CURRICULUM VITAE

PERSONAL DATA

Full Name: Mohammed Ramadan Mohammed Ahmed.
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Nationality: Egyptian.
Date of Birth: 01/12/1986.
Sex: Male.
Marital Status: Married.
Military Service: Exempted.

ACADEMIC DEGREES

Ph.D. (2018)**:** Chemistry Department, Faculty of Science, Ain Shams University
Thesis Title: ***Physicochemical and Mechanical Characteristics of Hardened Cement Pastes Containing Some Nano Metal Oxides***

M.Sc. (2014): Chemistry Department, Faculty of Science, Ain Shams University
Thesis Title: ***Studies on the Physicochemical Characteristics of the Hardened Cement Pastes Containing Nano Clay***

B.Sc. (2008): Chemistry Department, Faculty of Science, Ain Shams University.
Chemistry (Special Degree), Excellent (86 %).

PRESENT ACADEMIC RESEARCH

I am Interested in the improvement of the characteristics of the constructional building materials – mainly Cement Concrete and Geopolymer Concrete – as well as Nano-technology. Also, part of my research is in the field of using waste materials in the development of cement as an economical and environmental advantage. The characterization of some raw – materials as Lime stone has also been a part of my interest. My recent studies are concerned with the preparation of nano-materials from industrial and agricultural wastes and its different applications in industry.

EMPLOYMENT CAREER

- **2018 - present:** **Lecturer**, Chemistry Department, Faculty of Science, Ain Shams University
- **2014 – 2018:** **Lecturer Assistant,** Chemistry Department, Faculty of Science, Ain Shams University
- **2009 – 2014:** **Demonstrator**, Chemistry Department, Faculty of Science, Ain Shams University

TEACHING EXPERIENCE

- **Teaching Physical Chemistry courses for Undergraduate and Postgraduate students,** Chemistry Department, Faculty of Science, Ain Shams University. (General Chemistry, Cement, Nano science, Chemical Kinetics, Phase equilibrium, Electrochemistry, Thermodynamic, Physical Properties, Theories of Gases, Catalysis, Polymer, Surface Chemistry, Material science and Quantum Mechanics, Chemical bonding, Analytical Chemistry, Basics of Organic Chemistry)

PROFESSIONAL AFFILIATIONS

- **Member**, Building Materials Technology Unit – Faculty of Science – Ain Shams University (2009 – till now).
- **Member**, **Capacity Building Project** *"Innovations of special types of cement and utilization of industrial solid wastes in the production of economic building products and industrial wastewater treatment"* (2016 - ongoing), Funded by Science and Technology Development Fund (STDF) in Egypt (Project No. 22843).
- **Member, Competitive Project** "Production of novel cementitious materials with improved properties using some solid wastes and nano-materials prepared by low-cost techniques" Funded by Beny Suef University, Egypt (2019).
- **Member, Competitive Project "**Modeling and production of lightweight aggregates and concretes from Egyptian shales and their roles in conserving energy and environment" Funded by Science and Technology Development Fund (STDF) in Egypt (2018).

- **Co-PI, Competitive Project** "Sustainable Geopolymer-based Building Materials Prepared from Industrial Wastes Enhanced by Nanoparticles and Cross-linked Superplasticizer" Funded by Science and Technology Development Fund (STDF) in Egypt (2022).

List of publications (16 published articles and others under review)

1. **M. Ramadan**, M.S. Amin, Mostafa A. Sayed "Superior physico-mechanical, fire resistivity, morphological characteristics and gamma radiation shielding of hardened OPC pastes incorporating ZnFe2O4 spinel nanoparticles"Construction and Building Materials 234 (2020) 117807

2. S.A. Abo-El-Enein, F.I. El-Hosiny, S.M.A. El-Gamal, M.S. Amin , **M. Ramadan** " Gamma radiation shielding, fire resistance and physicochemical characteristics of Portland cement pastes modified with synthesized Fe_2O_3 and ZnO nanoparticles" Construction and Building Materials 173 (2018) 687–706

3. S. M. A. El-Gamal1, S. A. Abo-El-Enein1, F. I. El-Hosiny1, M. S. Amin, **M. Ramadan** "Thermal resistance, microstructure and mechanical properties of type I Portland cement pastes containing low-cost nanoparticles" J Thermal Analysis and Calorimetry (2018) 131:949–968

4. M.S. Amin, S.M.A. El-Gamal, S.A. Abo-El-Enein, F.I. El-Hosiny, **M. Ramadan** " Physico-chemical characteristics of blended cement pastes containing electric arc furnace slag with and without silica fume "HBRC Journal (2015) 11, 321–327

5. S.M.A. El-Gamal, M.S. Amin, **M. Ramadan** "Hydration characteristics and compressive strength of hardened cement pastes containing nano-metakaolin "HBRC Journal (2017) 13, 114–121

6. **M. Ramadan**, S.M.A. El-Gamal, F.A. Selim "Mechanical properties, radiation mitigation and fire resistance of OPC-recycled glass powder composites containing nanoparticles "Construction and Building Materials 251 (2020) 118703

7. Alaa Mohsena, Hamdy A. Abdel-Gawwad, **M. Ramadan** "Performance, radiation shielding, and anti-fungal activity of alkali-activated slag individually modified with zinc oxide and zinc ferrite nano-particles nanoparticles" "Construction and Building Materials 257 (2020) 119584

8. F.A. Selim , M.S. Amin, **M. Ramadan**, M.M. Hazem "Effect of elevated temperature and cooling regimes on the compressive strength, microstructure and radiation attenuation of fly ash–cement composites modified with miscellaneous nanoparticles" Construction and Building Materials 258 (2020) 119648

9. **M. Ramadan** M.S. Amin, Alaa Mohsen "Effect of high gamma radiation dosage and elevated temperature on the mechanical performance of sustainable alkali-activated composite as a cleaner product" Cement and Concrete Composites 121 (2021) 104087

10. Fatma Shwita , Nabil El-Faramawy , Wageeh Ramadan , **M. Ramadan**" Investigation of the mechanical properties, morphology and the attenuation behavior of gamma rays for OPC pastes mingled with two different glass wastes" Construction and Building Materials 313 (2021) 125475

11. Alaa Mohsen , **M. Ramadan**, Mahmoud Gharieb , Ahmed Yahya , Abdel Monem Soltan , M.M. Hazem "Rheological Behaviour, Mechanical Performance, and anti-fungal activity of OPC-Granite waste composite Modified with Zinc Oxide Dust" Journal of cleaner production Mohsen, A., Ramadan, M., Gharieb, M., ...Soltan, A., Hazem, M.M. 2022, 341, 130877

12. **M. Ramadan**, Wageeh Ramadan, Fatma Shwita, Nabil El-Faramawy "Valorization of hazardous glass wastes via geopolymer production with high mechanical characteristics and high gamma attenuation capacity: A comparative study with Portland cement" Radiation Physics and Chemistry d , 2022, 197, 110174

13. Synergetic impacts of mesoporous α-Fe_2O_3 nanoparticles on the performance of alkali-activated slag against fire, gamma rays, and some microorganisms Sayed, D.G., El-Hosiny, F.I., El-Gamal, S.M.A., Hazem, M.M., **Ramadan, M**. Journal of Building Engineering, 2022, 57, 104947

14. **M. Ramadan** , Mohamed Kohail , Aref A. Abadel , Yousef R. Alharbi , Rabin Tuladhar , Alaa Mohsen De-aluminated metakaolin-cement composite modified with commercial titania as a new green building material for gamma-ray shielding applications Case study in construction materials (2022)

15. Alaa Mohsen , Mohamed Kohail , Aref A. Abadel , Yousef R. Alharbi , Moncef L. Nehdi , **M. Ramadan** "Correlation between porous structure analysis, mechanical efficacy and gamma-ray attenuation power for hydrothermally treated slag-glass waste-based geopolymer" icase study in construction materials (2022)

16. **M. Ramadan** M.S. Amin, S.Waly, Alaa Mohsen " Rheological behavior, mechanical properties, fire resistance, and gamma ray attenuation capability for eco-friendly cementitious mixes incorporating thermally treated lead sludge. construction and building materials (2022)

Academic supervisions under study

1. Geopolymer production modified with nanoparticles (Donia Gamal, Ph.D 2018)
2. Recycling of marble dust and fly ash for production of eco-friendly cement composites containing nano-ZrO_2 (Mona Mohamedd, M.Sc, 2020)
3. Investigation of the mechanical properties, morphology and the attenuation behavior of gamma rays for OPC pastes mingled with two different glass wastes (Fatma Shwite, M.Sc, 2020).
4. Immobilization of hazardous lead-rich-sludge via the production of eco-friendly composites utilized for radiation shielding applications (Yara Esam, M.Sc, 2020)

COMPUTER SKILLS

Windows 7, Office 2010 (Word, Excel, Power Point), internet browsing and Origin15

LANGUAGE PROFICIENCY

• Arabic (Mother tongue).
• English (Very good).

REFERENCES

- Prof. Dr. Fouad Ibrahim **El-Hosiny (fouadelhosiny57@gmail.com)**
  Prof. of Physical Chemistry and Building Materials, Faculty of Science, Ain Shams University.
- Prof. Dr. Mohamed S. **Amin (mohamedsamin@hotmail.com)**
  Prof. of Physical Chemistry and Building Materials, Faculty of Science, Ain Shams University.