



CURRICULUM VITAE

AYMAN ELZOHAIKY, PHD, EIT

Department of Engineering & Technology

Texas A&M University-Commerce, Commerce, TX 75429, USA.

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EDUCATION

- University of Missouri, Columbia, MO, USA** 08/2013 – 07/2018
Ph.D. in Structural Engineering
Department of Civil and Environmental Engineering
Dissertation title: “*Monotonic and Fatigue assessment of Post-Tensioned Steel-Concrete Composite Beams*”
Advisor: Prof. Hani Salim
- Zagazig University, Zagazig, Egypt** 09/2005 – 04/2010
M.Sc. in Structural Engineering
Department of Structural Engineering
Thesis title: “*Strengthening of Continuous Composite Beams Using FRP*”
Advisors: Prof. Ashraf El-Shihy, Prof. Hesham Shaaban, and Prof. Suzan Mostafa
- Zagazig University, Zagazig, Egypt** 09/1999 – 06/2004
B.Sc. in Civil Engineering

PROFESSIONAL EXPERIENCE

Academic:

- Assistant Professor**, Department of Engineering & Technology, Texas A&M University-Commerce, Commerce, TX, USA. 09/2019 – Present
- Ad-Interim Assistant Professor**, Department of Engineering & Technology, Texas A&M University-Commerce, Commerce, TX, USA. 01/2019 – 5/2019
- Adjunct Instructor**, Department of Civil and Environmental Engineering, University of Missouri, Columbia, MO, USA. 08/2018 – 12/2018
- Graduate Research and Teaching Assistant**, Department of Civil Engineering, University of Missouri, Columbia, MO, USA. 08/2013 – 07/2018
- Lecturer**, Department of Structural Engineering, Zagazig University, Zagazig, Egypt. 05/2010 – 07/2013
- Graduate Research and Teaching Assistant**, Department of Structural Engineering, Zagazig University, Zagazig, Egypt. 03/2006 – 04/2010

Industrial (Part-time):

BCE-Behairy Consulting Engineering: Structural design (High Rise Building and bridge design sections)
03/2007 – 08/2007

PCE-Pyramids Consulting Engineering: Structural design (High Rise Building and bridge section)
08/2004 – 08/2006

PROFESSIONAL ACTIVITIES AND CERTIFICATIONS

- Passed the FE exam and I enrolled as an Engineer in Training (EIT) with Missouri Board.

HONORS

- Zagazig University Honor for: “Best M.Sc. in engineering and technology of advanced science” 2011
- Egyptian Engineers Syndicate Honor:
 - * Outstanding Engineers for excellence in Engineering Education (M.Sc.) 2010
 - * Outstanding Engineers for excellence in Engineering Education (B.Sc.) 2004
- 5 State Awards for Outstanding Undergraduate Students, Egypt. 1999 - 2004

PUBLICATIONS

Journal Papers

- El-Zohairy, A.,** Salim, H., and Saucier, A. (2019). “Fatigue tests on steel-concrete composite beams subjected to sagging moments” *Journal of Structure Engineering*, 145(5). [https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0002326](https://doi.org/10.1061/(ASCE)ST.1943-541X.0002326)
- El-Zohairy, A.,** Salim, H., and Saucier, A. (2019). “Steel-Concrete Composite Beams Strengthened with Externally Post-Tensioned Tendons under Fatigue” *Journal of Bridge Engineering*, 24(5). [https://doi.org/10.1061/\(ASCE\)BE.1943-5592.0001390](https://doi.org/10.1061/(ASCE)BE.1943-5592.0001390)
- Al-Sherrawi, M., Allawi, A. A., AL-Bayati, B., Al Gharawi, M., and **El-Zohairy, A.** (2018). “Behavior of Precast Prestressed Concrete Segmental Beams” *Civil Engineering Journal*, 4 (3): 488-496.
- El-Zohairy, A.,** Salim, H., Shaaban, H., Mustafa, S., and Shihy, A. (2018). “FE Analysis and Parametric Study of Continuous Steel-Concrete Composite Beams Stiffened with Post-tensioned Tendons” *Journal of Advances in Structural Engineering*, 21(6): 933-945 DOI: 10.1177/1369433217732495
- El-Zohairy, A.,** Salim, H., Fawzy, H., Mustafa, S., and Shihy, A. (2017). “Experimental and FE Parametric Study on Continuous Steel-Concrete Composite Beams Strengthened with CFRP Laminates” *Journal of Construction & Building Materials*, 157: 885-898.
- El-Zohairy, A.,** and Salim, H. (2017). “Parametric Study for Post-Tensioned Composite Beams with External Tendons” *Journal of Advances in Structural Engineering*, 20 (10): 1433-1450. DOI: 10.1177/1369433216684352

El-Zohairy, A., Salim, H., Fawzy, H., Mustafa, S., and Shihy, A. (2015). “Finite Element Modeling of Externally Post-Tensioned Composite Beams” *Journal of Bridge Engineering (ASCE)*, 20 (12). DOI: 10.1061/(ASCE)BE.1943-5592.0000756

El-Shihy A. M., Fawzy H. M., Mustafa S. A. A., **El-Zohairy A. A.** (2010). “Experimental and Numerical Analysis of Composite Beams Strengthened with CFRP Laminates in Hogging Moment Region” *Journal of Steel and Composite Structures*, 10 (3): 439-453.

Conference Proceedings

El-Zohairy, A., Salim, H., and Saucier, A. (2019). “Effect of Externally Post-Tensioned Tendons on the Fatigue Behavior of Steel-Concrete Composite Beams” *Structures Congress (ASCE), Orlando, FL, April 25-27.*

El-Zohairy, A., Salim, H., and Saucier, A. (2019). “Experimental Study on Fatigue Performance of Steel-concrete Composite Girders” *SEM Annual Conference, June 4-7, 2018, Greenville, SC. DOI.org/10.1007/978-3-319-95879-8_13*

Al-Sherrawi, M., Allawi, A. A., AL-Bayati, B., Al Gharawi, M., and **El-Zohairy, A.** (2019). “Experimental Investigation of Segmental Post-tensioned Girders” *SEM Annual Conference, June 4-7, 2018, Greenville, SC. DOI: 10.1007/978-3-319-95053-2_12*

Allawi, A. A., AlBayati, A., Al Gharawi, M., and **El-Zohairy, A.** (2019). “Experimental and Numerical Evaluations of Live Load Distributions of Steel-Concrete Composite Bridge” *SEM Annual Conference, June 4-7, 2018, Greenville, SC. DOI: 10.1007/978-3-319-95053-2_13*

Allawi, A. A., Al-Sherrawi, M., Al Gharawi, M., and **El-Zohairy, A.** (2019). “A Case Study to Evaluate Live Load Distributions for Pre-stressed RC Bridge” *SEM Annual Conference, June 4-7, 2018, Greenville, SC. DOI: 10.1007/978-3-319-95053-2_11*

El-Zohairy, A. and Salim, H. (2017). “Numerical Analysis of Steel-Concrete Composite Beams Strengthened with Pre-stressed CFRP Plates” *American Society for Composites (ASC) 32nd Annual Technical Conference, October 23-25.*

El-Zohairy, A., Salim, H., Fawzy, H., Mustafa, S., and Shihy, A. (2017). “Behavior of Continuous Steel-Concrete Composite Beams Reinforced with CFRP sheets” *American Society for Composites (ASC) 32nd Annual Technical Conference, October 23-25.*

El-Zohairy, A. and Salim, H. (2017). “Behavior of Post-tensioned Steel-Concrete Composite Beams Subjected to Hogging Moments” *American Society for Composites (ASC) 32nd Annual Technical Conference, October 23-25.*

El-Zohairy, A., and Salim, H. (2017). “Behavior of Steel-Concrete Composite Beams under Fatigue Loads” *Conference and Exposition on Experimental and Applied Mechanics, Indianapolis, IN, June 12-15. DOI 10.1007/978-3-319-62831-8_14*

El-Zohairy, A., and Salim, H., Shaaban, H., Mostafa S. (2017). “Continuous Composite Beams Stiffened with CFRP Sheet at the Hogging Moment Region” *Conference and Exposition on Experimental and Applied Mechanics, Indianapolis, IN, June 12-15. DOI 10.1007/978-3-319-63552-1_7*

El-Zohairy, A., and Salim, H. (2017). “Parametric Study of External Strengthening of Composite Beams using Post-Tensioned Tendons” *Structures Congress (ASCE), Denver, CO, April 6-8, 58-67. DOI: 10.1061/9780784480403.006*

Conference Presentations/Posters

- El-Zohairy, A.**, and Salim, H. (2017). “Steel-Concrete Composite Beams Subjected to Fatigue Loads” *Diverse Engineering Professionals Conference, Columbia, MO, October 7. (Poster)*
- El-Zohairy, A.**, and Salim, H. (2015). “Fatigue Analysis of Composite Beams Strengthened with Externally Post-Tensioned Tendons” *Mid-Continent Transportation Research Symposium, Ames, IA, August 19–20 (poster).*
- El-Zohairy, A.**, and Salim, H. (2015). “Analysis of Composite Beams Strengthened with Externally Post-tensioned Tendons” *1st Annual Missouri Bridge Conference, Columbia, MO, April 9 (poster).*

Manuscripts in Progress

- El-Zohairy, A.**, Salim, H., and Saucier, A. (2019). “Effect of shear connectors’ arrangement on fatigue behavior of steel-concrete composite beams” *Journal of Bridge Engineering (ASCE), in progress.*
- El-Zohairy, A.**, Salim, H., and Alavi, A. (2019). “Fatigue property of post-tensioned steel-concrete composite beams with external tendons” *Journal of Construction Steel Research, in progress.*
- Allawi, A. A., Shubber, A., and **El-Zohairy, A.** (2019). “Experimental Behavior of Laced Reinforced Concrete Beam under Static and Fatigue Loads” *Journal of Advances in Structural Engineering, in progress.*
- Allawi, A. A., Shubber, A., and **El-Zohairy, A.** (2019). “Numerical Analysis and Parametric Study of Laced Reinforced Concrete Beam under Static Load” *Journal of Engineering Structures, in progress.*
- El-Zohairy, A.**, and Salim, H. (2019). “Finite Element Simulation of Fatigue Damage in the Concrete Deck of Steel-Concrete Composite Beams” *Journal of Structural Engineering (ASCE), in progress.*
- El-Zohairy, A.** and Salim, H. (2019). “Experimental and FE Analysis of Steel-Concrete Composite Beams Strengthened with Externally Post-tensioned Tendons under Static Loads” *Journal of Steel and Composite Structures, in progress.*
- Allawi, A. AlBayati, A., Al Sharawi, M., Al Gharawi, M., and **El-Zohairy, A.** (2019). “Numerical Analysis and Parametric Study of Precast Prestressed Reinforced Concrete Segmental Beams” *Journal of Engineering Structures, in progress.*

RESEARCH PROJECTS

Effect of External Post-Tensioning on Fatigue Life of Shear Connectors in Steel-Concrete Composite Beams 03/2014 – 04/2018

Civil and Environmental Engineering Department, University of Missouri, Columbia, MO, USA. *Sponsored by the Egyptian Cultural and Educational Bureau, DeLong’s Inc., and Coreslab Structures Inc.*

Experimental Investigation of Precast Prestressed Reinforced Concrete Segmental Beams

03/2015 – 10/2017

Civil Engineering Department, University of Baghdad, Baghdad, Iraq. *Sponsored by the University of Baghdad and Hammurabi Contracting Company.*

Strengthening of Steel-Concrete Composite Beams with CFRP Laminates at Hogging Moment Regions 04/2008 – 03/2009

Department of Structural Engineering, Zagazig University, Zagazig, Egypt. *Sponsored by Zagazig University and Sika Egypt.*

REVIEWER ACTIVITIES

Ad hoc reviewer for Elsevier, ASCE, Taylor & Francis, ACI, etc.:

- 1 ASCE journal (*Journal of Structure Engineering*);
- 4 Elsevier journals (*Construction and Building Materials, Engineering Structures, Thin-Walled Structures*);
- 1 ACI journal (*ACI Materials*);
- 1 Sage journal (*Advances in Structural Engineering*);
- 1 Taylor & Francis journal (*Structure and Infrastructure Engineering*);
- 2 Several journals including *Journal of King Saud University and International Journal of Engineering Science and Technology*;
- 4 IEEE International Symposium on Cloud and Service Computing (SC2 2018).

TEACHING EXPERIENCE

Texas A&M University-Commerce, Commerce, TX, USA

Department of Engineering & Technology

Assistant Professor:

- 1- CONE 332 - Structural Analysis and Design
- 2- CONE 341 – Engineering Hydrology and Hydraulic
- 3- CONE 351 – Surveying for Construction
- 4- CONE 413 - Design & Const of Steel
- 5- CONE 414 - Design & Const of Concrete
- 6- ENGR 2303 - Engineering Mechanics

University of Missouri, Columbia, MO, USA

Civil and Environmental Engineering Department

Adjunct Instructor:

- 1- CV_ENG 3300 - Structural Analysis I. (Fall 2018)
- 2- ENGR1200 – Statics – Online Section (Fall 2018)
- 3- ENGR2200 – Strength of Material (Fall 2018)

Teaching Assistant:

- 1- CV_ENG 3300 - Structural Analysis I. (Fall 2016 and Spring 2018)
- 2- ENGINR 1200 - Statics and Elementary Strength of Materials (online course). (Falls, Springs and Summers of 2015-2018)
- 3- ENGINR 2200 - Intermediate Strength of Materials. (Fall 2015, Springs of 2016 and 2018, and Summer 2018)

Zagazig University, Zagazig, Egypt

Department of Structural Engineering

Lecturer:

1. Computer-Aided Design of Structures. (Course implementation, teaching, and grading). (Fall 2012)
2. High Rise Buildings Design. (Course implementation, teaching, and grading). (Spring 2012)

3. Earthquake engineering. (Preparing and grading all exams). (Fall 2011-2012)

Instructor:

1. Structure Analysis Program (SAP2000) (Summers 2006-2013)
2. Computer-aided design (CAD) program (Summers 2006-2013)

Teaching Assistant:

1. Theory of Structures I, II and III. (Falls of 2007-2012)
2. Structural Mechanics I, II. (Springs of 2006-2013)
3. Plates and Shells. (Springs of 2006-2013)
4. Matrix Methods of Structural Analysis. (Falls of 2007-2012)

TRAINING ON TEACHING

University of Missouri, Columbia, MO, USA

- 1- Orientation for New International Teaching Assistants (ONITA). (Fall 2015)
- 2- Teaching for Learning Workshop (Spring 2017)
- 3- 2nd Annual Teaching Renewal Week (Spring 2017):

Intentional Syllabus - Engagement - Dealing with Distracted Students - Defining and Preventing Plagiarism/Cheating - Grading/Assessment.

Zagazig University, Egypt

A program for teaching training as a requirement for the Assistant Lecturer position. The program titled “*Skills Development of Teaching Staff and their Assistants*” offered by *Faculty and Leadership Development Center (FLDC): Zagazig University*. The program includes these courses:

1. Using technology in teaching
2. Ethics of scientific research
3. International publication of papers
4. Effective communication skills
5. Testing systems and students evaluation

MEMBERSHIPS

American Society of Civil Engineering (A.M.ASCE)

Society for Experimental Mechanics (SEM)

Member of Egyptian Engineers Syndicate.