CURRICULUM VITAE
Shahlaa Esmail Ebrahim
BSc, MSc, PhD

1. PERSONAL DETAILS			
Title	**Prof. Dr. Environmental Engineering**	**Mobile Number:**	**+9647901798098**
Nationality	**Iraqi**	**Email:**	**shahlaa.ebrahim@coeng.uobaghdad.edu.iq**
Languages	**Fluent in English and Arabic**	**E-mail:**	**shahlaa.ebrahim@fulbright** mail.org
Address	**University of Baghdad, College of Engineering, Environmental Engineering Department**		

2. PRESENT EMPLOYMENT	
Job Title	**Professor**
Name and address of Employer	**College of Engineering, University of Baghdad, Al- Jadiriah, Baghdad- Iraq**
Main Responsibilities	**§ Prof. of Environmental Engineering** **§ Head of the Environmental Engineering Department, College of Engineering- Baghdad University** **§ Member of the Environmental Engineering Department board.** **§ Graduate Studies Coordinator.** **§ Member of the subject and exam boards in Environmental Engineering Department.** **§ Teaching post graduate courses in Environmental Engineering Department, Civil Engineering Department, and Surveying Engineering Department, College of Engineering, Baghdad University** **§ Teaching post graduate courses in Water Resources Department, College of Engineering, University of Sulaymani.** **§ Teaching undergraduate courses in Environmental Engineering Department and Nuclear Engineering Department.** **§ Supervising final year projects.** **§ Supervising PhD and MSc students in Environmental Engineering Department.** **§ Consultant work in the Environmental Engineering Department Consultant Bureau.** **§ Consultant of the Society of Engineering College of Association of Arab Universities (AARU).** **§ Secretary of Editing Board of the Journal of Engineering Science of the Society of Engineering College of Association of Arab Universities (AARU).** **§ Head of Quality Assurance Committee in the Department.** **§ Head of the Media Committee in the Department.** **§ Member in the Ministry of Higher Education' Committee for Iraqi Universities Ranking (2018-)**
Commencing Date	**28/12/1986**

3. GRADUATE AND POSTGRADUATE QUALIFICATIONS

Title of the Award	Subject	Awarding Body	Date
PhD. (FT) (Grade 90%)	Environmental Engineering	Baghdad University, College of Engineering, Environmental Engineering Department (The research includes 6 months training at Cardiff University, UK)	February 2008
MSc. (FT) (Grade: 83% - 1st Class)	Environmental Engineering - Hazardous Waste Treatment	Baghdad University, College of Engineering, Environmental Engineering Department	1996
B.Sc (FT) (Grade 67%)	Nuclear Engineering (5 year course. The first 3 years studying Chemical Engineering and the last two years specialising in Nuclear Engineering)	Baghdad University, Nuclear Engineering Department	1986

***PhD study included three courses:**

1- Advanced Mathematics, Global Environmental Problems, Multi-Phase Flow, and Radiation Pollution.

2- Finite Element, Advanced Fluid Flow, Environmental Management (including the study of ISO 14000), and Optimization.

3- The comprehensive Exam including written and oral exam in the following subjects:
Industrial Waste, Hazardous Waste, Air-Pollution, Air-Pollution Control, Surface Water Pollution, Ground Water Pollution, Treatment Plant, Solid Waste, Advanced Mathematics, Finite Element, Multi-Phase Flow, and Radiation Protection.

4. TRAINING

- **Radiation Protection 1987, Baghdad, Iraq.**
- **AutoCAD Training course 1990, Baghdad, Iraq.**
- **Teaching Instruction Procedures 1997, Baghdad, Iraq.**
- **Microsoft Office concentrating on Excel 2004, Baghdad, Iraq.**
- **Sustainability and renewable energy course, 2009, Oregon State, United States of America.**
- **Arc GIS desktop (I, II, III), 2009, Baghdad, Iraq.**
- **Conflict management training and the strategic economic needs with security exercise, 2010, Beirut, Lebanon.**
- **Joining Michigan State University as a Fulbright Visiting Scholar for a period of 10 weeks, 2010, Michigan State, United States of America.**
- **Attending the Quality Assurance training held by the UNESCO in Erbil 2012.**
- **Preparing the Self Assessment Report (SAR) of the Environmental Engineering Department.**
- **And Preparing the Strategic Plan for the College of Engineering to reach Accreditation.**
- **Attending the Quality Assurance training held by the UNESCO in Amman, Jordan, 2013.**
- **Attending the Quality Assurance training held by the UNESCO in Amman, Jordan, 2015.**

5. INSTITUTIONAL OR PROFESSIONAL MEMBERSHIP AND ACTIVITIES

Institution/Professional Bodies	Type of Membership/Involvement	Date
The Iraqi Engineering Institute	Consultant	June, 1988
Iraqi women leader program	Member and Participant / basic conflict management training and the strategic economic needs with security exercise	March,2010
Iraqi women profession	Member	January, 2010
Fulbright alumni	Member	September 2010
Scientific Society for Engineering Colleges in Universities members of the Association of Arab Universities in the Arab Homeland	Consultant	May 2013-

Journal of Engineering Science published by the Scientific Society for Engineering Colleges	**Editor**	**May 2013-**

6. PERSONAL STATEMENT

I consider myself as an enthusiastic, hardworking, committed and good team player/leader. I am self motivated and eager to learn and grow professionally. I always work to my full potential and set competitive but achievable aims to work towards. I have excellent management skills, and I am effective at balancing my time in order to achieve goals in the most efficient way. I easily adapt to change and my knowledge of other cultures and societies are enhanced through travelling over the world.sso

I am fluent in English and Arabic.

7. PUBLICATIONS

1. Ebrahim Shahlaa E., (1996) – "Leachate Composition from Solidified Industrial Hazardous Wastes". MSc Thesis, Baghdad University, Baghdad, Iraq.
2. Ebrahim Shahlaa E., (2008)- "Evaluation of a Mixture Adsorbent and Glass Bed for the Removal of Phenol and Methylen Blue from Water" . PhD Thesis, Baghdad University, Baghdad Iraq.
3. Ebrahim Shahlaa.E., (1997), "Leachate Composition from Solidified Industrial Hazardous Waste", Journal of Engineering , Vol. 3, 43-56
4. Ebrahim Shahlaa. E., (2008)"Increasing the Adsorption Surface Area of Activated carbon", Journal of Engineering, Vol. 14, No. 3, 2700-2717.
5. Ebrahim, Shahlaa. E., (2010), "Saving Amberlite XAD4 by using Inert Material in Adsorption Process", Desalination and water treatment, Volume 20 , 234-242
6. Ebrahim Shahlaa. E., (2010), "Removal of lead, cadmium, and mercury ions using biosorption", Desalination and water treatment, Volume 24 , 1-8.
7. Ebrahim Shahlaa. E., (2011), "Utilization of Thomas model to predict the breakthrough curves for adsorption and ion exchange", Journal of Engineering, No. 4, Vol. 16, 6206-6223.
8. Ebrahim, Shahlaa. E., (2011), "Modelling the Removal of Phenol by Natural Zeolite in Batch and Continuous System", Babylon University Journal, Vol. 4.
9. Ebrahim Shahlaa. E., (2011), "Evaluation of Adsorbents for Removal of Phenol and Methylene Blue from Wastewater", Journal of Environmental Engineering and Science, Vol.6,issue (II)
10. Ebrahim Shahlaa. E., (2012), "Saving Activated Carbon by Using Inert Material in Adsorption Process", J. Int. Environmental Application and Science. , Vol. 7(1): 101-113.
11. Ebrahim Shahlaa. E. , and Jabbar H., (2012), Optimum water allocation for Abu-Ziriq marsh ecological system, Journal of Engineering
12. Ebrahim Shahlaa. E., and Rihda M., (2012), Competitive biosorption of Pb(II), Cr(II), and Cd(II) ions in single component system by live and dead anaerobic biomass, batch study,(in Press, Journal of Engineering).
13. Ebrahim Shahlaa. E., and Rihda M., (2012), Equilibrium, kinetic, and thermodynamic biosorption of Pb(II), Cr(III), and Cd(II) ions by dead anaerobic biomass from synthetic wastewater, Environ Sci Pollut Res., Vol. 19, No. 3.
14. Ebrahim Shahlaa, and Sara Yaarob, (2012), Removal of cadmium ions from simulated wastewater using rice husk biosorbent, Journal of Engineering.
15. Ebrahim et al., (2012) "Floatation and Sorptive-Floatation methods for removal of lead ions from wastewater using SDS as surfactants and barley husk as biosorbent" Journal of Chemistry.
16. Ebrahim et al., (2013), "Competitive biosorption of Pb(II), Cr(II), Cd(II) from synthetic wastewater heterogeneous anaerobic biomass in single, binary, and ternary batch systems.

17- Ebrahim et al., (2013)," Performance of Biomass Adsorber Column for Competitive Removal Pb(II), Cr(III) and Cd(II) ions from Synthetic Wastewater, Indian Journal of Applied Research.

18- Ebrahim et. al., (2013), " Decolorization of Reactive Red dyes in simulated Wastewater by Advance Oxidation Processes", Books Journal of Engineering Science of the Society of

Engineering Colleges. Vol 2.

19- Ebrahim et al., (2015), " Use of Cork Stoppers to Remove Lead Ions from Wastewater Using Batch and Inverse Fluidized Bed" Journal of Engineering Science of the Society of Engineering Colleges.

20- Ebrahim et al., (2016), " Competitive removal of Cu2+, Cd2+, Zn2+, and Ni2+ ions onto iron oxide nanoparticles from wastewater, Desalination and Water Treatment, 57 20915–20929.

21-Ebrahim et al., (2016)" Bisorption of Heavy Metals onto Two Types of Fungi Biomass in Batch Experiments", Journal of Engineering Science of the Society of Engineering Colleges.

22- Ebrahim et al., (2016)"Toxicity Leaching Characteristics of Cement Based Stabilized/ Solidified Sands Contaminated with Heavy Metals", Journal of Engineering Science of the Society of Engineering Colleges.

23- Ebrahim et al., (2016)" Removal of Acid Blue Dye from Industrial Wastewater by Using Reverse Osmosis Technology", Journal of Engineering Science of the Society of Engineering Colleges.

24-Ebrahim Shahlaa, E., (2016)," Using Green and Blue-green Algae in a Liquid Fluidized Bed Reactor, Journal of Engineering.

25- Ebrahim Shahlaa, E., (2018), " Biosorption of Cationic Dyes onto Cork Stopper Particles , Journal of Engineering Science of the Society of Engineering Colleges.

26- Ebrahim Shahlaa, E., (2018), " Removal of Pharmaceuticals from Synthetic Wastewater by Ozone" Journal of Engineering Science of the Society of Engineering Colleges.

27- Ebrahim Shahlaa, E., (2018), "Removal of Acid Blue Dye from Industrial Wastewater by using Reverse Osmosis Technology", Journal of Engineering Science of the Society of Engineering Colleges.

28- Ebrahim Shahlaa, E., (2018), "PREDICTION THE BREAKTHROUGH CURVES OF LEAD IONS BIOSORPTION IN FLUIDIZED BED REACTORUSING ARTIFICIAL NEURAL NETWORK", THE JOURNAL OF SOLID WASTE TECHNOLOGY AND MANAGEMENT/ USA.

29- Ebrahim Shahlaa, E., (2019)," Competitive Adsorption of Cd (II) and Zn (II) in Single and Binary systems from Aqueous Solutions onto Cork Stopper Particles", Journal of Engineering Science of the Society of Engineering Colleges.

30- Ebrahim Shahlaa, E., (2019), " Isolation and Identification of Ureolytic Bacteria Isolated from Livestock Soil to Improve the Strength of Cement Mortar" Journal of University of Technology.

31- Ebrahim Shahlaa, E., (2019)," Biomineralization based remediation of cadmium and nickel contaminated wastewater by ureolytic bacteria isolated from barn horses soil" Environmental Technology & Innovation/ USA.

32- Ebrahim Shahlaa, E., (2020)," Comparison Between Commercial and Synthesized Fe3O4 Nanoparticles for Removal of Heavy Metal Contaminants in Wastewater, Journal of Engineering Science of the Society of Engineering Colleges.

33- Ebrahim Shahlaa, E., (2020)," Comparison between dead anaerobic biomass and synthesized Fe3O4 nanoparticles for the removal of Pb(II), Ni(II) and Cd(II), Desalination and water treatment, 173, 351–366. /USA.

34- Ebrahim Shahlaa, E., (2020)," Removal of Methylene Blue and Congo Red Dyes by Pre-treated Fungus Biomass – Equilibrium and Kinetic Studies, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences 66, Issue 2, 84-100/ Malaysia.

Books:

1-Ebrahim and Mohammed, "Removal of Cadmium from Simulated Wastewater Using Biosorption", LAMBERT Academic Publishing, 2013

Innovation:

No.:5492
Date:16\9\2018
Title: Removal of Heavy Metals from Wastewater Using Cork Stopper Particle as a Medium in Inverse Fluidized Bed.

8. REFEREES

Professor Dr. Abbas H. Sulaymon
Head of the Environmental Engineering
Department, College of Engineering,
University of Baghdad.
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Dr. Talib A. Mahdi
Senior Research Associate-GRP Manager
Geoenvironmental Research Centre,
Cardiff University,
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UK
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Professor Dr. Rafa H. Al-Suhaili
Head of the Civil Engineering Department,
College of Engineering,
University of Baghdad.
Tel: +9647901386513
Email: rafiishaker@yahoo.co.in

9. RELEVANT EXPERIENCE AND MAIN ACHIEVEMENTS

WORK EXPERIENCE

1- University of Baghdad, College of Engineering, Environmental Engineering Department (2007-)

- Head of Environmental Engineering Department- College of Engineering- Baghdad University 2014-2017.
- Member of the Environmental Engineering Department board.
- Graduate studies coordinator (2007-20120
- Member of the subject and exam boards in Environmental Engineering Department.
- Teaching post graduate courses in Environmental Engineering Department. **(Hazardous Waste and Finite Element).**
- Teaching post graduate courses in Civil Engineering Department and Surveying Engineering Department. **(Optimization and Advanced Mathematics)**.
- Teaching post graduate courses (PhD and MSc courses) in Irrigation Engineering Department and Civil Engineering Department, College of Engineering, Al-Sulaymania University. **(Optimization and Finite Element)**.
- Teaching undergraduate courses in Environmental Engineering Department and Nuclear Engineering Department. **(Mathematics, Computer Programming, Control, Environmental Protection, Computer Application, Geology, Ecology, Numerical Analysis, Ground Water Pollution, and Hazardous Waste).**
- Supervising final year projects.
- Supervising PhD and MSc students.
- Lecturing in the Continuing Education Centre in Al-Khwarizmi College of Engineering in the fields of air, water, and soil pollution.
- Lecturing the employee of the Iraqi Ministry of Oil in the fields of injection water quality control and the measurements of solids in the injected water in Beirut, Lebanon.

2-Cardiff University, U.K (March 2007-August 2007)

- Sponsored by the Iraqi government to join the Geoenvironmental Research Centre group at Cardiff University to undertake part of the PhD research.

3- University of Baghdad, College of Engineering, Environmental Engineering Department (May 2006- March 2007)

- Starting PhD project titled "Evaluation of a Mixture Adsorbent and Glass Bed for the Removal of Phenol and Methylene Blue from Water". .Building a Packed bed adsorption column using industrial Waste-water containing Phenol as an organic pollutant and analyzing the water by using UV Technique.

4- University of Baghdad, College of Engineering, Nuclear Engineering Department (1996-2007)

- After successfully obtaining the master degree in 1996 in the field of Civil Engineering, starting teaching under graduate courses in Mathematics, Computer Programming, Control, Environmental Protection, and Computer Application, supervising under graduate projects in the field of hazardous waste treatment, and member of the Nuclear Engineering Department board.

5- University of Baghdad, College of Engineering, Nuclear Engineering Department (1986-1996)

- Joining the University of Baghdad as an engineer working and teaching in areas related to:
- Tutorial problems solving in "Control Theory" for the 4th year and "Numerical Analysis" for the 5th year undergraduate students.
- Laboratory organization, equipments set up and trouble shooting, plus supervision of experiments covering wide variety of subject matters for both post graduate and under-graduate students. The following are examples:
- Experiments on Nuclear Radiation (Detection, Measurement and Dosimetry).
- Experiments on Control Concepts, including PC-based Simulation. Microcomputer based control, Digital electronics, and Classical Servo-Control loops.
- Software development, Program writing in BASIC, Interactive Learning of Numerical Analysis and Control. Theory Concepts with the aid of desktop PC's.
- Administrative responsibilities related to communication with Companies on equipment purchase, analysis of offers, negotiation, etc.

EXPERTISE

- Highly experienced in the field of remediation of hazardous wastewater, concentrated on the using of solidification stabilization treatment with Portland cement.
- Highly experienced in the analysis of organic materials in wastewater by using UV and GC techniques.
- Instructors of short courses in industrial air, water pollution, and environmental legislation to the employee of the Ministries of Petroleum, Environment, Industry and Health in Iraq.
- Good experienced in the measurements of nuclear isotopes using multi-channel analyzer.
- Advanced skill in Microsoft Office specially using Excel.
- Advanced in ODE Solver provided by MATLAB using Finite Element and Orthogonal Collocation Methods.
- Highly experience in delivering lectures in different engineering disciplines.
- Advanced MATLAB applications.
- GIS projects

PROJECTS

- Industrial environmental consultant in the following government companies:
- Iraqi Atomic Energy Commission.
- Al-Nu'man factory for drip irrigation.
- Ibn-Rushd Company for quality control.
- Starting treatment of waste with high Cyanide content using Portland cement stabilisation, and developed and delivered training courses for the workers to handle and store the Cyanide waste.
- Finishing a project with the Ministry of Higher Education and Scientific Research supported financially by the Ministry titled "Removal of Heavy Metals Using Biosorption"(2010)
- Finishing a project with ASTF (Arab Science and Technology Foundation) supported financially by Sandia National Laboratories in the United States of America titled " Equilibrium and Kinetics of Glass Beads and Activated Carbon for Removal of Pb (II), Hg (II), and Cd (II) from Wastewater by Adsorption" (2012).

Supervised the following student's projects:

- Treatment of Radioactive Wastewater by Solidification.
- Treatment of Hazardous Industrial Wastewater.
- Using natural materials as adsorbents in the removal of water pollutants.
- Design of Wastewater Treatment Plant in Dairy Factory.
- Design of Wastewater Treatment Plant in Al-Dura Refinery Plant.
- Design of Wastewater Treatment Plant in Paper Mill Industry.
- Design of Domestic Treatment Plant.
- Design of Water Desalination system by solar radiation.
- Noise Pollution Study in Baghdad University.
- Desalination By Using UV Cell.
- And others

Supervised the following MSc and PhD thesis:

- Optimum Water Allocation for Al-Nasyriah Marshes Ecological Restoration (MSc).
- Competitive Biosorption of Heavy Metals Using Expanded Granular Sludge Bed Reactor (PhD).
- Removal of heavy metals using fluidized bed by bio-adsorbents (MSc).
- Comparison between fixed and fluidized bed for the removal of heavy metals using biosorbents (MSc)
- Removal of Dyes Using Advanced Oxidation (PhD)
- Competitive Removal of Heavy Metals by Nanosorbent and Biomass (PhD)
- Recycling natural insulators to remove heavy metals using inverse fluidized bed (MSc)
- Noise Pollution Assessment and Control in Selected Schools in Baghdad City.(MSc)
- Competitive removal of heavy metals by two types of fungi biomass.(PhD)
- Removal of micro-pollutants from industrial wastewater by using membrane technology(PhD)
- Experimental and theoretical studies of heavy metals leachate from solidified cementouse materials (PhD).
- Biosorption of Cadmium and Zinc Ions onto Cork Particles Using Inverse Fluidized Bed(MSc).
- Dyes Removal by cork particles Using Inverse Fluidized Bed(MSc)
- Removal of Pharmaceutical Hazardous Waste by Advanced Oxidation Process(PhD).
- Evaluation the Microbial Induced Carbonate Precipitation (MICP) Using Biocementation Process(PhD).
- Removal of Pollutants from Industrial Wastewater Using Membrane Technology.(PhD)
- Leachate composition from biocemenntation process (PhD).
- Removal of Dyes by Fungi Biomass (MSc)
- Production of nanomaterial for the removal of pollutants from industrial hazardous waste (PhD)
- Leachate composition from solidified hazardous waste using a cement mortar mixed with nanomaterials (MSc).
- The use of constructed wet land for bioremediation of pollutants using free and sub-surface batch systems (MSc)

CONSULTANT

- Environmental Impact Assessment of AL-Musayab Gaseous Power Plant.
- Consultant of the Society of Engineering College of Association of Arab Universities (AARU).
- Member in the Consultant Office for Environmental Projects and Researches.

CERTIFICATE APPRECIATION

- Prime Minster: 1
- Minister:2
- President of Baghdad University and other Universities: more than 15
- Vice President of Baghdad University for Scientific Affairs:5
- Vice President of Baghdad University for Administration Affairs:5
- Dean of the College: more than 30
- Certificate from the President of Baghdad University as the Première PhD student of the College of Engineering for the year 2008.