**Curriculum vitae**

**Personal Informations**

First name : Ayman Abdel Ghfar Ahmed

Date of birth : September 14 1971

Nationality : Egyptian

Mobile : 054 5757 290

Work address : King Saud University, Faculty of Sciences,

Chemistry Department , Riyadh

E-mail: [aghafr@ksu.edu.sa](mailto:aghafr@ksu.edu.sa)

[aymanghfar@gmail.com](mailto:aymanghfar@gmail.com)

Marital status: married

**Academic Eduacation**

***Oct.2001–June2005***

Master degree: Organic Chemistry

University: Menofeya University, Egypt

Title: High performance liquid chromatography with ultra violet detector

(HPLC– UV) for quantification of Rapamycin immunosuppressive drug.

***Oct.1991–may 1994***

Bachelor of Science (B.Sc.), Mansoura University, Egypt

**Publications**

|  |
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| 1–  Synthesis and characterization of a new starch/SnO2 nanocomposite for efficient adsorption of toxic Hg2+ metal ion. Mu. Naushad, Tansir Ahama, Gaurav Sharma, Ala’a H. Al-Muhtaseb, Ahmad B. Albadarin, Mohammad M. Alam, Zeid A. ALOthman, Saad M. Alshehri, Ayman A. Ghfar. Chemical Engineering Journal, **2016**, 300, 306–316 |
| 2 –  Effect of natural food condiments on carcinogenic/mutagenic heterocyclic amines formation in thermally processed camel meat. Mohammad Rizwan Khan, Mu Naushad, Zeid Abdullah Alothman, Mohammed Saad Algamdi, Ibrahim Hotan Alsohaimi, Ayman Abdul Ghfar. *Journal of Food Processing and Preservation*, **2016**, doi:10.1111/jfpp.12819 |
| 3–  Effect of Zeta Potential of Exfoliated Amphiphilic Montmorillonite Nanogels on Removal Efficiencies of Cationic Dye water pollutant, Ayman M. Atta, Hamad A. Al-Lohedan1, Z. A. ALOthman, Ahmed M. Tawfeek, Ayman AbdelGhafar, Nora A. Hamad, *International Journal of Electrochemical Science*, **2016**, 11, 3786 - 3802 |
| 4–  Correlation between vitamin D levels and apoptosis in geriatric patients infected with hepatitis C virus genotype 4; [Gabr SA](http://www.ncbi.nlm.nih.gov/pubmed/?term=Gabr%20SA%5BAuthor%5D&cauthor=true&cauthor_uid=27217734), [Alghadir AH](http://www.ncbi.nlm.nih.gov/pubmed/?term=Alghadir%20AH%5BAuthor%5D&cauthor=true&cauthor_uid=27217734), [Allam AA](http://www.ncbi.nlm.nih.gov/pubmed/?term=Allam%20AA%5BAuthor%5D&cauthor=true&cauthor_uid=27217734), [Ajarem J](http://www.ncbi.nlm.nih.gov/pubmed/?term=Ajarem%20J%5BAuthor%5D&cauthor=true&cauthor_uid=27217734), [Al-Basher G](http://www.ncbi.nlm.nih.gov/pubmed/?term=Al-Basher%20G%5BAuthor%5D&cauthor=true&cauthor_uid=27217734), [Abdel-Maksoud MA](http://www.ncbi.nlm.nih.gov/pubmed/?term=Abdel-Maksoud%20MA%5BAuthor%5D&cauthor=true&cauthor_uid=27217734), [Ghfar AA](http://www.ncbi.nlm.nih.gov/pubmed/?term=Ghfar%20AA%5BAuthor%5D&cauthor=true&cauthor_uid=27217734), [Aboud A](http://www.ncbi.nlm.nih.gov/pubmed/?term=Aboud%20A%5BAuthor%5D&cauthor=true&cauthor_uid=27217734). *Clinical Interventions in Aging*, **2016**,11:523-33. |
| 5–  Molecular Structure, Spectroscopic and DFT Computational Studies of Arylidene-1,3-dimethylpyrimidine-2,4,6(1H,3H,5H)-trione. Assem Barakat, Saied M. Soliman, Hazem A. Ghabbour, M. Ali, Abdullah Mohammed Al-Majid, Mohammad Shahidul Islam, Ayman A. Ghfar. Crystals, **2016**, <http://www.mdpi.com/2073-4352/6/9/110> |
| 6-  Simultaneous determination of monosaccharides and oligosaccharides in dates using liquid chromatography–electrospray ionization mass spectrometry.[***Ayman A. Ghfar***](http://www.sciencedirect.com/science/article/pii/S0308814614019463),  [Saikh M. wabaidur](http://www.sciencedirect.com/science/article/pii/S0308814614019463), [A. Yacine Badjah Hadj Ahmed](http://www.sciencedirect.com/science/article/pii/S0308814614019463), [Zeid A. Alothman](http://www.sciencedirect.com/science/article/pii/S0308814614019463), [Mohammad R. Khan](http://www.sciencedirect.com/science/article/pii/S0308814614019463), [Nora H. Al-Shaalan](http://www.sciencedirect.com/science/article/pii/S0308814614019463)[b](http://www.sciencedirect.com/science/article/pii/S0308814614019463#af010). [Food Chemistry](http://www.sciencedirect.com/science/journal/03088146), [176](http://www.sciencedirect.com/science/journal/03088146/176/supp/C), **2015**, 487–492. |
| 7-  Activated carbon From Waste as an Efficient Adsorbent for Malathion for Detection and Removal Purposes, [Mohamed Abdelaty Habila](http://www.sciencedirect.com/science/article/pii/S1226086X15004189), [Zeid Abdullah ALOthman](http://www.sciencedirect.com/science/article/pii/S1226086X15004189), [Saad A. Al-Tamrah](http://www.sciencedirect.com/science/article/pii/S1226086X15004189), [***Ayman Abdel Ghafar***](http://www.sciencedirect.com/science/article/pii/S1226086X15004189), Mustafa Soylak. *Journal of Industrial & Engineering Chemistry*, **2015**, 32 (2015) 336–344. |
| 8-  Removal of tartrazine dye onto mixed-waste activated carbon: Kinetic and thermodynamic studies. [Mohamed Abdelaty Habil](http://www.sciencedirect.com/science/article/pii/S1878535213001275)[a](http://www.sciencedirect.com/science/article/pii/S1878535213001275#af005), [Zeid Abdullah Al Othman](http://www.sciencedirect.com/science/article/pii/S1878535213001275), [Rahmat Ali](http://www.sciencedirect.com/science/article/pii/S1878535213001275), [***Ayman Abdel ghafar***](http://www.sciencedirect.com/science/article/pii/S1878535213001275), Salah Hassouna , CLEAN – Soil, Air, Water, 42, 12, **2014**, 1824–1831. |
| 9-  Valorization of two Waste Streams into Activated Carbon and Studying Its Adsorption Kinetics, equilibrium isotherms and thermodynamics for Methylene Blue Removal, Zeid Abdullah AL Othman, [Mohamed Abdelaty Habil](http://www.sciencedirect.com/science/article/pii/S1878535213001275)[a](http://www.sciencedirect.com/science/article/pii/S1878535213001275#af005), [Rahmat Ali](http://www.sciencedirect.com/science/article/pii/S1878535213001275), [***Ayman* *Abdel ghafar***](http://www.sciencedirect.com/science/article/pii/S1878535213001275), [Salah Hassouna](file:///C:\Users\facebook\AppData\Roaming\Microsoft\Word\Salah%20%20%0d%20%20%20%20%20%20%20%20%20%20%20%20%20%20Hassouna) . [Arabian Journal of Chemistry](http://www.sciencedirect.com/science/journal/18785352), [7, 6](http://www.sciencedirect.com/science/journal/18785352/7/6), **2014**, 1148–1158. |
| 10-  Analysis of pesticide residues in cucumber using highly sensitive ultra-performance liquid chromatography – tandem mass spectrometry. Saikh Mohammad Wabaidur, ***Ayman Abdul Ghfar***, Zeid Abdullah Alothman, Masoom Raza Siddiqui, Mohamed Habila, Majed Albokari, Ibrahim Mashhour. Wulfenia Journal, 22, 9, **2014**, 1-8. |
| 11-  [UPLC–MS as an Analytical Tool for the Determination of Aflatoxins in Food](http://www.crcnetbase.com/doi/abs/10.1201/b16670-12?queryID=)**.** [Kareem Yusuf](http://www.crcnetbase.com/action/doSearch?Contrib=Yusuf%2C+K), [Ahmad Aqel](http://www.crcnetbase.com/action/doSearch?Contrib=Aqel%2C+A), [***Ayman Abdel Ghfar***](http://www.crcnetbase.com/action/doSearch?Contrib=Ghfar%2C+A), [Zeid Abdullah Alothman](http://www.crcnetbase.com/action/doSearch?Contrib=Alothman%2C+Z).Pages 279–306, **2014,** Book chapter 11,<http://www.crcnetbase.com/doi/abs/10.1201/b16670-12>. |
| 12-  [Determination of Acrylamide in Foodstuffs Using UPLC–MS](http://www.crcnetbase.com/doi/abs/10.1201/b16670-14?queryID=)". [***Ayman Abdel Ghfar***](http://www.crcnetbase.com/action/doSearch?Contrib=Ghfar%2C+A), [Ibrahim Hotan Alsohaimi](http://www.crcnetbase.com/action/doSearch?Contrib=Alsohaimi%2C+I). Pages 333–358. **2014,** Book chapter 13, http://www.crcnetbase.com/doi/abs/10.1201/b16670-14.  **Book title**: "Ultra Performance Liquid Chromatography Mass Spectrometry- Evaluation and Applications in Food Analysis". CRC press, eBook ISBN: 978-1-4665-9155-4, DOI: 10.1201/b16670-14, <http://www.crcnetbase.com/doi/book/10.1201/b16670>. |
| 13-  Analysis of aflatoxins in nonalcoholic beer using liquid–liquid extraction and ultra performance LC-MS/MS, , Mohammad R. Khan, Zeid A. Alothman, **Ayman A. Ghfar**, Saikh M. Wabaidur, Journal of Separation Science. **2013**, 36, 572–577. |
| 14-  Simultaneous analysis of Vitamin C and Aspirin in aspirin C effervescent tablets by high performance liquid chromatography-photodiode array detector, Khan, Mohammad Rizwan; Alothman, Zeid Abdullah; Naushad, Mu.; ***Ghfar, Ayman Abdul***; Wabaidur, Saikh Mohammad [Journal of Liquid & Related Technologies](http://www.ingentaconnect.com/content/tandf/ljlc;jsessionid=4drsbl77h0o8f.alice), 35, 17, **2012**, 2454- 2461. |
| 15-  Determination of capsaicinoids in Capsicum species using ultra performance liquid chromatography-mass spectrometry. Zeid Abdullah Alothman; Saikh Mohammad Wabaidur, Mohammad Rizwan Khan, ***Ayman Abdel Ghafar***, Mohamed Abdelaty Habila, Yacine Badjah Hadj Ahmed, Journal of Separation Science, [35, 21, **2012**,](http://onlinelibrary.wiley.com/doi/10.1002/jssc.v35.21/issuetoc)2892–2896. |
| 16-  Determination of Capsaicin and Dihydrocapsaicin in Capsicum Fruit Samples using High performance Liquid Chromatography, Zeid Abdullah Al Othman, Yacine Badjah Hadj Ahmed Mohamed Abdelaty Habila and ***Ayman Abdel Ghafar***, *Molecules*, **2011**, 16(10), 8919-8929. |

**Accepted Book Chapter**

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| Hydroxyproline as a biomarker in liver disease, Sami A. Gabr, Ahmad H. Alghadir, Yousery E. Sherif , Ayman A. Ghfar, Book Chapter, **2016.** |

**Submitted manuscripts**

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| 1-  Removal of Cobalt from aqueous solution using Oxidized Activated Carbon: Kinetic and Equilibrium studies. El-Refaie S.B. Kenawy, Zeid A. Alothman, ***Ayman A. Ghfar***, Mohamed A. Habila, *journal of Brazilian chemical society*, **2016.** |
| 2-  Trihexyl(tetradecyl)phosphonium Bis 2, 4, 4 - (trimethylpentyl)phosphinate modified Mixed waste activated carbon for removal of mercury, ***Ayman A. Ghfar***, Mohamed Abdelaty Habila, Zeid A.AL Othman, Ahmed Abdel Sattar. *journal of hazardous chemistry*, **2016**. |
| 3-  Identification of Nitrate and Nitrite in Drinking Water using Ultra Performance Liquid Chromatography-Electrospray Ionization Mass Spectrometry, saikh Wabaidur, Mohammad R Khan; Zeid A AlOthman; Masoom  R Siddiqui; ***Ayman A. Ghfar***; Mu Naushad; Nasser  M AL-Harbi. *Process Safety and Environmental Protection*, **2016**. |
| 4-  Ameliorating Effects of Curcumin on Tartrazine Induced Oxidative Stress and Histological Changes in Liver of Male Rats,El-Desoky, *G.E.****; Ghfar A.***; Yusuf, K.; Al-Othman, Z. *PLOS journal*, **2016.** |
| 5-  Identification of hidden toxic heavy metals and titanium in skin-whitening cosmetics using microwave digestion and inductively coupled plasma atomic emission spectrometry. Ayoub Abdullah Alqadami, Mohammad Abulhassan Abdalla, Mu Naushad, Mohammad Rizwan Khan, Zeid A. Alothman, Ayman A. Ghfar, International Journal of Analytical Chemistry, **2016.** |

**Training Courses**

***Nov. 2013*** Dynamic Mechanical Analysis (DMA)

Place: (Research Center, Fafulty of science, King Saud Universty, K.S.A.)

***May 2013*** Differential Scanning Calorimetry(DSC)

Place: (Research Center, Fafulty of science, King Saud Universty, K.S.A.)

***Sept. 2012*** TSQ Quantum Ultra Triple Stage Quadrupole Mass Spectrometer

Place: (Thermo Scientific Training Center, Hemel Hempstead, United Kinkdom, U.K.)

***April 2012*** Ultra performance liquid chromatography with [Tandem mass spectrometric](http://en.wikipedia.org/wiki/Mass_spectrometry#Tandem_mass_spectrometry)

detection [UPLC-MS/MS].

Place: ( Gulf Scientific university, Dubai, United Arab Emarates, U.A.E.)

***Mars 2012*** Occupational Safety and Health Administration [OSHA]

Place of Issue: United States of America (USA)

Place: Saudi Chemical Society, K.S.A.[a member of International Union of Pure

And Applied Chemistry-(IUPAC)].

***Feb. 2011*** Gas Chromatography training course (GC)

Place: (King Saud University, Chemistry Department, College of science, Advance

material Research Chair, -Riyadh - Saudi Arabia)

***April 2001*** High performance liquid chromatography with ultra violet detection [HPLC-UV ]

Place: (Toxicology research center, F.gorgne – Catania – Italy)

***Sept. 2007*** ICDL International computer driving license

Place: Scientific computer Center, Mansoura University –Egypt.

**Conferences, Symposiums and workshops**

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| 1 | ***The  2nd Saudi International Conference in Scientific Publishing*** ***2015***,  11-13/10/2015, King Saud University, Riyadh, K.S.A |
| 2 | ***Environmental Applications of Nanotechnology Workshop***, 29/03/2015, Advanced material research chair, King Saud University, Riyadh, K.S.A. |
| 3 | ***The 3rd International Symposium of Chemical and Biological Safety***, Royal Society of Chemistry & Saudi Chemical Society, 12-14/05/2015, Riyadh, K.S.A. |
| 4 | ***Symposium of materials and energy for new energy technologies***, Saudi Chemical Society and Royal Rociety of Chemistry, King Saud University, 09/12/2013, Riyadh, K.S.A. |
| 5 | ***The 2nd Saudi International NanoTechnology Conference (2 SINC) 2012,*** King Abdulaziz City for Science and Technology (KACST), 11–13/11/2012, Riyadh, K.S.A. |
| 6 | ***Saudi International Environmental Technology Conference 2012***, King Abdul-Aziz City for Science and Technology (KACST), 13–15/05/2012, Riyadh, K.S.A. |
| 7 | ***The Saudi International advanced materials technology Conference 2012***, King Abdul-Aziz City for Science and Technology (KACST), 3-4/12/2012, Riyadh, K.S.A. |
| 8 | ***Saudi International Water Technology Conference***, King Abdul-Aziz City for Science and Technology (KACST), 21–22/11/2011, Riyadh, K.S.A. |
| 9 | ***4th International Chemistry Conference*** ***2011***, Riyadh, Kingdom of Saudi Arabia,19–21/11/2011. |

**Work Experiences**

***Mars 2010 – September 2015***

As an Academic Researcher in King Saud University K.S.U. Riyadh, Saudi Arabia

, Responsibe for Quantitative and qualitative analysis of variety of natural and Synthetic

compounds using the following techniques :-

1. (UPLC MS/MS): Ultra Performance Liquid Chromatography with Mass detector
2. (GC/MS/MS): Gas chromatography- TSQ Quantum Ultra Triple Stage Quadrupole Mass Spectrometer
3. (HPLC /UV): High Performance Liquid Chromatography with Ultraviolet detector,

(UPLC /FLR): Fluorescence Detector and (UPLC /RID): Refractive index detector.

1. (GC/FID): Gas chromatography- Flame ionization detector, (TCD): Thermal conductivity

detector

1. (FTIR): Fourier transform infrared Ultraviolet detection spectroscopy
2. (UV/VIS): Ultraviolet/Visible spectrophotometer

***Research Fields***

* Natural products extraction and analysis: essential oils, plant extracts, food, additives.
* Analysis of various organic pollutants and their residues: hydrocarbons, pesticides, PCBs.
* Water and soil analysis.
* Capillary column preparation for high resolution gas chromatography.
* Column packing for high performance liquid chromatography.
* Complex mixtures fractionation and separation.
* Gas chromatography on both packed and capillary columns.
* High performance liquid chromatography for analytical or preparative purposes.

***Sept.2008 – Mars 2010***

As a Chemist in water purification, municipal and industrial wastewater treatment

systems company, Riyadh, Al-Khobar, Saudi Arabia.

Responsible for analysis of water samples brought from wells to determine the following

1- Anions : Carbonate, bicarbonate, nitrate, nitrite, sulphate, phosphate, silica and fluoride.

2- Cations : Sodium, potassium, calcium, magnesium, ferrous, Aluminum, manganese and

Copper

3- Water dissolved solids, total (TDS)

4- Water hardness (Ca CO3)

***Sept.2007 – Aug.2008***

As a medical analysis specialist in Al-Kadisya clinic for Internal medicine, Obstetrics

and gynecology, Riyadh, KSA.

Responsible for the routine Clinical analysis, Chemistry Immunology, Microbiology,

Hematology,

***Oct.2002– Sept.2007***

As a medical analysis specialist in Al-Shorouk hospital for Internal medicine and

Surgery, Mansoura, Egypt.

***May 1997–Oct.2002***

As a medical analysis specialist in Mansoura university hospitals, Egypt

Responsible for the following duties:-

1 - Determination of Rapamycin immunosuppressive drug in whole blood for Kidney

transplanted patients by using high performance liquid chromatography with ultra violet

detector (HPLC– UV (.

2 –Analysis of liver functions, kidney and lipid profile including in human blood.

3 –Assessment complete blood picture (CBC), Reticulocytic count, Blood indices, Blood

coagulation factors, Blood bank duties including blood cross match and blood transfusion.

assessment of blood gases.

4 –Assessment of Hepatitis- C- Virus ( HCV ), Hepatitis- B- Virus ( HBsAg ), AIDS

( HIV ) in human serum

5–Performing of Ziehl-Neelsen ( Z.N.) staining for detection of acid-fast Bacilli in different

body fluids including sputum, urine, blood, Pus, alveolar aspiration – pleural lavage.

6–ELISA (Enzyme linked immunosorbent assay) technique for Assessment of T3-thyroid

hormone, T4-thyroid Hormone, TSH-thyroid - stimulating hormone, PTH Parathyroid

hormone, free T3, free T4, Estradiol, Prolactin Prl, [Testosterone](http://en.wikipedia.org/wiki/Testosterone), [Progesterone](http://en.wikipedia.org/wiki/Progesterone), [Estradiol](http://en.wikipedia.org/wiki/Estradiol).

***Activities :***

Teaching of practical and theoretical training course in High Performance Liquid Chromatography -Mass Spectrometry (UPLC/ MS/MS) hold in Department of Chemistry - Advanced Materials Research Chair in the period from 29/7/1434 to 29/8/1434.

***Membership***

Member of the Saudi Chemical Society Saudi Chemical Society SCS, College of science King Saud University-Riyadh - Saudi Arabia [a member of International Union of Pure and

Applied Chemistry-(IUPAC)].

**References**

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| 1- Dr : **Zeid Abdullah Al** Othman , Associated Professor of analytical chemistry,  College of science, Chemistry Department, King Saud University, K.S.A.  Mobile : 00966540300679  Telephone: 00966467475999  email : [zaothman@ksu.edu.sa](mailto:zaothman@ksu.edu.sa) |
| 2- Professor : **Ahmed Yacin Badgah Hadj Ahmed**, Professor of analytical chemistry,  College of science, Chemistry Department, King Saud University, K.S.A..  Mobile : 00966540300679  Telephone: 00213 21 77 15 41  E-mail : [ybadjah@ksu.edu.sa](mailto:ybadjah@ksu.edu.sa) |
| 3 - Professor : **Ibrahim F. Zeid** , Professor of organic chemistry, College of science,  Chemistry Department, El-Menofya university, Egypt.  Mobile : 0020124098364  Telephone: 002027600228  E-mail : [ifzeid@hotmail.com](mailto:ifzeid@hotmail.com) |
| 4 - Professor: **Orsola giampiccollo**, Professor of pharmacology and general manager of  Toxicology Research Laboratory - Catania - Italy  Telephone: 0039 095598507  Mobile. : 0039 3475372996  Fax : 0039095598592  E-mail : geregiamp@virgilio.it |