Curriculum Vitae

Ayman H. Kamel

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***h*-index: 26 (Scopus)**, Author ID: **57880255400**.

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PERSONAL DATA:

Name **:** Ayman Helmy Kamel Mohamed

Date place and date **:** July 18th, 1976, Cairo, Egypt.

Nationality : Egyptian

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ACADEMIC POSITION:

- Professor of Analytical and Environmental Chemistry, Department of Chemistry, College of Science, University of Bahrain, Bahrain.
- Professor of Analytical and Environmental Chemistry, Chemistry Department, Ain Shams University, Cairo, Egypt.
- Member of the **Technical Committee for the establishment of regulations and educational programs** within the *committees of the Ministry of Higher Education* to ***supervise and follow-up national projects for the establishment of universities and educational institutions and research in the Arab Republic of Egypt.***

ACADEMIC QUALIFICATIONS:

1. **Ph.D. in Analytical chemistry**

   Chemistry Department, Ain Shams University, Cairo, Egypt **(Sep. 2001-Sep. 2005)** entitled with (*Modern Techniques and Methods for Determination of Some Environmental Pollutants and Industrial Products)*.

2. **M. Sc. in Analytical Chemistry**

   Chemistry Department, Ain Shams University, Cairo, Egypt, **(July 1999-Sep. 2001)** entitled with (*Preparation and Characterization of Some Electrochemical Sensors and Their Applications in Industrial Analysis***)**.

3. **Advanced Pre-Master courses in Inorganic and Analytical chemistry**

   Chemistry Department, Ain Shams University, Cairo, Egypt **(Nov. 1997-Nov. 1998)**.

4. **B.Sc. in Chemistry (Excellent with honor degree, 85, 37%)**

   Chemistry Department, Faculty of Science, Ain Shams University, Cairo, Egypt, **Sep. 1993- June 1997.**

PREVIOUS AND CURRENT SCIENTIFIC AND/OR PROFESSIONAL ACTIVITIES EMPLOYMENT:

I-Teaching experiences

Teaching all analytical and environmental chemistry courses for both graduate and under-gradute students such as:

- Chromatographic separation
- Chromatographic analysis
- Electrochemical analysis
- basics in analytical chemistry
- Qualty control and ISO standards
- Safety in chemical laboratories
- Environmental analysis
- Water and Air pollution
- Industrial Chemistry
- General Chemistry.
- Optical methods of analysis, ….etc.

1. Professor of Analytical and Environmental Chemistry, Department of Chemistry, College of Science, **University of Bahrain**, Bahrain from 19th May 2021 till now.
2. Professor of Analytical Chemistry, Chemistry Department, Faculty of Science, **Ain Shams University** from 31 Jan 2016 till now.
3. Associate Prof. of Analytical Chemistry for teaching the undergraduate and graduate students in the Chemistry Department **Ain Shams University** from 29 Jan 2011 to 30 Jan 2016.
4. Associate Prof. of Analytical chemistry, Faculty of Engineering, **Heliopolis University** since 2014-2017.
5. Assistant Prof. of Analytical Chemistry in **Qassim University** (QU) in Saudia Arabia since 16 th Sep. 2010 till June 2014.
6. Assistant Prof. of Analytical Chemistry in Chemistry Department, Faculty of Science, **Ain Shams University** (ASU) since 28st Nov. 2005 till 31th Dec. 2010.
7. Associate Prof. of Analytical Chemistry for teaching the undergraduate and graduate students in the Chemistry Department, **American University in Nigeria** (AUN) from Aug. 2009 till June 2010.
8. Assistant lecturer for the undergraduate and graduate students in the Chemistry Department, Faculty of Science, **Ain shams University** from October 2001 to September 2005
9. Teaching assistant for the undergraduate students in the chemistry laboratories in the faculty of science, **Ain Shams University**, Abbasia, Cairo, Egypt from October 1997 to September 2001.

II- Management experience

1. Member of the *Technical Committee for the establishment of regulations and educational programs within the committees of the Ministry of Higher Education to supervise and follow-up national projects for the establishment of universities and educational institutions and research in the Arab Republic of Egypt.*
2. Head of Accreditation committee, Chemistry Department, **University of Bahrain.**

3. Head of Scientific Academic promotion committee, Chemistry Department, **University of Bahrain.**
4. Member of the Scientific Academic promotion committee, College of Science, **University of Bahrain.**
5. Member of Accreditation committee, College of Science, **University of Bahrain.**
6. Head of the Central Laboratory for micro analysis, Faculty of Science, **Ain shams University** from Nov. 2015 till Nov. 2019.
7. Head of petroleum chemistry program, Faculty of arts and Science, **American University of Nigeria**, Yola, Nigeria.
8. Chemistry program coordinator, College of Science, **Qassim University**.
9. Member of Accreditation committee, College of Science, **Qassim University.**
10. Head of Assessment & Academic Accreditation committee, Chemistry Department, College of Science, **Qassim University.**
11. Head of laboratories, Equipments & Services committee, Chemistry Department, College of Science, **Qassim University.**
12. Head of Higher education & research committee, Chemistry Department, College of Science, **Qassim University.**
13. Member of the **Committee to develop postgraduate courses**-Chemistry Department, Faculty of Science, Ain Shams University.
14. Member of the **Graduate Studies Committee-** Chemistry Department, Faculty of Science, Ain Shams University.
15. Head of organizing committee for the first international scientific conference of Faculty of Science- Ain Shams University" New Frontiers in Science", Hurgada, Red Sea, Egypt Nov. 12-15, 2019.
16. Head of organizing committee for the first international scientific conference of Faculty of Science- Ain Shams University" New Frontiers in Science", Hurgada, Red Sea, Egypt October 24-27, 2017.
17. Head of organizing committee for the second international scientific conference of Faculty of Science-Ain Shams University" New Frontiers in Science", Hurgada, Red Sea, Egypt October 24 – 27, 2018.

III- Research experiences

1. *h*-index: **26 (Scopus)**, Author ID: **57880255400**.
2. Supervising and co supervising 27 master students and 17 phD students.
3. Visiting professor in the institute of Coastal Zone Research (YIC), Chinese Academy of Sciences (CAS), Shandong Provincial Key Laboratory of Coastal Environmental Processes, YICCAS, Yantai, Shandong 264003, P. R. China (from 15th Oct. 2017 to 30th of April 2018, and funded from the Chinese Academy of Sciences (CAS).
4. Post-doctoral Fellow in Instituto Superior de Engenharia do Porto (ISEP), of the Polytechnic Institute of Porto, **Portugal,** and funded from the Portugal government [Fundacao para a Ciencia e Tecnologia (FCT), with reference SFRD/BPD/38740/2007 Portugal.
5. Post-doctoral Fellow in Instituto Superior de Engenharia do Porto (ISEP), of the Polytechnic Institute of Porto, **Portugal**, and funded from the Ministry of Higher Education and Scientific research (MHESR), Egypt.
6. Post-doctoral Fellow in Pretoria university, Pretoria, **South Africa** 2006**),** and funded from the SA government [National Research Foundation (NRF)].
7. Training in Institute of chemical Technology, Praha, **Czech Republic** (*Analytical Chemistry*) (29th June-15th August **1996**).
8. A member in the first school established in Egypt in Microanalysis and microanalytical laboratory, Chemistry Dep., Ain Shams Uni., Cairo, Egypt Under supervision of Prof. Saad S. M. Hassan **(D. Sc.)**.
9. A member in the first school in Egypt in chemical and biochemical sensors at Ain Shams University, established by Prof. Saad S. M. Hassan **(D.Sc.)**.
10. A member in the reference laboratory for the Egyptian Environmental Affairs Agency (**EEAA**) at Ain Shams University with the Assistance of Danish International of Development Assistant (**DANIDA**).
    - Assessment and evaluation of the environmental situations of some Egyptian factories involving sampling and analysis for their wastes.
    - Monitoring of Air, Water, Noise, Heat Stress and Workplace quality for some industrial facilities of different activities.

- Monitoring of the emissions from some hazardous waste hospital incinerators in Egypt.
- Monitoring of lead pollution for Qalubia lead clean-up project (USAID).

AREA OF SCIENTIFIC ACTIVITY:

Analytical Chemistry field, dealing with electro-analytical based techniques. Potentiometry with ion-selective sensors and voltammetry with chemical modified electrodes are the main tools. Until now, analysis of food, bio-molecules, pharmaceutical and environmental samples have been the purpose of all methodologies developed or under development. All issued determinations are of organic or inorganic nature. Several detectors are constructed for each analyte, changing not only sensing systems but also the configuration of the electrodes. Mostly, the main purpose is to provide electrodes of suitable configuration and performance for in-situ determinations.

Automation of all analytical methods by flow injection analysis, sequential injection analysis and multi-commutation are regarded as well, aiming to adjust the implemented analytical methods to routine procedures, when these are required.

DOMAIN OF SPECIALIZATION

1- New approaches for the development of rational design of solid-state electrochemical sensors for environmental monitoring.
2- The design and development of man-tailored mimc polymers as a novel stationary phase in chromatographic separation and solid phase extraction and their use in industrial and environmental monitoring.
3- The design and development of biomimetic sensors for inorganics and organics based on **molecularly imprinted polymers** (MIPs).
4- Preparation of new nanomaterials for water treatment.
5- Robust and reliable chemical sensor for Environmental and biomedical analysis.

6- Development of flow injection analysis-based method with several detection systems. Specifically, potentiometric, and optical detectors.
7- E-waste recycling.

PRESENT RESEARCH INTERESTS

Generally, the analysis of complex samples by means of simple methods I am being looked for. Therefore, the construction of analytical detectors requiring decreased sample volume, and presenting high selectivity, quick response, and low cost, is still a main interest. This is mostly utopian for most samples, but this target needs to be reached because today's society presents new challenges, such as identify and quantify residual amounts of contaminant in complex food, pharmaceutical and environmental samples. The quality control of everything interacting with us and our heath is an important field to develop.

Because the reliability of an analytical method is one of the parameters that must be considered for its validation, my research is also concentrated in the method uncertainties' sources, assurance of quality of the analytical information, interconnection between sample, method, and instrument in analytical chemistry.

CONFERENCES AND WORKSHOPS

1. Keynote speaker in the first international conference held on 23th-24th June 2021, Chemistry department, College of Science, University of Bahrain, entitled " recent trends in Environmental Chemistry".
2. Organizing committee for the 1st International conference for Faculty of Science, Ain Shams University, "new frontiers in Science", Hurgada, Egypt, 23th Oct. 2017.
3. Organizing committee for the 1st International conference for Faculty of Science, Ain Shams University, "New frontiers in Science", Hurgada, Egypt, 26th Oct. 2018.
4- Workshop on: "Statistics in testing laboratories": 2-4 Nov. **1997**.
Reference Laboratory, Faculty of Science, Ain Shams University, in cooperation with Egyptian Environmental Affairs Agency (EEAA).
5- Workshop on: "Internal Quality Control": 9-12 Nov. **1997**.

Reference Laboratory, Faculty of Science, Ain Shams University, in cooperation with Egyptian Environmental Affairs Agency (EEAA).

6- 6th European Conference on Marine Natural Products, 19-23 July **2009**, Porto, Portugal.

7- *Eurosensors XXIV*, September 5–8, **2010**, Linz, Austria.

8-ASIIN Annual Conference, *'Interlinking Internal and External Quality Assurance at Higher Education Institutions*", 12-13 December **2013**, Stuttgart, Germany.

9- Lecturer for the theoretical part for a series of analytical chemistry workshops [i.e. Spectroscopy, chemical and biosensors, water analysis and chromatography] held at the Central Laboratory, Faculty of science, Ain Shams University, Cairo, Egypt on **2009**.

10-Workshop on: " *Strategic Planning in Higher Education*", 21-22 September **2014**, Center of Developing and Training, Ain Shams University.

11- Workshop on: "*Preparation of Program Report*", 21-22 April **2014**, Deanship of Accreditation and quality, Qassim University.

12- 1st International Scientific workshop on " Biosensors Technology& Molecular imprinted polymers: Potential applications of Theragnostic, Food safety & Environment (28-29 April **2015**), Ain Shams University, Cairo, Egypt.

13- 4th Scientific Conference of Ain Shams University ["Towards a National Innovation System" Current indicators and Future Prospects], 27-29 April **2015**, Ain Shams University, Cairo, Egypt.

14- 5th International conference for the Arab scientists' forum on" Science research & Sustainable Development in Arab Countries & Facing the challenges", Sharm El-Sheikh, South Sinai, Egypt 16-19/04/2016.

PRIZES AND AWARDS

- **World's top 2% scientist -Elsevier &Stanford University, U.S.A. - Oct 2022**
- **World's top 2% scientist -Elsevier &Stanford University, U.S.A. - Oct 2021**.
- **State Prize in Basic Sciences**, Chemistry**,** Arab Republic of Egypt, 2015.
- **The medal of the first-class franchise**, Arab Republic of Egypt, 7-8-2017.
- Prize of "***Award Excellent Research*** "on 26th of March **2009**, awarded from **Ain Shams University**, Cairo, Egypt.

- **Medal of Faculty of Science**, Ain Shams University in contribution to obtain the college for the certificate of academic accreditation, **2017**.
- **Medal of Ain Shams University, Best researcher in the university, 2017.**

MEMBER IN THE EDITORIAL BOARD OF:

- European Chemical Bulletin Journal (ISSN 2063-5346), **Hungary.**
- Modern Chemistry Journal (Science Publishing Group), **India**.
- International Journal of Chemistry and Material Science (Academe Research Journals).
- Journal of Chemistry (SCIREA publisher), USA
- Chemistry of Compounds Journal (Verizona Publisher), **USA**.
- Reviewers in many prestigious journals in analytical chemistry such as, Anal. Chem. (ACS), Talanata, Anal. Chim. Acta, Biosens.&Bioelectro.,…etc

SOCEITY MEMBERSHIP:

- Member in the Research Cooperative
- Member in the Society for Molecular Imprinting.
- Member in Syndicate of Scientific Professions, Cairo, Egypt.

AWARDED PROJECTS

- "*New approaches for the development of rational design of solid-state potentiometric sensors for environmental monitoring*", financially supported by the Chinese Academy of Sciences President's International Fellowship Initiative (PIFI). Grant No. 2017VEA0024, **China.**
- "*Development of the Atomic spectroscopy unit in the Central Laboratory for microanalysis and qualifying it for accreditation in accordance with the specifications of (ISO 17025/2005)*", funded from Project Management Unit for Higher Education Development, Ministry of Higher Education, Cairo, **Egypt**
- "*Guanine and Adenine Biosensors for the Electrochemical Determination of Antioxidant Capacities of Flavored Waters*", funded from the Ministry of Higher

Education and Scientific research (MHESR), Egypt and carried out in Instituto Superior de Engenharia do Porto (ISEP), of the Polytechnic Institute of Porto, **Portugal.**

- *"Development of chemical sensors for detection/quantification of antimicrobial residues in fish from aquaculture*", funded and carried out in Instituto Superior de Engenharia do Porto (ISEP), of the Polytechnic Institute of Porto, **Portugal**.
- "*Flow through potentiometric sensors for selective monitoring of quaternary ammonium herbicides residue in food and soil*" funded and carried out in Al-Qassim University, Burryida, **Saudia Arabia**.
- "*Preparation and characterization of innovative selective imprinted polymers for the removal of hazardous mercury compounds and their applications in marine environment and treatment of industrial wastewater*" funded and carried out in Qassim University, Burryida, **Saudia Arabia**.
- "*Modern techniques and methods based on molecularly imprinted polymers for selective recognition of phenyl urea pesticides and their applications to environmental analysis*", funded and carried out in Qassim University, Burryida, **Saudia Arabia**.
- "*Electroless Nickel deposition as an industrial application for metal protection from corrosion and wear*", funded and carried out in Qassim University, Burryida, **Saudia Arabia**.
- "*Miniaturized potentiometric sensors based on PbS nanoparticles and a newly synthesized ionophore and their application for static and hydrodynamic monitoring of lead as a hazardous waste*", funded and carried out in Qassim University, Burryida**, Saudia Arabia.**
- "*Novel planar chip biosensors for potentiometric immunoassay of acid phosphatase activity based on the use of ion association complexes as novel electroactive materials*", funded and carried out in Qassim University, Burryida, **Saudia Arabia**.

SKILLS:

- In parallel to the analytical filed, waste management of effluents provided from laboratorial activities is being developed and implemented. This concern a project that uses the education of chemistry for solving the emergent problems of the chemical laboratory with integrated management of resources and waste awaking up their student to a sustainable sound behavior.
- Manage the day-to-day workload of the chemistry department and mentoring of junior staffs and Coop students.
- Undertake method validation, method development and similar projects as the need arise.
- Operation and practical hands-on experiences with the ability to trouble shoot various analytical instruments GC, HPLC and AAS lab equipment.
- Assist the QC department in undertaking quality inspections and quality audits.
- Excellent skills in using some computer programs such as: Excel, Word, Power point, Origin, Isis Draw and chem-office, and the use of these programs in presenting the lectures and in drawings.

Papers:

Preparation of about **121** papers covering a wide range of methods and techniques for the micro and ultra-micro determination of various inorganic, organic, industrial, environmental, pharmaceutical, biological, and biochemical compounds. Of these, **121** papers have already been published in peer reviewed international journals.

LIST OF PUBLICATIONS

1- New lead selective membrane potentiometric sensors based on chiral-2,6-bis-pyridinecarboximide derivatives, *Talanta* 60, 81 (**2003**). Saad S.M. Hassan, M.H. Abou Ghalia, Abdel-Galil E. Amr, **Ayman H. K. Mohamed**

2- Novel thiocyanate-selective membrane sensors based on di-, tetra-, and hexa-imidepyridine ionophores, *Anal.Chim.Acta*, 482,9 (**2003**). Saad S.M. Hassan, M. H. Abou Ghalia, Abdel-Galil E. Amr, **Ayman H. K. Mohamed**

3- Novel Dicyanoargentate polymeric sensors for selective determination of cyanide

ions, *Electroanalysis* Vol.16, issue 4 (**2004**) 298. Saad S. M. Hassan, S. A. M. Marzouk, **Ayman H. K. Mohamed**, N. M. Badawy

4- Novel potentiometric copper (II) selective membrane sensors based on chiral bridged bicyclic pyridine tetrapeptide derivative as neutral ionophores, *Talanta* 66 **(2005)** 1034. Saad S.M. Hassan, Eman M. Elnemma, **Ayman H. K. Mohamed**

5- Flow injection fluorimetric determination of chromium (VI) in electroplating baths by luminescence quenching of tris (2,2`-ruthenium bipyridyl, *Talanta* 67 (**2005**) 696. Saad S.M. Hassan, Ayman A. Abdel-Shafi, **Ayman H. K. Mohammed**

6- Novel Potentiometric Sensor for the Determination of Creatinine in Human Serum and Its Application in Flow Injection Analysis, *Electroanalysis* Vol. 24, 17 (**2005)** 2246. Saad S. M. Hassan, Eman M. Elnemma, **Ayman H. K. Mohamed**

7- Continuous Potentiometric monitoring of Sildenafil Citrate (Viagra) in Pharmaceutical Preparations using Novel membrane sensors *J. Applied electrochem.* 36 (**2006**) 139. Saad S.M. Hassan, Eman M. Elnemma, W. H. Mahmoud and **Ayman H. K. Mohamed**.

8- Mercury (II) ion-Selective polymeric membrane sensors for determination of hazardous mercury waste, *Analytical Sciences* 22 (**2006**) 877. Saad S. M. Hassan, W. H. Mahmoud, **Ayman H. K. Mohamed**, and Ali E. Kelany.

9- A novel spectrophotometric method for batch and flow injection determination of sulfite in beverages, *Anal. Chim. Acta*, 570 (**2006**) 232. Saad S.M. Hassan, Mohamed S. A. Hamza, **Ayman H. K. Mohamed.**

10- A Flow-through planar miniaturized sensor for the determination of lead with potentiometric anionic response, *Electroanalysis*, 19 (**2007**) 2419. **Ayman H. Kamel.**

11- Conventional and miniaturized planar chip sensors for potentiometric assay of uric acid in biological fluids using flow injection analysis, *J. Pharm. & Biomed. Anal.* 45 **(2007)** 341. **Ayman H. Kamel.**

12- A Novel Potentiometric Membrane Sensors for Specific Binding of Chlormequat by Molecular Imprinting Technique. *Electroanalysis* 20 **(2008)** 194. **Ayman H. Kamel**, Felismina Teixeira, Sofia A. A. Almeida, and M. Goreti F. Sales.

13- Development of a novel automatic potentiometric system for determination of selenium and its application in pharmaceutical formulations and anodic slime, *Electroanalysis*, 20, **2008**, 1016. **Ayman H. Kamel**, Eman H. Elnaby, Ali E. Kelany.

14- Guanine and Adenine Biosensors for the Electrochemical Determination of Antioxidant Capacities of Flavored Waters, *Biosensors and bioelectronics.*, 24 (**2008**) 591. **Ayman H. Kamel**, Felismina Teixeira, Cristina Delerue-Matos, and M. Goreti F. Sales.

15- Flow-Through Potentiometric Assessment of Sulfadiazine in Drugs and Biological Fluids, *Anal. Sci.*, 25 (**2009**) 365, **Ayman H. Kamel**, M. Goreti F. Sales, Sofia A. A. Almeida, Felismina T. C. Moreira

16- A Novel Poly (Vinyl Chloride) Matrix Membrane Sensor for Batch and Flow-injection Determination of Thiocyanate, Cyanide and Some Metal Ions, *Anal. Sci.*, 25 (**2009**) 911, Saad S. M. Hassan, I. H. A. Badr, **Ayman H. Kamel**, Mona S. Mohamed.

17- A simple potentiometric method for determination of acid and alkaline phosphatase enzymes in biological fluids and dairy products using a nitrophenylphosphate plastic membrane sensor, *Anal. Chim. Acta* , 640 (**2009**) 75 Saad S. M. Hassan, Hossam E. M. Sayour, **Ayman H. Kamel.**

18- Flow-Through Assay of Quinine Using Solid Contact Potentiometric Sensors Based on Molecularly Imprinted Polymers, **Ayman H. Kamel ,** Hossam E. M. Sayour **;** *Electroanalysis***,** 21 **(2009)** 2701**.**

19- Batch and hydrodynamic monitoring of vitamin C using novel periodate selective sensors based on a newly synthesized Ni(II)-Schiff bases complexes as a neutral receptors, Ayman A. Abd El-Aziz, **Ayman H. Kamel**, *Talanta*, 80 (**2010**) 1356.

20- Automatic potentiometric system based on periodate polymeric membrane sensors for the assessment of ascorbic acid in flavored waters**,** J. Rafaela L. Guerreiro, **Ayman H. Kamel**, M. Goreti F. Sales, *Food Chemistry*, 120 (**2010**) 934.

21- Man-tailored biomimetic sensor of molecularly imprinted materials for the potentiometric measurement of oxytetracycline, Felismina T. C. Moreira, **Ayman H. Kamel,** Joana R. L.Guerreiro, M. Goreti F.Sales, *Biosens.&Bioelect.,26 (***2010***)*

566.

22- Response characteristics of Copper-selective polymer membrane electrodes based on a newly synthesized macrocylcic calix[4]arene derivative as a neutral carrier ionophore, *Electroanalysis* **,** 22 **(2010)** 2453. **Ayman H. Kamel**, Wagiha H. Mahmoud, Marwa S. Mostafa.

23- New Potentiometric Sensors based on two Competitive Recognition Sites for Determining Tetracycline Residues Using Flow-Through System, *Procedia Engineering*, 5 **(2010)** 1200. Felismina T. C. Moreira, **Ayman H. Kamel**, J. Rafaela L. Guerreiro, Vera L. O. Azevedo, M. Goreti F. Sales.

24- New potentiometric sensors for the determination of tetracycline in biological samples: Batch and flow mode operations, *Analytical Methods* 2 **(2010)** 2039. Felismina T. C. Moreira, J. Rafaela L. Guerreiro, Vera L. O. Azevedo, **Ayman H. Kamel**, M. Goreti F. Sales.

25- Biomimetic ciprofloxacin sensors made of molecularly imprinted network receptors for potential measurements, *Analytical Methods* 3 (**2011**) 957, **Ayman H. Kamel**, Wagiha H. Mahmoud, Marwa S. Mostafa.

26- Molecularly-imprinted materials for potentiometric transduction:Application to antibiotic enrofloxacin, *Anal. Lett.* 44(12) (**2011**) 2107, **Ayman H. Kamel**, Felismina T. C. Moreira, M. Goreti F. Sales.

27- A solid binding matrix/ mimic receptor-based sensor system for trace level determination of iron using potential measurements, *Int. J. Electrochem.* volume **2011, 1-10**. **Ayman H. Kamel**, Felismina T. C. Moreira, M. Goreti F. Sales.

28- Potentiometric System for Doxycycline Antibiotic Using a Molecularly Imprinted Polymer as an Artificial Recognition Element, *Sensor letters*, 9 (**2011**) 1654. **Ayman H. Kamel**, Felismina T. C. Moreira, M. Goreti F. Sales.

29- Mimicking receptor for cyanide based on ion imprinting and their applications in potential transductions, **(2012**, 24, No. 6, 1409 – 1415**,** *Electroanalysis*), Hesham S. M. Abd-Rabboh, **Ayman H. Kamel**.

30- Flow through potentiometric sensors based on molecularly imprinted polymers for selective monitoring of mepiquat residue, a quaternary ammonium herbicide, (**2012**, 4, 3007**,** *Anal. Meth.*) **Ayman H. Kamel**, Tamer Y. Soror, Fahd M. Al-

Romian.

31- New Potentiometric Sensors Based on Selective Recognition Sites for Determination of Ephedrine in Some Pharmaceuticals and Biological Fluids, (**2013**, 103, 330 *Talanta*)**,** Saad S. M. Hassan**, Ayman H. Kamel**, Heba Abd El-Naby.

32- Flow through potentiometric detection based on camylofin–selective polymer membrane sensors and its application to pharmaceutical formulations, [2 (**2013**) 88-93), *Eur. Chem. Bull.],* **Ayman H. Kamel**, Wagiha H. Mahmoud, Marwa S. Mostafa.

33- Man-tailored biomimetic sensors of molecularly imprinted polymers for selective recognition of some phenylurea herbicides and their application to potentiometric transduction, [*Int. J. Chem. & Mat. Sci.*, 1 (**2013**) 1-12], **Ayman H. Kamel**, Fahad M. Al Romian,

34- Kinetic assessment of selenium based on novel potentiometric picrate membrane sensors, (25 (**2013**) 1-9, *Electroanalysis*), Saad S. M. Hassan, Ibrahim H. A. Badr, **Ayman H. Kamel**, and Mona S. Mohamed.

35- Membrane sensors for static and hydrodynamic potentiometric assessment of cetirizine drug in pharmaceutical formulations, (**2013***, 2(5),* 232-237), *Eur. Chem. Bull.)* Saad S. M. Hassan**, Ayman H. Kamel**, Heba Abd El-Naby.

36- Miniaturized potentiometric sensors based on PbS nanoparticles and a newly synthesized ionophore and their application for static and hydrodynamic monitoring of lead as a hazardous waste, **(***Eur. Chem. Bull.,* **2013***, 2(9),* 687-693) **Ayman H. Kamel,** Fahad M. Al Romian, Abdel-Galil E. Amr**.**

37- Preparation and Characterization of Innovative Selective Imprinted Polymers for the Removal of Hazardous Mercury Compounds from Aqueous Solution, *Life Sci. J.*, **2013**; 10 (4) 1654. **Ayman H. Kamel**.

38- Novel Potentiometric Sensors for Batch and Continuous Monitoring of Alizarin Red S Dye and Their Application for Aluminum Assessment*, J. Chin. Chem. Soc.* 61 (**2014**) 295–302, Saad S. M. Hassan**, Ayman H. Kamel**, Heba Abd El-Naby.

39- New Plastic Membrane Sensors for Selective Determination of Pyridine as a Hazardous Pollutant: Validation and Applications to Flow Injection Analysis, *Int.*

J. Electrochem. Sci. 9 (**2014**) 1663-1677, **Ayman H. Kamel**, Magdi E. Khalifa, Fadl A. Elgendy, S. A. Abd El-Maksoud,

40- MIP-Based Biomimetic Sensors for Static and Hydrodynamic Potentiometric Transduction of Sitagliptin in Biological fluids *Int. J. Electrochem. Sci.* 9 **(2014)** 4361 – 4373, **Ayman H. Kamel***,* Hoda R. Galal.

41- Fabrication of novel sensors based on a newly synthesized macrocyclic pyridine derivatives ionophores for potentiometric monitoring of copper", *Analytical Methods***, 2014**,**6**, 7814 -7822, **Ayman H. Kamel**, Magdi E. Khalifa, Fadl A. Elgendy, S. A. Abd El-Maksoud.

42- Novel Planar Chip Biosensors for Potentiometric Immunoassay of Acid Phosphatase Activity Based on the Use of Ion Association Complexes as Novel Electroactive Materials, **Ayman H. Kamel***,* Hoda R. Galal, *Int. J. Electrochem. Sci.*, 9 (**2014**) 5776-5787.

43- Cloud point extraction for pre-Concentration and determination of palladium in water and food samples by visual and flame atomic absorption spectrometry**,** F. A. Elgendy, M. E. Khalifa, **Ayman H. Kamel**, *Eur. Chem. Bull.,* **2015***, 4(1),* 60-66.

44- Potential transducers based man-tailored biomimetic sensors for selective recognition of dextromethorphan as an antitussive drug, E.H. El-Naby, **Ayman H. Kamel**, Mat. Sci. Eng. C 54 (**2015**) 217-224.

45- New potentiometric transducer based on a Mn(II) [2-formylquinoline thiosemicarbazone] complex for static and hydrodynamic assessment of azides**,** **Ayman H. Kamel**, *Talanta* 144 (**2015**) 1085-1090.

46- Assessment of pesticides in environmental samples using voltammetric molecular imprinted based sensors: a review (2006-2015), **Ayman. H. Kamel**, Hend. Z. Yamani, Nardine Safwat, Hoda R. Galal, *Eur. Chem. Bull.,* **2016***, 5(2),* 69-76.

47- Anion recognition through copper (II) [dipeptide derivative] complex: A poly (vinyl chloride) based sensor for iodide ion determination", **Ayman H. Kamel**, M. E. Khalifa, S. A. Abd El-Maksoud, F. A. Elgendy, *Eur. Chem. Bull.,* **2016***, 5(9),* 368-375.

48- Solid contact biosensor based on man-tailored polymers for acetylcholine detection: application to acetycholinesterase assay, **Ayman H. Kamel** , Fatma A.

Al Hamid, Tamer Y. Soror, Hoda R. Galal, Fadl A. El Gendy, , *Eur. Chem. Bull.,* **2016***, 5(7),* 266-273.

49- Solid Contact Potentiometric Sensors Based on Host-Tailored Molecularly Imprinted Polymers for Creatine Assessment, **Ayman H. Kamel**, Abeer M. E. Hassan*, Int. J. Electrochem. Sci.,* 11 (**2016**) 8938-8949

50- Automatic potentiometric system for quantification of three imidazole derivatives based on new polymeric PVC membrane sensors, **Ayman H. Kamel** , Amina A. A. Argig, *Ionics* 23 (2017) 2201-2211.

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