# **Curriculum Vitae**



**Personal information** 

Name | Ahmad Mohamed Ahmad Abo Markeb

Address | Chemistry Department, Annex (B), Faculty of Science, Assiut University, 71516, Assiut,

Egypt.

Telephone Home | +2 088 2140014

Telephone Work | +2 088 2412400

Mobile +2 010 2122 4645

E-mail a\_markeb@aun.edu.eg

Nationality Egyptian

Date of birth | August 3<sup>rd</sup>, 1985

Gender | Male

Desired employment / Occupational field

**Current Position** 

Dates | From October 2017 till now

Occupation | **Lecturer** in Chemistry Department.

Name and address of Institute | Faculty of Science, Assiut University, Assiut, Egypt.

Work experience

Dates | From October 2013 until September 2017.

Occupation or position held | PhD candidate in Chemical, biological, Environmental Engineering Department.

Name and address of Institute | Escola D'enginyeria, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain.

Dates | From May 2012 to September 2013.

Occupation or position held | Assistant Lecturer in Chemistry Department.

Name and address of Institute | Faculty of Science, Assiut University, Assiut, Egypt.

Dates | From February 2007 to April 2012.

Occupation or position held | Demonstrator in Chemistry Department.

Name and address of Institute Faculty of Science, Assiut University, Assiut, Egypt. Work at International Accredited Laboratory Dates From February 2012 to September 2013 Occupation or position held Quality Assurance Manager in Analytical Chemistry Unit (ACAL) accredited from the American Association for Laboratory Accreditation (A2LA). Name and address of Institute Analytical Chemistry Unit, Faculty of Science, Annex (B), Assiut University, Assiut, Egypt From March 2010 to February 2012 Dates Occupation or position held Technical Manager in Analytical Chemistry Unit (ACAL) accredited from the American Association for Laboratory Accreditation (A2LA). Name and address of Institute Analytical Chemistry Unit, Faculty of Science, Annex (B), Assiut University, Assiut, Egypt **Dates** From April 2009 to February 2010 Occupation or position held Laboratory Coordinator and Training Program Officer in Analytical Chemistry Unit (ACAL). Name and address of Institute Analytical Chemistry Unit, Faculty of Science, Annex (B), Assiut University, Assiut, Egypt Dates From November 2006 to March 2009 Occupation or position held Analyst in Analytical Chemistry Unit (ACAL). Name and address of Institute Analytical Chemistry Unit, Faculty of Science, Annex (B), Assiut University, Assiut, Egypt Work at National Accredited Faculty Dates From February 2012 to September 2013 Occupation or position held Co-coordinator of Higher Studies and Research. Name and address of Institute Faculty of Science, Assiut University, Assiut, Egypt Research Experience Dates From October 2013 to September 2017 Title Environmental Applications of Engineered Nanomaterials: Synthesis and Characterization Name and type of organisation Escola D'enginyeria, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain providing Research Experience Dates From October 2013 till December 2015

Title	Biogas treatment using advanced nanomaterials
Name and type of organisation	Escola D'enginyeria, Universitat Autònoma de Barcelona (UAB), Barcelona, Spain
providing Research Experience	
Dates	From September 2012 to September 2013
Title	Preparation of Nanoparticles as Anticancer Drug Carrier for Biomedical Applications
Name and type of organisation	Faculty of Science, Assiut University, Assiut, Egypt
providing Research Experience	
Dates	From October 2008 to April 2012
Title	Advanced Analytical and Bioanalytical Studies on Several Antioxidants (M. Sc. Thesis)
Name and type of organisation	Faculty of Science, Assiut University, Assiut, Egypt
providing Research Experience	
Courses of Development of	
Faculty Members  Dates	From 27 – 29 May 2012
Title	"University Administration"
	Faculty and Leadership Development Project (FLDP), Assiut University, Assiut, Egypt
Name and type of organisation providing courses	raculty and Leadership Development Project (LDP), Assidt Oniversity, Assidt, Egypt
Dates	From 19 - 21 May 2007
Title	"Prepare Writing and Disseminating Scientific Research Internationally"
	Faculty and Leadership Development Project (FLDP), Assiut University, Assiut, Egypt
Name and type of organisation providing courses	raculty and Leadership Development Project (PLDP), Assidt Oniversity, Assidt, Egypt
Dates	From 12 - 14 May 2007
Title	"The Use of Technology in Teaching"
Name and type of organisation providing courses	Faculty and Leadership Development Project (FLDP), Assiut University, Assiut, Egypt
Dates	From 5 - 7 May 2007
Title	"Recent Trends in Teaching"
Name and type of organisation	Faculty and Leadership Development Project (FLDP), Assiut University, Assiut, Egypt
providing courses	Traceity and Leadership Development Project (FLDF), Assidt University, Assidt, Egypt
Dates	From 15 - 17 April 2007
Title	"Credit Hour System"
riue	Great flour System

Name and type of organisation Faculty and Leadership Development Project (FLDP), Assiut University, Assiut, Egypt providing courses From 17 - 19 March 2007 Dates Title "Effective Communication Skills" Name and type of organisation Faculty and Leadership Development Project (FLDP), Assiut University, Assiut, Egypt providing courses **Educational Training** "Material Science and Nanotechnology", in Faculty of Science, Assiut University on March 31, 2012. **Student Exchange Program** "Technical Experience" (IAESTE), part of the German Academic Exchange Service (DAAD) in the lab of Environmental Chemistry at Lüneburg Universität, Germany under the supervision of Prof. Wolf-Ulrich Palm from August 1, 2005 – September 30, 2005. **Training on Instruments Dates** From May 2011 to July 2011 Title "Differential Scanning Calorimetry (Shimadzu DSC 60)" Name and type of organisation Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt providing Training From November 2010 to March 2011 Dates Title "Gas Chromatography/ Mass Spectrometry (Agilent GC/MS 7890A/ 5375B)" Name and type of organisation Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt providing Training From November 2010 to March 2011 Dates Title "High Performance Liquid Chromatography (Agilent HPLC 1200 series)" Name and type of organisation Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt providing Training Dates From August 2009 to December 2009 Title "UV/VIS spectrophotometer (Labomed, USA)" Name and type of organisation Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt providing Training Dates From January 2009 to April 2009

Title "Voltammetry (BASi CV-50W)"

Name and type of organisation providing Training Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt

Dates From November 2010 to March 2011
Title "Microarray (GenPix 4100A, Molecular devices)"

Name and type of organisation providing Training	Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt
Dates	From February 2008 to March 2008
Title	"Thermocycler (Biometra)"
Name and type of organisation providing Training	Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt
Dates	From March 2007 to June 2007
Title	"Gas Chromatography/ Flame Ionization Detector (Agilent GC/FID 6890N)"
Name and type of organisation providing Training	Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt
Dates	From November 2006 to January 2007
Title	"Capillary Electrophoresis (Agilent CE G1600AX)"
Name and type of organisation providing Training	Analytical Chemistry Unit, Faculty of Science, Assiut University, Assiut, Egypt

## **Conferences Participation**

- 1- "Novel magnetic core-shell Ce-Ti@Fe<sub>3</sub>O<sub>4</sub> nanoparticles as adsorbent for water defluoridation", Ahmad Abo Markeb, Amanda Alonso, Antoni Sánchez, Xavier Font, 29-30 June 2016, JPHD 2016, oral presentation, Barcelona, Spain.
- 2- "Effective removal of antimony from aqueous solution using Forager Sponge® and SPION-loaded onto Forager Sponge®", Verónica VERDUGO, Lorenzo MASSIMI, Ahmad ABO MAKEB, Amanda ALONSO, Cristina PALET, Manuel VALIENTE, ISMEC, Casa Convalescència ALBA Synchrotron 7-10 June 2016 Barcelona, Spain.
- 3- "Effect of cerium dioxide, titanium dioxide, silver, and gold nanoparticles on the activity of microbial communities intended in wastewater treatment", Ahmad Abo Markeb, Amanda Alonso, Lucía Delgado, Josep A. Torà, Eudald Casals, Víctor Puntes, Xavier Font, Julián Carrera, Antoni Sánchez, 3-7 May 2015, p.136, SETAC Europe 25th annual meeting, Barcelona, Spain.
- 4- "New Generation of Nanomaterials for Green House Gases Adsorption", Trends in Nanotechnology 2014, Amanda Alonso, Ahmad Abo Markeb, Xavier Font, Antoni Sánchez, David Gabriel, Javier Lafuente, 27-31 Octubre 2014, Barcelona.
- 5- "Alfalfa: A Novel Source of the Antioxidants 5- and 7- hydroxyflavones with their binding constants with BSA using Capillary Electrophoresis and HPLC with fluorescent Detection", Ahmad Abo Markeb and Nagwa Abo El-Maali, "Assiut University 8th International Pharmaceutical Sciences Conference Faculty of Pharmacy, Assiut, 14-15 March, 2012.
- 6- "Validated application of dual chiral capillary electrophoresis and reversed phase high performance liquid chromatography methods for simultaneous separation and determination of monohydroxyflavone isomers and polyhydroxyflavone". Ahmad Abo Markeb, The third Conference for Young Researchers, Basic Science & Technology, Assiut, 19-20th April 2011.

### **Publications**

- 1. A. Yazdi, Ahmad Abo Markeb, L. Garzón-Tovar, J. Patarroyo, J. Moral-Vico, A. Alonso, A. Sanchez, N. G. Bastús, I. Imaz, X. Font, V. puntes and D. Maspoch, Core-shell Au/CeO2 nanoparticles supported in UiO-66 beads exhibiting full CO conversion at 100 °C, Journal of Material Chemistry A, 2017.
- 2. Ahmad Abo Markeb, Amanda Alonso, Antoni Sánchez, Xavier Font, Adsorption process of fluoride from drinking water with magnetic core-shell Ce-Ti@Fe<sub>3</sub>O<sub>4</sub> and Ce-Ti oxide nanoparticles, Science of the Total Environment, 598 (2017) 949 – 958.
- 3. Amanda Alonso, J. Moral-Vico, Ahmad Abo Markeb, Martí Busquets-Fité, Dimitrios Komilis, Victor Puntes, Antoni Sánchez, Xavier Font, Critical review of existing nanomaterial adsorbents to capture carbon dioxide and methane, Science of the Total Environment, 595 (2017) 51 –62.
- 4. Ahmad A. Markeb, Laura A. Ordosgoitia, Amanda Alonso, Antoni Sanchez' and Xavier Font, Novel magnetic core-shell Ce-Ti@Fe<sub>3</sub>O<sub>4</sub> nanoparticles as an adsorbent for water contaminants removal, RSC Advances, 6 (2016) 56913-56917.
- 5. Ahmad Abo Markeb, Amanda Alonso, Antonio David Dorado, Antoni Sánchez and Xavier Font, Phosphate removal and recovery from water using nanocomposite of immobilized magnetite nanoparticles on cationic polymer, **Environmental Technology**, 37:16 (2016) 2099–2112.
- 6. Ahmad A. Markeb, Nagwa A. El-Maali, Douaa M. Sayed, Amany Osama, Mohamed A. Y. Abdel-Malek, Amen H. Zaki, Mostafa E. A. Elwanis, and James J. Driscoll, Synthesis, Structural Characterization, and Preclinical Efficacy of a Novel Paclitaxel-Loaded Alginate Nanoparticle for Breast Cancer Treatment, International Journal of Breast Cancer, 2016 (2016) 1-8.
- 7. Verónica VERDUGO, Lorenzo MASSIMI, Ahmad Abo Markeb, Amanda ALONSO, Cristina PALET, Manuel VALIENTE, Effective removal of antimony from aqueous solution using Forager Sponge® and SPION-loaded onto Forager Sponge®, Casa Convalescència ALBA Synchrotron 7-10 June 2016 Barcelona.
- 8. Xavier Font, Amanda Alonso, Ada Rebeca Contreras, Ahmad Abo Markeb, Antoni Sánchez, Nanotecnología para el medio ambiente: Eliminación de contaminantes mediante nanomateriales, Industria Química (2014) 72-77.
- 9. A. Abo Markeb, N. Abo El-Maali, Simultaneous quantitation of 5- and 7hydroxyflavone antioxidants and their binding constants with BSA using dual chiral capillary electrophoresis (dCCE) and HPLC with fluorescent detection, Talanta 119 (2014) 417–424.

## **Workshops Participation**

- 1- "Proficiency Testing as a necessary Requirement for Labs Accreditation", Proficiency Testing Provider Center in Chemistry Department, Faculty of Science, Assiut University on October 20th, 2012.
- "The route for International Accreditation of Analytical Chemistry Labs", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on November 14-15th, 2009.

### **Seminars Attendance**

- "Environmental and Food Testing", Agilent Technologies by Talaat Nazer, Marco Farina, Paul Boguszewski, Georges Tsoupras, Uwe Noetzel and Abdou Mekebri in Mövenbick Resort El Sokhna on November 27-28th, 2012.
- 2- "Recent Advances in MicroArray Application" by Mr. Yann Filadeau, Agilent Genomic Channel Manager in Semiramis Intercontinental Cairo on February 18th, 2010.

# Personal skills and competences

Mother tongue

**Arabic** 

Other languages

English, Very Good Spanish, Very Good French. Good German, Beginner

Social skills and competences

Team work: I have worked in various types of research teams.

### Technical skills and competences

- "Introduction to traceability in Analytical Lab", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on June 24th, 2010.
- "Assessment of Lab Competence", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on September 13th, 2010.
- "Root Cause Analysis and Corrective Action", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on July 12th, 2010.
- "Estimation of Budget Uncertainty", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on May 15-17th, 2010.
- "Interpretation and Statistical Treatment of Analytical Data", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on January 11-12th, 2010.
- "Lab Quality Control", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on November 15th, 2009.
- "Method Validation", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on November 14th, 2009.
- "Introduction to Measurement Uncertainty", Analytical Chemistry Unit (ACAL) in Chemistry Department, Faculty of Science, Assiut University on November 14th, 2009.

### Computer skills and competences

- The International Computer Driver's License (ICDL).
- MiniTab Software.
- Sigmaplot software.
- Origin Software.
- Adobe Photoshop.
- Microsoft Office programs

### Other skills and competences

"IsoLIMS, Iso Laboratory Information Management System", UE-Systems Co. On July 19-26th, 2010.

### Other Trainings

- "Proper Use of Fire Warning Alarms", Public Safety Administration in Assiut University on October 15th, 2008.
- "Proper Use of Fire Extinguishers", Public Safety Administration in Assiut University on September 7th, 2008