22.LIVE LOAD DISTRIBUTION OF PRECAST CONCRETE U-GIRDER BRIDGES.
  - By: Eng. Ahmed Zakareia Hanafy Aly, January 2015.
- 23.INVESTIGATING THE EFFECT OF BOUNDARY CONDITIONS ON THE EVALUATION OF SEISMIC RESPONSE MODIFICATION FACTOR OF STEEL FRAMES.
  - By: Eng. Masood Majed Mohamed Irheem, April 2015.
- 24.OPTIMUM POSITION OF OUTRIGGER SYSTEM FOR HIGH-RISE REINFORCED CONCRETE BUILDINGS UNDER LATERAL LOADS.
  - By: Eng. Mohamed Esam Mohamed Said, April 2015.
- 25. ASSESSMENT OF CODE PROVIDED SEISMIC RESPONSE MODIFICATION FACTOR OF REINFORCED CONCRETE FRAMES.
  - By: Eng. Mahmoud Mohamed Abdallah Hegazy, May 2015.
- 26.EFFECT OF USING STIFFENERS ON THE LOCAL BUCKLING OF I-SHAPED PLATE GIRDER WITH CIRCULAR OPENINGS.
  - By: Eng. Osama Fath Alrahman Abdallah, September 2015.
- 27.SEISMIC RESPONSE MODIFICATION FACTOR FOR REGULAR REINFORCED CONCRETE DUAL SYSTEMS.
  - By: Eng. Ismail Kotb, October 2015.
- 28.STUDY OF SEISMIC GAP BETWEEN ADJACENT BUILDINGS IN ACCORDANCE TO DIFFERENT CODES.
  - By: Eng. Hossam Gouda, November 2015.
- 29. ASSESSMENT OF ALTERNATIVE METHODS FOR CALCULATION OF SEISMIC SEPARATION DISTANCE IN COMPARISON TO THE EGYPTIAN CODE.
  - By: Eng. Ahmed Aly Mostafa, November 2015.
- 30.EVALUATION OF SEISMIC RESPONSE MODIFICATION FACTOR OF REINFORCED CONCRETE FRAMES IN THE EGYPTIAN CODE BASED ON NONLINEAR STATIC ANALYSIS.
  - By: Eng. Amira El-Yamani Mohamed, February 2016.
- 31.ANALYTICAL MODELING OF PRESSURIZED WATER REACTOR NUCLEAR POWER STATION UNDER STSTIC LOADS.
  - By: Eng. Mohamed Farag Zaki, March 2016.
- 32.BEHAVIOR OF RECTANGULAR REINFORCED CONCRETE COLUMNS STRENGTHENED WITH STEEL JACKET USING FINITE ELEMENT ANALYSIS.
  - By: Eng. Mohamed Fahmy Al-Braga, April 2016.
- 33. WIND LOADS ASSESSMENT FOR STEEL LATTICE TOWERS WITH DIFFERENT CODES.
  - By: Eng. Mohamed Saeed Ismail, July 2016.

- 34.EFFECT OF OVERLOAD VEHICLES ON BEHAVIOR OF COMPOSITE STEEL GIRDER BRIDGES.
  - By: Eng. Kamel Tamer Hawash, September 2016.
- 35.COMPARATIVE STUDY BETWEEN EMPERICAL EQUATIONS OF CRITICAL WIND SPEED FOR CABLE-STAYED BRIDGES
  - By: Eng. Nouran Mamdoh Nagdy, October 2016.
- 36.COMPARATIVE STUDY OF PRESTRESS LOSSES ACCORDING TO INTERNATIONAL CODES.
  - By: Eng. Mahmoud Medany Mohamed, October 2016.
- 37.EFFECT OF INCLINATION OF CABLES PLANE ON THE STABILITY OF LONG SPAN CABLE-STAYED BRIDGES.
  - By: Eng. Sara Saeed Mamdoh Abdel Karim, December 2016.
- 38.INVESTIGATING THE EFFECT OF BRACING AND NUMBER OF BAYS ON THE VALUE OF RESPONSE MODIFICATION FACTOR.
  - By: Eng. Abdel Rahman Sobhy Al-Tanashy, January 2017.
- 39.EVALUATING THE SAFETY LEVEL OF PRESTRESSED CONCRETE BRIDGE GIRDERS DESIGNED USING DIFFERENT INTERNATIONAL CODES.
  - By: Eng. Ehab Mamdoh Hanna Reyad, March 2017.
- 40.EVALUATION OF ALTERNATIVE TECHNIQUES FOR CALCULATION OF SEISMIC SEPARATION DISTANCE IN COMPARISON TO THE EGYPTIAN CODE CONSIDERING THE EFFECT OF STORY HEIGHTS.
  - By: Eng. Aly Mohamed Kotb, June 2017.
- 41.SEISMIC RESPONSE MODIFICATION FACTOR FOR MEDIUM HEIGHT RC BUILDINGS WITH DUAL LATERAL LOAD STRUCTURAL RESISTING SYSTEM.
  - By: Eng. Doaa Mohamed Darwish, July 2017.
- 42.NONLINEAR ANALYSIS OF REINFORCED CONCRETE COLUMNS SUBJECTED TO COMBINED EFFECTS OF AXIAL AND BLAST-INDUCED TRANSVERSE LOADS.
  - By: Eng. Mahmoud Gamal Abdel Wahab, July 2017.
- 43.EFFECT OF MODELING METHODS ON THE STRUCTURAL BEHAVIOR OF CABLE-STAYED BRIDGES UNDER STATIC LOADS.
  - By: Eng. Khaled Gomaa Abdel Megeid, November 2017.

### Main Supervisor of the following Ph.D. Thesis:

1. BUCKLING AND ULTIMATE CAPACITY OF MULTI-SPAN CABLE-STAYED BRIDGES WITH CONSIDERATION OF GEOMETRIC AND MATERIAL NONLINEARITIES.

By: Eng. Gamal Helmy Hanna, March 2002.

2. PROPOSED PRACTICAL PROCEDURE CONSIDERING INELASTIC BUCKLING FOR CALCULATING CRITICAL LOADS AND STRESSES IN STRUCTURES.

By: Eng. Emad Marey, July 2005.

3. AN EXPERT SYSTEM FOR DEVELOPING INFORMAL SETTLEMENTS.

By: Eng. Majed Assas, March 2007.

4. FINITE ELEMENT ANALYSIS OF BLAST AND LOW-VELOCITY IMPACT ON SANDWICH PANELS WITH MULTIPLE SUPPRESSIVE CORES.

By: Eng. Mohamed Yassein Leithy, June 2010.

5. PROPOSED PRACTICAL METHOD OF ANALYSIS FOR INELASTIC BUCKLING IN PLATES.

By: Eng. Sameh Riskallah Ibrahim, November 2010.

6. THE IMPACT OF THE KUWAITI JUDICIAL ARBITRATION LAW TO RESOLVE DISPUTES IN CONSTRUCTION CONTRACTS AND COMPARED TO THE EGYPTIAN TYPICAL LAW.

By: Eng. Abdel Aziz Al-Omeiry, July 2011.

7. PROPOSED EXPERT SYSTEM TO DEFINE THE CAUSES OF CRACKS IN RC STRCTURES AND THE METHODS OF REPAIR.

By: Eng. Ibrahim El-Sheikh, July 2011.

8. PRACTICAL ANALYSIS PROCEDURE TO STUDY THE BEHAVIOR AND STRENGTHENING OF MASONRY TOWERS.

By: Eng. Adel Abdel Mohsen, June 2012.

9. FINITE ELEMENTS ANALYSIS FOR DYNAMIC AND STATIC TECHNIQUES OF VESSEL COLLISION WITH CABLE-STAYED BRIDGES

By: Eng. Ashraf Ragab, October 2012.

10.STUDYING THE INFLUENCE OF PRESTRESSTING AND POUNDING LOADS ON QUASI-ISOLATED PC CABLE STAYED BRIDGES WITH RIGID PYLON DECK CONNECTION USING EXPERIMENTALLY VERIFIED MODEL

By: Eng. Mohamed Abdel Shakour Hasnon, December 2015.

11.DETERMINATION OF CRITICAL WIND SPEED OF LONG-SPAN SUSPENSION BRIDGES USING NUMERICAL SIMULATION

By: Eng. Ahmed Abdel Aziz A. Mohamed, February 2016.

- 12.EFFECIENCY IMPROVEMENT OF CONSTRUCTION PROJECTS USING LEAN SIX SIGMA METHODOLOGY
  - By: Eng. Ahmed Abdallah El-Tawil, March 2016.
- 13. OPTIMIZATION MODELS TO PRIORITIZE INTERVENTION PROJECTS IN SLUMS By: Eng. Mohamed Fawzy Orabi, April 2016.
- 14.AERODYNAMIC STABILITY OF ULTRA-LONG SPAN CABLE-SUSPENSION BRIDGES By: Eng. Ezz-Eldin Kamel Aly, April 2016.
- 15.FLUTTER STABILITY AND AERODYNAMIC OPTIMIZATION OF CABLE-STAYED BRIDGE DECK USING NUMERICAL SIMULATION.
  - By: Eng. Saad Abu El-Ela Saad, September 2016.
- 16.SEISMIC BEHAVIOR AND REPAIR OF STEEL FIBER REINFORCED CONCRETE BRIDGE COLUMNS.
  - By: Eng. Abdel Rahman Mohamed Naguib, May 2017.
- 17.ASSESSMENT OF USING EXTERIOR BRICK WALLS FOR EXISTING REINFORCED CONCRETE STRUCTURES SUBJECT TO BLAST LOADS.
  - By: Eng. Ahmed Amin Bayoumy, July 2017.
- 18.NUMERICAL SIMULATION OF CONCRETE GRAVITY DAM UNDER SEISMIC LOADING.
  - By: Eng. Mohamed Ashraf Al-Sayad, November 2017.

### Participating and Attending the following Scientific Conferences:

- 1. The  $5^{th}$  East Asia Pacific Structural Engineering and Construction Conference, Griffith University, Gold Coast, Australia, 25-27 July 1995
- 2. General Meeting Number 50, Japanese Society of Civil Engineers, Matsuyaya, Japan, 19 21 September 1995
- 3. The 7<sup>th</sup> Arab Structural Engineering Conference, Kuwait University, Kuwait, 24 26 November 1997
- 4. Bridge Engineering Conference, Egyptian Society of Engineers, Sharm El-Sheikh, Egypt, 26 30 March 2000
- 5. The 8<sup>th</sup> Arab Structural Engineering Conference, Cairo University, Cairo, Egypt, 21 23 October 2000
- 6. The 8<sup>th</sup> International Conference on Civil and Structural Engineering Computing, Civil-Comp Press, Vienna, Austria, 19 – 21 September 2001
- 7. IABSE Symposium: Structures for High-Speed Railway Transportation, Antwerp, Belgium, 27-29 August 2003.
- 8. The 5<sup>th</sup> Alexandria International Conference on Structural & Geotechnical Engineering, AICSGE 5, Alexandria, Egypt, 20-22 December 2003.
- 9. The 2<sup>nd</sup> International Conference on Advances in Engineering Sciences & Technologies, National Research Center, Cairo, Egypt, 12-14 November 2005.
- 10. The 1<sup>st</sup> International Conference on Restoration of Heritage Masonary Structutres, Cairo, Egypt, 24-27 April 2006.
- 11. The 11<sup>th</sup> Arab Structural Engineering Conference, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia, 25-27 October 2009.
- 12. The 8<sup>th</sup> International Conference on Civil and Architecture Engineering, The 5<sup>th</sup> International Scientific Conference of the Military Technical College, Cairo, Egypt, 25-27 May 2010.
- 13. ASCE 6<sup>th</sup> International Engineering and Construction Conference: Advances in Affordable Housing & Green Construction, HBNRC, Cairo, Egypt, 28-30 June 2010.
- 14. The 2<sup>nd</sup> International Conference on Construction in Developing Countries (ICCIDC-II): Advancing and Integrating Construction Education, Research & Practice, Cairo, Egypt, 3-5 August 2010.
- 15. The 12<sup>th</sup> International Conference on Non-Conventional Materials and Technologies (IC-NOCMAT): Materials & Technologies for Sustainable Infrastructure Systems, Cairo, Egypt, 21-23 September 2010.
- 16. IABSE Cairo Conference: Global Thinking in Structural Engineering, Sharm El-Sheikh, Egypt, 7-9 May 2012.
- 17. The 12<sup>th</sup> International Conference on Structures Under Shock and Impact (SUSI 2012), Kos, Greece, 4-6 September 2012.
- 18. IABSE Cairo Conference: Global Thinking in Structural Engineering, Sharm El-Sheikh, Egypt, 7-9 May 2012.

- 19. The 12<sup>th</sup> International Conference on Structures Under Shock and Impact (SUSI 2012), Kos, Greece, 4-6 September 2012.
- 20. The 13<sup>th</sup> International Conference on Structures Under Shock and Impact (SUSI 2014), New Forest, UK, 3-5 June 2014.
- 21. The 2014 World Congress on Advances in Civil Environmental and Materials Research (ACEM'14), BEXCO, Busan, South Korea, 24-28 August 2014.
- 22. The 14<sup>th</sup> International Conference on Structural and Geotechnical Engineering, Ain Shams University, Cairo, Egypt, December 2015.

### LIST OF PUBLICATIONS:

- 1- Nishino, F. and Attia, W. (1992): "A proposal for in-plane stability design of steel framed structures", Structural Engineering/Earthquake Engineering Journal, Japanese Society of Civil Engineers, Vol. 8, No. 4, Tokyo, Japan, January.
- 2- Yoshizawa, T. and <u>Attia, W.</u> (1992): "Investigation of cable strength and capacity of cable-stayed bridge with intermediate piers", Technical Research Conference No. 14, Nippon Engineering Consultants Co., Tokyo, Japan, July. (in Japanese)
- 3- Attia, W. and Moriya, T. (1995): "Buckling analysis of I-section beam-columns with laterally supported flanges", Fifth East Asia-Pacific Conference on Structural Engineering and Construction, Gold Coast, Australia, July.
- 4- Attia, W. and Moriya, T. (1995): "Stability design procedure of plate girders with upper flanges restrained by concrete slab", General Meeting of the Japanese Society of Civil Engineers No. 50, Matsuyama, Japan, September.
- 5- Attia, W. and Gaafar, I. (1997): "Investigating the stability of an edge-girder cable-stayed bridge", Engineering Research Journal, Vol. 51, University of Helwan, Faculty of Eng.&Tech., Materia, Cairo, Egypt, January.
- 6- Attia, W. and Gaafar, I. (1997): "Torsional load capacity of the girder of Tatara bridge", Engineering Research Journal, Vol. 52, University of Helwan, Faculty of Eng.&Tech., Materia, Cairo, Egypt, April.
- 7- Attia, W. and Nishino, F. (1997): "A proposal of stability design procedure of steel frames", Journal of Engineering and Applied Science, Vol.44, No.4, Faculty of Engineering, Cairo University, Cairo, Egypt, August.
- 8- Attia, W. (1997): "*Determination of vibration modes of multi-span suspension bridges*", The Seventh Arab Structural Engineering Conference, Kuwait City, Kuwait, November.
- 9- Attia, W., Bakhoum, M., Morad, M. and Helmy, G. (2000): "*Parametric study of multi-span cable-stayed bridges with top stay cables*", Bridge Engineering Conference 2000, IABSE, Sharm El-Sheikh, Sinai, Egypt, March.
- 10-Marey, E., Attia, W. and Iskandar, S. (2000): "A comparative study of live load on highway bridges in different codes", Bridge Engineering Conference 2000, IABSE, Sharm El-Sheikh, Sinai, Egypt, March.

- 11-Attia, W., Ghobrial, N. and Ibrahim, S. (2000): "Iteration techniques for optimal estimation of prestressing forces in cable-stayed bridges", The Eighth Arab Structural Engineering Conference, Cairo, Egypt, October.
- 12-Bakhoum, M., <u>Attia, W.</u>, Mourad, M. and Helmy, G. (2000): "*Ultimate capacity of multi-span cable-stayed bridges while considering elastic buckling*", The Eighth Arab Structural Engineering Conference, Cairo, Egypt, October.
- 13-Attia, W. (2000): "Effect of cross-hangers on the stability of long-span suspension bridges", Civil Engineering Research Magazine, Faculty of Engineering, Azhar University, Cairo, Egypt, October.
- 14-Bakhoum, M.M., Helmy, G., <u>Attia, W.A.</u>, and Mourad, M. (2001): "*Nonlinear behaviour, failure loads and inelastic buckling of multispan cable-stayed bridges*", The Eighth International Conference on Civil and Structural Engineering Computing, Vienna, Austria, September 19-21.
- 15-<u>Attia, W.A.</u>, Mourad, M., and Helmy, G. (2003): "*Evaluation of overall stability of multi-span cable-stayed bridges*", IABSE Symposium 2003, Structures for High-Speed Railway Transportation, Antwerp, Belgium, August 27-29.
- 16-Attia, W.A., and Khalil, E.A.B. (2003): "Effect of one layered wind stays on the stability of long-span suspension bridges", 5<sup>th</sup> Alexandria International Conference on Structural & Geotechnical Engineering, AICSGE 5, Alexandria, Egypt, December 20-22.
- 17-Marey, E., <u>Attia, W.A.</u>, and Iskander, S. (2005): "*Proposed method of analysis for Inelastic buckling in members*", 2<sup>nd</sup> International Conference on Advances in Engineering Sciences & Technologies, National Research Center, Cairo, Egypt, November 12-14.
- 18-El-Rayes, M., <u>Attia, W.A.</u>, and Abdel Gawad, A.K. (2005): "Developing expert system to encode restoration priority of monuments", 2<sup>nd</sup> International Conference on Advances in Engineering Sciences & Technologies, National Research Center, Cairo, Egypt, November 12-14.
- 19-<u>Attia, W.A.</u>, and Abdel Mohsen, A. (2006): "An Expert System for Restoration of Infrastructure of Historical Buildings",1<sup>st</sup> International Conference on Restoration of Heritage Masonry Structures, Cairo, Egypt, April 24-27.

- 20-Attia, W.A., and Assas, M.M. (2006): "Expert System Application to Evaluating and Selecting the Solution for Informal Settlements", Umm Al-Qura University Journal of Science-Medicine-Engineering, Makkah, Saudi Arabia, Vol. 18, No. 2, July, pp. 125 142.
- 21- Attia, W.A., and Assas, M.M. (2006): "Arabic and Foreign Experiments in Developing of Informal Settlements", Engineering Journal, Al-Azhar University, Cairo, Egypt, Vol. 9, No. 3, July, pp. 955 964. (In Arabic)
- 22-Assas, M.M., and Attia, W.A. (2007): "Informal Settlements in Saudi Arabia, Features, Reasons, Solutions from Point of View Experts", Journal of Al-Azhar University, Engineering Sector, Cairo, Egypt, Vol. 2, No. 3, April, pp. 616 631.
- 23-Assas, M.M., and Attia, W.A. (2007): "Structural Defects of Informal Settlements Buildings", Journal of Al-Azhar University, Engineering Sector, Cairo, Egypt, Vol. 2, No. 3, April, pp. 632 647.
- 24-Elgammal, A. and Attia, W. (2009): "Vessel Impact Force Investigation of Long-span Cable-stayed Bridges", 11<sup>th</sup> Arab Structural Engineering Conference, King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia, October 25-27.
- 25-Laissy, M.Y., <u>Attia, W.A.</u> and Abdel-Wahab, M.M. (2010): "A Review of the Blast Effects on Sandwich Panels with Suppressive Cores", 8<sup>th</sup> International Conference on Civil and Architecture Engineering, 5<sup>th</sup> International Scientific Conference of the Military Technical College, Cairo, Egypt, May 25-27.
- 26-Laissy, M.Y., <u>Attia, W.A.</u> and Abdel-Wahab, M.M. (2010): "Experimental and Numerical Simulation of Projectile Penetration in Concrete", 8<sup>th</sup> International Conference on Civil and Architecture Engineering, 5<sup>th</sup> International Scientific Conference of the Military Technical College, Cairo, Egypt, May 25-27.
- 27-El-Leithy, N.F., Hussein, M.M. and <u>Attia, W.A.</u> (2010): "Sellecting a Suitable Structural System for a Tall Building", ASCE 6<sup>th</sup> International Engineering and Construction Conference, Advances in Affordable Housing & Green Construction, Housing & Building National Research Center, Cairo, Egypt, June 28-30.
- 28-Attia, W.A., El-Sayed, T.A. and Abdel-Mohsen, A. (2010): "Behavior, Repair & Strengthening of Historic Stone Masonry Towers", 2<sup>nd</sup> International Conference on Construction In Developing Countries (ICCIDC-II), Advancing and Integrating Construction Education, Research & Practice, Cairo, Egypt, August 3-5.

- 29-Rizkalla, S.I., Attia, W.A. and Mehany, S.S. (2010): "Effective Modulus of Elasticity Method for Inelastic Buckling Analysis", 12<sup>th</sup> International Conference on Non-Conventional Materials and Technologies (IC-NOCMAT 2010), Materials & Technologies for Sustainable Infrastructure Systems, Cairo, Egypt, September 21-23.
- 30-Rizkalla, S.I., <u>Attia, W.A.</u> and Mehany, S.S. (2010): "Proposed Practical Method of Analysis for Inelastic Buckling in Plates", 12<sup>th</sup> International Conference on Non-Conventional Materials and Technologies (IC-NOCMAT 2010), Materials & Technologies for Sustainable Infrastructure Systems, Cairo, Egypt, September 21-23.
- 31-Rizkalla, S.I., <u>Attia, W.A.</u> and Mehany, S.S. (2010): "Effective Modulus of Elasticity Method for Inelastic Buckling Analysis", Al-Azhar Engineering Eleventh International Conference, Cairo, Egypt, December 21-23.
- 32-El-Leithy, N.F., Hussein, M.M., Attia, W.A. (2011): "Comparative Study of Structural Systems for Tall Buildings", Journal of American Science, Brooklyn, NY, U.S.A., Vol. 7, No. 4, March, pp. 707-719.
- 33- Attia, W.A. and Khalil, E. (2012): "Dynamic Behavior of Ultra Span Cable Stayed Bridges Provided with Cable Nets", IABSE Cairo Conference: Global Thinking in Structural Engineering, Sharm El-Sheikh, Egypt, May 7-9.
- 34-Bayoumey, A.A. and Attia, W.A. (2012): "Critical Wind Speed Investigation of Suspension Bridges with Multiple Main Cables", IABSE Cairo Conference: Global Thinking in Structural Engineering, Sharm El-Sheikh, Egypt, May 7-9.
- 35-Bayoumey, A.A. and Attia, W.A. (2012): "Investigation of Critical Wind Speed of Suspension Bridges with Multiple Main Cables", Journal of American Science, Brooklyn, NY, U.S.A., Vol. 8, No. 6, June, pp. 716-721.
- 36-Sayed, A.R. and Attia, W.A. (2012): "Finite Element Analysis Techniques of Vessel Collision with Cable-Stayed Bridges", Life Science Journal, Richmond Hill, NY, U.S.A., Vol. 9, No. 2, June, pp. 1179-1190.
- 37-Laissy, M.Y., <u>Attia, W.A.</u> and Abdel-Wahab, M.M. (2012): "Investigating Projectile Penetration of Sandwich Panels with Multiple Suppressive Cores", 12<sup>th</sup> International Conference on Structures Under Shock and Impact (SUSI 2012), Kos, Greece, September 4-6.

- 38-Tawadrous, R., <u>Attia, W.</u> and Laissy, M. (2014): "*Investigating Projectile Penetration of Concrete Block Reinforced by Ceramics*", 13<sup>th</sup> International Conference on Structures Under Shock and Impact (SUSI 2014), New Forest, UK, June 3-5.
- 39-Hussein, M., Badri Hussein, A. and Attia, W. (2014): "Comparative Study of Wind Tunnel Test Resuls to International and Egyptian Design Codes", The 2014 World Congress on Advances in Civil Environmental and Materials Research (ACEM'14), BEXCO, Busan, South Korea, August 24-28.
- 40-Badri, A., Hussein, M. and Attia, W. (2015): "Study of Wind Tunnel Test Results of High-Rise Buildings Compared to Different Design Codes", Wind and Structures, Vol. 20, No. 5, May, pp. 623 642.
- 41-Abdel Aziz, A., and Attia, W.A.: "Aeroelastic Investigation of Different Deck Sections for Suspension Bridges by Numerical Analysis", International Journal of Engineering and Innovative Technology (IJEIT), Vol. 4, Issue 12, June.
- 42-Irheem, M.M.M. and Attia, W.A. (2015): "Investigating Effects of Boundary Conditions on the Evaluation of R-Factor of Un-Braced Steel Frames", HBRC Journal, Housing and Building National Research Center, Elsevier B.V., In Press, Accepted June.
- 43-Abdel Aziz, A., and Attia, W.A.: "Investigation of Flutter by Two Numerical Simulations Analysis for Suspension Bridges", Global Journal of Engineering Science and Research Management, Vol. 2, No. 8, August.
- 44-Hasan, M., Khalil, E., <u>Attia, W.</u> and Turkey, A. (2015): "Influence of Deck Longitudinal Prestressing on Cable-Stayed Bridges", Structural Engineering International, International Association of Bridge and Structural Engineering (IABSE), Zurich, Switzerland, Vol. 25, Number 3, August, pp. 292 299.
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- 51-Mohamed, E.K., Khalil, E., <u>Attia, W.A.</u> and Mohamed, A. (2016): "Deck Optimization for Enhanced Aerodynamic Stability of Long Span Bridges", Engineering Research Journal, Faculty of Engineering at Shoubra, Egypt, Number 28, April.
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- 57-Elgohary, M.O. and Attia, W.A. (2017): "Bridge Pylons-Modeling and Design under CFD Analysis", Journal of Al Azhar University Engineering Sector (JAUES), Al-Azhar University, Egypt, Vol. 12, No. 45, October, pp. 1285-1294.

## PRACTICAL EXPERIENCE

- 1. From August 2017 till now, Director of the "Research and Studies Center of Civil Engineering (RSCCE)", Faculty of Engineering, Cairo University.
- 2. From 1997 till now, Chairman of the "Egyptian Japanese Engineering Consulting Center" (EJECC) (Private Consulting Firm).
- 3. From March 2005 till now, Main Supervisor, Structural Engineering Division, Beeah Consulting Firm.
- 4. From January 1997 till now, Engineering Consultant, Cairo University Hospitals.
- 5. From January 2006 till May 2010, Engineering Consultant, Health Insurance Organization, Egypt.
- 6. From October 1991 till April 1996, Consultant Engineer at Nippon Engineering Consultant Company, Japan.
- 7. From 1996 till 1997, Consultant Engineer at Prof. Dr. Ibrahim Gaafar Engineering Consulting Office.
- 8. From August 1993 till April 1994, Head of the Structural Engineering Section at Prof. Dr. Mostafa El-Kafrawy Engineering Consulting Office.
- 9. From January 1985 till October 1987, Designer Engineer at Prof. Dr. Ahmed El-Kafrawy Engineering Consulting Office.
- 10. From July 1983 till July 1985, Designer Engineer at Prof. Dr. Gamal Sherif Engineering Consulting Office.

# SAMPLES OF THE DESIGNED PROJECTS 1. BRIDGES AND DAMS

- 1. Structural analysis and stability study of ALFERDAN cable-stayed bridge over the Suez Canal (with the Arab Consultants).
- 2. Structural Analysis and stability study of TATARA cable-stayed bridge in Japan (the longest cable-stayed bridge in the world).
- 3. Dynamic analysis of HAYASAKI multi-span suspension bridge in Japan.

- 4. Stress analysis of concrete arch dam at FUGY province in Japan.
- 5. Design of reinforced concrete piers for ARA-KAWA arch bridge in Japan.
- 6. Dynamic analysis of a reinforced concrete bridge in YAMAGATA province in Japan.
- 7. Preparing several structural analysis programs for analysing cable-stayed bridges and suspension bridges under vertical and lateral loads.
- 8. Design of the reinforced concrete bridge for terminal 2 of Cairo International Airport.
- 9. Design of DAHLET EL-ROSHD prestressed concrete bridges in MEKKA in Saudi Arabia.

### 2. RESIDENTIAL BUILDINGS

Several buildings in different locations in Egypt including the following:

- 1. Fisal Tower (33 floors), owned by El-Gezira Investment Co., located on the Nile Street, Giza.
- 2. Maadi Plaza (35 floors), located on Kornish El-Nile Street, Maadi.
- 3. Sheraton Tower (24 floors), owned by Sheraton Tower Owners Union, located beside the Cairo Sheraton Hotel, Giza.
- 4. Montaser City (5 buildings, 11 floors each), owned by Mr. Ahmed Montaser, located in the city of Tanta.
- 5. Shehab Purl (12 floors), owned by Mr. Mohamed Safwat Saleh, located in Shehab Street, Mohandseen.
- 6. El-Thawra Tower (14 floors), located in El-Thawra Street, Mohandseen.
- 7. El-Andaleeb Tower (16 floors), 72 Gamat El-Dewal El-Arabia Street, Mohandseen.
- 8. Abu-Elmahasen Tower (15 floors), owned by Architecture and Construction Company, located in Abu-Elmahasen Street, Heliopolis.
- 9. El-Khalifa El-Mamon Tower (15 floors), owned by Architecture and Construction Company, located in El-Khalifa El-Mamon Street, Heliopolis.
- 10. Nehro Tower (19 floors), located in Nehro Street, Heliopolis.
- 11. Building owned by Mr. Ahmed El-Masry (13 floors), Port Said.
- 12. Badr Tower (16 floors), owned by Badr Investment Company, located in Maadi.
- 13. 6th of October Tower (40 floors), located in Manial, Cairo.
- 14. El-Kawsar Tower (16 floors), 11 Lebanon Street, Mohandseen.

- 15. Abu Sombol Tower (15 floors), owned by Abu Sombol Housing and Investment Company, located in Mohandseen.
- 16. Rehab El-Iman Tower (19 floors), owned by Mr. Abbas Mohamed Hassan and Others, 95 King Fisal Street, Giza.
- 17. New Nehro Tower (15 floors), owned by the Consulting Company for Construction, located in Nehro Street, Heliopolis.
- 18. El-Yasmin Tower (17 floors), owned by El-Ektsadeya Housing and Construction Company, 44 Abdel-Monem Reyad Street, Agoza.
- 19. Sphinx Tower (24 floors), owned by Dr. Aly Raafat, Mohandseen.
- 20. International Garden Tower (21 floors), Nasr City.
- 21. Sheikh Saleh Al-Rashed Tower (21 floors), Mekka, Saudi Arabia.
- 22. Beta 6 Tower (12 floors), owned by Beta Construction Company, 2 Anas Ibn Malek Street, Mohandseen.

### 3. WATER TANKS

- 1. Elevated water tank at the New Amereia City, Alexandria.
- 2. Several elevated tanks in different locations in Saudi Arabia.
- 3. Aeriation tanks and Final Sedimentation tanks for Industrial Waste Water Treatment Plant of 200 m3/ hour located at the Egyptian Company for Starch and Glucose Manufacturing in Mostorod, Egypt.

### 4. FACTORIES

- 1. Factory of The German Company for Paper Manufacturing, 6th of October City.
- 2. Factory of Allam Animal Food Supplies Company, 6th of October City.
- 3. Car Spare Parts factory owned by Mr. Mohamed Hossam El-Din, 6th of October City.

### 5. <u>HOSPITALS</u>

1. El-Maghraby Eyes Hospital, El-Sayeda Nafisa, Cairo.

### 6. RESORTS AND HOTELS

- 1. Karnak Hilton Hotel, Luxor City.
- 2. Amon Sheraton Village, Aswan City.
- 3. Palm Beach Resort, Hurgada
- 4. Yemen Hotel, 5-star hotel in Yemen.

### 7. EMBASSIES

- 1. Egyptian Embassy in Tokyo, Japan.
- 2. Egyptian Embassy in Islam Abad, Pakistan.
- 3. Egyptian Embassy in New Delhi, India.

### 8. MILLING PROJECTS

- 1. El-Aseel Mill in El-Senbellawain, with a capacity of 140 tons/day, in cooperation with the Swiss company "BUHLER".
- 2. El-Akhal Mill in 6th of October City, with a capacity of 140 tons/day, in cooperation with the Swiss company "BUHLER".
- 3. The Egyptian Company for Milling and Food Industries Mill in 6th of October City, with a capacity of 140 tons/day, in cooperation with the Swiss company "BUHLER".
- 4. El-Etehad Mill in Sadat City, with a capacity of 120 tons/day, in cooperation with the Turkish company "ALAPALA".
- 5. United Brothers Mill in Assiut City, with a capacity of 120 tons/day, in cooperation with the Turkish company "ALAPALA".
- 6. Kafr Hamza Mill in Qualubeya, with a capacity of 120 tons/day, in cooperation with the Chec company "PROKOP" and Turkish company "DEGIRMENCIOGLU".

### 9. MOSQUES

- 1. Al-Rashdan mosque, Nasr City.
- 2. El-Rahma mosque, Mostafa El-Nahas Street, Nasr City.
- 3. El-Rahman Guests mosque, Hadayek El-Kopa, Heliopolis.
- 4. El-Beshry mosque, 6th October City.

### 10. <u>DIFFERENT JOBS</u>

- 1. Design revision and preparing a technical report of the Youth Housing Project buildings at El-Obor City, constructed by Al-Robaeia Construction Company.
- 2. Design revision and preparing a technical report for the retaining walls of a Housing Compound owned by Eng. Mahmoud Nosair, constructed by Al-Robaeia Construction Company.
- 3. Preparing Steel Bars Bending Lists for the Waste Water Treatment Plant at El-Gabal El-Asfar, constructed by EGYCO.
- 4. Preparing the technical data and figures of the Cable-Stayed brochure printed by the Arab Contractors Company.
- 5. Design revision and preparing a technical report for Ammar Ibn Yaser School.

### 11. <u>TELECOMMUNICATION TOWERS</u>

- 1. Design and construction supervision of towers foundations with heights ranging from 10 to 96 m for the highway telecommunication network on the following roads:
- 2. 12 Towers on Ismailia Port Said Road.
- 3. 18 Towers on Cairo Beni Suef Road.
- 4. 21 Towers on Cairo Suez Road.
- 5. 11 Towers in Ras Sudr Zone.
- 6. 27 Towers in Abis Nubaria Zone
- 7. Design and construction supervision of metal roof-top towers with heights ranging from 9 to 27 m for VODAFONE Network, constructed by Modern Telecom Company as following:

- 8. 28 Towers in the First Phase of the project.
- 9. 80 Towers in the Second Phase of the project.
- 10. Design and construction supervision of metal roof-top towers with heights ranging from 9 to 27 m for VODAFONE Network, constructed by AL.AN Deck Company as following:
- 11. 23 Towers in the Second Phase of the project.
- 12. Design and construction supervision of towers foundations with heights ranging from 34 to 60 m for VODAFONE Network, constructed by Modern Telecom Company as following:
- 13. 28 Towers in different locations all over Egypt.

### TRAINING COURSES

- 1. *International Publishing of Research*, Faculty and Leadership Development Center, Cairo University, 3-5/4/2012
- 2. *Research Ethics*, Faculty and Leadership Development Center, Cairo University, 17-19/4/2012
- 3. *E-Learning*, Faculty and Leadership Development Center, Cairo University, 17-19/4/2012
- 4. *Managing Research Teams*, Faculty and Leadership Development Center, Cairo University, 24-26/4/2012
- 5. *Quality Standards in Teaching*, Faculty and Leadership Development Center, Cairo University, 28-30/4/2012
- 6. *Competitive Research Projects*, Faculty and Leadership Development Center, Cairo University, 12-14/6/2012