

## DR. Aly A. Emam

Associate Professor, Civil & Environmental Engineering Dept., King Abdulaziz University

### Education

<i>Degree</i>	<i>Discipline</i>	<i>Institution</i>	<i>Year</i>
PhD	Civil Engineering	The Ohio State University, USA	1998
MS	Structural Engineering	Cairo University, Egypt	1985
BS	Civil Engineering	Cairo University, Egypt	1980

### Academic Experience

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title (Chair, Coordinator, etc.)</i>	<i>Full or Part Time</i>
2017	Present	King Abdulaziz Univ.	Assoc. Prof		Full Time
2010	2017	Ryerson University, Canada	R. Assoc.		Full Time
2007	2010	HBNRC, Egypt	Assoc. Prof.		Full Time
2005	2007	HBNRC, Egypt.	Assist. Prof.		Full Time
2001	2005	Ryerson University, Canada	Post-Doc.		Full Time
1998	2000	Ohio State University, USA.	Post-Doc.		Full Time
2002	2017	EPIC, Canada	Instructor		Part Time

### Non Academic Experience

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position description (Brief)</i>
2004	2008	HBRC-Materials Institute	Deputy Quality Manager	<p>As deputy to the Quality Manager for the Material Research Institute, which is ISO 17025 accredited through IAS, California, my role during accreditation process and continued surveillance include the following activities:</p> <ul style="list-style-type: none"><li>• Preparing quality manuals and forms</li><li>• Writing experimental procedures based on relevant ISO standards</li><li>• Preparing project files</li><li>• Automation of work records and documents</li><li>• Establishing procedures for measurement uncertainty (MU) for each test.</li><li>• Planning maintenance and calibration for all testing equipments and measuring devices</li><li>• Training staff on ISO 9001 and 17025 requirements and implementation</li></ul>

2003	2008	HEEPF	Consultant	<p>As a consultant to HEEPF (Higher Education Enhancement Project Fund), my duties include the following activities:</p> <ul style="list-style-type: none"> <li>• Preparing HEEPF Management, Monitoring and Evaluation Reports for 29 projects in 3 universities.</li> <li>• Quality Control &amp; Monitoring of the funded Projects.</li> <li>• Reporting on the Impact Assessments for the Funded Projects. .</li> <li>• Presenting Awareness Building &amp; Dissemination of Information workshops in different universities.</li> <li>• Following-up on projects sustainability</li> <li>• Recommending protocols for coordination and integration</li> </ul>
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### **Certifications and Professional Registrations**

1. Registered Professional Engineer in the Province of Ontario, Canada
2. Registered Professional Engineer in Egypt

### **Current Membership in Professional Organizations**

<i>Member Since</i>	<i>Rank</i>	<i>Society/organization</i>
2010	Member	Professional Engineers Ontario (PEO), Canada
2002	Member	Canadian Association for Road Safety Professional, Canada
1982	Member	Egyptian Syndicate of Engineers

### **Honors and Awards**

1. The Ohio State University Presidential Fellowship nomination.

### **Service activities (within and outside of the institution)**

1. Assistant to the Civil Eng. Dept. Chairman, KAU, for Graduate Studies, 2019 -present.
2. Coordinator for the structural group at Civil Eng. Dept., KAU, 2019-present.
3. Consultant for PEng. Records of Engineering Experience Review for PEO Applicants, EPIC, Canada. 2010-2017.
4. Consultant for Higher Education Enhancement Project Fund (HEEPF), Ministry of Higher

Education, Egypt. 2003-2008.

5. Member of the Egyptian Building Code Sub-Committee on RC Design and Material Testing, HBNRC, Egypt. 2003- 2007
6. Member of the ISO 9001 Quality Team, HBNRC, Egypt, 2004-2008
7. Deputy Quality Manager for ISO 17025, HBNRC, Egypt 2005-2008

### **Principal Publications/Presentations from the Past Five Years**

1. Mikhailenko, P., Cassagnabère, F., Emam, A. and Lachemi, M. (2018) “Influence of physico-chemical characteristics on the carbonation of cement paste at high replacement rates of metakaolin” *Construction & Building Materials*, Vol.158, p. 164–172.
2. Tamrakar, N., Emam, A. and Lachemi, M. (2018) “Durability of Steel Fiber Reinforced Self-Consolidating Concrete” under review for publication.
3. Lachemi, M. and Emam, A. (2016) “Stress Analysis and Durability Evaluation of Existing RC Components Due to Corrosion: Numerical Investigation” Ryerson University, (Hydro-Quebec), July 2016
4. Lachemi, M. and Emam, A. (2014) “Numerical Simulation Models and Parametric Study of Buried Reinforced Concrete Chambers; Part 1: Subsurface Contaminants Flow in Porous Media, Part 2: Corrosion of Concrete Reinforcement, and Part 3: Linear and Nonlinear Stress Analysis Using Steel or GFRP as Chamber Reinforcement”, Ryerson University, (Hydro-Quebec), June 2014
5. Emam, Aly and Elbadry, Hossam “Simplified Criteria for Performance-Based Aggregate Properties for Soil Replacement in Construction Sites” *HBRC Journal* Aug. 2013
6. Emam, A., Shokry, K. and Hasan, E. “Dynamic Response of Laminated Polymer Composite Plates with Matrix Cracks” *Azhar Engineering Journal*, 2012.

### **Recent Professional Development Activities**

1. Engineering Learning Outcomes Workshop, Canadian Engineering Accreditation Board (CEAB), Ryerson University, Canada, Oct. 2016
2. Workshop on Classroom Management, Teaching and Learning Center at Ryerson University, Canada, Aug, 2016.
3. Workshop on Diversity and Inclusiveness in Classroom Environment. Teaching and

Learning Center at Ryerson University, Canada, Jan, 2017.

4. Workshop on Calibration and Certification of Lab Devices, National Institute of Standards (NIS), Egypt, 2007.