

Curriculum Vitae**SHERIF A. MOURAD**

Department of Structural Engineering,
Faculty of Engineering, Cairo University,
Giza, EGYPT

Personal Data:

Born September 1962 in Cairo, EGYPT.

Present Position:

Professor of Steel Structures and Bridges, Structural Engineering Department, Faculty of Engineering, Cairo University.

Previous Managerial Positions:

Dean, Faculty of Engineering, Cairo University (August, 2012 – October 2016).

Vice Dean for Graduate Studies and Research, Faculty of Engineering, Cairo University (August 2009 – July 2012).

Director, Center for Advancement of Postgraduate Studies, Faculty of Engineering, Cairo University (CAPSCU), Nov. 2007 – July 2009.

Vice Director, Civil Engineering Research Center, Faculty of Engineering, Cairo University (CAPSCU), Sept. 2006 – Nov. 2007.

Education:

- B.Sc. in Civil Engineering, June 1984 (Distinction with Honor degree, 3.91 GPA), Faculty of Engineering, Cairo University, EGYPT.
- M.Sc. in Structural Engineering, May 1987 (Distinction), Faculty of Engineering, Cairo University, EGYPT.
- Ph.D. in Engineering, September 1990 (4.0 GPA), University of California, Irvine, CA92717, U.S.A.

Experience:**Teaching:**

- March 2002 – Present, Professor of Steel structures and Bridges, Department of Civil Engineering, Cairo University, Egypt, teaching graduate courses in Steel Design, Earthquake Engineering, and Numerical Methods as well as undergraduate Structural, Civil and Architectural students courses in Steel Design.
- January 1997 – March 2002, Associate Professor, Department of Civil Engineering, Cairo University, Egypt, teaching graduate courses in Steel Design and Structural Dynamics, and teaching undergraduate Structural and Architectural students courses in Steel Design.
- Fall 91 – January 1997, Assistant Professor, Department of Civil Engineering, Cairo University, Egypt, teaching graduate courses in Steel Design and Structural Dynamics, and helping in teaching undergraduate Civil and Architectural students courses in Steel Design.

- Summer 89, 90, 91, 92: Lecturer, Summer Session, University of California, Irvine, teaching *Computational Methods in Engineering*.
- Spring 91, Lecturer, University of California, Irvine, teaching *Soil Mechanics Laboratory*.
- Fall 90, Winter 91, Lecturer, University of California, Irvine, teaching *Computational Methods in Engineering*.
- Winter 90: Teaching Associate, Department of Civil Engineering, University of California, Irvine, teaching *Computational Methods in Engineering*.
- Spring 89, 90: Teaching Assistant, Department of Civil Engineering, University of California, Irvine, teaching *Soil Mechanics Laboratory*.
- Winter 89: Teaching Associate, Department of Civil Engineering, University of California, Irvine, teaching *Reinforced Concrete Design*.
- Fall 88: Teaching Assistant, Department of Civil Engineering, University of California, Irvine, teaching *Strength of Materials*.
- Spring 88: Teaching Assistant, Department of Civil Engineering, University of California, Irvine, teaching *Computer Methods in Structural Analysis*.
- Winter 88: Teaching Assistant, Department of Civil Engineering, University of California, Irvine, teaching *Steel and Wood Design*.
- September 84--June 87: Teaching Assistant, Structural Engineering Department, Cairo University, teaching *Structural Steel Design* and *Metallic Bridges*.

- Dr. Mourad participated with the UNESCO to prepare educational material to help teach earthquake engineering to practicing engineers, with the aim of increasing seismic awareness of the significance of dynamic loading. The material included colored slides, videos, textbooks and references, computer programs as well as compact disks. A series of lectures were prepared using the material in coordination with several other Egyptian experts. The project was extended further to include seismic retrofitting, and the material was presented and discussed with experts from various Arab countries.

- 1991 to date: Dr. Mourad participated in several lectures, workshops, short courses, and training courses on structural design, with emphasis on seismic design philosophy, theory, and applications. The following is a partial list of lectures given:
 - Seismic Design of Liquid Storage Tanks, Workshop on Structural Dynamics and Earthquake Engineering, Organized by the Egyptian Society of Earthquake Engineering.
 - Fundamentals of Structural Dynamics, four lectures presented as part of a short course on Seismic Design of Structures, Organized by the Egyptian Syndicate of Engineers, Cairo.
 - Design Codes for Seismic Design of Buildings, presented at the Symposium on the October 12, 1992 Earthquake, Organized by the Training Center of the Arab Contractors (Osman Ahmed Osman).
 - Design of Steel Structures in Accordance with the Egyptian Code, Faculty of Engineering, Cairo University, Organized by the Training Center of Cairo University.
 - Seismic Design of Highway Bridges, presented as part of a short course on design of earthquake resistant structures, organized by the Egyptian Syndicate of Engineers, Aswan.
 - Introduction to Seismology, and Seismic Design of Reinforced Concrete Structures, five lectures as part of a short course on Earthquake Resistant Design, The American University in Cairo, Engineering Services.

-
- Design and Retrofit of Highway Bridges, part of a short course on Repair and Rehabilitation of Structures, The American University in Cairo, Engineering Services.
 - Design of Steel Structures, The American University in Cairo, Engineering Services.
 - Repair and Maintenance of Steel Structures, The American University in Cairo, Engineering Services.
 - Earthquakes and their Causes, Earthquake Resistant Design and Detailing, three lectures as part of a short course on Earthquake Resistant Design, Organized by the Saudi Engineering Committee, at Riyadh.
 - On the stability and strengthening of historical monuments, lecture at the workshop on New Technologies and Historical Monuments, sponsored by the UNESCO, Cairo, 4--8 Dec., 1994.
 - Seismic Retrofit Fundamentals, a Training Course at Cairo University, sponsored by UNESCO and Cairo University, Cairo, Dec. 1998.
 - Assessment of Superstructure Condition for Historical Buildings, Advanced Technology Training Program for Cultural Heritage, Cairo, Feb. 2005.

Research:

- Principal Investigator, "Building Information Modeling: Integrated Design Environment for Engineering Education", Tempus Project accepted for funding, Budget one million Euros, December 2013.
- Principal Investigator, "The use of small amplitude vibrations for monitoring important structures with application on some historical monuments and predicting the response under possible seismic excitation and recommended methods for strengthening", Joint Research Project between the Academy of Scientific Research and Technology and the Faculty of Engineering, Cairo University, 2007-2009.
- Co-Principal Investigator, "Evaluation of the structural behavior of existing bridges and reinforced concrete buildings in Egypt subjected to seismic loading", Joint Research Project between the Academy of Scientific Research and Technology and the Faculty of Engineering, Cairo University, 2007-2010.
- Team Member, European Commission Project: Earthquake Protection of Historical Buildings by Reversible Mixed Technologies (PROHITECH), FP6 Project FP6-2002-INCO-MPC-1.
- Team Member, European Commission Project: Open and fully compatible next generation of strengthening system for the rehabilitation of Mediterranean building heritage (OPERHA), FP6 Project FP6-2003-SSP3-513718.
- 2005-2006: Team Member, Joint European Projects: Advanced Technology training program for Cultural Heritage (ATECH), funded by TEMPUS, project No. 30049.
- Septmber 1999 – October 2000: Principal Investigator, "The Effects of Seismic Loading on Construction and the procedures to mitigate the damaging effects", Joint Research Project between the Academy of Scientific Research and Technology and the Faculty of Engineering, Cairo University.
- 1999 – 2001: Team Member, European Commission Project: ERB IC18CT98-0385 Integration of Traditional and New Techniques for the Protection and Conservation of Historical and Cultural Built Heritage in Earthquake Prone Areas.
- June 92--September 92: Visiting Assistant Researcher, University of California, Irvine, working on a project for Seismic Analysis of Bridges.
- October 90--September 91: Postdoctoral Researcher, working on two research projects: Reduced Scale Testing of Pier Walls Under Cyclic Loading for Seismic Retrofit, and Performance of Liquid-Storage Tanks During the 1989 Loma Prieta Earthquake.

- June 89--September 90: Research Assistant (Dynamic Analysis of Fluid-Structure Systems).
- December 88: Research Assistant (Vibration and Buckling of Composite Shells).
- June 88--November 88: Research Assistant (Dynamic Analysis of Fluid-Structure Systems).

Publications:

Dr. Mourad has published more than 130 technical papers in proceedings of local and international conferences as well as local and international journals. A list is available upon request.

Journal Referee:

Dr. Mourad acted as a referee for more than 20 international and local journals, in addition to numerous conferences and research proposals. A list is available upon request.

Honors and Awards:

- State Award for Research in Engineering Sciences, 2002.
- Teaching Assistant of the year, ASCE student chapter, Univ. of California, Irvine, 1990.
- Chi Epsilon Civil Engineering Honor Society, Excellence in teaching award, 1989-90.
- Dissertation Fellowship, Fall 1989.
- Regents Fellow, Summer 1988.
- Tuition Fellowship 1987-90.
- Chancellor Fellow, University of California, Irvine, 1987-88.
- Academic honors, Cairo University 1979-84.

Graduate Theses Supervision:

Dr. Mourad has participated in the supervision of 60 M.Sc. Thesis as well as 21 Ph.D. dissertations that were awarded at Cairo University.

Design and Consultation:

- 1992-present: Participated as a team member/team leader with RSCCE in the structural design of new structures as well as structural assessment of existing buildings and design of remedial measures for several structures. Tasks included numerical modelling, structural analysis, assessment of stresses under permanent and temporary loading and conformance with the Egyptian design codes. The output included structural drawings, bill of quantities, and specifications.
- 1994--present: Partner, NileConsult. In charge of the design, design review, construction supervision and/or providing technical assistance for various projects, including:
 - Steel Bridges:
 - Design and design review for steel spans of the International Coastal Highway, North Coast.
 - Design of steel spans for the new Cairo-Alex freeway.
 - Design review of Cable-stayed Bridge, Cairo Airport Mall.
 - Design of West-Bay Lagoon Project Bridges, Dubai, UAE.
 - Design of several link bridges between buildings: San Stefano Complex, Laurent Complex, Degla View, Crystal Plaza, El-Galaa Hospital, ...

-
- Industrial Buildings and Workshops:
 - EIM new headquarter and workshops, Abou-Rawwash, Giza.
 - Design of steel structures for the new workshops for EIM, Abou-Rawwash.
 - Design of a new Firebrigade building, Mansheyat Nasser (in collaboration with GTZ).
 - Refinery plant in the 10th of Ramadan City.
 - Oil tanks and facilities in Damietta Harbour.
 - Steel workshops and warehouses, Gasco Company.
 - Design review and technical support for SINCO fertilizer factory, Suez.
 - Assessment of excessive vibration reported in the steel structure of the Hammer Crusher, Assiut Cement factory, and investigating remedy solutions.
 - Structural design of shiploading support system, Abou-Zneima Phosphate factory, Sinai.
 - Structural modifications and renovation for dedusting system. Delat Steel.
 - Residential/Commercial/Office Buildings:
 - KTC Technology Center Headquarters, Kattameyya.
 - New TV Building, Mokattam City.
 - Residential buildings and villas in Cairo and the new developments in Sheikh Zayed, Six October, Shorouk, and Tagamo'a.
 - Cairo University Faculty Housing Projects, Hadayek El-Ahram.
 - Design review of Crystal Tower and AREC Tower, Kuwait.
 - Main building for the Institute of Tourism and Hotels, Hiliopolis.
 - Main building and facilities for the Institute for Optics, Hiliopolis.
 - Fanara Family Group Resort, Fayed.
 - Lugal Resort, Sharm El-Sheikh.
 - Bowling Center, Shooting Club, Giza.
 - Indoor Swimming Pool, Shooting Club, Giza.
 - Improvements at El-Galaa Hospital, including a new steel link bridge between existing buildings.
 - Inspection and assessment of structural safety of 40 self-supported and cable-stayed communication towers, heights ranging from 20 to 120 meters.
 - Providing technical assistance to KISR (Kuwait Institute for Scientific Research) in some important projects at Kuwait using advanced computer programs for structural analyses.
 - Investigate the potential of floor vibration at the Arcadia Mall, due to the introduction of vibrating equipment in an entertainment area.
 - Investigation of cracks in the concrete skeleton of the Lime Stone Crusher, Sinai Cement Factory.
 - Specialized consultation on design and execution of post-tensioned slabs, Vodaphone buildings (Link and C3), Smart Village.
 - Evaluation of several industrial, commercial, and residential buildings for various financial institutions.
 - Design Review for the Insurance Consortium: Dr. Mourad is a member of the design review team responsible for issuing Stability and Risk Definition Reports for Steel Structures.
 - 1991--2006: Freelance Senior Structural Engineer, working with several design offices. Leading a team involved in the design and supervision of major project including

Concrete and Steel Bridges, Prestressed Concrete Structures, Industrial Facilities, Central Laboratories, Hotels, Sewage Treatment Plants, Exhibition Halls, Commercial Centers and Governmental and Private Buildings in several Arab and African Countries. Design was using international codes; American (AISC, ACI), European (EC02 and EC03). Projects included:

- Design, supervision, and technical support during construction for San-Stefano Complex - a residential and commercial complex in Alexandria, Egypt..
 - Assessment of the structural stability of the Holy Haram in Mecca, and structural options for improvement of circulation.
 - Design and technical support during construction of the expansion of exhibition spaces of Dubai World Trade Centre, United Arab Emirates.
 - Design and technical support during construction of Terminal 3 - Dubai International Airport, United Arab Emirates.
 - Design review and technical support during construction of Bur Juman Centre Extension, United Arab Emirates.
 - Design and preparation of construction documents of Steel Melt Shop at Sadat City, Egypt.
 - Seismic hazard assessment for Damietta Harbour.
 - Design and preparation of construction documents of Laurent Complex - a residential and commercial complex in Alexandria, Egypt..
 - Design and technical support during construction for Coastguard Headquarters and Facilities, Kuwait.
 - Design of the Conrad Hotel, Cairo.
 - Design and technical support during construction for Beirut International Airport, Lebanon.
 - Seismic hazard assessment for Adaseyya Dam, Jordan.
 - Seismic hazard assessment for Sahl Hashish, Red Sea, Egypt.
 - Design, design review and technical assistance for Nag-Hammady Fiber-Board factory, Doshna.
-
- 1995-present: Participated in the structural stability assessment and design of remedial measures for several historical monuments. Task included numerical modelling, structural analysis, assessment of stresses under permanent and temporary loading – especially earthquake excitations, in addition to determination of causes of deterioration and proposing methods for repair. The number of monuments exceeds 50, and are located in Egypt (Cairo, Alexandria, Rasheed, Luxor, Aswan, Kafr El-Sheikh, ...) as well as Syria and Yemen. A list is available upon request.
-
- 1988--1991: Structural design of different elements such as braced steel towers and liquid storage tanks, conforming with the American UBC and its seismic provisions.
 - 1985--1987: Part-time design engineer at a consulting office (Consulting Engineering Center, 7 Lebanon St., Mohandeseen, Giza, EGYPT).
 - 1984--1987: Structural Design Engineer participating in the design of several projects; Residential buildings, industrial facilities and silos.