## **Nesma Mahmoud Mohammed Fahmy**

## E-mail: nesma\_fahmy@acu.edu.eg

	-Ph.D. degree: "Analytical study on some antifungal drugs in formulation", Faculty of
Education	Pharmacy-Cairo University, August 2018.
	-Ms.c. degree: "Analytical study on some local anaesthetic drugs in formulation",
	Faculty of Pharmacy-Cairo University - 2015.
	-Faculty: Bachelor's degree of Pharmacy and Pharmaceutical Sciences, Faculty of
	Pharmacy - Cairo University - Cumulative grade Excellent with Honors, June 2009.
	-School: Education Home Language School- Dokki, Giza, Egypt- General secondary
	with grade 98.9 %, June 2004.
	- Working as a lecturer in the Pharmaceutical Chemistry Department-Ahram Canadian
Work	University (September 2018-ongoing)
experience	- Working as a A.L. in the Pharmaceutical Chemistry Department-Ahram Canadian
	University (2015- August 2018)
	-Working as a T.A. in the Pharmaceutical Chemistry Department-Ahram Canadian
	University (October 2009-2015)
Teaching	- Instructor of Pharmaceutical Analytical Chemistry I, Pharmaceutical Analytical
experience	Chemistry II, Pharmaceutical Analytical Chemistry III, Analysis of Food and cosmetics,
	Instrumental Analysis, and Drug Quality Control.

- Member in the pharmaceutical consultation and services center, Fall 2022-ongoing - Member in the Quality Control Unit, Spring 2022-ongoing - Co-ordinator of Quality culture dissemination committee, Spring 2022-ongoing. - Member in preparing quality standards file in the quality assurance unit, ACU, spring 2022-ongoing. - Member of examination control unit for level 1 pharmacy students for the academic year 2021/2022. - Coordinator for the Pharmaceutical Chemistry Department in the quality assurance unit, ACU, Fall 2018-Fall 2021. Other - Member of the complaints and schedules committee in the examination control unit, **Experience** ACU, Fall 2018-Spring 2020. - Member in preparing Scientific Research file in the quality assurance unit, ACU, Fall 2018. - Member of the examination control unit for level 1 pharmacy students, ACU, Spring 2017 and Fall 2018. - Member in questionnaire analysis committee in the quality assurance unit, ACU, spring 2017. - Member in preparing Organizational Structure file in the quality assurance unit, ACU, spring 2017. - GCP and EDA regulations, December 2022, ACU. Trainings and - IR and Raman Spectroscopy, December 2022, ACU. -International Publishing, 7<sup>th</sup> and 8<sup>th</sup> of November 2022, FLDC. Workshops - Effective Examination and Assessment of students, October 2022, FLDC. - Blended learning, October 2022, FLDC. -Critical thinking, 9<sup>th</sup> and 10<sup>th</sup> October 2022, FLDC. - Leadership skills, 5<sup>th</sup> and 6<sup>th</sup> October 2022, FLDC. - Mobile applications, 5<sup>th</sup> and 6<sup>th</sup> September 2022, FLDC. - Using design expert software for analytical method validation, 28<sup>th</sup> and 29<sup>th</sup> of August 2022, 3rd international conference of Pharmaceutical sciences-MU-PHARM 2022- at faculty of Pharmacy, Mansoura University. - NMR technologies in drug discovery, 29<sup>th</sup> August, 3<sup>rd</sup> international conference of

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	Pharmaceutical sciences-MU-PHARM 2022– at faculty of Pharmacy, Mansoura
	University.
	- NMR spectroscopy from scratch, 27 <sup>th</sup> August, 3 <sup>rd</sup> international conference of
	Pharmaceutical sciences-MU-PHARM 2022- at faculty of Pharmacy, Mansoura
	University.
	-Teaching and learning strategies, 23 <sup>rd</sup> and 24 <sup>th</sup> February 2022, NAQAA.
	- Competency based NARS, 11 October 2021, NAQAA.
	- Research article from hypothesis to publication, April 2021, ACU.
	- Time management workshop, September 2020, ACU.
	- Emotional intelligence, March 2020, ACU.
	- Patent system and copyrights in the pharmaceutical field, ACU, February 2020
	- Hands on Microfabrication and disposable copper based sensor for anodic stripping
	voltametry workshop, March 2019, ACU.
	- LC-Mass for the determination of biologicals workshop, February 2019, ACU.
	- Road to accreditation: Pharmacy NARS and program ILOs, March, 2 <sup>nd</sup> -3 <sup>rd</sup> 2014,
	ACU.
	- Road to accreditation: how to write self study report workshop, February 16 <sup>th</sup> -17 <sup>th</sup>
	2014, ACU.
Workshops	- Analytical method validation for the QC, QA, and R&D departments of October
(instructor)	Pharma for Pharmaceuticals, 15 <sup>th</sup> September 2022.
	- Graphical representation of concentration as a novel spectrophotometric technique for
	the determination of components in formulation Workshop, February 2019, ACU.
	- Nesma M Fahmy, Hind A Abdullatif, Adel M Michael, Miriam F Ayad, Yossra
Publications	A Trabik, "Smart Eco-Friendly Spectrophotometric Methods Resolving Highly
	Overlapping Spectra: Application to Veterinary Antibiotic Injections", Journal
	of AOAC International, Volume 105, Issue 5, 2022, Pages 1234–1246
	- Nesma M. Fahmy, Khaled Hesham, Shereen M. Tawakkol, Lobna AbdelAziz,
	Mona H. Abdelrahman. "Three Different Approaches Based on Derivative Ratio
	Spectra for Spectrophotometric Resolution of Quaternary Mixture in Semisolid
	Dosage Form". Journal of AOAC International, 104(5), <b>2021</b> , 1223–1231.

- Nesma M. Fahmy, Khaled Hesham, Shereen M. Tawakkol, Lobna AbdelAziz, Mona H. Abdelrahman, Mathematical filtration of quaternary mixture to the zero order spectra of its individual components, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 261 (2021) 119999.
- Nesma M. Fahmy, Adel M.Mikhael, Comparative Study For The Assay of Plant Derived Chemicals in Pharmaceutical Formulation Using Methods Dependent on Factorized Spectra, AOAC, 2021, Volume 104, Issue 4, July-August 2021, Pages 968–974.
- Adel M.Mikhael, Ahmed Mohammed, Youssef Abd Al Aziz, Nesma M.
   Fahmy, A Comparative Study Between Conventional ICP-OES and The Innovative PLS Model-Assisted ICP-OES for The Assay of Trace Elements, AOAC, 104(1), 2021, 84-90.
- Hayam M. Lotfy, Nesma M. Fahmy, Coupling of liquid-liquid extraction and mathematical filtration techniques for the separation and quantification of five components in semisolid dosage form with severely overlapped spectra.
   Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, (2020) 24:118299.
- Papers derived from the PhD thesis under the supervision of Professor Dr Hayam M.

  Lotfy, Professor Dr Shereen M. Tawakkol, Professor Dr Yasmin M. Fayez, and

  Professor Dr Mostafa A. Shehata":
- 1. Coupling of Physical and Chromatographic Separation for Analyzing Cream Containing Miconazole, Mometasone Furoate and Gentamicin Sulphate, **Journal of Chromatographic Science**, 2022.
- 2. Stability-Indicating Chromatographic Methods for the Analysis of Clotrimazole in Pharmaceutical Formulation with Dexamethasone Acetate and an Application of the

HPLC Method to an Acidic Degradation of Clotrimazole -Kinetic Study, Chromatographic Science, DOI:10.1093/chromsci/bmz024, volume 57, issue 6, July 2019, pages 518-527.

- 3. Spectrophotometric Resolution of the Severely Overlapped Spectra of Clotrimazole with Dexamethasone in Cream Dosage Form by Mathematical Manipulation Steps, Spectrocimica Acta part A, May 2018, Volume:202, Pages:115-122.
- 4. Comparative study of the efficiency of computed univariate and multivariate methods for the estimation of the binary mixture of clotrimazole and dexamethasone using two different spectral regions, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, January (2018), Accepted manuscript available online: 9-JAN-2018, DOI information: 10.1016/j.saa.2018.01.009, (2018) pages: 126–135.
- Evaluation of Graphical and Statistical Representation of Analytical Signals Of Spectrophotometric Methods, Spectrochimica Acta Part A: Molecular and Biomolecular, Spectroscopy, April (2017)
   DOI:10.1016/j.saa.2017.04.058, Volume 184 pages 61–70.
- 6. Spectrophotometric Determination For the Binary Mixture of Clotrimazole and Dexamethasone in Pharmaceutical Dosage Form, **Analytical Chemistry Letters**, January (2017), volume (7), Issue 1, pages 30-42,

<u>Papers derived from the M.Sc. thesis under the supervision of Professor Dr Hayam M.</u> Lotfy, Professor Dr Shereen M. Tawakkol, and Professor Dr Mostafa A. Shehata":

 Validation and application of chemometrics-assisted spectrophotometry and liquid chromatography for simultaneous determination of the ternary mixture of lidocaine hydrochloride, Fluocortolone pivalate, and Chlorquinaldol, Analytical Chemistry Letters, (2016), Volume 6:3, Pages 205-213,

- 2. A comparative study of novel spectrophotometric resolution techniques applied for pharmaceutical mixtures with partially or severely overlapped spectra, **Spectrochimica Acta, Part A**, (2015), Volume 136, Pages 937-952.
- Stability Indicating Chromatographic methods for the Determination of Pharmaceutical Dosage Forms Containing Calcium dobesilate in the presence of its interfering substances, International Journal of Pharmacy and Pharmaceutical Science, Vol 6 Issue 11, Dec (2014), pages 123-130.
- 4. Successive UV-Spectroscopic Resolution as a novel technique for the Analysis of Ternary Mixtures of Pharmaceuticals. **Spectrochimica Acta Part A**, (2014), Volume 121, Pages 313-323.
- Validated Stability Indicating Spectrophotometric Methods for the Determination of Lidocaine Hydrochloride, Calcium Dobesilate, and Dexamethasone Acetate in their Dosage Forms, Analytical Chemistry Letters, (2013), Volume 3, Issue 3, Pages 208-225.

## **Conferences**

- 1. Coupling of physical and chromatographic separation for analyzing cream containing miconazole, mometasone furoate, and gentamicin sulphate, The second ACU international conference (IPCACU 2018), November 14-15<sup>th</sup>, 2018, poster.
- Stability-Indicating HPLC and HPTLC Methods for Analysis of Clotrimazole in Pharmaceutical Formulation with Dexamethasone Acetate and an Application to Acidic Degradation Kinetic Study, 8th international Scientific Conference of Faculty of Pharmacy Cairo University, 22 April 2017, poster.
- 3. Spectrophotometric Determination of Miconazole and Mometasone Furaoate in mixture, together with Gentamicin Sulphate in Pharmaceutical Dosage Forms, **The first ACU international conference (NTPMR 2016)**, May (2016), **poster.**
- 4. Validated Stability Indicating Spectrophotometric Methods for the Determination of

	Lidocaine Hydrochloride, Calcium Dobesilate, and Dexamethasone Acetate in Their
	Dosage Forms. 4th International Scientific Conference of Faculty of
	Pharmacy, Cairo University, (April 2013), poster.
	- Granted the ideal staff member in the analytical chemistry department for the
Awards	academic year 2021/2022, ACU.
	- Granted best PHD thesis in analytical chemistry department, ACU, for the
	academic year 2018/2019, in the second ACU international conference
	(IPCACU 2018)
	- Granted best poster in the first ACU international conference (NTPMR 2016)

<sup>&</sup>lt; References are Furnished upon Request>