

## Curriculum Vitae

**Name: Prof. Dr. Basil Ahmed Mohamed El-Sabbagh**



**E mail:** basil261@yahoo.com

### **Present Job**

Professor of Chemistry and Raw Building Materials Processing Technology.

Head of Nano Chemistry and Technology laboratories.

Head of Electrochemistry and Corrosion laboratories.

Quality Management Consultant.

**Raw Materials and Processing Institute, HBRC. Egypt**

### **Educational Qualifications**

\* **B.Sc. " Chemistry "**- Cairo University, 1983. (Very good)

\* **M.Sc." Physical and Inorganic Chemistry"**- Zagazig University, 1990.

#### **Thesis entitled:**

**" Effects of Application of Some Steel Coatings on the Corrosion Prevention of Reinforcement in Concrete "**.

**\* Ph.D. " Physical and Inorganic Chemistry"- Zagazig University 1995.**

**Thesis entitled:**

**" Dual Effect of Chemical Admixtures on Concrete Durability and Corrosion Behavior of Steel Reinforcement ".**

**\*Professor Associate 30/7/2001 up to 28/7/2009.**

**\*Professor of Chemistry and Raw Building Materials Processing Technology  
from 28/7/2009 up to date**

### **Research Experience and Other Skiles**

- In Addition I worked as a quality manager to develop all chemical laboratories (6 labs.)\* At Raw Materials and Processing Technology Institute to meet the requirements of the ISO 17025/2005. from 3/ 2006 up to 7/2015

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\*Accredited by the International Accreditation Service (IAS), USA (2009)

Quality Management Consultant, Quality and Technical Assessor for the requirements of the ISO 17025/2017 from 2017 up to date

### **LIST OF PUBLICATION**

- 1- H.A. El-Sayed, and **B.A. El-Sabbagh**, "Utilization of an Industrial Waste Product to Develop a Corrosion Protective coating to Steel Reinforcement in Concrete", Presented at the "Building the Future-Innovation in Design, Materials and Construction" Conference, Brighton, England, 19-21 April (1993).

- 2- H.A. El-Sayed, A.H. Ali and **B.A. El-Sabbagh**, "Some Aspects of Microsilica-Modified Cement and Concrete", Presented at Con. chem. Conference, Brussels, Nov. (1995).
- 3- H.A. El-Sayed, A.H. Ali and **B.A. El-Sabbagh**, "Effect of Microsilica on Strength and Chemical Resistance of Portland Cement Concrete", Presented at 9th Int. Technical Conference on Cement and Building Materials, United Arab Emirates, 4-8 Nov. (1996).
- 4- H.A. El-Sayed, A.H. Ali and **B.A. El-Sabbagh**, "Effect of Microsilica Incorporation in Concrete on the Corrosion Protection of Embedded Reinforcement", Presented at 10th Int. Congress on the Chemistry of Cement (ICCC), Goteborg, Sweden, 2-6 June (1997).
- 5- H.A. El-Sayed, A.H. Ali and **B.A. El-Sabbagh**, "Water - Reducing Concrete Admixtures for Utilization in Hot Climatic Regions", Presented at Conchem. Int. Conf. Düsseldorf, Germany, Dec. (1997).
- 6- El-Sayed H.A., A.H. Ali, **B.A. El-Sabbagh** and H. M. Hassan, "Role of an innovated waste products mix in promoting concrete characteristics: (a) strength and durability", Presented at 8th Int. Conf. on Environmental Protection is a Must, Alex. Egypt, May (1998), Pp. 303-312.
- 7- A.H. Ali and **B.A. El-Sabbagh**, "Role of Silica Fume in Concrete Upon Strength Improvement and Salt Attack Counteraction", Presented at 3rd Conference On Our World in Concrete and Structure, Singapore, August, (1998).

- 8- A.H. Ali, **B.A. El-Sabbagh**, and H.M. Hassan, "Role of Some Waste Products in Promoting Concrete Strength and Reinforcement Corrosion Protection “, Corrosion Prevention and Control J., Bucks, England V.45 No 6, Dec. (1998), Pp. 173-180.
- 9- **B.A. El-Sabbagh** and N.G. Abdel-Gafour, “Mineralogy and Performance of Basaltic Rocks from Tushka Basin as Aggregates in Concrete”, Bull. TIMS, Vol. 76, July (2000), Pp.109-124.
- 10- Hamdy A. EL-Sayed, Nazek A. Gabr, **Basil A. El-Sabbagh** and Fatma Kh. Abd El-Halim, “ Durability of Silica Fume – Admixed LECA Concrete “, Bull. TIMS, Vol. 76, July (2000), Pp. 125-140
- 11- **Basil A. El-Sabbagh**, “ Utilization of Cement Slurry as a Protective Coat for Steel Reinforcement in Concrete”, Presented at 8th International Conference for Building & Construction, “ Inter Build 2001”, CICC, Cairo, Egypt, 21-25 June (2001), Pp. 91-99.
- 12- H.A. EL-Sayed, **B.A. El-Sabbagh** and H.M. Hassan, “Role of an Innovated Waste Products Mix in Promoting Concrete Characteristics: (b) Corrosion Protection of Steel Reinforcement “, Egyptian J. of Applied Science, Vol. 15, No. 8, August (2000), Pp. 1-12.
- 13- M.S. Ibrahim, **B.A. El-Sabbagh**, S.A. Abo-El-Enein, M.R. Ismail and M.M. Younes, “Effect of a Corrosion Inhibitor on the Durability of Cement Mortars in Aggressive Media”, Arab Journal of Nuclear Science and Application, 35 (2) (2002) Pp 329-340.

- 14- **B.A. El-Sabbagh**, A. M. Kandeel and H. A. Hassan, "Utilization of the Cement Kiln Dust in the Cement Bricks Manufacturing", Bull. Fac. Sci., Mansoura Univ., Egypt V. 31 No. 1, pp 1-12, June (2004).
- 15- **B.A. El-Sabbagh**, A. M. Kandeel and H. A. Hassan, "The Physico-Mechanical and Microstructure Properties of Sulphate Resisting and Blended Cement Containing 20% Silica-fume Pastes in presence of BVF admixture", CERM, AL-Azhar Univ., Egypt, V. 27 No. 3, pp 615-633 (2005).
- 16- **B.A. El-Sabbagh** and A. M. Kandeel," The Physico-Mechanical and Microstructure Properties as Well as the Effect of 4%  $MgSO_4$  Solution on Sulphate Resisting, Granulated Slag and Ordinary Portland Cement Pastes", Proceeding of the ICCE-12 Twelfth International Conference on Composites/Nano Engineering, Tenerife, Spain, August 1-6, (2005).
- 17- Fathy H. mosalamy, Mohamed R. Mabrouk and **Basil A. El-Sabbagh**, "Performance of Blended Cements in the Presence of Different Chemical Admixtures", Proceeding of the ICCE-14 Fourteenth International Conference on Composites/Nano Engineering, Boulder, Colorado, USA, July 2-8, (2006).
- 18- B.A. El-Sabbagh, A. M. Kandeel, H. A. Hassan, and N. A. Gabr " Utilization of Some Industrial Wastes in the Production of Cement Bricks", 22nd International Conference on Solid Waste Technology and Management Philadelphia, PA, USA, March 18-21, (2007).

- 19- **Basil A. El-Sabbagh**, Ayman M. Kandeel and Tarek M. El-Sokkary, "The Uses of Potteries Crushed Waste in Decorative Pottery Tile Manufacture", Proceeding of the Thirteenth Conference on Cement Microscopy, Nevada, Reno, USA, 21-24 April (2008)
- 20- Saaid I. Zaki, Alla M. Rashad and **Basil A. EL-Sabbagh** "Sugarcane Ash as Cement Pozzolana Binder in Cement Pastes", Proceeding of the First International Conference on New Cements and their Effect on Concrete Performance, Cairo, Egypt 16-18 December, (2008).
- 21- **Basil A. El-Sabbagh**, "Effect of Some Superplasticizers on the Corrosion Behavior of Steel Reinforcement", Egyptian journal of Applied Science, Egypt, Vol. 24 No. 3B, March, (2009), pp 438- 448.
- 22- Fathy H. Mosalamy, **Basil A. EL-Sabbagh** and Ayman M. Kandeel, "Reutilization of Some Industrial Wastes in Concrete Blocks Production", Egyptian journal of Applied Science, Egypt. Vol. 24 No. 6B, June, (2009), pp 502- 510.
- 23- Hosam.El\_Din H. Seleem, Alaa M. Rashad and **Basil. A. El-Sabbagh**, "Durability and Strength Evaluation of High-Performance Concrete in Marine Structures". Construction and Building Materials , 24 (2010), pp 878–884.
- 24- H. M. Khater, **B. A. El-Sabbagh**, M. Fanny, M. Ezzat and M. Lottfy, "Effect of Nano-Silica on Alkali Activated Water-Cooled Slag Geopolymer", ARPN Journal of Science and Technology, VOL. 2, NO. 2, March (2012), pp 170-176

- 25- H. M. Khater\*, **B. A. El-Sabbagh**, M. Fanny, M. Ezzat, M. Lottfy and A. M. El Nagar, “Effect of nano-clay on alkali activated water cooled slag geopolymer”, *British Journal of Applied Science & Technology* 3(4), (2013) 764-776.
- 26- El-Hagarey, Mohamed E., **El-Sabbagh, B. A.** and F. Safranyik, “Mathematical Model of Engineering and Hydraulic Design Factors of Innovative Pressure Compensating Pottery Dripper”, *European Journal of Academic Essays* 2 (9), (2015), pp. 61-71
- 27- Elsayed M. Elnaggar, Tarek M. Elsokkary, Mostafa A. Shohide and **Basil A. El - Sabbagh**, “ Impact of Nanosized Silica on the Physico-Mechanical Properties and Corrosion Protection of Concrete”, *Al-Azhar Bulletin of Science*, Article 6, V (30), Issue 1-A , (2019), pp. 55- 66
- 28- Elnaggar, E.M., Elsokkary, T.M., Shohide, M.A., **El-Sabbagh, B.A.** and Abdel-Gawwad, H.A., “Surface Protection of Concrete by New Protective Coating”, *Construction and Building Materials*, , 220, (2019), pp. 245–252.
- 29- Fatma Refaata, Hussein Marey Mahmoud, **Basil El-Sabbagh**, and Atef Brania, “Evaluating Thermal and UV Stability of some Protective Coatings for Historical Murals in Egypt”, *Advanced Research in Conservation Science*, Vol. 1, Issue 2, (2020) pp. 31-47.
- 30- Mossalam, E., Ahmed, N.M., Souaya, E.M.R. and **El-Sabbagh, B.**, “The Influence of Binary Pozzolanic Replacements on the Durability and Corrosion Performance of Reinforced Concrete”, *Pigment and Resin Technology*, V (50), N (1), (2021), pp. 19–31

- 31- Ahmed, Nivin M., Mossalam, Essam Abdelfattah, **El-Sabbagh, Basil** and Souaya, Eglal M.R., “Evaluation of Synergic Methods for Corrosion Protection of Reinforced steel”, Pigment & Resin Technology, V (51), N (2), (2021), pp. 149-161.

### **The most Important Consulting Work Inside and Outside the Center**

Since 1985, I was engaged in several research projects as a member of the Raw Materials and Processing Institute, The project reports are:

- Shale brick production in Egypt, with IDRC (Canada), 1st phase (1990).
- Shale brick production in Egypt, with IDRC (Canada), 2nd phase (1991).
- Shale brick production in Egypt, with IDRC (Canada), 3rd phase, (1993).
- Studies on using the non-traditional aggregates in concrete, part 1, in Arabic, (1995).
- Updating the data for the production activities of building brick industry in Egypt, 1st report, in Arabic, (1995).
- Updating the data for the production activities of building brick industry in Egypt, 2nd report, in Arabic, (1996).
- Studies on the effect of ground water on the concrete construction in Arabic, (1996).
- Studies on using the non-traditional aggregates in concrete, part 2, in Arabic, (1996).
- Updating the data for the production activities of Building Brick Industry in Egypt, Third Report, in Arabic, (1996).
- Updating the data for the production activities of Building Brick Industry in Egypt, Fourth Report, in Arabic, (1997).
- Updating the data for the production activities of Building Brick Industry in Egypt, Final Report, in Arabic, (1997).
- Studies on the use of calcareous clays in building brick-making by firing technique, in Arabic (1997).
- Studies on some cement and concrete properties containing silica fume, in Arabic (1998).
- Project of Egypt map of available building raw materials and the industries based on them, nowadays and in future, 1st project, Tushka county, in Arabic (1999).



- Project of Egypt map of available building raw materials and the industries based on them , nowadays and in future,2nd project , Western Northern Coast area, in Arabic (1999).
- Project of Egypt map of available building raw materials and the industries based on them ,nowadays and in future,3rd report, Northern Sinai in Arabic(1999).
- Project of Egypt map of available building raw materials and the industries based on them, nowadays and in future , 4th report, East of Suez canal branch area -Delta - East of Delta, in Arabic (2000).
- Study on the reaction of untraditional aggregates with alkalis and its effect on the different properties of concrete, in Arabic (2000).
- Project of Egypt map of available building raw materials and the industries based on them, nowadays and in future , 5th report , Southern Sinai in Arabic (2000).
- National study on recycling of the wastes of building works and the industries of building materials which produce environmental impurity in Egypt , and the possibilities for their utilization , in Arabic (2001).
- Analytical studies on the results of chemical analysis of cement samples collected weekly from different Portland cement companies, e.g. Helwan, National, Tora, Asute, El-Menia, El-Masria, Suez (Quttamia and Ain El\_sokhna), (From 1998 to date).
- Participating to a joint program between the HBRC and Academy for Scientific Research and Technology, Egypt “Modernization the Egypt map of available building raw materials and the industries based on them”. from 2006 up to date.
- Innovative building materials according to the green building standards and sustainable development. (from 2009 up to date)
- National research project on concrete for nuclear power plants (from 2011 up to date).
- Participating in the national program for the Egyptian code of solid waste management. (From 2011 up to date).
- Participating in a joint program between the HBRC and STDF "Application of nanotechnology for the development of sustainable green building in Egypt". (From 2010 up to date).