

## Curriculum Vitae

### Biographical data:

Name: Ahmed Mohamed Yousry Hamed  
Birth date: 04-12-1974  
Home Address: Ibrahemia towers, tower 4, 11<sup>th</sup> floor, Assiut  
Work Address: Civil Eng. Dept., Faculty of Engineering, Assiut University, Assiut.  
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### Education:

2006-2011 Ph.D. in Structural Engineering from Norwegian University of Science and Technology (NTNU) Trondheim Norway. The title of the thesis is "Structural Capacity of Anchorage Ties in Masonry Veneer Walls Subjected to Earthquake"  
1997-2000 M.Sc. in Civil Engineering with Distinction degree from Assiut University, Egypt. The thesis's title is: "Elasto-plastic Analysis of R.C. Slender Beams"  
1992-1997 B.Sc. in Civil Engineering, Very Good with honour's degree from Assiut University, Egypt.

### Current and previous employment:

2011-Present Assistant Professor of Analysis of Structures, department of Civil Engineering, Assiut University, Egypt.  
2012-2013 Senior Engineer/ academic responsible at structural Department, Rambøll Oil and Gas, Oslo Norway,  
2009-2011 Senior Engineer in the section of fixed offshore structures (concrete group), DNV, Norway.  
2006-2009 Teaching assistant/ Ph.D. candidate, Department of Structural Engineering, NTNU, Norway.  
2004-2006 Researcher, Department of Structural Engineering, NTNU, Norway.  
2002-2003 Visiting researcher in SINTEF Civil and Environmental Engineering, Cement and Concrete, Trondheim, Norway.  
2000-2004 Assistant lecturer in Civil Engineering Department, Assiut University, Egypt.  
1997-2004 A part time R.C. structures designer/ consultant engineer in a Consulting Construction office in Assiut, Egypt.  
1997-2000 Demonstrator in Civil Engineering Department, Assiut University, Egypt.

### Professional Experience:

2011-current Teaching the following subjects: "Theory of structures (for second and third year civil engineering students and for first year Architecture students), Computer applications in civil Engineering (for fourth year civil Engineering students), Structural Systems contains concrete structures, steel structures and foundations design (for third year Architecture and interior design students). Supervisor for the 4th year civil engineering students in the Structural Analysis and Design graduate project.  
2014-Current Director of the Information Centre at Faculty of Engineering, Assiut University.  
2015-Current PI (Principle Investigator) and director of the Risk assessment and modelling lab (RAM Lab) at Civil Eng. Dept., Faculty of Engineering, Assiut University.  
2012-2013 Academic responsible, responsible for the structure analysis and research projects in the department of structural engineering at Rambøll Oil and Gas, Norway.  
2009-2011 Verification and certification of concrete offshore structures and components, (wind turbines' foundations and shafts, concrete coating for pipeline, grouted connections for mono-pile in offshore structures,..)  
2004-2009 Helping in running the classes of Reinforced Concrete design for the structural engineering students, NTNU, Trondheim, Norway.  
1997-2004 Structural Designer/ Consultant Engineer at a Consulting Construction office in Assiut, Egypt.  
1997-2004 Helping in running the classes of Theory of Structures and Reinforced Concrete Design for the 1st , 3rd and 4th year civil engineering students, Assiut University.  
1997-2004 Assistant supervisor for the 4th year civil engineering students in the reinforced concrete graduate projects.  
1992-1997 Trainee in Al-Garbiya Construction Company as a site assistant, Egypt.

### Courses:

2012	ANSYS, Advanced dynamic nonlinear explicit Finite element Analysis FEA, at EDR Norway.	
2012	ANSYS, Introduction to Workbench and Advanced nonlinear FEA, at EDR Norway.	
2012	Design of portable offshore units according to DNV 2.7-3, Organized by Tekna.no, Oslo, Norway.	
2010	Offshore safety course including HUET (Helicopter underwater escape training) in compliance with NSCOC-D, NOGEPa and OPITO requirements organized by Norge Maritime Utdanningscenter AS, Horten, Norway.	
2009	Pipeline Design course (2 full days) organized by DNV, Høvik, Norway.	
2010	Eurocode 8 – Design of Structures For Earthquake Resistance, organized by NORSAR, Oslo, Norway.	
2008	Intensive Course with the title “Design of structures, in Norway, for earthquake loading according to Eurocode 8.” Organized by Tekna.no, Oslo, Norway.	
2004	Intensive, 3 days, course in using the 3D laser scanner “RIEGL LMS-Z420” with its software “RiSCAN PRO” given by RIEGL representative at NTNU, Trondheim, Norway.	
2006	Intensive courses (5 days) of the Finite element software “DIANA” at TNO, Delft, the Netherlands contain introduction, analysis of concrete structure, analysis of masonry structure and user supplied subroutine.	
2004-2006	4 doctoral courses at NTNU Trondheim, Norway. Creep and Shrinkage of Concrete Structures Numerical Simulation of Reinforced Concrete Finite element method Nonlinear Static and Dynamic Analysis by FEM	with grade “A” with grade “A” with grade “A” with grade “B”
2000-2001	3 doctoral courses at Assiut University, Egypt. Advanced Theory of Structure II Engineering Application of the Computer II Structural Dynamics and Earthquake Engineering	with grade Distinction with grade Distinction with grade Distinction
2000	ICDL (International Computer Driving License) it contains seven exams in (Information technology, Windows, Word, Excel, Power Point, Access, Internet & Outlook) Data; Word, Excel, Power point and Internet, Assiut University, Egypt.	
1998	Young Leaders Preparation Course, Leader Preparation Institute, Ministry of Higher Education, Cairo, Egypt.	
1997	Course for Teacher preparation at Assiut University. Contains pedagogics, Psychology, Teaching Methods.	

### Publications:

-‘Experimental evaluation of the modulus of elasticity and the compressive strength of a masonry brick’, Hamed A. M. Y. Accepted for publication in Engineering Journal of Faculty of Engineering, Assiut University 2015.

-‘Structural Engineering applications for 3D Laser Scanning Models’, Hamed A. M. Y. submitted for possible publication in the Euto-American Congress REHABEND 2016 University of Cantabria.

-‘Structural Capacity of Anchorage Ties in Veneer Walls Subjected to Earthquake’ Høiseth K. V., Hamed A. M. Y. and Kvande T. International Masonry Society, 9th International Masonry Conference, Guimarães, Portugal 2014.

-‘Masonry Veneer Walls Subjected to Earthquake Loading’ Ahmed Hamed and Karl Høiseth, 7th International DIANA Users Meeting (17-Jun-2010) Brescia, Italy.

-‘Structural Analysis of 3D Laser Scanning Models Using FEM’ A M YOUSRY, K V HØISETH and J A ØVERLI, International Masonry Society, 7th International Masonry Conference, 7IMC, London 30th/31st October – 1st November 2006.

-During my 10 months scholarship, from the Norwegian research council, which I spent at SINTEF (Trondheim, Norway) I submitted 4 reports:

- i) Reinforced Concrete Cracks Modelling in Finite Element Method, September 2002.

ii) Debonding Failure in RC Beams Strengthened by FRP-EBR, October 2002.  
 iii) Materials Models for Creep and Shrinkage, April 2003.  
 iv) Time-Dependent Behaviour of Concrete Beams, May 2003 (Joint publication with Åse Lyslo a Norwegian Ph.D. student at NTNU at that time).  
 -“ Safe Limits Against Lateral Instability of R.C. Slender Beams Cast of High and Ultra High Performance Concrete” The international congress of the University of Dundee “Challenges of Concrete Construction”, 5-11 September 2002 Dundee, Scotland.

-Many internal research reports at SINTEF, DNV and Rambøll (Not for public publications due to clients' restrictions) the following are the titles of some of these research reports:

- Qualification of New Technology- Qualification Plan -Basalt Fiber Reinforcement Rods-DNV internal report.
- Concrete Crushing Criteria for Pipeline- Desktop Study- DNV internal report.
- Background for Recommendations on Design of Grouted Connections in Offshore Wind Turbine Structures- DNV internal report.
- Fatigue Assessment of Reinforced concrete foundations for wind turbine-DNV internal report.
- Simplified Calculation Method For Drop Test Simulation. Rambøll Oil and Gas internal report.

***Thesis:***

“Structural Capacity of Anchorage Ties in Masonry Veneer Walls Subjected to Earthquake”, PhD. Thesis, Ahmed Mohamed Yousry Hamed 2011:181, ISBN 978-82-471-2911-1 (printed version) ISBN 978-82-471-2912-8 (electronic version) ISSN 1503-8181.

“Elasto-plastic Analysis of R.C. Slender Beams” M.Sc. thesis, Assiut University, Assiut, Egypt, November 2000.

**Languages:**

Arabic:	Mother tongue
English:	Very good both written and spoken
Norwegian:	Very Good
German:	Basics

**Other Important Experiences and Visiting:**

- PI (principle investigator) and director of RAM lab (Risk assessment and modelling laboratory) at Assiut University. RAM Lab aims mainly to develop a centre of excellence in some modern and interdisciplinary fields. The main goal is to establish an applicable strategy for Risk assessment and documenting of Egyptian monuments and ancient structures Using state of the art 3D technologies (Laser scanning, thermal photogrammetry & FEM analysis). This strategy will be discussed with the Egyptian authority in order to be implemented all over Egypt. Also the lab is offering training courses and consultancy for relevant organizations.
- At Rambøll oil and Gas, I was the project manager for the research project of drop test simulation. The main goal of the project is to simulate numerically the drop test required by the standards for certification for portable offshore units DNV 2.7-3. Verify the procedure against real test experimental. The project is succeed to produce both explicit dynamic analysis to simulate the drop test simulation and an approximate equivalent static method to simulate the drop test.
- As a senior engineer in the section of concrete offshore structures at DNV, Norway I participated in the following projects:
  - Prepare State of the art for concrete coating for pipeline as a part of phase one of a JIP (Joint industry project).
  - FEM analysis of the grout in grouted connection in the mono-pile wind turbine (a part of a JIP).
  - Analysis of the experimental test results of the grouted connection (for mono-pile) and writing the final report of the test results.
  - Verification of new technology for the basalt fibre as a reinforcement material for offshore structures.
  - Design verification of the concrete tower of Aljandria (Spain) wind turbines farm.
  - Design verification of the concrete foundation Fåre (Denmark) wind turbines farm.
  - Design verification of the concrete foundation Drantum (Denmark) Wind Turbines farm.
  - Design verification of the concrete foundation Nees (Denmark) wind turbines farm.
  - Several site visits for concrete coating plants for Nord-stream pipe line project in order to verify the PQT(pre qualification trails) tests in Mukran (Germany) and Kotka (Finland).
  - Several consultancy projects concerning: grouted connection in mono-pile foundations for offshore wind turbine, concrete coating for pipeline, concrete offshore structures and demolish of jacket structure (at Draugen platform Norway).

- I have been awarded a scholarship from the Norwegian Research Council for 10 months (from 8/2002 till 6/2003) as a visiting researcher. I spent this scholarship in SINTEF Civil and Environmental Engineering, Cement and Concrete at Trondheim Norway.
- Visiting of LNEC (The Laboratório Nacional de Engenharia Civil ) (Portugal) for training on programming in Distinct element method using UDEC under the supervision of Dr. J.V. Lemos in the period from 28/06/07 until 29/07/07.
- It is worth mentioning that I have a strong background in utilizing some standard commercial software packages such as ANSYS, DIANA and Abaqus (FEM programs), UDEC (DEM program) and AutoCad.
- One of six member of the editorial committee of the ICCES1 (First International Conference of Civil Engineering Science 7-8 October 2003, Assiut University, Egypt).

### **Research projects:**

I have participated in the following research projects as a main participant:

- Mechanical properties of high and ultrahigh performance concrete, Assiut University, Egypt.
- Instability (second order) failures of slender beams, Assiut University, Egypt.
- De-bonding failure of FRB sheets from R.C. beams, SINTEF, Trondheim, Norway.
- 3D laser scanning applications in structural Engineering, NTNU, Norway.
- Combined FEM-DEM technique in structural analysis. NTNU, Norway.
- The consequences of the implementation of Eurocode 8 and Eurocode 6 in Norway, NTNU, Norway.
- Basalt fiber as a new anti-corrosion reinforcement for reinforced concrete structures, DNV, Norway.
- Capacity of grouted connections in mono-pile foundations for offshore wind turbines, DNV, Norway.
- Simulation of drop test by explicit dynamic and equivalent static methods, Rambøll Oil & Gas Norway.
- Risk assessment and modeling of ancient structures and important buildings using 3d laser scanning, Assiut University, Egypt.

### **Qualifications:**

High Structural Engineering education,  
 Research experience,  
 Teaching experience (Theory of structures, Reinforced concrete design, Masonry design, Seismic analysis and earthquake safety design, Foundations Design, Steel Structures)  
 Management and leadership experiences  
 Familiar with several codes and standards (Egyptian Code, Eurocodes, DNV,...),  
 Design verification of concrete structures and components (both on-shore and offshore),  
 Consultancy experience,  
 Design experience  
 Field work experience,  
 Excellent computer skills.

***Dr. Eng. Ahmed Mohamed Yousry Hamed***