

Kingdom of Saudi Arabia

Ministry of Education

Taibah University

College of Pharmacy



Name	Mahmoud Ahmed Omar Hassan	
Specialization	Pharmacognosy and Pharmaceutical chemistry	
Current Position	Professor	
Contact email (Official)	maohassan@taibahu.edu.sa	
Alternate email	momar71g@yahoo.com	
Academic Qualifications	2000-2005	Doctor of philosophy (PhD) in pharmaceutical sciences (Pharmaceutical Analytical Chemistry), College of Pharmacy, Minia University, Egypt
	1995-1999	Master's degree (MSC) in pharmaceutical sciences (Pharmaceutical Analytical Chemistry), College of Pharmacy, Assiut University, Egypt.
	1989-1994	Bachelor's degree in pharmaceutical sciences , college of Pharmacy, Al-Azhar University, Egypt.
Teaching Experience	<p>Demonstrator In Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Al-Azhar University at Assiut from May 1995 to July 1999.</p> <p>Associate lecturer Azhar University at Assiut since July 1999 to Dec. 1999.</p> <p>Associate lecturer In department of Analytical chemistry, faculty of pharmacy, Minia University, Minia, Egypt, since Dec. 1999 until Jun 2005.</p> <p>Assistant Professor In Analytical chemistry from Jun 2005 until July 2010.</p> <p>Associate professor In Analytical chemistry from July 2010 till 2015.</p> <p>Professor In Analytical chemistry from Sep. 2015 till 2019</p> <p>Professor in Pharmacognosy and pharmaceutical chemistry department, college of pharmacy, Taibah university. 2019 till now</p>	

Courses Taught and Teaching in TU	<p>College of Pharmacy, Taibah University, Madinah, Saudi Arabia</p> <ul style="list-style-type: none"> • PPC 216: Pharmaceutical Analytical chemistry I • PPC 318: Pharmaceutical Analytical chemistry II • PPC 419: Pharmaceutical Analytical chemistry II • PPT 539: Pharmaceutical Technology III • PPC 513: Biological Analysis
Research Interests	<ul style="list-style-type: none"> • Create New Analytical Methods • Determination of Drugs In pure forms, different pharmaceutical formulations and biological fluids • Application of spectrophotometry • Application of spectrofluorimetry • Application of voltammetry • Application of chromatography • Quality in pharmacy analysis

Publications

1. Ahmed M Shehata, Mahmoud A Omar, Islam M Mostafa, Hossein M Elbadawy, Mohammed Almaghrabi, Abobakr A Mohamed, Fine-tuning Fluorescence of Amlodipine Adopting on Blocking of Photoinduced Electron Transfer (PET): Application in Human Plasma. *J Fluoresc.* 2024 May 22. doi: 10.1007/s10895-024-03761-2. Online ahead of print.
2. Mahmoud A Abdelmajed, Khalid M Badr El-Din, Tamer Z Attia, Mohamed Oraby, Mahmoud A Omar, Condensation methodology for quantification of Polymyxin B fluorimetrically: application to pharmaceutical formulations and greenness assessment. *BMC Chem.* 29;18(1), 2024:105.
3. Islam M Mostafa, Mahmoud A Omar, Mohamed Ahmed Elsayed , Mohammed Almaghrabi , Abobakr A Mohamed , Green and inventive fluorescence approach for levodropnopizine determination in human plasma. *Spectrochim Acta A Mol Biomol Spectrosc.* 5:312, 2024, 124060.
4. Abobakr A. Mohamed, Mahmoud A. Omar, Mohamed Ahmed Elsayed, Islam M. Mostafa, Suppression of photo-induced electron transfer of alcaftadine for its photoluminescence detection in aqueous humor. *Microchemical Journal,* 199,2024, 110056.
5. Mahmoud A. Omar, Mahmoud A.H. Moustafa, Mohammed Almaghrabi, Ahmed K.B. Aljohani, Tamer Z. Attia, Validated spectrofluorimetric method for determination of cyproheptadine in pharmaceutical formulation and human plasma. Application to content uniformity test. *Results in Chemistry,* 7, 2024, 101341
6. Mahmoud A Omar, Abobakr A Mohamed, Yaser Alahmadi, Ahmed M Shehata, Hossein M Elbadawy, Islam M Mostafa, Improving fluorescence emission of cyproheptadine by hindering its intramolecular photoinduced electron transfer (PET): Application to content uniformity testing and human plasma. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy,* 308, 2024, 123725
7. Hesham Salem, Mahmoud A Omar, Dina Z Mazen, Deena A M Nour El-Deen, Simultaneous Determination of Ceftazidime in Three Different Pharmaceutical Preparations Combined with Either Tazobactam, Tobramycin or Sulbactam by

	HPTLC-Spectrodensitometric Method. <i>Journal of Chromatographic Science</i> , 62,1, 2024, 35–43
	8. Abobakr A Mohamed, Mahmoud A Omar, Sayed M Derayea, Mohamed Ahmed Elsayed, Islam M Mostafa, <u>Photoluminescence detection of nadifloxacin: Adopts switching off photoinduced electron transfer (PET)</u> . <i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i> , 5, 2024, 123451
	9. SM Derayea, YF Hassan, MA Hammad, YM Alahmadi, MA Omar, E Samir <u>Feasible spectrofluorimetric approach for the ultrasensitive determination of lomefloxacin based on synergistic effects of micellization and metal complexation</u> . <i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i> , 2023, 292, 122399
	10. Tamer Z. Attia, Mahmoud A. Abdelmajed, Mahmoud A. Omar, Sultan S. Al Thagfan and Khalid M. Badr El-Din, New validated spectrofluorimetric protocol for colistin assay through condensation with 2,2-dihydroxyindan-1,3-dione: application to content uniformity testing,. RSC Adv. 2022; 12(52): 33559–33566.
	11. Hany A Batakoushy, Mahmoud A Omar, Hytham M Ahmed, Mohamed A Abdel Hamid and Mahmoud M Sebaiy, Pharmacology and Analytical Chemistry Profile of Dapagliflozin, Empagliflozin and Saxagliptin. <i>Pharmaceutics and Pharmacology Research</i> , 2022, 2(5), 548.
	12. Alshymaa A. Aly, Tadeusz Górecki , Mahmoud A. Omar, Green approaches to comprehensive two-dimensional liquid chromatography (LC × LC). <i>Journal of Chromatography Open</i> . 2, 2022, 100046
	13. Noha S Abbas , Yahya Abduh Salim Mohamed , Sayed M Derayea , Mahmoud A Omar , Gamal A Saleh, Micellar Thin Layer Chromatography and Computer-Aided Analysis of Empagliflozin, Linagliptin and Metformin HCl Ternary Mixture, <i>J Chromatogr Sci</i> . 2022 ;60(10):946-952
	14. Mahmoud A. Omar, Walid E. Eltoukhi, Osama H Abdeltageed, Sameh Ahmed and Mohamed A. Hammad, Novel Fluorimetric Procedure for

Estimation of Sumatriptan in its Tablet Formulation and in Human Plasma; Implementation to Content Symmetry Testing. J. Current Chemical and Pharmaceutical Sciences, 2022, 12 (8), 1-8

15. NS Abbas, YAS Mohamed, SM Deraya, MA Omar, GA Saleh Micellar Thin Layer Chromatography and Computer-Aided Analysis of Empagliflozin, Linagliptin and Metformin HCl Ternary MixtureJournal of Chromatographic Science,2022, 60 (10), 946-952
16. DA Nour-Eldeen, MA Omar, SK Mohamed, AA Mohamed Micelle-enhanced spectrofluorimetric method for the rapid determination of bronchodilator terbutaline and its prodrug bambuterol: application for content uniformity test Luminescence 2022,37 (7), 1057-1063
17. KM Badr El-Din, MA Abdelmajed, MA Omar, TZ Attia, Salvage Parenteral Antibiotics for Multidrug-Resistant (MDR) Gram-Negative Bacteria; A Fluorescamine-Based Technique for Ultrasensitive Spectrofluorimetric Measurement of Polymyxins; Human Plasma Application. Luminescence 2022, 37 (6), 971-979
18. AM Haredy, SM Deraya, AA Gahlan, MA Omar, GA Saleh Arabian Journal of Chemistry 2022, 15 (3), 103663
19. EF Anwer, DAMN El-Deen, SM Deraya, MA Omar, Benzofurazan -based fluorophore for the spectrofluorimetric determination of 6-Aminocaproic acid: Application to spiked human plasma and urine. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 2022, 268, 120723
20. NA Abdallah, YM Alahmadi, R Bafail, MA Omar, Multi-walled carbon nanotubes/polyaniline covalently attached 18-crown-6-ether as a polymeric material for the potentiometric determination of delafloxacin Journal of Applied Electrochemistry, 2022,1-13
21. TZ Attia, MA Abdelmajed, MA Omar, KMB El-Din, Selective Spectrofluorimetric Protocol for Determination of Commonly Used Gram-negative Bactericidal Drug in Combined Pharmaceutical Dosage Forms and Human Plasma. Journal of Fluorescence,2022, 1-10

22. Ahmed M. Haredy, Sayed M. Derayea, Ahmed A. Gahlan, Mahmoud A. Omar, Gamal A. Saleh, Graphene oxide modified glassy carbon electrode for determination of linagliptin in dosage form, biological fluids, and rats' feces using square wave voltammetry. Arabian Journal of Chemistry, 2022, 15 (3), 103663
23. Tamer Z Attia , Mahmoud A Omar, Deena A M Nour El-Deen, Asmaa Mohamed Abbas, Abobakr A Mohamed , A novel spectrofluorimetric method for determination of lomefloxacin adopting on zinc(II) chelation strategy: Application in human plasma. Luminescence, 2022, 37(2):255-262.
24. Tamer Z Attia, Huda H Saied, Deena A M Nour El-Deen, Yaser M Alahmadi, Mahmoud A Omar , Sensitivity improvement for spectrofluorimetric determination of commonly used antifungal drug 'nystatin': application for oral suspension. Luminescence, 2022, 37(1):134-140.
25. Abobakr A. Mohamed, Sayed M. Derayea, Mahmoud A. Omar, A new fluorescence method for specific determination of tedizolid in real human plasma: Based on twisted intramolecular charge transfer (TICT) blocking. Journal of Molecular Liquids. 2021, 337, 1, 116593
26. Ebtehal F. Anwer, Deena A.M. Nour El-Deen, Mahmoud A. Omar, An innovational validated spectrofluorimetric technique for determination of 6-Aminocaproic acid in pure form and its tablet: Application to spiked human plasma and urine. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 2021, 261, 119984.
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28. Ebtehal F Anwer, Deena A M Nour El-Deen , Mahmoud A Omar, Design and strategy for spectrofluorimetric determination of tranexamic acid in its

authentic form and pharmaceutical preparations: application to spiked human plasma. Luminescence, 2021, 36(5):1327-1334.

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32. Noha S. Abbas a, Sayed M. Deraya b, Mahmoud A. Omar b c, Gamal A. Saleh, Innovative TLC-densitometric method with fluorescent detection for simultaneous determination of ternary anti-diabetic mixture in pharmaceutical formulations and human plasma. Microchemical Journal, 2021, 165, 106131.
33. Mohamed A Abdel-Lateef, Mahmoud A Omar, Ramadan Ali, Albandary Almahri, Sayed M Deraya, Innovative Thin-Layer Chromatography/Fluorescence Detection Approach for Sensitive and Specific Determination of Ledipasvir in Rats' Feces and Pharmaceutical Dosage Form. J Chromatogr Sci. 2021, 21;59(7):634-641.
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36. Sayed Mohamed Deraya, Mahmoud Ahmed Omar, Mohamed Abdelkhalek Hammad, Yasser Farag Hassan, Khalid M. Badr El-Din, Augmented spectrofluorimetric determination of certain fluoroquinolones via micellar – Metal complex connection: Application to pharmaceuticals and biological fluids. *Microchemical Journal.*, 2021, 160, , 105717.
37. Mahmoud A Omar, Ebtehal F Anwer, Deena A M Nour El-Deen, Derivatization of tranexamic acid for its rapid spectrofluorimetric determination in pure form and pharmaceutical formulations: Application in human plasma. *Spectrochim Acta A Mol Biomol Spectrosc.* 2021, 15:247:119111
38. Ahmed A Gahlan, Ahmed M Haredy, Sayed M Deraya, Mahmoud A Omar, Gamal A Saleh, A Glassy Carbon Electrode for the Determination of Linagliptin, an Antidiabetic Drug in Pure Form, Tablets and Some Biological Fluids by Adsorptive Stripping Voltammetry. *Curr Pharm.* 2021; 27(20):2415-2424.
39. Noha S Abbas, Sayed M Deraya, Mahmoud A Omar, Gamal A Saleh, TLC-spectrodensitometric method for simultaneous determination of dapagliflozin and rosuvastatin in rabbit plasma: stability indicating assay and kinetic studies. *RSC Adv.* 2020;10(67):40795-40805.
40. Islam M Mostafa, Mahmoud A Omar, Dalia M Nagy, Sayed M Deraya, Use of Hantzsch reaction for quantitation of milnacipran as a magic treatment for fibromyalgia syndrome in human plasma and urine. *Luminescence*. 2021; 36(1):73-78.

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44. Sayed M Derayea, Ahmed A Gahlan, Mahmoud A Omar, Gamal A Saleh, Ahmed M Haredy, Spectrofluorometric determination of alogliptin an antidiabetic drug in pure and tablet form using fluorescamine, a fluorogenic agent: application to content uniformity test. *Luminescence*. 2020 ;35(7):1028-1035
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50. Sayed M Deraya, Amal B Ahmed , Mahmoud A Omar , Nada S Abdelwahab, Maha M Abdelrahman, The convenient use of fluorescamine for spectrofluorimetric quantitation of pramipexole in pure form and pharmaceutical formulation; application to content uniformity testing. *Spectrochim Acta A Mol Biomol Spectrosc.* 2020, 238:118414.
51. Ahmed A Abu-Hassan, Mahmoud A Omar, Sayed M Deraya, New approach for stability study and determination of fluvoxamine in raw materials and pharmaceuticals through condensation with 2,2-dihydroxyindane-1,3-dione. *Luminescence.* 2020 ;35(6):934-940.
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53. Mahmoud A Omar, Hytham M Ahmed, Hany A Batakoushy, Mohamed A Abdel Hamid, New spectrofluorimetric analysis of empagliflozin in its tablets

and human plasma using two level full factorial design. *Spectrochim Acta A Mol Biomol Spectrosc.* 2020;235:118307.

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55. Sayed M. Deraya, Amal B. Ahmed, Nada S. Abdelwahab, Maha M. Abdelrahman, Mahmoud A. Omar, Innovative spectrofluorometric protocol based on micro-environment improvement for determination of Quetiapine in dosage forms and rat plasma. *Spectrochim Acta A Mol Biomol Spectrosc.* 2020;233: 118196.
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dapagliflozin: Application to stability study and pharmaceutical preparation. Luminescence. 2020; 35(2):260-265.

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pharmaceutical formulations, Journal of Molecular Structure Volume 1185, 5 June 2019, Pages 92-98 <https://doi.org/10.1016/j.molstruc.2019.02.090>

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powders and different pharmaceutical formulations, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 192 (2018) 108–116

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Presentations and Abstracts	<p>1. Egyptian pharmaceutical society XXXI Conference of pharmaceutical sciences, Cairo, Egypt, Dec., 2008.</p> <p>2. Conference of quality assurance and accreditation Cairo, Dec., 23, 2008.</p>
Memberships	<p>1-Editor -in- chief for journal of advanced biomedical and pharmaceutical science <u>http://jabps.journals.ekb.eg/</u></p> <p>2- Editor -in- chief for Journal of Modern Research <u>https://jmr.journals.ekb.eg/</u></p>

Workshops / Seminars attended

3. *Quality Coordinator, Faculty of Pharmacy, taibah university.*
4. *Member of the Curriculum Committee, Faculty of Pharmacy, taibah university.*
5. *Member of the Control Committee, Faculty of Pharmacy, taibah university.*
6. *Examination Committee Member, Faculty of Pharmacy, taibah university.*
7. *Member of many different department committees, Faculty of Pharmacy, taibah university.*
8. *Assiut Univ. 5th International Pharm. Sci. Conference, Faculty of Pharmacy, Assiut, Egypt, March, 7-8, 2006.*
9. *Egyptian pharmaceutical society XXX Conference of pharmaceutical sciences, Cairo, Egypt, Dec., 19-21, 2006.*
10. *Al-Azhar 4th International Conference for Pharmaceutical and biological Sciences, Cairo, Feb., 13-15, 2006.*
11. *Assiut Univ. 6th International Pharm. Sci. Conference, Faculty of Pharmacy, Assiut, Egypt, March, 12-13, 2006.*
12. *Egyptian pharmaceutical society XXXI Conference of pharmaceutical sciences, Cairo, Egypt, Dec., 2008.*
13. *Conference of quality assurance and accreditation Cairo, Dec., 23, 2008.*
14. *International computer Driving licence (ICDL), July 2005.*

- 15. A part-time lecturer at Nahda University (NUB) in Bani swaife in the courses of Analytical chemistry, 2008.**
- 16. The winner for the "SamaSina" prize for the best research paper at Minia University 2006/2007.**
- 10. Post doctor in Osaka university, Osaka, Japan, Jun 2009- March 2010.**
- 11- A member of editorial board of global journal of analytical chemistry**
[\(www.simplex-academic-publishers.com\)](http://www.simplex-academic-publishers.com), Feb. 2010.
- 12- Egyptian pharmaceutical society XXXII Conference of pharmaceutical sciences, Cairo, Egypt, Dec., 20011.**
- 13- Assiut Univ. 9th International Pharm. Sci. Conference, Faculty of Pharmacy, Assiut, Egypt, March, 12-13, 2014.**
- 13- Attend several meetings for Quality assurance and accreditation**
- 14- Clinical Pharmacy Programme Course coordinator from September 2008 June 2011.**
- 15- External reviewer for some publications of Talanta and Spectrochimica Acta.**
- 16- Head of analytical chemistry department, Faculty of Pharmacy, Minia University, from 2010 till 2013.**
- 17- Vice dean for Environmental Affairs and Community Service from 2013 till now.**
- 18- Member of Faculty of Pharmacy consultant committee, faculty of Pharmacy, Minia University.**

- 19- Member of the Faculty of Pharmacy Committee,
Minia University**
- 20- Participate in the supervision of theses within the
department and outside.**
- 21- External referee for master thesis, faculty of
Pharmacy, Cairo University and Babi-swaif University.**
- 22- Internal referee for several master and Ph.D thesis, faculty
of Pharmacy,**
Minia University.
- 23- . Member of the Advisory Board of the Faculty of
Pharmacy - Minia**
University.
- 24- Member of strategic plan, Faculty of Pharmacy,
Minia University**
- 25- Participate in oral examinations in various Egyptian
universities.**
- 26- Got the Minia University prize for international
scientific publication.**
- 27- Follow up visitor for one of the Ph.D. students, Faculty of
Pharmacy,**
Osaka University, Japan.
- 28- Got Advanced Word, Advanced Excel and Advanced
PowerPoint courses.**
- 29- Participating in the modification and development of
regulations for the**
Faculty of Pharmacy - Minia University.

Awards	<p>1- Top 2% of researchers worldwide, 2023.</p> <p>2- Honoring of the Minia Governor for obtaining the Minia University prize for International scientific publication.</p> <p>3- Minia University Encouragement Award 2016</p> <p>4- Faculty of pharmacy, Taibah university Encouragement Award 2021 (Abundance of research).</p>
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