

SAYED AHMED, MAHMOUD. *PhD Candidate, EIT*

Research & Graduate Assistant

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Toronto, ON, M5A3X1, Canada

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PROFESSIONAL PROFILE / ACHIEVEMENTS

- Provide Analytical and Numerical Solutions for structural engineering design issues
- Design of Reinforced Concrete Structures, and Concrete Mix Designs
- Design of Composite & Steel Structures
- Design of Foundation and Earth Structures
- Conduct Destructive & Non-Destructive Testing
- Develop market research analysis for Business-to-Business (B2B) and Business-to-Client (B2C)
- Develop procedures, policies, technical programs, and academic course materials

PROFESSIONAL EXPERIENCE

Sept. 2016 – Dec. 2016 V-Rod Canada Inc., Ryerson University, and Ontario Centres of Excellence (OCE Project # 25401, Talent Edge Internship)
Toronto, ON, Canada

Post-Doctoral and Intern

- Parametric study on cost-effective design of bridge barrier-deck junction and connected deck slab cantilever using GFRP bars.

Sept. 2009 – Sept. 2011 Yeates School of Graduate Studies, Civil Engineering
Ryerson University, Toronto, ON, Canada

Research Assistant (RA)

- Conduct monotonic load-to-collapse and dynamic loading for precast FDDPs (full depth deck panel) lay over twin steel girders and composed of High Modulus (HM) Glass Fiber Reinforced Polymers (GFRP) bars embedded into Normal Strength Concrete (NSC) or High Performance Concrete (HPC) and jointed with Ultra-High Performance Fiber Reinforced Concrete (UHPFRC).
 - Research is funded by : (1) MTO Ontario Ministry of Transportation's Highway Infrastructure Innovation Funding program; (2) Transcels-Pultrall Canada Inc.; (3) Schoeck Canada Inc.; (4) Lafarge North America Inc.; (5) St. Marys / Canada Building Materials
- Conduct a series of creep tests, flexural tests and axial compression tests for composite sandwich panels named Structural Insulated Panels (SIP) and Permanent Wood Foundation (PWF) panels composite of Expanded Polystyrene (EPS) foam laminated between Oriented Strand Board (OSB) and/or Canadian Softwood Plywood (CSP).
 - Research is funded by Thermapan Structural Insulated Panels
- Conduct push-over tests and monotonic load-to-collapse tests for composite bridge beams with different arrangement for the shear clusters / pockets.

- Research is funded by: MTO Ontario Ministry of Transportation
- Develop concrete mix design (CMD) for the Ultra-High Performance Fiber Reinforced Concrete (UHPC) for St. Marys / Canada Building Materials (CBM) that exceeds 110 MPa within 4 days and 140 MPa at 28 days, 150 MPa at 56 days.
- Provide technical reports including analytical modeling for the experimental results
- Place Purchase Orders (POs) and Request For Quotations (RFQs) for the supply of construction materials and/or equipment and its necessarily trainings.
- Prepared the “Safety Manual” based on the Ontario Occupational Health & Safety Act and Regulations – The Green Book” for the Department of Civil Engineering.
- Updated the Department of Civil Engineering with all engineering curriculums in Canada

March 2010 – Present Self Employed

Structural Designer

- Provide structural detailing services.
- Prepare as-built drawings for existing buildings and conduct structural analysis.
- Analyzed the ultimate & serviceability limit state due to snow drift loading for steel portal frame’s flat roof for placing of solar panels in Muskoka, per NBCC Structural Commentaries (Part 4 Division B) subcontracting from BAH Enterprise Inc.
- Designed steel structure building (Dec. 2011), and prepared the complete structural drawings including foundation, columns, and OWSJ drawings for one-story commercial building, Bank Triangle, Ottawa, Canada.

List of Clients

Rebar Enterprise Inc., Oakville, Ontario, Canada

ARDEL Steel, Regina, Saskatchewan, Canada

BAH Enterprises Inc. (Dr. Bassam Halabieh, PhD, P.Eng P.E.), Oakville, ON, Canada

Sennah Engineering (Dr. K. Sennah), Mississauga, ON, Canada

March 2010–June 2010 Rebar Enterprise Inc, Oakville, ON, Canada

Detail Engineer, Supervised by Ahmed Abdelall, B.Sc. Civil Eng.

- Analyzed the required forces, shear, and moment to obtain reinforced steel bars per sections for preparing of placing drawings, per ACI 318, CSA A23 for pre-approval.
- Determined the bond, anchorage, bar cutoffs, splices according to the CSA A23.3
- Detailed reinforcing concrete structures for ICI and High-rise Buildings per ACI 315, ACI SP-66, CRSI, and CSA A23.
- Prepared workshop, placing drawings and Bar lists for vertical and horizontal elements.
- Investigated rebar detailing w.r.t. metal scaffolding / PERI slip form requirement.
- Prepared Estimation, Recap & Summary Sheets

Projects:

- Concord Cityplace; Concord Adex, Toronto, ON.
- Parkway Forest Reurbanization, Toronto, ON.
- Town of the Blue Mountain Town Hall, Thornbury, ON.
- Residential Development, Regent Park, Toronto, ON.

May 2000 – Feb. 2009 The Engineers Brothers Company (TEBC), Cairo, Egypt

Senior Vice President (SVP), Civil Engineer

- Directed and coordinated activities of the construction of buildings, importing of construction equipment & spare parts division for which responsibility is delegated to further attainment of goals and objectives.
- Reviewed analyses of activities, costs, operations, and forecast data to determine department progress toward stated goals and objectives.
- Conferred with senior management and other administrative personnel to review achievements and discuss required changes in goals or objectives resulting from current status and conditions.
- Served as member of management committees as necessary.
- Coordinated activities of divisions or departments to effect operational efficiency and economy.
- Directed and coordinate promotion of products manufactured or services performed to develop new markets, increase share of market, and obtain competitive position in industry.
- Analyzed department budget requests to identify areas in which reductions can be made and allocate operating budget.
- Conferred with administrative personnel and review activity, operating, and sales reports to determine changes in programs or operations required.
- Directed preparation of directives to division or department administrator outlining policy, program, or operations changes to be implemented.
- Promoted organization in industry, manufacturing, or trade associations.
- Planned, developed, and implemented divisional policies and goals.
- Directed supervision of all construction executives and employees.
- Performed other duties and responsibilities as required.

Design-Build and Construction Projects

- Reinforced Concrete Multi-Story Residential Buildings, Nasr City, Cairo, Egypt.
- Restoration for RC Multi-Story Residential Buildings, Nasr City, Cairo, Egypt.
- Reinforced Concrete (RC) Religion Public Building, Nasr City, Cairo, Egypt.

Supplying of Construction Equipment & Spare Parts

Selected List of Clients:

- Italcementi Group; Italy and Egypt
- Cemex, Egypt
- Arab Contractors; Egypt, Algeria, Mauritania, Benin, Chad, Sudan, Libya
- Petrojet, Egypt
- General Nile Company for Desert Roads, Egypt, Mauritania
- General Nile Company for Roads Construction, Egypt
- Canal Harbour & Great Project Co. (CHP), Egypt
- Petroleum Marine Services (PMS), Egypt
- Khalda Petroleum Company (KPC - Apache), Egypt

2003

El-Mallah for Engineering & Contracting, Cairo, Egypt

Resident Engineer

- Managed the project's time-cost-resources
- Prepared detailed workshop drawings using AutoCAD from structural drawings in

connection with MS Excel.

- Designed temporarily structure and off-shoring systems.
- Inspected the site to assure that construction works comply with the Egyptian code requirements, structural drawings, and project specifications.

Project:

- *Reinforced Concrete Multi-Story Residential Building, Sheraton, Cairo, Egypt.*

2002

El-Gabry General Contracting Company, Giza, Egypt

Technical Office Engineer

- Prepared detailed workshop drawings using AutoCAD from structural drawings in connection with MS Excel.
- Prepared time-cost-resource schedules and project specification manuals for subcontractors.
- Designed temporarily structure and off-shoring systems.
- Inspected the site to assure that construction works comply with code requirements, structural drawings, and project specifications.

Project:

- *Complex Compound for Cairo University Staff Housing, Cairo, Egypt.*
- *Complex Compound for Suez Canal University Staff Housing, Ismailia, Egypt.*
- *University of Tenth of Ramadan, Sharkyah, Egypt.*
- *Industrial Steel Structure Warehouse, Ministry of Agricultural, Helwan, Egypt.*
- *Dredging Water Canal, Ismailia, Egypt.*

INTERNSHIP EXPERIENCE

Summer 1998, 99

Arab Contractors (arabcont.com), Egypt

Intern Field Engineer

- Completed technical sessions at the Management and Technology Training Institute (MTTI) for the Arab Contractors
- Revised the construction blue-prints and the project specifications
- Supervised the daily construction site activities

Projects:

- Tenth of Ramadan Reinforced Concrete Bridge, Cairo-Ismailia Desert Road, Egypt (1999)
- Construction for Al-Azhar Hospital in Nasr City, Cairo, Egypt (1998)

Summer 1997

National Authority for Tunnels (NAT.org.eg), Egypt

Intern Field Engineer

- Completed technical sessions
- Revised the construction blue-prints and the project specifications
- Supervised the daily construction site activities for the construction of: the diaphragm walls, Tunnel Boring Machine (TBM), injection of the soil with soft and hard jell, etc.

Projects:

- Construction for subway stations, and the precast segmental tunnelling for the 2nd line

from Cairo University to Tahrir Square passing underneath the Nile river.

TRADE EXPERIENCE

Spring / Summer 2011 Statistics Canada (Government of Canada), Toronto, ON

Census Enumerator

- Performed door-to-door around census
- Contacted people and gathered demographic data
- Conducted personal interviews – both in – person and over the phone to obtain completed questionnaires
- Processed entering data into a computerized online databases
- Conducted Arabic/English translations

Projects:

- Households in Toronto Downtown

ACADEMIC EXPERIENCE

Sept. 2011 – Present Faculty of Engineering and Architectural Science (FEAS), Civil Eng.
Ryerson University, Toronto, ON, Canada

Lead Graduate Assistant (GA)

- Discuss assigned duties with course instructor in order to coordinate instructional efforts.
- Prepare lesson materials, bulletin board displays, exhibits, equipment, and demonstrations
- Present subject matter to students under the direction and guidance of instructor, using lectures, discussions, or supervised role-playing methods
- Conduct demonstrations to teach
- Design the course assignments (Questions and Answers) and rubric for the Strength of Materials CVL320.
- Demonstrate the use of the computer aided design (CAD) including the AutoCad to build 2D and 3D models.
- Conduct non-destructive experimental tests to determine the mechanical behavior of the materials including, Load-deformation, Stress-Strain, Modulus of Elasticity, Support Reactions, ... etc for the CVL320.
- Demonstrate the use of the applicable Computer Aided Structural - Finite Element Analysis software including SAP2000, ETABS for simple or complex structure and compare the results of the Joint Forces, Member Forces/Stresses, Support Reactions, Displacement and Rotations with the exact/FEA solutions.
- Provide technical and academic support, in addition to the design of MatLab Mini-Lectures, course assignments (Questions & Answers) and course projects for 1200 students into the CEN100.
- Experienced with the BlackBoard (Bb), D2L system, iClicker, and Top Hat systems.
- Conducted geotechnical experimental lab works
- Hold meetings with other Graduate Assistants & lab technicians (if required) to set a plan for teaching methodologies, marking procedures (rubric) and exchange of information.
- Invigilate and monitor the academic integrity during the examinations.

Courses

- Bridge Design and Construction (CVL905: F2016); supervised by Dr. Khaled Sennah
- Computer Aided Structural Analysis (CVL312: F2016); supervised by Dr. Imad Eldin Khalafalla
- Introduction to Engineering (CEN100: F2012, F2013, F2014, F2015); supervised by Dr. Lamya Amleh,
- Strength of Materials I (CVL320: F2012, F2013, F2014, S2014, F2015); supervised by Dr. Ahmed Shaker,
- Structural Building Systems (CVL908: W2012, W2013); supervised by Dr. Hassan Saffarini and Dr. Hesham Marzouk,
- Engineering Graphical Communications (CVL207; W2013); supervised by Dr. Mike Chapman,
- Geotechnical Properties of Soil (CVL434: W2015); supervised by Dr. Jinyuan Liu.

Dec. 2010 - 2013 Maple Leaf College of Business and Technology, North York, ON, Canada

Part-time Instructor

for the Civil Engineering Design and Technology Diploma Program

- Prepared practical and educational curriculum & presentations for Ontario Building Code 2006, covering Building Code Act, Concrete / Steel / Wood Standards, Code, and Building Code Qualification Exam (BCIN).
- Implemented instructions to use of OBS into Project Specification Manuals per CSI, Residential Building Permits, and drawings general notes.

Courses

- Ontario Building Code (OBC)
- Introduction to Architectural and Structural Design (IASD)

Dec. 2001 - 2003 Department of Construction and Building Engineering (CBE);
- Higher Institute of Engineering, Culture & Science City, Egypt
- Faculty of Engineering, October 6 University, Egypt

Teaching Assistant (TA)

- Demonstrated teaching materials for the students.
- Invigilated the exams

Courses

- Design of Reinforced Concrete Structures (CBE401); supervised by Dr. Amr Hussein Abdel-Azim Zaher
- Soil Mechanics (CBE 421); supervised by Dr. Hisham Arafat Mahdi
- Soil Mechanics Laboratory (CBE 422); supervised by Dr. Hisham Arafat Mahdi
- Design of Construction of Earth Structures & Foundation (CBE 423); supervised by Dr. Hisham Arafat Mahdi
- Introduction to Transportation Planning & Highway Design (CBE 541)
- Methods & Equipment of Construction (CBE 453); supervised by Dr. Mohamed Askar
- Quality Control and Specifications (CBE 451)
- Engineering Economy; supervised by Dr. Ibrahim Abdul Rashid Nasir

VOLUNTEER

Dec.2-4, 2014	Construction Institute for Steel Construction (CISC) trade show into Construct Canada, Toronto, ON Volunteer
Oct. 2014 – May 2015	Ryerson University Library & Archives – Student Advisory Committee (RULA-SAC), Toronto, ON Graduate Student Representative
Sept. 2014 - 2015	Civil Engineering Graduate Program Association, RSU, Toronto, ON President (Co-Founder)
Sep 19 – 21, 2014	Ontario Universities’ Fair (OUF) in Metro Toronto Convention Centre (MTCC) for Ryerson University, Toronto, ON Volunteer
June 2014 - Present	Ryerson University, Toronto, ON Student Procession Marshall
May 28-31, 2014	Canadian Society for Civil Engineer (CSCE) Conference, Halifax, NS Volunteer
Oct. 2013 – May 2014	Ryerson University Library & Archives – Student Advisory Committee (RULA-SAC), Toronto, ON Advisor
Sept. 2013 – 2015	Toronto District School Board (TDSB), Toronto, ON Cluster Parent Academy Committee (CPAC) Member
Dec. 2012 – Present	Ryerson University Civil Engineering Graduate & Alumni Society (www.facebook.com/RuCivil) Administrator (Founder)
Sept. 2012 - 2014	Civil Engineering Graduate Program Association, RSU, Toronto, ON (www.facebook.com/groups/RUCivil/) Deputy Education Chairperson and Co-Founder
Sept. 2010 – Present	Nelson Mandela Public Park School, Toronto District School Board Nelson Mandela Parent’s Council Member

HONORS AND AWARDS

1. Certificate of Appreciation, The Sustainable and Innovative Bridge Engineering Research Center (SIBERC) & College of Engineering, Fuzhou University, China, May 2016.

2. International Conference and Research Support Fund (ICRSF), Ryerson International (RI), April 2016.
3. Ontario Graduate Scholarship (OGS 2015/2016), September 2015
4. Ryerson Graduate Student Travel Award, Yeates School of Graduate Studies, Ryerson University, April 2015
5. The **DENNIS MOCK Student Leadership Award**, Yeates School of Graduate Studies, Ryerson University, April 14, 2015
6. RCI Foundation, USA. Convention College Sponsorship, March 2015
7. International Conference and Research Support Fund (ICRSF), Ryerson International (RI), September 2014
8. **Transportation Association of Canada (TAC) Foundation Scholarship**: by SNC-Lavalin, in celebration of TAC's centennial, August 2014
9. NSERC GGSF Grad Travel Funding, Yeates School of Graduate Studies, Ryerson University, June 2014
10. **NORMAN ESCH Engineering Innovation and Entrepreneurship Award – II**, November 2013
11. Ontario Graduate Scholarship (OGS/Ryerson 2013/2014), September 2013
12. Access to Opportunity Program (ATOP), September 2013
13. Ryerson Graduate Student Travel Award, Yeates School of Graduate Studies, Ryerson University, June 2013
14. **NORMAN ESCH Engineering Innovation and Entrepreneurship Award – I**, July 2013
15. Ryerson Graduate Scholarship (RGS), September 2012
16. Access to Opportunity Program (ATOP), September 2012
17. Ryerson Graduate Award (RGA), September 2011
18. Access to Opportunity Program (ATOP), September 2011
19. Ryerson Graduate Award (RGA), September 2010

SOCIETIES / MEMBERSHIP

March 2015 -1/31/17	RCI, Inc. USA Student Member # 42971
2014	American Society for Civil Engineering (ASCE) Student Member # 00010380873
Dec 2013 – Present	Precast / Prestressed Concrete Institute (PCI), USA Student Member
Dec 2013 – Present	Canadian Precast Prestressed Concrete Institute (CPCI), ON Student Member
Sept. 30, 2013- 2015	The Conservative Party of Canada Member
Sept. 2012 – 2015	American Concrete Institute (ACI), USA

Student Member

- May 3, 2012 – Present The Corporation of the Seven Wardens, Inc.
Obligated Engineer # 53822
- 2011 – Present Ryerson University Alumni
Member # 001160658
- 2010 – Present Canadian Society for Civil Engineering (CSCE)
Student Member# 080729
- 2009 - Present Professional Engineers of Ontario (PEO), Toronto, ON, Canada
Engineer In-Training (EIT) # 100145139
- 2009 - Present The Canadian Union of Public Employees (CUPE) Local 3904 Unit 3
Member (Employee # 000304932)
- 2009 - Present **Ryerson Students' Union** (Local 24 Canadian Federation of Students)
Student Member# 500361611
- 2002 - 2003 Project Management Institute (PMI), USA
Member #285514
- 2001 - Present Egyptian Syndicate of Engineers (www.eea.org.eg), Cairo, Egypt
Civil Engineer #51/24-01343/2000/3
- 2000 - Present El-Shams Sporting Club, Cairo, Egypt
Member# 73600

TECHNICAL COMMITTEES

- May 2014 – Present Structure Division, Canadian Society for Civil Engineering (CSCE)
Student Member
- May 2014 – Present Bridge Subcommittee, Canadian Society for Civil Engineering (CSCE)
Student Member

PUBLICATIONS

Journal Articles

1. Azimi, H.; Sennah, K.; **Sayed-Ahmed, M.**; Nikravan, N.; Louie, J.; Hassaan, A.; Al-Bayati. (October, 2014). *Bridge Deck-Guardrail Anchorage Detailing for Sustainable Construction*. ASCE Journal of Bridge Engineering, Vol.19, Issue 10, pp.
2. **Sayed-Ahmed, M.** (June, 2013). *Nonlinear Time-Dependent Behaviour of Concrete Insulated Panel*. Concrete Research Letters, ISSN 2180-1371, Vol. 4, Issue 2, pp. 591-597.

3. **Sayed-Ahmed, M.:** Sennah, K. (March, 2013). *Finite Element and Modal Analysis of 3D Jointless Skewed RC Box Girder Bridge*. Concrete Research Letters, ISSN 2180-1371, Vol. 4, Issue 1, pp. 557-568.
4. **Sayed-Ahmed, M.** (Dec., 2012). *Building with Base Isolation*. Journal of Al-Azhar University Engineering Sector, JAUES, ISSN 1110-6409, Vol. 7, Issue 1, pp. 147-159.
5. **Sayed-Ahmed, M.;** Helmy, N. (Dec., 2012). *Engineering Public Policy for Eco-Friendly SIP Houses*. Journal of Al-Azhar University Engineering Sector, JAUES, ISSN 1110-6409, Vol. 7, Issue 1, pp. 160-172.
6. **Sayed-Ahmed, M.** (June, 2012). *Statistical Modelling and Prediction of Compressive Strength of Concrete*. Concrete Research Letters, ISSN: 2180-1371, Vol. 3, Issue 2, pp. 452-458.
7. **Shaaban, M.** (Dec, 2010). *Rockfall Bolting and Barrier Protection Systems*. Journal of Al-Azhar University Engineering Sector, JAUES, ISSN 1110-6409, Vol. 5, Issue 1, pp. 736-747.
8. **Sayed-Ahmed, M.;** Shehata, E.; Sennah, K. (2010). *Development of Creep Model for Structural Insulated Timber-Foam Sandwich Walls under Sustained Soil Pressure in Basements of Residential Buildings*. Journal of Al-Azhar University Engineering Sector, JAUES, ISSN 1110-6409, Vol. 5, Issue 1, pp. 603-614.

Conference Papers

9. **Sayed-Ahmed, M.;** Sennah, K. (2016). *Ultimate and Fatigue Response of UHPFRC-Filled, Transverse Angle-Joint in Full-Depth, GFRP-Reinforced, Precast Bridge Deck Panels*. TRB: International Bridge Conference (IBC 2016), M.D., USA.
10. **Sayed-Ahmed, M.;** Sennah, K.; Monsif, M. Y. (2016). *Mechanical Behaviour of Ultra-High Performance Reinforced Concrete Obtained with Different Concrete Constituents and Mix Designs*. CSCE: 5th International Materials Specialty Conference, London, ON.
11. **Sayed-Ahmed, M.;** Sennah, K. (2016). *Bond Strength of Ribbed-Surface High-Modulus Glass FRP Bars Embedded into Unconfined UHPFRC*. CSCE: 5th International Structural Specialty Conference, London, ON.
12. **Sayed-Ahmed, M.;** Sennah, K, Diab, A. and Mansour, S. (2016). *Ultimate Flexural Strength and Long-Term Creep Deflection for Structural Insulated Foam-Timber Sandwich Panels*. CSCE: 5th International Structural Specialty Conference, London, ON.
13. Hamoda, A.; Sennah, K.; Hossain, K.; Shoukry, M.; Mahmoud, Z.; **Sayed-Ahmed, M.** (2016). *Behaviour of Composite High-Performance Concrete Slab-on-Steel Girders Subjected to Hogging Moment*. CSCE 2016 Annual General Conference, London, ON.
14. **Sayed-Ahmed, M.;** Sennah, K. (2016). *Fatigue Strength of Angle-Shaped Transverse Connection for GFRP-Reinforced Precast Full-Depth Deck Panels in Accelerated Bridge Construction*. CSCE: 5th International Structural Specialty Conference, London, ON.
15. **Sayed-Ahmed, M.;** Sennah, K. (2016). *Applications of Prefabricated Bridge Elements and Connection Technology in Accelerating Integral Abutment Bridge Construction*. The First International Symposium on Jointless & Sustainable Bridges, Fuzhou University, Fujian, China.
16. **Sayed-Ahmed, M.;** Sennah, K. (2016). *Development of Ultra-High Performance Concrete Jointed Precast Decks and Concrete Piles in Integral Abutment Bridges*. The First International Symposium on Jointless & Sustainable Bridges, Fuzhou University, Fujian, China.

17. **Sayed-Ahmed, M.;** Sennah, K. (2015). *Fatigue Resistance of GFRP-Reinforced Precast Full-Depth Deck Panel with Transverse Joints*. IGSGE 14: The 14th International Conference on Structural & Geotechnical Engineering 2015, Sustainable infrastructure: From research to practice, New Cairo, Egypt, December 20-22, pp. 1-11.
18. **Sayed-Ahmed, M.;** Sennah, K. (2015). *Ultimate and fatigue strength of GFRP-reinforced, full-depth, precast bridge deck panels with zigzag-shape transverse joints filled with UHPFRC*. CSCE 5th International / 11th Construction Specialty Conference (ICSC), Vancouver, BC, June 8-10.
19. **Sayed-Ahmed, M.;** Sennah, K. (2015). *Structural behavior of UHPFRC-filled, transverse C-Joint in full-depth, GFRP-reinforced, precast bridge deck panels resting over steel girders*. CSCE 2015th Annual Conference/ 4th International Conference on Engineering Materials and Mechanics, Regina, SK, May 27-30.
20. Lu, J.; Sennah, K.; **Sayed-Ahmed, M.;** Afefy, H. M. (2015). *Development length of sand-coated glass fiber reinforced polymer bars with headed-end embedded in high-performance concrete*. CSCE 2015th General Conference, Regina, SK, May 27-30.
21. Sherif, M.; **Sayed-Ahmed, M.;** Sennah, K.; Judieh, S. (2015). *Development of Ultra-High Performance Concrete as a Closure Strip Filling Material in Prefabricated Bridge Applications*. CSCE 2015th 4th International Conference on Engineering Materials and Mechanics, Regina, SK, May 27-30.
22. **Sayed-Ahmed, M.;** Sennah, K. (2014). *Development of transverse joints for full-depth precast deck panels incorporating ribbed-surface GFRP bars, HPC and UHPFRC*. The 2014 PCI Convention and National Bridge Conference, National Harbour, MD, USA, September 6-9.
23. **Sayed-Ahmed, M.;** Sennah, K. and Lai, D. (2014). *Development of transverse joints for full-depth precast normal-strength concrete deck panels incorporating ribbed-surface GFRP bars and UHPFRC*. CSCE 9th International Conference on Short and Medium Span Bridges (SMSB), Calgary, Alberta, July 15-18.
24. **Sayed-Ahmed, M.;** Sennah, K. (2014). *Pullout strength of sand-coated bars embedded in ultra-high performance fiber reinforced concrete*. CSCE 2014th International Specialty Conference, Halifax, NS, May 28-31.
25. **Sayed-Ahmed, M.;** Sennah, K. (2013). *Effect of Temperature and Relative Humidity on Creep Deflection for Permanent Wood Foundation Panels*. CSCE 3rd Specialty Conference on Material Engineering & Applied Mechanics, Montréal, Québec, May 29-Jun 1.
26. **Sayed-Ahmed, M.;** Sennah, K. (2012). *Flexural Creep Effects on Permanent Wood Foundation Made of Structural Insulated Foam-Timber Panels*. CSCE 3rd International Structural Specialty Conference, Edmonton, June 6-9. ISBN: 978-1-894662-18-5, Vol. 3, pp. 1892-1901.
27. Sennah, K.; Nikravan, N.; Louie, J.; Hassan, A.; Al-Bayati, N; El-Sayed-M; **Sayed-Ahmed, M.** (2011). *Bridge Deck-guardrail Anchorage Detailing for Sustainable Construction*. CDCC - The Fourth International Conference on Durability & Sustainability of Fibre Reinforced Polymer (FRP) Composite for Construction and Rehabilitation. Quebec City, June 20. ISBN: 978-2-7622-0196-3, pp. 337-334.

Sponsored Reports

28. **Sayed-Ahmed, M.** and Sennah, K. (2016). Mechanical behaviour of Ultra-High Performance Fiber Reinforced Concrete obtained with different concrete constituents and mix designs. Technical Report sponsored by St. Mary's Cement / CBM, Toronto, ON, Canada, 107 pages.
29. Khaled Sennah, Mohtady Sherif, **Mahmoud Sayed-Ahmed**, and Saleh Judieh. (2014). Development of Ultra High Performance Fiber Reinforced Concrete. Technical Report sponsored by St. Mary's Cement / CBM, Toronto, ON, Canada, 30 pages.
30. **Sayed Ahmed, M.** (2013). *Market Research Analysis Report for Full-Depth Precast Deck Panel used in the Accelerated Bridge Construction*. Sponsored by The Esch Foundation, Ryerson University, Canada, 63 pages.
31. Sennah, K.; **Sayed-Ahmed, M.** (Oct, 2011). *Flexural Creep Effects on Permanent Wood Foundation Made of Structural Insulated Foam-Timber Panels*. Technical Report sponsored by Thermapan Industries Inc., Fort Erie, Ontario, Canada, 166 pages.

Thesis

32. **Sayed-Ahmed, M.** (2016). PhD Thesis. Ryerson University, Toronto, ON, Canada.
33. **Sayed-Ahmed, M.** (2011). *Flexural Creep Effects on Permanent Wood Foundation Made of Structural Insulated Foam-Timber Panels*, M.A.Sc. Thesis. Ryerson University, Toronto, ON, Canada.

Posters

34. **Sayed-Ahmed, M.:** Sennah, K. (Nov. 2013). *Effect of Temperature and Relative Humidity on Creep Deflection for Permanent Wood Foundation Panels*. Research Symposium, Research and Innovative Office (RiO), Ryerson University.

Presentations

1. *Applications of Prefabricated Bridge Elements and Connection Technology in Accelerating Integral Abutment Bridge Construction*. (2016). The First International Symposium on Jointless & Sustainable Bridges, Fuzhou University, Fujian, China.
2. *Development of Ultra-High Performance Concrete Jointed Precast Decks and Concrete Piles in Integral Abutment Bridges*. (2016). The First International Symposium on Jointless & Sustainable Bridges, Fuzhou University, Fujian, China.
3. Mechanical performance of isotropic and orthotropic structural insulated panels made of CSP, OSB faces and sandwich EPS core. (Dec 15, 2015). Seminar Session; ARUP (www.arup.com), Toronto, ON.
4. *Development of transverse joint for precast full-depth, full-width deck panels incorporating GFRP bars and UHPFRC*. (2015). Canadian Precast/Prestressed Concrete Institute (CPCI) Annual Meeting, Windsor, ON, Oct 6.
5. *Ultimate and fatigue strength of GFRP-reinforced, full-depth, precast bridge deck panels with zigzag-shape transverse joints filled with UHPFRC*. (2015). CSCE 5th International / 11th Construction Specialty Conference, Vancouver, BC, June 8-10.
6. *Structural behavior of UHPFRC-filled, transverse C-Joint in full-depth, GFRP-reinforced, precast bridge deck panels resting over steel girders*. (2015) CSCE 2015th Annual Conference/ 4th International Conference on Engineering Materials and Mechanics, Regina, SK, May 27-30.

7. *Development of transverse joints for full-depth precast deck panels incorporating ribbed-surface GFRP bars and UHPFRC.* (2014). The 2014 PCI Convention and National Bridge Conference, National Harbour, MD, USA, September 6-9.
8. *Recent advances in sustainable bridge design and construction.* (2014). Alumni Lounge, Mattamy Athletic Centre (MAC), Ryerson University, Sept. 4.
9. *Development of transverse joints for full-depth precast normal-strength concrete deck panels incorporating ribbed-surface GFRP bars and UHPFRC.* (2014). CSCE 9th International Conference on Short and Medium Span Bridges (SMSB), Calgary, Alberta, July 15-18.
10. *Pullout strength of sand-coated bars embedded in ultra-high performance fiber reinforced concrete.* (2014). CSCE 2014th International Specialty Conference, Halifax, NS, May 28-31.
11. *Effect of Temperature and Relative Humidity on Creep Deflection for Permanent Wood Foundation Panels.* (2013). CSCE 3rd Specialty Conference on Material Engineering & Applied Mechanics, Montréal, Québec, May 29-Jun 1.
12. *Flexural Creep Effects on Permanent Wood Foundation Made of Structural Insulated Foam-Timber Panels.* (2012). 3rd International Structural Speciality Conference, Edmonton, June 6-9.
13. *Bridge Deck-guardrail Anchorage Detailing for Sustainable Construction.* (2011). CDCC - The Fourth International Conference on Durability & Sustainability of Fibre Reinforced Polymer (FRP) Composite for Construction and Rehabilitation.

CERTIFICATION

2015	Skyrider Equipment (SIAC), ON Scissor Lift Operator
Apr. 2014 – 2017	J.H. Ryder Machinery Ltd., Mississauga, ON O/H Bridge Crane Operator
March 2014 – 2017	J.H. Ryder Machinery Ltd. , Mississauga, ON Powered Industrial Lift Truck
Feb. 2014 – 2016	CSC Canada Safety Compliance, CAN Indoor & Outdoor Cranes Certificate
Feb. 2012	Ryerson University, Toronto, ON Graduate Professional Skills Development Program
2010 – 2016	Ryerson University, Toronto, ON Workplace Hazardous Materials Information System (WHMIS)
2010 – 2016	Ryerson University, Toronto, ON Orientation to Environmental Health & Safety (EHS)

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2010 – 2016 Ryerson University, Toronto, ON
Orientation to Occupational Health & Safety (OHS) Law - Rights, Roles & Responsibilities

April 2010 Concrete Reinforcing Steel Institute (CRSI), USA
The CRSI Detailer Training Program

EDUCATION

Sept. 2011 – Present Yeates School of Graduate Studies,
Ryerson University, Toronto, Ontario, Canada
PhD Civil Engineering Program, GPA 4.17/4.33

Supervisor: Dr. Khaled Sennah

Sept. 2009 – Oct. 2011 Yeates School of Graduate Studies,
Ryerson University, Toronto, Ontario, Canada
M.A.Sc. Civil Engineering Program, GPA 3.89/4.33

Thesis approved by:

Dr. Songnian Li, P.Eng, Chair
PhD, University of New Brunswick, Canada

Dr. Khaled Sennah, P.Eng., P.E., Advisor
PhD., University of Windsor, Canada

Dr. Anwar Hossian, P.Eng.
PhD., University of Strathclyde, United Kingdom

Dr. Medhat Shehata, P.Eng.
PhD., University of Toronto, Canada

Oct. 2001 – May 2003 College of Engineering & Technology
Arab Academy for Science, Technology & Maritime Transport
Non Degree Post-Graduate Diploma, GPA 3.42/4.00

Advisor:

Dr. Ibrahim Abdul Rashid Nasir
Ain Shams University, Egypt

Oct. 1995 – May 2000 Higher Institute of Engineering - 6 October City,
Culture & Science City, 6 October City, Egypt
B.Sc. Construction & Building Engineering, GPA 3.56/4.00
Evaluated by World Education Services (WES.org) and deemed
equivalent to the Canadian Bachelor of Science in Engineering

Thesis approved by:
Dr. Shaker Ahmed Bheiri (Shaker EL Behairy)
Ain Shams University, Egypt

Dr. Amr Hussein Abdel-Azim Zaher
Ain Shams University, Egypt

Co-supervised by
Dr. Omar Ali Moses Nawawy
Ain Shams University, Egypt

SERVICES

Editorial

- Reviewer, Journal of Concrete Research Letters (CRL), Malaysia.
(www.issres.net/journal/index.php/crl/index)
- Reviewer, American Society of Civil Engineers (ASCE) Journal of Bridge Engineering, USA. (ascelibrary.org/journal/jbenf2)
- Reviewer: Journal of Civil Engineering and Architecture Research, USA.
(www.ethanpublishing.com)
- Reviewer, Structural Engineering and Mechanics (SEM), Korea.
(www.techno-press.com)
- Reviewer, The Canadian Society for Civil Engineering (CSCE), 5th International Materials Speciality Conference (Chair: Dr. Moncef Nehdi, Western University), London, ON.

Technical Committee

- Judge. (W2016). Capstone Projects' Presentations for Structural Bridges, Ryerson University, ON.
- Judge. (F2015). Reverse Engineering Projects for the CEN100, Ryerson University, ON.

CONTINUING EDUCATION UNITS (CEU)

March 9, 2015	RCI, Inc. 30 th International Convention & Trade Show, USA Wind load design specs and air barrier performance levels (C15-302) Strategies for Energy-Efficient and Fire-Resistant Building Enclosure Details (C15-304) The Problems with and solutions for ventilated attics (C15-312) Stucco Detailing for buildings with unique geometry (C15-314)
March 8, 2015	RCI, Inc. 30 th International Convention & Trade Show, USA Whetherability : How Do Design Students Consider the Building

	Envelope? (C12-202) Innovative Repairs to Terra Cotta Parapets and Cornices (C15-205)
March 7, 2015	RCI, Inc. 30 th International Convention & Trade Show, USA Fenestrations (C15-101) Development of a Standard Test Method to Determine the Wind Resistance of Vegetated Roof Assemblies (C15-103)
Nov. 2012	Wood Solutions Fairs, Canadian Wood Council (CWC), Toronto, ON WoodWorks Engineering Software Demonstration (T4-S2+S6) Innovative Timber-Based Systems for Schools Structural Insulated Panels (T3-S5) Adventures in Engineering – Designing the Iconic Metropol Parasol (T5-S4)
Nov. 2013	Wood Solutions Fairs, Canadian Wood Council (CWC), Toronto, ON Part 1: An Overview and Demonstration of WoodWorks Design Office Software Part 2: Analysis and Design for Wind and Seismic Loads using Shearwalls Meeting 6-Storey Challenges with LSL 5-and 6-storey Wood National Code Change Proposals and Research Modern Timber Connections Fire Safety and the Building Code – The Next 20 years, the Next 20 Storeys
Feb 23, 2012	Canadian Institute of Steel Construction (CISC), Toronto, ON Inspection of Steel Structures (0.7 CEU)
June 21, 2012	Canadian Institute of Steel Construction (CISC) , Toronto, ON Seismic Connections of Steel-Framed Buildings (0.7 CEU)
June 22, 2012	Canadian Institute of Steel Construction (CISC) , Toronto, ON Seismic Connections of Steel-Framed Buildings (0.7 CEU)
Oct. 31 – Nov 1, 2011	Canadian Institute of Steel Construction (CISC) , Toronto, ON Steel Bridges: Design, Fabrication, Construction (1.4 CEU)
Feb 13, 2012	Yeates School of Graduate Studies, Ryerson University, Toronto, ON Graduate Professional Skills Development Program
August 2011	Ryerson University, Toronto, ON Ryerson Graduate Student Professional Development in Teaching Program - Level 1

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Dec. 2011 Ryerson University, Toronto, ON
Ryerson Graduate Student Professional Development in Teaching Program - Level 2

Dec. 2011 Ryerson University, Toronto, ON
Instructional Skills Workshop

Apr. 2010 Concrete Reinforcing Steel Institute (CRSI), USA
The CRSI Detailer Training Program

July 3rd, 2009 ACCES Employment, Mississauga, ON
Engineering Connections Program

May 1st, 2009 Skills for Change, Toronto, ON
Engineering Your Future

July 2-12, 2001 EPM Consultancy, Cairo, Egypt
Planning and Controlling Projects: Resources and Cost Analysis (#602), Primavera (2.1 CEU)

June 1-21, 2001 EPM Consultancy, Cairo, Egypt
Planning and Controlling Projects using P3; Planning and Scheduling (#601) – Primavera (2.1 CEU)

Aug 15 – Sep 1, 99 Institute of National Planning, Cairo, Egypt
Short-term training course in: SAP-90

July 3-28, 99 The Arab Contractors Computer Center, Cairo, Egypt
A course of study in: Windows 98 – AutoCad 2D (60 hours)

OTHER QUALIFICATIONS

Language Skills	Arabic: Mother Language English: Fluent French: Basics
Citizenship	Canadian
Driving License	G – Driving Licence (Ontario, Canada)
Activities	Reading, Traveling, Photographing, Swimming

ONLINE PROFILE

ORCID	orcid.org/0000-0003-4299-4851
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Twitter	twitter.com/msasayedahmed
Blog	mahmoudsayedahmed.blogspot.com

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Google Scholar	scholar.google.ca/citations?user=8EEf3fIAAAAJ
Research Gate	https://www.researchgate.net/profile/Mahmoud_Sayed_Ahmed
Ryerson University	https://engage.ryerson.ca/pg/profile/m.sayedahmed
Google +	https://plus.google.com/+MahmoudSAYEDAHMED-Phd
ResearcherID	http://www.researcherid.com/rid/K-2020-2014



PERSONAL BIOGRAPHY

Mahmoud SAYED AHMED is Research & Graduate Assistant and Doctoral Candidate at the department of Civil-Structural Engineering in Ryerson University, Canada. He has M.A.Sc. and B.Sc. in Civil Structural/Construction Engineering. He is experienced into design-build projects for industrial, commercial and institutional (ICI) buildings made of reinforced concrete, steel and wood structures. His industrial-research involved the applications of the Structural Insulated Panel (SIP), Permanent Wood Foundation (PWF) panel, Glass FRP-Reinforced Precast Bridge Full-Depth Deck Panel (FDDP), design of Short Medium Span Bridge (SMSB) and concrete mix design for Ultra-High Performance Fiber Reinforced Concrete (UHPRC). He has several published peer-reviewed technical papers/reports in Egypt, Malaysia, Canada and USA. He is also reviewer for some technical academic-research journals in USA, and Malaysia. He has received several awards for the academic achievements and volunteering activities from the University, Province of Ontario, Industry and local community.::