

CURRICULUM VITAE

Rafik Abbas Mahmoud Elady

Professor, Properties and Strength of Materials
Alexandria University
Consultant Engineer

(Updated 2014)



PERSONAL INFORMATION

Date of Birth: October 20, 1965.
Citizenship: Egyptian
Marital Status: Married (Four Children)

CONTACT INFORMATION

Mailing address: 21 El-Fath St., #2, Bulkley, Alexandria, Egypt.
Work address Institute of Graduate Studies and Research, University of Alexandria,
163 Horreya Avenue, Shatby 21526, P.O Box 832, Alexandria, Egypt.
Telephone Number: Cell Phone: (+20) 0101519157
Home: (+203) 5232256
Fax: (+203) 5435956
Email: rafik.abbas@yahoo.com

EDUCATION

- 1983** General Secondary Certificate (Diploma) from Saint Marc College, *French School*.
- 1988** BSc. in Civil Engineering, Faculty of Engineering, Alexandria University.
- 1989** Qualifying Courses for Master Degree in Materials Science, Institute of Graduate Studies and Research, Alexandria University.
- 1990** Special Qualifying Courses for Master Degree.
- 1992** M.Sc. in Materials Technology, Department of Materials Science, Institute of Graduate Studies and Research, Alexandria University. Title of the M.Sc. thesis "Slag as a building material".
- 1997** Ph.D. in Materials Science, Department of Materials Science, Institute of Graduate Studies and Research, Alexandria University. Title of Ph.D. dissertation "Durability of steel slag as construction material and its advanced application".
- 2004** Promoted to Assoc. Professor from The Permanent Scientific Committee of Structural Engineering and Construction.
- 2009** **Promoted to Professor of Properties and Strength of Materials – Structural Engineering, from The Permanent Scientific Committee of Structural Engineering and Construction, Supreme Council of Universities, Egypt.**

ACADEMIC CHRONOLOGY OF EMPLOYMENT

Present Position: Professor of Properties and Strength of Materials – Structural Engineering, Institute of Graduate Studies & Research, Alexandria University (since June 2009).

2004-2009 Associate Professor, Materials Science Department, Institute of Graduate Studies & Research, Alexandria University.

1998-2004 Lecturer, Materials Science Department, Institute of Graduate Studies & Research, Alexandria University.

LEGISLATION AND BUILDING CODES

- Member of the National Committee for **Preparation and implementation of the Executive Article of the Egyptian Construction Law** (2007-2009).
- **Egyptian Code for Design and Construction of Reinforced Concrete Structures;** Member of Materials and Testing Subcommittee.
- **Egyptian Code for Utilization of Solid Wastes in Construction,** Member of the Permanent Committee.
- **Egyptian Code for Design Criteria and Construction Specifications for Masonry Works;** Member of the Materials and Quality Control Subcommittee.
- **Egyptian Code for the Application of Fiber Reinforced Plastic (FRP) in Construction;** Member of the Materials and Quality Control Subcommittee.
- **Egyptian Code for Energy Efficiency Buildings,** Residential and Commercial Buildings; Member of the Permanent Committee, and former Code Coordinator.
- **Member of the Egyptian Technical Specifications for Ready-Mixed Concrete.**

LANGUAGES

Arabic, French and English.
(Reading, writing and speaking)

PROFESSIONAL MEMBERSHIPS

- | | |
|---|----------------------|
| ▪ Consultant Engineer, in field of Quality Control and Structures Testing, by The Egyptian Engineering Syndicate | 2009-present. |
| ▪ Egyptian Engineering Syndicate, | 1988-present. |
| ▪ Arab Society of Materials Science, | 1990- present. |
| ▪ French Speaking Engineers Association, Cairo | 1997-present. |

ACADEMIC EXPERIENCES

Teaching Experiences

1. Building Materials, Properties and Testing.
2. Cement Manufacturing and Composition.
3. Composite Materials in construction.

4. Construction Materials and Environment Effect.
5. Materials and Technology of Green Buildings.
6. Mechanical Properties of Materials.
7. Chemical Changes and Materials Properties.
8. Materials and Technology for Buildings Repair.
9. Production and Composition of Cement and Cementitious Materials.
10. New Trends in Construction Materials.

Supervision of Ph.D. Degrees (8)

1. Conductive concrete and its use in corrosion control, ongoing.
2. Recycling and reuse of marble quarry dust in the production of building materials; ongoing.
3. Non Conventional Uses of Recycled Waste Water in Bahrain Kingdom; Case Study: Concrete Production; 2010.
4. Studies on physico-mechanical properties and durability of some pozzolanic cement; 2010.
5. Studies on the cathodic protection of steel props at harbors platforms; 2009.
6. Natural fibers waste as filler and reinforcement of PVC compound; 2008.
7. Effect of environmental conditions on archeological building stones and its restoration; 2007.
8. Effect of some ingredients on some mechanical and physical properties of ductile cast iron; 2007.

Supervision of M.Sc. Degrees (21)

1. The mechanical behavior of fiber reinforced concrete; 2001.
2. Environmental uses of waste water sludge; 2003.
3. Effect of Braid parameters on the strength of FRP composite; 2006.
4. Effect of high temperature on lightweight concrete; 2006.
5. Polymer modified cement; 2006.
6. Diffusion of chloride ions in high-performance concrete; 2008.
7. Applicability of recycled polymers as coating material for concrete, 2010.
8. Preparation and characterization of high strength and corrosion resistant nano-steel; 2012.
9. Application of Nano-Polymer in Coating Materials; ongoing.
10. Evaluation of chloride ion penetration in concrete; 2011.
11. Green Corrosion Inhibition of steel reinforcement in concrete structures; 2011.
12. Special concretes for fire protection; ongoing.
13. Application of nano-technology in coating materials; ongoing.
14. Preparation and Characterization of Superhydrophobic Polypropylene for Biomedical Applications; 2013
15. The effect of using sugarcane bagasse as natural fiber & nano-calcium carbonate as filler on the properties of high density polyethylene; ongoing.
16. Effect of heat treatment on the structural and optical properties of tellurite glasses; ongoing.
17. Thermal Properties of Quaternary Tellurite Glass Systems; ongoing.
18. Effect of Addition of Gd_2O_3 on Mechanical Properties of Tellurite Glass; ongoing.

19. Effect of Gadolinium oxide on the Optical Properties of Tellurite glass system; ongoing.
20. Preparation and Characterization of Reinforced Thermoplastic Pipe for High Pressure Applications; ongoing.
21. Studying the Chloride Ion Penetration in Concrete Using Different Techniques; ongoing.

Supervision of Diploma Projects (16)

1. Evaluation of Egyptian blastfurnace slag cement; 1999.
2. Mechanical and thermal properties of some composite materials; 1999.
3. Effect of water-soluble polymers on concrete performance; 1999.
4. Efficiency of new generation of superplasticizer; 2000.
5. Thermal performance of some building and insulating materials, 2000.
6. Utilization of some fatty acids in concrete blocks; 2000.
7. Effect of magnetic and electric field on concrete properties; 2000.
8. New generation of high-performance concrete; 2001.
9. Optical testing of welded joint materials; 2001.
10. Bond between polyethylene and cement based material; 2002.
11. Corrosion activity of steel bars in calcium hydroxide solutions; 2002.
12. Physical-mechanical interrelation of high density and low density polyethylene; 2003.
13. Workability of concrete at elevated temperature; 2004
14. Evaluation of water repellent for mortar repair in coastal historical buildings; 2007.
15. Investigation of consolidant materials for ancient stones repair; 2007.
16. Application of Nanotechnology in Construction; 2007.

PARTICIPATION IN NATIONAL STUDIES

- ▶ *Applied Study on Self-Compacting Concrete.*
Applicability of producing SCC using local materials and its properties was the aim of this study. Results were the main reference for the preparation of the Egyptian Technical Specifications for the Self-Compacting Concrete, (2003-2004).
Task: Member of the research team.
- ▶ *National Study on Hot Weather Concreting.*
Factors affecting concrete mixing, transportation and placing under conditions of high ambient temperature, low humidity, wind were examined and evaluated. Study results were the main reference for the preparation of the Egyptian Technical Specifications for the Manufacture of Concrete in Hot Climates. (2002-2003).
Task: Member of the research team.
- ▶ *National Study on Recycling of Building Materials Waste in Construction.*
This study investigated the recycling of wastes resulting from the production of building materials, e.g., ceramic, masonry, quarries and cement dust, (2001-2003).
Task: Member of the research team.
- ▶ *Concise Dictionary for Housing, Architect and Construction.*
This dictionary is issued by the League of Arab Countries; it gives Arabic, English and French translation for construction terminology (2001).
Task: Member and Coordinator of the Egyptian team.
- ▶ *National Study on Egyptian Building Materials Map.*
This study aimed at allocating and testing of raw materials required for the construction industry all-around Egypt, (1998-2001).
Task: Member of the research team.

- ▶ *The Arab ASTM Specifications Handbook for Concrete Testing (Arabic translation)*.
This book is issued by ASTM representative and includes 29 ASTM standards in Arabic. Covering the specifications and standard test methods for concrete materials and testing (1999-2000).
Task: Member of the translation and reviewing committee.
- ▶ *Scientific Project entitled "Process Development for the Utilization of the Steel-Slag at the El-Dekhela Steel Company in the Construction Industry"*.
Financed by El-Dekhela Steel Co., (1996-1997).
Task: Project coordinator and member of the research team.
- ▶ *Scientific Project entitled "Process Development for the Utilization of the Steel-Slag at the Egyptian Copper Company in the Construction Industry"*.
The Science and Technology Cooperation financially sponsored the scientific project, through the agreement between the Academy of Scientific Research and Technology and US Agency for International Development (1993-1996).
Task: Project coordinator and member of the research team.

SCIENTIFIC ACTIVITIES & MAJOR ACHIEVEMENTS

- Principal Investigator of French-Egypt project entitled "Towards chloride diffusion coefficient as an indicator of quality construction in Egypt", French-Egypt Joint Research Grant No. EFCM1/10/4651 (2012).
- Principal Investigator of US-Egypt project entitled "Evaluation of Green Corrosion Inhibitors for steel Reinforcement in Concrete Structures", US-Egypt Joint Research Grant No. MAN10-009-001 (2006-2008).
- Establishment of an Applied Diploma (inter-faculty program) entitled "Materials and Technology for Monuments Restoration" and the construction of all courses syllabus. Faculties involved: Faculty of Engineering, Faculty of Science, Faculty of Fine Arts, Faculty of Arts, and Institute of Graduate Studies and Research (2007).
- Initiating Dual Ph.D. Degree program between the Department of Civil, Construction, & Environmental Engineering, University of Alabama at Birmingham, USA and the Department of Materials Science, Alexandria University in the field of Environmentally-Friendly Construction Materials (2008).
- Founding The Building Materials Laboratory at the Institute of Graduate Studies and Research, Alexandria University, including equipment purchasing and installation. Development of equipment and machinery to conform to the testing requirements of new building materials. Performing technical training for lab assistants to enhance their abilities according to the ongoing research and laboratory studies (1998-2010).
- Performing quality control tests for construction works, buildings inspection, structural assessment and technical consultancy for more than 70 different companies, including public and private construction companies and cement production companies (1998-2010).
- Coordinator of The Research Group "Protection of Buildings and Materials against Environmental Impacts" involving representatives from the faculties of Engineering and Fine Arts to implement joint research work and submission of research projects (2007-2009).
- Patent under registration "Innovative Material from Plastic Waste as Waterproofing Coating for Concrete to be used in the moisture isolation in structural applications.
- Membership of the Institute Committees:

- 1998-2000 the Library Committee.
 - 2000-2001 Equipment and Laboratories Committee.
 - 2001-2006 Community Service and Environmental Affairs Committee.
 - 2007-2008 Cultural Relations Committee.
 - 2008-2009 Graduate Studies Committee.
 - 2008-2009 Community Service and Environmental Affairs Committee.
 - 2008-2009 Board Member Center of Graduate Studies and Research.
- Founding Member, of "The Arab Society of Materials Science".

ORGANIZING CONFERENCES & WORKSHOPS

- The International Conference and Workshop on Sustainable Green Building Design and Construction, , organized by NSF-USA, University of Alabama and Housing and Building National Research Center, Cairo, Egypt, 8-11 March 2009 (Member of the Steering Committee)
- The International Conference on Innovations in Building a Safer World Legislation – Codes – Standards, Organized by the Ministry of Housing and the World Organization of Building Officials, UN Committee, Cairo, Egypt, 9-12 November, 2008 (Member of the Organizing Committee).
- The International Conference on Bridge Management Systems – Monitoring, Assessment and Rehabilitation, 21-23 March 2006 (Member of the Technical Committee).
- The International Conference on Heritage Cities, organized by th International Urban Development Association INTA and the Ministry of Housing, Luxor, Egypt, 29 November to 2 December 2006, (Member of the Organizing Committee).
- The International Conference on Innovations in Materials and Design of Civil Infrastructure, 28-29 Dec. 2005, organized by NSF-USA and Egypt (Member of the Organizing Committee).
- The Fourth Middle East Symposium on Structural Composites for Infrastructure Applications, 20-23 May 2005, organized by Egyptian Society of Engineers and Ain Shams University (Member of the Organizing Committee).
- The International Conference on Future Vision and Challenges for Urban Development, Cairo, Egypt, 20-22 December 2004, (Head of the Organizing Committee).
- The International Conference on Arab Building Codes and Arab Economic Integration in Engineering Fields, Organized by the Ministry of Housing, Utilities & Urban Communities and The League of Arab Countries, Cairo, 20-22 September 2003, (Member of the Scientific and Organizing Committees).
- The Second International Workshop on Structural Composites for Infrastructure Applications, 17-18 December 2003, (Steering Committee).
- The International Workshop on the Use of Advanced Composite Materials in Civil Engineering, 15-16 December 2002, (Steering Committee).
- The International Workshop on Structural Composites for Infrastructure Applications, 28-30 May 2001, (Steering Committee).
- The Arab Conference on Building Materials and Economical Challenges, Cairo, Egypt, 9-12 April 2000. Organized by the Ministry of Housing, Utilities & Urban Communities and The League of Arab Countries, (Scientific and Organizing Committees).

- The Arab Conference on Repair and Rehabilitation of Structures, Cairo, Egypt, 17-19 September 1998. Organized by the Ministry of Housing, Utilities & Urban Communities, and The League of Arab Countries, (Scientific and Organizing Committees).
- The First and Second Symposium entitled "Towards National Strategy of Materials: Metallic Materials - Building Materials" Alexandria, Egypt, (Organizing Committee).
- The Second and Third Arab International Conference on Materials Science Alexandria, Egypt, (Organizing Committee).

ATTENDANCE OF CONFERENCES & SCIENTIFIC MEETINGS

- 2010** Twelve International Conference on Non-conventional Materials and Technologies “Materials & Technologies for Sustainable Infrastructure Systems”, Cairo, Egypt, 21-23 September.
- 2009** International Conference on Sustainable Green Building Design and Construction, Cairo, Egypt, 8-11 March, organized by NSF-USA, University of Alabama and Housing and Building National Research Center (Paper Presented).
- 2009** The International Conference on Developing the New Urban Communities; Policies and Priorities, Alexandria, 28-31 March.
- 2009** The International Conference on Advanced Materials for Applications in Acoustics and Vibration, British University, Cairo, 4-6 January (Paper Presented).
- 2008** New Cements and their Effect on Concrete Performance, Housing and Building National Research Center, Cairo, 16-18 December (Paper Presented).
- 2008** The International Conference on Innovations in Building a Safer World Legislation – Codes – Standards, Organized by the Ministry of Housing and the World Organization of Building Officials, UN Committee, Cairo, Egypt, 9-12 November.
- 2007** Sixth International Conference on Structural and Geotechnical Engineering, Faculty of Engineering, Alexandria, 15-17 April.
- 2006** International Conference on Heritage Cities, Luxor, Egypt, 29 November-2 December (Paper Presented).
- 2006** International Conference on Bridge Management Systems-Monitoring, Assessment and Rehabilitation, Cairo, Egypt, 21-23 March.
- 2004** International Conference on Future Vision and Challenges for Urban Development, Housing and Building Research Center, Cairo, 20-22 December (Paper Presented).
- 2004** The Eight International Conference on Materials for Energy Applications, Presenting lecture entitled "Codes and Standards for Energy Efficiency in Building Design", , Alexandria, 18-20 April.
- 2003** The Second International Workshop on Structural Composites for Infrastructure Applications, Housing and Building Research Center, Cairo, 16-18 December.
- 2003** The 10th International Colloquium on Structural and Geotechnical Engineering, Ain Shams University, Cairo, 22-24 April (Presented Paper).
- 2003** The International Conference on Performance of Construction Materials in the New Millennium, Cairo, 18-20 February (Presented Paper).
- 2002** The Third Middle East Symposium on Structural Composites for Infrastructure Applications, Aswan, 17-20 December (Presented Paper).
- 2002** Workshop on the Use of Advanced Composite Materials in Civil Engineering, Housing and Building National Research Center, Cairo, 15-16 December.

- 2001** The International Workshop on Structural Composites for Infrastructure Applications, Housing and Building National Research Center, Cairo, 28-30 May.
- 2000** The Arab Conference on Building Materials and Economical Challenges, organized by the League of Arab Countries, Cairo, Egypt, 9-12 April.
- 1998** The Arab Conference on Repair and Rehabilitation of Structures, organized by the League of Arab Countries, Cairo, Egypt, 17-19 September.
- 1997** International Workshop on Composite Materials & Waste Minimization, UNIDO & The International Center for Science & High Technology (ICS), Bergamo, Italy, 13-17 March.
- 1997** Fourth International Conference on Frontiers of Polymers & Advanced Materials, Cairo, Egypt, 4-9 January.
- 1995** Industrial Waste Management Symposium, Alexandria, Egypt, 25-26 November.
- 1995** Training Course on "Pollution Prevention", Alexandria, Egypt, 18-19 April.
- 1995** The First Training Course on Cement Chemistry organized by Helwan University and the Arab Society of Materials Science Cairo, Egypt, 4-6 April.
- 1994** Training Course on "Technical Writing", Alexandria, Egypt, 25-28 July.
- 1993** The Second Symposium on "Towards National Strategy of Materials: Building Materials". Alexandria, Egypt, 26-27 September.
- 1993** Steel Corrosion in Concrete, Faculty of Engineering, Alexandria, 28 August.
- 1992** The Third Arab International Conference on Materials Science: Degradation and Stabilization of Materials, Alexandria, Egypt, 26-30 September.
- 1990** The First Alexandria Conference on Structural and Geotechnical Engineering, Alexandria, Egypt, 1-3 December.
- 1990** The Cooperative Education Conference, Alexandria, Egypt, 5-8 May.
- 1989** "Uses of Sodium Silicate in Building Materials", Institute of Graduate Studies and Research, Alex, Egypt, 2-3 December.

LIST OF PUBLICATIONS (32 papers)

1. Rafik Abbas, Wagih A. Sadik, Abdel Ghaffar M. El Demerdash, and Adel F. Badria, "A Simple Method to Prepare Superhydrophobic Polypropylene Coatings for Biomedical Applications", Nanotech Challenges 2014, International Conference on Nanomaterials Synthesis, Fabrication and Applications, 14-17 April, 2014, Cairo, Egypt.
2. Eslam Abdel Aziz, Ahmed Hefnawy, Rafik Elady, Mahmoud Nasr and Taha Mattar; "Effect of Cr and nano-inoculant alloying on the properties of steel"; ARABCAST 2012, 16-19 November 2012, Sharm Elshaikh, Egypt.
3. Eslam Abdel Aziz, Ahmed Hefnawy, Rafik Elady, Mahmoud Nasr and Taha Mattar; "Enhancement of corrosion behaviour of steel via Cr and nano-inoculant alloying", 2nd International Conference on Corrosion and Mitigation, 10-13 December 2012, Hurgada, Egypt.
4. Rafik Abbas, Salah Abo-El-Enien and El-Sayed Ezzat, "Properties and Durability of Metakaolin Blended Cement: Mortar and Concrete" *Materiales de Construcción*, SPAIN, Vol. 60, No. 300, Oct - Dec, 2010, pp. 33-49, doi:10.3989/mc.2010.v60.i300.
5. Salah Abo-El-Enien, Rafik Abbas and El-Sayed Ezzat, "Properties and Durability of Metakaolin Blended Cement" *Materiales de Construcción*, SPAIN, Vol. 60, No. 299, July - Sept, 2010, pp. 21-35, doi:10.3989/mc.2010.v60.i299.

6. R. Abbas, "Influence of Nano-SiO₂ Addition on Properties of Conventional and Ultra-High Strength Concretes", HBRC Journal, Housing and Building National Research Center, Vol. 5, No. 1, April 2009, pp. 18-30.
7. R. Abbas, "Effect of Limestone powder on the properties of self-compacting concrete; Eight years results" Ain Shams Journal of Civil Engineering, March 2009, pp. 165-180.
8. Essam El-Rafey, Mohamed Abdel-Razik, Rafik Abbas and Wael El-Dessouky, "Recycling of Polystyrene as Waterproofing Admixture and Coating for Concrete", International Conference on Sustainable Green Building Design and Construction, Cairo, Egypt, 10-12 March 2009.
9. A. Kamel, R. Abbas, A. El-Sheikh, E. El-Rafey, "Characterization of polyvinyl chloride/natural-fiber composites for Construction Applications", International Conference on Advanced Materials for Application in Acoustic and Vibration, Cairo, Egypt, 4-6 January 2009.
10. Rafik Abbas, and Tarek Bahaa, "Properties and Durability of Activated Portland Slag Cement: Mortar and Concrete", Engineering Research Journal, Faculty of Engineering, Helwan University, Vol. 119, October 2008, pp. C67-C83.
11. S. Abo-El-Enien, R. Abbas and E. Ezzat, "Metakaolin Blended Cement: Paste Characteristics and Concrete performance" Engineering Research Journal, Faculty of Engineering, Helwan University, Vol. 119, October 2008, pp. C33-C52.
12. Rafik Abbas, "Strength of Retempered Concrete Subjected to Prolonged Mixing and Hot Weather Conditions", Engineering Research Journal, Faculty of Engineering, Helwan University, Vol. 118, August 2008, C34-C61.
13. Rafik Abbas, Essam El-Rafey, and Maissa Salah El-Din, "Influence of Sulfate Attack on Chloride Ion Ingress in High-Performance Concrete", HBRC Journal, Vol. 4 No. 2, August 2008, pp. 9-26.
14. Rafik Abbas, A.M. Abdel Gaber and Mohamed Khalil, "Extension of Cathodic Protection Effect to Steel Piles at Tidal and Splash Zone", The 6th International Libyan conference on Corrosion Science, 12-14 November 2007.
15. Rafik Abbas, Ahmed Hefnawy and Mohamed Khalil, "New Chalange by Extension of Cathodic Protection on Steel Piles at Splash Zone", The 6th International Libyan conference on Corrosion Science, 12-14 November 2007.
16. Essam El-Rafey, Rafik Abbas, and Eman Amin, "Strength and Thermal Performance of Lightweight Aggregate concrete under temperature effect, Part II: Insulating Concrete", Ain Shams Journal of Civil Engineering, Vol. 42, No. 3, September 2007, 21-37.
17. Ali Fahmy, R. Abbas, A. Hefnawy and M. Moussa, "The Effect of Copper Additions to Physical and Mechanical Properties of Ductile Iron", First International Conference on Materials and Environment, Annaba, Algeria, 23-25 April 2007.
18. Sherif Kandil, Samir Nasr, Adel El Kurdi, Rafik Abbas and Shahira Sharaf El-Din, "Evaluation of Repair Materials for Limestone consolidation in Taposiris Magna Monument", International Conference on Heritage Cities, Luxor, Egypt, 29 November to 2 December 2006.
19. Rafik Abbas, Adel William, and Eman Amin, "Strength and Thermal Performance of Lightweight Aggregate concrete under temperature effect, Part I: Structural Concrete", The International Conference on Future Vision and Challenges for Urban Development, Cairo, 20-22 December 2004.
20. Rafik Abbas and Tarek Bahaa, "Performance of Steel Fiber-Reinforced Self-Compacting

- Concrete (FRSCC)", Engineering Research Journal, Faculty of Engineering, Helwan University, Vol. 89, October 2003, pp. C17-C34.
21. Rafik Abbas and Amr El-Hefnawy, "Axially Loaded Reactive Powder Concrete Compression Members", Engineering Research Journal, Faculty of Engineering, Helwan University, Vol. 89, October 2003, C1-C16.
 22. M. M. Abd El-Razek and Rafik Abbas, "Performance of Fiber Reinforced Mortar under High Temperature Effect", L'industria Italiana del Cemento, No. 788, June 2003, pp. 522-537.
 23. Rafik Abbas, "Properties and Durability of Concrete with Addition of Limestone Powder", Proceeding of the 10th International Colloquium on structural and Geotechnical Engineering, Ain Shams University, Structural Engineering Department, Cairo, 22-24 April 2003.
 24. A. El-Hefnawy, R. Abbas , "Effect of Curing Conditions on the Performance of Reactive Powder Concrete", International Conference on Performance of Construction Materials in the New Millennium, Cairo, 18-20 February 2003, Vol.2, pp. 1045-1054.
 25. Sayed Abd-Elbaky, Amr El-Hefnawy and Rafik Abbas "Rehabilitation of RC Beams with Different Degrees of Rebars Corrosion Using CFRP Sheets", Proceeding of the Third Middle East Symposium on Structural Composites for Infrastructure Applications, Aswan, Egypt, 17-20 December 2002.
 26. Rafik Abbas, Essam El-Rafey, Aly El-Sheikh and Amgad Kamel, "Mechanical Properties of Hybrid Fiber Reinforced Concrete", Alexandria Engineering Journal, Faculty of Engineering, Alexandria University, Vol. 41 (2002), No.3, May 2002, pp. 455-464.
 27. Adel Kurdi, Shafik Khoury and Rafik Abbas, "A New Concrete for the 21 Century: Reactive Powder Concrete" Alexandria Engineering Journal, Faculty of Engineering, Alexandria University, Vol. 40 (2001), No.6, November 2001, pp. 893-909.
 28. Rafik Abbas, "Assessment of Locally Available Materials for Producing Self-Compacting Concrete: Mortar Characteristics", Engineering Research Journal, Faculty of Engineering, Helwan University, Vol. 73, February 2001, pp. 153-167.
 29. Kurdi, A. Eldarwish and R. Abbas, "Sea Water Attack on Egyptian Steel Making Slag-Aggregate Concrete", Proceedings of the International Workshop on Evaluation, Repair, Renewal and Preservation of Structures, Ottawa, Canada, 31 May – 1 June 1999.
 30. Kurdi, A. Eldarwish and R. Abbas, "Applicability of ECW Steel Slag in Concrete", Alexandria Engineering Journal, Alexandria University, Vol. 36, No.4, Section C, May 1997, C185-C200.
 31. S. Kandil, M. El-Rafey, M. Ghoneim, A. Kurdi and R. Abbas, "Evaluation of Slag as a Coarse Aggregate in Hot Mix Bituminous Concrete", Alexandria Engineering Journal, Alexandria University, Vol. 32, No.2 Section C, April 1993, C113-C117.
 32. S. Kandil, M. El-Rafey, A. Kurdi and R. Abbas, "Utilization of Steel-Making Slag in Concrete" Alexandria Engineering Journal, Alexandria University, Vol. 31, No.2 Section C, October 1992, C615-C623.