

# Moustafa A. Shawkey

Assistant Lecturer, Technical Office Manager

M.Sc., FE Civil/EIT

**Date of Birth:** Nov 15, 1988      **Mobile No.:** +2 01121400607  
**Nationality:** Egyptian      **Email:** moustafa.shawkey@psas.bsu.edu.eg  
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## Employment

- Sep, 2022 to Present**      **Lecturer**, Environmental Sciences and Industrial Development dep., Faculty of Postgraduate Studies for Advanced Sciences (PSAS), **Beni-Suef University, Egypt.**
- May, 2016 to Sep, 2022**      **Assistant Lecturer**, Environmental Sciences and Industrial Development dep., Faculty of Postgraduate Studies for Advanced Sciences (PSAS), **Beni-Suef University, Egypt.**
- Teaching courses for the diploma and master program of Cement Chemistry and Technology.
  - Performing laboratory testing of cement and concrete based smart materials.
  - Assisting MSc and PhD students on their laboratory testing during their research work.
  - Executing many administrative duties in the faculty.
- Electron Microscopy Unit Diretor, PSAS, BSU**
- October, 2021 to Present**      **Structural Engineer, Unit of Consultation and Engineering & Technical Support (UCETS) وحدة (الاستشارات الهندسية), Beni-Suef University, Egypt.**
- Review of Quantity Takeoffs, Material Takeoffs, Construction Estimation, and shop drawing submittals.
  - Review and approve the main contractor invoice.
- Feb., 2020 to July, 2020**      **Erasmus + KA107 Mobility program scholarship, University of Jaen, Spain.**
- Attended courses entitled "Simulation Technologies: artificial intelligence using Matlab".
- Sep., 2018 to Mar., 2019**      **Visiting Researcher**, Faculty of Engineering, **University of Edinburgh, UK.**
- Studied early age behavior of cement structure using Acoustic Emission technologies
  - Utilized ABAQUS software to study and predict concrete materials at an early age.
  - Helped undergraduate students to carry out experimental testing in terms of geopolymer concrete as a part of their graduation project.
- July, 2015 to May, 2017**      **Technical Office Manager, AL-Roaya Engineers &Contractors, Egypt.**
- Coordinated between the construction and engineering teams, managed the cost analysis and cost control of site activities, and checked the quality of the work executed.
- April, 2012 to July, 2015**      **Technical Office Engineer, AL-Roaya Engineers &Contractors, Egypt.**
- Prepared technical and material submittals planned and maintained project budget and schedule planning, supervised and reviewed the preparations of construction method statements.
- Aug., 2010 to Jan., 2011**      **Civil Design Engineer, EMC, Egypt.**
- Carried out civil engineering design, prepared drawings and performed engineering calculations, produced engineering reports and plans, preparation of tender documents and the assessment of tenders.

## Education

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- Oct., 2016 to Nov., 2021**      **Ph.D. in Cement Chemistry and Technology**, Beni-Suef University, Egypt.  
Dissertation: Smart cement: new avenues are opened in the construction industry.
- Sep., 2010 to Sep., 2015**      **M.Sc. in Civil engineering**, Assuit University, Egypt.  
Dissertation: Improvement of the physical and mechanical properties of concrete by adding multi walled carbon nanotubes and other nano materials.
- Sep., 2005 to July, 2010**      **B.S. in Civil engineering**, Assuit University, Egypt.  
Honor very good (80.61%), top 3% of graduating class.  
Graduation project: "special structures"  
Project grade: Excellent.

## Research Interest

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- Acoustic emission testing and evaluation of concrete at its early-age
- Developing fundamental multiscale models for concrete through advanced characterization and modeling of concrete at microscales Using ANSYS FEM software.
- Enhancing of intelligent concrete materials through the integration of nanotechnology-based self-sensing materials.
- Improving the dielectric and the piezoresistive properties of magnetic nanoparticles/cement composites.
- Developing high-performance cement and concrete materials as measured by their mechanical and durability properties.

## Research projects

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- The Centre of Excellence (Economic commercial production of nanomaterials for local market needs), **STDF fund, 2018.**
- Innovative piezoelectric energy harvesting techniques, **BSU fund, 2017.**

## Publications

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- **Moustafa A. Shawkey**, Ahmed M. Hassan, Mohamed M. Rashad, K-means clustering of acoustic emission signals and numerical modeling during early-age hydration of portland cement mortar, Structures (submitted April, 2021).
- **Moustafa A. Shawkey**, Mohamed A. Abdelzaher, Hamada M. Mahmoud, Mohamed M Rashad, Monitoring of Acoustic Emission Behavior during Early-Age Cement Paste hydration, IOP Conference Series: Materials Science and Engineering, 2021, 1046, 1-7
- M.A. Ahmed, Y.A. Hasaneen, K.A. Assaf, S. E. El-dek, **M.A. Shawkey**, Piezoelectric response of MWCNTs/cement nanocomposites., microelectronic engineering, 2015, 146, 53-56.
- M.A. Ahmed, Y.A. Hasaneen, K.A. Assaf, **M.A. Shawkey**, The effect of incorporation of Ferrite nanoparticle on compressive strength and resistivity of self-compacting concrete, Open Journal of Civil engineering, 2015,5, 131-138.
- M.A. Ahmed, Y.A. Hasaneen, K.A. Assaf, **M.A. Shawkey**, Fascinating improvement in mechanical properties of cement mortar using Multiwalled carbon nanotubes and Ferrite nanoparticles, Int. J. Struct. & Civil Eng. Res., 2015, 4, 1, 159-170.

## Teaching courses

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- Chemistry and Production of Cement
- Fundamentals of Air Pollution
- Instrumental analysis

## Honors& Awards

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- Feb., 2020**      Erasmus + KA107 Mobility program scholarship, **University of Jaen, Spain.**
- Sep., 2018**      Short term Research Scholarship, **University of Edinburgh, UK.**
- Aug., 2017**      The winner of younger researcher project call, funded by **Beni-Suef University, Egypt.**

- April, 2013** I've Passed the Fundamentals of Engineering (FE) exam organized by **the National Council of Examiners for Engineering and Surveying (NCEES), USA.**
- July, 2009** Short term Study Scholarship, **Pyatigorsk University, Russia.**
- July, 2007** Short term Study Scholarship, **Aleppo University, Syria.**

## Conferences & Presentations

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- Nov., 2019** **(oral)** The Fifth International Conference on Advanced Sciences (ICAS5), **Hurghada, Egypt.**  
Title "Monitoring of Acoustic Emission Behavior during Early-Age Cement Paste hydration."
- Dec., 2014** **(oral)** MTPR-014 conference, **Luxor, Egypt.**  
Title "Piezoresistive behavior of Multi Walled carbon nanotubes and Multiferroic nanoparticles / cement mortar composites."
- Sep., 2014** **(oral)** Nanosmat conference, Dublin, **Ireland.**  
Title "Piezoelectric response of MWCNTs/cement composites."
- Dec., 2013** **(Poster)** 3rd nano today conference, **Singapore.**  
Title "The Effect of Incorporation of Multi Walled Carbon Nanotubes and Ferrite Nanoparticles on Compressive and Flexural Strength of Concrete."
- Oct., 2013** **(oral)** Setcor International Conference on Nanotechnology, **Dubai, UAE.**  
Title "The effect of incorporation of Multi Walled carbon nanotubes and Multiferroic nanoparticles on the electrical properties of concrete."
- Sep., 2013** **(oral)** Euro Intelligent Materials 2013, **Kiel, Germany.**  
Title "The effect of incorporation of Ferrite nanoparticle on compressive strength and resistivity of self-compacting concrete."
- April, 2010** **(oral)** The international student conference "Water Quality- Quality of life", **Moscow, Russia.**  
Title "Aswan High Dam is an Excellent Example for the Technical Co-operation between Nations."

## Conferences attendance

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- April, 2018** Waste to Energy - The 2<sup>nd</sup> International Conference of the ESID department, **BSU, Egypt**
- Nov., 2017** The Fourth International Conference on Advanced Sciences (ICAS4), **Hurghada, Egypt**
- Mar., 2016** Grand Challenges in Construction Materials, **UCLA, Los Angeles, USA**
- Mar., 2012** Nano-Technology for Green and Sustainable Construction, **HBRC, Cairo, Egypt**

## Reviewer

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- Reviewer in "**Open Journal of Civil Engineering**" (Scientific Research).

## Scientific and Volunteering Tasks

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- Sharing my department staff in designing Quality Control and Occupational Safety and Health program.
- Organizing many scientific and social events in ESID department.
- Participating in environmental awareness seminars under the auspices of Beni-Suef governorate.

## Selected Workshops & Training Courses

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- April, 2021** Digital marketing, **Egypt FWD initiative**
- Nov., 2019** How to Get Published – Webinar, **Hurghada, Egypt**

<b>Oct., 2019</b>	Masterclass in Scientific Writing and Publishing, <b>BSU, Egypt</b>
<b>Oct., 2018</b>	Structures Lab Induction, <b>University of Edinburgh, UK</b>
<b>Dec., 2018</b>	ABAQUS techniques, <b>University of Edinburgh, UK</b>
<b>Oct., 2017</b>	Nanotechnology for sustainable development, <b>CMRDI, Egypt</b>
<b>May, 2017</b>	Education Programs and Course Specifications, <b>BSU, Egypt</b>
<b>Nov., 2015</b>	Planning& Cost Control Professional Workshop using Primavera 6, <b>Cairo, Egypt</b>
<b>March, 2015</b>	Autodesk Revit Structure, <b>Autodesk, Cairo, Egypt</b>
<b>Sep., 2014</b>	Surface Coating technology, <b>Trinity College Dublin, Ireland</b>
<b>Dec., 2011</b>	Using of Nanotechnology in Construction, <b>HBRC, Cairo, Egypt</b>
<b>July, 2011</b>	Fundamentals of Trading the Global Financial Markets, <b>Cairo, Egypt</b>
<b>July, 2011</b>	Technical and Fundamental analysis, <b>Cairo, Egypt</b>
<b>Aug., 2010</b>	OG Campus and internship Program, <b>Cairo, Egypt</b>
<b>July, 2010</b>	The initial Trading of communication& Sales Skills, <b>Alico, Egypt</b>
<b>July, 2009</b>	Keys for Learning Russian Language, <b>Pyatigorsk State Linguistic University, Pyatigorsk, Russia</b>
<b>June, 2009</b>	SAP 2000, <b>Assiut University, Egypt</b>

## Media

<b>Oct., 2016</b>	An interview on the radio FM to talk about the development of cement industry in Egypt.
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## Memberships

<b>2010 to present</b>	Egyptian Engineers Syndicate.
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## Activites

- Travelling: I've traveled to 12 countries and about 50 cities.
- Making documentary movies.
- Photographing : Page on Facebook [Moustafa Shawkey Photography](#) with more than 5000 likes.

## Other Skills

- **Language skills:** Arabic (mother tongue), English (Very good), Spanish (Fair).
- **Computer skills:** PlanSwift, ANSYS, Revit, Primavera, Auto Cad, Sap2000, Etabs, Safe, CSI column.

## References

- **Prof. Hamada M. Mahmoud**  
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- **Prof. Ahmed M. Hassan**  
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