

# Curriculum Vitae

**Name:** **Mohamed Talat Mostafa**  
Professor of Concrete Structures  
Faculty of Engineering, Cairo University

## **Personal Data:**

**Address:** Structural Eng. Dept.,  
Faculty of Engineering,  
Cairo University,  
Giza, Egypt.

## **Education:**

**Ph.D.** Structural Engineering, North Carolina State University,  
Raleigh, North Carolina, USA. (Dec., 1980).

“An experimental investigation on segmentally constructed  
hyperbolic prestressed cooling tower”.

**M.Sc.** Structural Engineering, Duke University, Durham, North  
Carolina, USA. (May, 1975).

“Prestressing losses in prestressed concrete beams  
subjected to sustained cracking loads”.

**B.Sc.** Civil Engineering, Cairo University, Egypt. (1969).

## **Employment & Teaching Experience:**

**1995 - Now** Professor of Concrete Structures, Cairo University,  
Egypt.

(Credit System Students: R.C Design I &II)

(Regular System Students: (R.C. Design courses/  
Graduation Project)

(Supervising of Graduate Students for M.Sc. & Ph.D)

**1991 - 1995** Assoc. Prof. Structural Eng. Dept., Cairo University  
Egypt.

(R.C. Design/ Graduation Project/ Prestressed Conc.).

- 1985 - 1991** Leave of absence from Cairo University to United Arab Emirates University, UAE. (Earned the title of Assoc. Prof. From Cairo University on Feb., 1987).  
(Statics/ Structural Design (1&2&4) / Cement and Conc. Technology/ Structural Concept (1&2)/ Graduation Projects for undergraduate and graduate students).
- 1981 - 1985** Assistant Prof. (Lecturer), Structural Eng. Dept., Cairo University, Egypt.  
(R.C.Design/ Building Technology/ Prestressed Conc./ Graduation Project).
- 1980 - 1981** Visiting Instructor, Civil Eng. Dept., North Carolina State University, USA.  
(Materials of Construction/ Advanced Theory of Reinforced Concrete).
- 1975 - 1980** Teaching and Research Assistant, Civil Eng. Dept., North Carolina State University, USA.  
(R.C.Design/ Structural Analysis and Mechanics/ Strength of Materials/ Concrete Technology).
- 1973 - 1975** Teaching Assistant, Civil Eng. Dept., Duke University, USA.  
(R.C.Design/ Strength of Materials/ Concrete Technology/ Structural Analysis and Mechanics/ Statics/ Dynamics).
- 1970 - 1973** Teaching Assistant, Structural Eng. Dept., Cairo University, Egypt.  
(Strength of Materials & Concrete Technology/ R.C.Design).

**Languages:** Arabic and English

### **Professional Membership & Academic Rewards:**

- Member, phi kappa phi (honor society), USA.
- Member, National Engineering Tau Beta pi, USA.
- Member, NCSU, ASCE, the American Society of Civil Engineering, USA.
- Member, Egyptian Syndicate for Engineering Professions, Civil Engineering Division.
- Member, Egyptian Society for Engineers.
- Member, Editorial Board of Scientific journal "Dirasat Hundasia", The United Arab Emirates University (1988 – 1991).
- Graduate Student Certificate of Outstanding Teaching, North Carolina State University, USA, 1980.

### **Activities:**

- -Structural design and supervision of concrete structures such as residential, educational, and industrial buildings
- Structural evaluation of R.C. structures.
- Maintenance, repairs, and strengthening of R.C. structures
- Co-Supervisor, Concrete Research Laboratory, Faculty of Engineering, Cairo University.
- Member of committee of student affairs of Faculty of Engineering, Cairo University.
- Head of sport committee of Faculty of Engineering, Cairo University.
- Member of basketball committee of Shooting Club, Dokki, Giza. (!994 till 2000)

### **Professional Engineering Experience:**

- 1- Construction site, Crane & Denbo general contracting company, Durham, North Carolina, U.S.A. "Construction of Power Plant at the University lake, chapel hill, N.C." 1974.
  
- 2- Structural Engineer, Kimley - Horn & Assoc. Inc., Raleigh, North Carolina, U.S.A. "Working on the North Carolina Bridge Inspection Program" 1980.

- 3- Structural Design of many buildings in Egypt such as:  
Suez tower, residential project in Giza - Residential project in Marsa Matrouh, Alexandria - Kuwait international tower in Alexandria- Elsaft Ninth district project (Residential - Schools) in New Amria city - Almabothine residential city (Cairo University residential project)- Suez cultural center (Theater building) - Al-Defreswar tourism center in Ismallia - Several multistory residential buildings in Egypt- Faculty of Commerce (English Dept., Cairo University) - High institute for engineering annex building (Six of October City) - Several elevated and underground concrete water tanks - Upgrading Project of Hilton swimming pool in Cairo - Extension of football stadium of Zamalik sports club - Annex building of Faculty of Engineering, Cairo University (Extension Project at Sheik Zayed City)- Annex buildings of Cairo University at Sheik Zayed City (five buildings)- Misr Insurance Company building at New Cairo.....etc
- 4- Structural Evaluation of many existing buildings in Egypt, Oman, Libya such as residential, educational buildings, and bridges (Repairs & Strengthening).
- 5- Structural consultation works with Accor hotels and Educational hospitals in Egypt.
- 6- Member of Cairo University technical committee for supervising of engineering works of the university buildings.
- 7- Head of technical committee (No.8) for building violations of Giza Governorate.
- 8- Committee member of the Egyptian Code of Design and Execution of Concrete Structures.
- 9- Member of the Standing Committee of the Egyptian Code for Design and Execution of Bridges.

10-Structural evaluation of wheat silos located in Damietta Harbor owned by The General Company for Silos and Storage.

11-Work with Research and Studies Center of Civil Engineering (RSCCE)– Faculty of Engineering, Cairo University - for structural evaluation, design, and supervising of many buildings in Egypt.

12-Structural consultations, strengthening and repair works, for many National Educational Institutes and Hospitals related to the Ministry of Health in Egypt, through the Consulting Group of Faculty of Engineering, Cairo University. ( المجموعة الإستشارية )  
(بهندسة القاهرة)

\* أعمال الإستشارات الإنشائية التابعة للمجموعة الإستشارية بهندسة القاهرة للمنشآت التالية:

- مبنى معهد القلب القومي بإمبابة.
- مبنى معهد القلب القومي بأرض مطار إمبابة.
- مبنى أمراض الكبد كورنيش النيل – إمبابة.
- مبنى مستشفى الأطراف الصناعية النيل – إمبابة.
- مستشفى أمراض الكلى بالمطرية.
- مستشفى أحمد ماهر التعليمي – عابدين – القاهرة.
- مستشفى الجلاء للولادة – القاهرة.
- مستشفى سوهاج بسوهاج.

13- Managing, Preparing, Conducting, and Reporting of load tests of bridges in Egypt such as:

- Elsemad bridge, Aboud, Cairo.
- Alazhar bridge, Cairo.
- King Faysal bridges group, Giza.
- Alfardous bridge, Cairo.
- Ahmed Badawy bridge, Cairo.

- Altayran bridge, Cairo.
- Alzaytoun bridge, Cairo.
- Rode El Farag bridge, Cairo.
- Belbace bridge, Sharkia Governorate.
- Meetnama bridge, Kaleobia Governorate.
- Abo Elmanga bridge, ring road, Egypt.
- Alzahraa bridge, Cairo.
- Faraskour bridge, Damietta.
- Ring road bridges group, and bedstrains, Egypt.
- Almansoura bridge, Dakahlia Governorate.
- Underground metro bridge, Shoubra Elkhima.
- Tersa bridge, Giza.
- Luxor bridge, Luxor.
- Alhafria & Alarabin bridges, Ring road, Cairo.
- Gamal Abdelnasser bridge, Alexandria Governorate.
- Port Said bridge (Ring road), Port Said Governorate.
- 6 th October Cable stayed bridge, Cairo.
- Almarutia bridge (26 July corridore), Giza.
- Almonib bridge, Cairo.
- Barageel & Elsarow bridges, Giza.
- Tersa, Konaysa, Nahia & Berak el Khiam bridges, Giza.
- Asphalt Elkanater & Sawahel bridges, Masraf Eskandar & Zaytouna bridges, Zefta- Meetghamr bridge.
- Underground metro bridge, Haram- Giza.
- Suspended Bridge of Suez Canal (Elsalam Bridge).
- Elnozha Bridge, Nasr City, Cairo.
- Several Bridges on The International Coastal Road between Damietta and Port Said City.
- Other Several Bridges all over Egypt.

### **Publications:**

- 1 - Development length of prestressing strands, PCI Journal, Vol. 22, No. 5, Sept./Oct. 1977, U.S.A.
- 2 - Comments on development length of prestressing strands, PCI Journal, Vol. 23, No. 4, July /Aug. 1978, U.S.A.
- 3 - Experimental study of a segmentally constructed cooling tower, PCI Journal, Vol. 28, No.3, May/June 1983. Also in ASCE/SESA Exchange

session "Physical modeling of shell and space structures, ASCE Annual convention, Oct. 1982, New Orleans, U.S.A.

- 4 - Effect of prestressing level on partially prestressed continuous beams, First National Conference on the Science and Technology of Buildings, Khartoum, Sudan, Dec. 1984.
- 5 - Behavior of reinforced concrete slabs under line load, First National Conference on the Science and Technology of Buildings, Khartoum, Sudan, Dec. 1984.
- 6 - Flexural - Shear cracking in partially prestressed concrete beams, Proc. of First Egyptian (Arab) Structural Engineering Conference, Cairo University, Vol. 1, April 1985.
- 7 - Partially prestressed beams with opening in the pure bending zone, proc. of First Egyptian (Arab) Structural Engineering Conference, Cairo University, Vol. 1, April 1985.
- 8 - Experimental investigation on partially prestressed continuous beams, Proc. of First Egyptian (Arab) Structural Eng. Conference, Cairo University, Vol. 1, April 1985.
- 9 - Partially prestressed beams with opening in the shear span , Proc. of First Egyptian (Arab) Structural Engineering Conference, Cairo University, Vol. 2, April 1985.
- 10 - Experimental analysis of partially prestressed concrete beams with opening in the pure bending zone, Journal of the Egyptian Society of Engineers, Vol. 25, No. 3, Oct/Dec. 1986.
- 11 - Effect of steel fibers on properties of concrete, Proc. of 3<sup>rd</sup>. Arab Structural Engineering Conference, United Arab Emirates University, Vol. 3, March 1989, PP. 337 - 356.
- 12 - Effect of dissolved inorganic salts on the setting of Al-Ain ordinary portland cement, Dirasat Hundasia Research Journal, Faculty of Engineering, United Arab Emirates University, Vol. 3, No. 1, 1990 PP. 49 - 64.
- 13 - The use of epoxy coated steel rebars in reinforced concrete structures, Technical Report, The Technology and Energy Research Center, United Arab Emirates University, 1992.
- 14 - Application of Strut - And - Tie Model (SATM) to reinforced concrete deep beams, Proc. Of 5<sup>th</sup>. Arab Structural Engineering Conference, al-Fateh University, Libya, Vol.2, Nov. 1993, PP. 719 - 729.

- 15 - Reinforced concrete deep beams with web openings - A truss model approach, Journal of the Egyptian Society of Engineers, Vol. 33, No. 2, April 1994, PP. 3 - 11.
- 16 - Behavior of simply supported composite reinforced concrete prelabs, Engineering Research Journal, Faculty of Engineering & Tech., Mataria, Helwan University, Cairo, Vol. 2, Feb. 1995 PP. 460 - 471.
- 17 - Non-Linear finite element analysis of simply supported deep beams with openings, Engineering Research Journal, Faculty of Engineering & Tech., Mataria, Helwan University, Cairo, Vol. 2, Feb. 1995 PP. 403 - 419.
- 18 - Capacity of concrete brackets - on the application of truss analogy, Journal of the Egyptian Society of Engineers, Vol. 34, No. 2, April 1995, PP. 11 - 17.
- 19 - Three - Dimensional analysis of concrete confined by lateral reinforcement, Civil Engineering Research Magazine, Faculty of Engineering, Al Azhar University, Cairo, Vol. 17, No. 3, March 1995, PP. 522 - 530.
- 20 - Non-linear analysis of continuous deep - ordinary (shallow) beams, Civil Engineering Research Magazine, Faculty of Engineering, Al Azhar University, Cairo, Vol. 17, No. 3, March 1995, PP. 559 - 574.
- 21 - Micro and macroscopic response of a concrete model. Civil Engineering Research Magazine, Faculty of Engineering, Al Azhar University, Cairo, Vol. 17, No. 3, March 1995, PP. 531 - 540.
- 22 - Application of equilibrium truss models to reinforced concrete corner connections subjected to opening moments, Mansoura 2<sup>nd</sup> Engineering Conference, Mansoura University, April 1997.
- 23 - Behavior of biaxially reinforced concrete column under simulated earthquake loading, Engineering Research Journal, Faculty of Engineering & Tech., Mataria, Helwan University, Cairo, Dec. 1998.
- 24 - Behavior of axially reinforced concrete column under simulated earthquake loading, Journal of the Egyptian Society of Engineers, No. 2, 1998.
- 25 - A Plasticity model for 2-D reinforced concrete compressive struts with application to deep beams, Journal of the Egyptian Society of Engineers, No. 3, Vol.38, 1999.



- 26 - Ultimate capacity of keyed rigid cantilever retaining wall supporting loaded backfill, Civil Engineering Research Magazine, Al-Azhar University, CERM Vol. 22, No. 1, Jan. 2000.
- 27 - Strengthening of exterior and corner preloaded columns by concrete jackets, Journal of Egyptian Society of Engineers, Vol. 39, No.2, 2000.
- 28 - Strengthening of corbels using CFRP an experimental program, The Third International Conference on Composite in Infrastructure ICCI, San Francisco, California, USA, 02. June 10-12, 2002, Paper No. 13.
- 29 - Long term deflection for H.S.C. beams, Engineering Research Journal, University of Helwan, June 2004.
- 30 - Behavior of masonry walls strengthened by reinforced concrete jackets, Engineering Research Journal, University of Helwan, 2005.
- 31 – Long term deflection of reinforced high strength concrete beams, HBRC Journal. Vol. 4 No.3, Dec. 2008, PP. 96-104.
- 32 – Behavior of one-way composite Pre-slabs with different shear connector shapes, Proceedings of the joint 8<sup>th</sup> IFEE2017 and 3<sup>rd</sup> TSDIC2017, Sharjah, United Arab Emirates, April 18 – 20, 2017.