

Curriculum Vitae (CV)

1. Personal Details:

Name	Dr. Marwan Shamseddin Moh'd Shalash
Nationality	Jordanian
Place and Date of Birth	Kuwait; September 11, 1975
Gender	Male
Marital Status	Married
Job Title	Lecturer (<i>Assistant Professor</i>)
Number of Years of Experience	7 Years (Academic University) 12 Years (Pharmaceutical Industry)
E-mail address	Shalashm07@yahoo.com Shalashm07@gmail.com
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Web of Science Researcher ID	KLY-9893-2024
ORCID-ID	0000-0003-4957-3734 https://orcid.org/0000-0003-4957-3734
Scopus Author-ID	37104912100
Home Address	Al-Osra Pharmacy, Army street, Al Zarqa, Jordan.



2. Educations:

- **Ph.D in Analytical Chemistry-Separation;** Universiti Sains Malaysia (USM), April 2017.
Thesis title: *The Development of Green Microextraction Methods for the Determination of Phenolic Acids in Honey and Beverages.*
- **M.Sc. in Analytical Chemistry- Chemical Instrumentation;** Universiti Sains Malaysia (USM), August 2008, with very good average (Grade: 3.13).
Thesis title: *Flow Injection Method for the Determination of Paracetamol in Pharmaceutical Formulation.*
- **B.Sc. in Chemistry;** Mutah University –Al Karak; February 1998, with very good average (Grade: 80.6 %) and with the 1st rank.
- **Ministry of Higher Education and Scientific Research:** Education Credential Assessment from the Jordanian Ministry of Higher Education and Scientific for Bachelor, Master, and Doctorate (Date: *July 24, 2017*)

3. Professional Experiences:

Name of Organization	Position Title	Date Served	
		From	To
Faculty of Pharmacy, Northern Border University (NBU), Kingdom of Saudi Arabia.	<i>Assistant Professor</i> of Analytical Chemistry	15/09/2020	Until now
Faculty of Sciences and Arts, Northern Border University (NBU), Kingdom of Saudi Arabia.	<i>Assistant Professor</i> of Analytical Chemistry	16/10/2017	15/09/2020
School of Chemical Sciences, University Sains Malaysia, Penang, Malaysia, (Professor Bahrudin Saad)	<i>Research Assistant</i> for Master Course (Separation Science)	01/2013	04/2017

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School of Chemical Sciences, University Sains Malaysia, Penang, Malaysia	Teaching assistant for analytical chemistry	01/2010	01/2013
Hikma Pharmaceuticals Company, Amman, Jordan	<ul style="list-style-type: none"> - Quality Unit Senior Supervisor - Quality Assurance and Compliance Senior Supervisor - Quality Control Senior Supervisor - Quality Control Supervisor - Quality Control Senior Analyst - Quality Control Analyst 	04/1998	02/2010

4. Administrative Activities and Experience:

Position Title	Name of Organization	Date Served	
		From	To
Head of Quality and Accreditation Unit	Faculty of Pharmacy , Northern Border University (NBU), Kingdom of Saudi Arabia.	01/09/2022	Until now
Head of Chemistry Department	Faculty of Sciences and Arts , Northern Border University (NBU), Kingdom of Saudi Arabia	05/09/2019	15/09/2020
Head of Academic Development Unit	Faculty of Sciences and Arts , Northern Border University (NBU), Kingdom of Saudi Arabia	19/11/2018	19/11/2019

5. Teaching Experience:

Courses Taught University		
College of Pharmacy (Northern Border University (NBU))	<ul style="list-style-type: none"> - General Chemistry I - General Chemistry II - General chemistry Lab - Pharmaceutical Analytical Chemistry - Instrumental Analysis - Instrumental Analysis Lab - Biochemistry 	<ul style="list-style-type: none"> - Pharmaceutical Organic Chemistry - Chromatography - Natural Product - Spectra of Organic compounds - Quality control and Drug analysis
College of Sciences and Arts (Department of Chemistry) Northern Border University (NBU)	<ul style="list-style-type: none"> - General Chemistry I - General Chemistry II - General chemistry Lab - Analytical chemistry - Instrumental Analysis - Chromatographic method of Separation - Electrochemistry 	<ul style="list-style-type: none"> - Topics of Analytical Chemistry - Spectra of Organic Compounds - Biochemistry - Bioinorganic Chemistry - Project Research - Field Training - Photochemistry
Courses Taught During Ph.D. Fellowship School of Chemical Sciences, Universiti Sains Malaysia (USM)	<ul style="list-style-type: none"> - Analytical Chemistry - Chemistry Practical V Laboratory Manual (KUT 205) - Chemistry practical VI- Organic Laboratory (KUT 206). - Separation methods (Instrumental), (HPLC,GC,CE) (KAA505) 	<ul style="list-style-type: none"> - Separation methods practical-Laboratory (Instrumental practical), (HPLC,GC,CE) ,(KAA505). - Analytical Chemistry I (KUT 245).

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**Courses Taught for
Postgraduate Students
School of Chemical
Sciences, University Sains
Malaysia (USM)**

- Chromatography (master's *Students Class*)
- Natural Products (*master's Students Class*)

6. Professional Experiences in Pharmaceutical Industry:

➤	Senior Supervisor of Quality Unit (Quality Control-Quality Assurance-Compliance) in the Pharmaceutical Industry with 12 years of experience within Hikam Pharmaceutical Jordan (MENA region)
➤	Conduct activities concerned with the quality assurance/control of industrial processes, materials, and products (Active Pharmaceutical Ingredients), develop new approaches to solve and provide recommended process improvement to the management
➤	Conducting internal audits to make sure Hikma pharmaceutical sites are in alignment with Hikma Quality Standards and FDA/MHRA regulations
➤	Good knowledge of <i>USP, ICH, ISO Guidelines, FDA, GMP, GLP, MHRA guidelines</i>
➤	Ensuring the implementation of GMP and GLP regulations
➤	Follow up GMP Trends and chemistry deficiency letters.
➤	Ensure appropriate IQ,OQ, and PQ for the required classes of equipment
➤	Massively contributed to setting internal quality SOPs
➤	Managing development, validation and analysis of drug substances and drug products (according to ICH, FDA and MHRA guidelines).
➤	Checking the data of analysis generated for both Europe and US markets
➤	Training and supervising department employees

7. Research Interests:

➤	Exploring, developing and applicability of new microextraction techniques approaches and eco-environmental friendly methods by using Analytical Green Chemistry concepts for the analysis of nutrition, environmental water and pharmaceutical products using high performance liquid chromatography (HPLC), Capillary Electrophoresis (CE), Ultra-high Performance Liquid Chromatography (UPLC), Gas chromatography (GC) coupled to variety of detections systems, including mass spectrometry techniques (MS) and flow injection analysis.
➤	Developing and Synthesis a simple and miniaturized analytical techniques in association with novel nanomaterials such as functionalized nanoparticles and exploring analytical applications of these materials in the biomedical, Nutrition, Pharmaceutical and environmental monitoring areas.
➤	Exploring application of green analytical techniques to enhance performance of sample preparation, chromatographic separations and detection.
➤	Synthesis and characterization of advanced functional materials of nanomaterials and characterization using different instruments-Spectroscopy (<i>UV , IR, NMR, Ms</i>) and Other such as <i>TEM, SEM, DSC</i> that used for Pharmaceuticals-Food Applications

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& Professional Training:

Technical Training:

- Training for one month at the Jordan Petroleum Refinery -Laboratory Chemistry Center.
- Training for two months at the Ministry of Water & Irrigation. 13-Jan to 1- February 1997 in Chemistry Lab.
- Training for one month at Arab Center for Pharmaceutical & Chemicals as a Chemical analyst. 1-27 September 1997.
- Training course of Service, Maintenance, and Installation for Trace GC Instrument which was held by Thermo Electronic Corporation in Milan Italy. 10-13 November 2003.
- Occupational Health, Safety & Environmental (HSE) training course - OSHA-10. Held by Hikma Pharmaceutical, 5 December 2009.
- Training course of Chirality held by School of Chemical Science — Universiti Sains Malaysia (USM), 23-24 October 2007.
- Training course of Procedure for Method Validation and Verification, held by School of Chemical Science (USM) and Institute Kimia –Malaysia, 28-29 January 2008
- The 3D CE & Chemstation training course, held by Agilent Technologies, 29-30 April 2008.
- Training course of Laboratory safety and management, held by School of chemical science- Universiti Sains Malaysia (USM), 13 July 2011.
- Training course of Malaysia standards (MS), held by School of chemical science- Universiti Sains Malaysia (USM), 13 September 2013.

<i>Managerial Training</i>
Training course in Time Management held by International Consulting & Training Network (ICTN).
<i>Training of Trainers (TOT)</i>
Training course in Training of Trainers (TOT) held by The Arab international Society for Management Technology (AIMICT) in Amman July 13-21, 2019

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9. Publication:

1-	Manganous oxide-cobalt@carbon microcubes with a hierarchical mesoporous structure for high performance lithium storage Xiaojiao Hana, Yifei Fenga, Dalal A. Alshammari, <u>Marwan Shalash</u> , Salah M. El-Bahy, Hua Yuane, Wei Duf, Xiao Liug, Fuyi Jianga,*, Chuanxin Houa,*, Xiaoyu Zhanga,*. <i>Advanced Composites and Hybrid Materials journal</i> 7 (2024) 116 Impact Factor: 23.2, Q1 (2023-WOS)
2-	Structural, optical and magnetic properties of a new metal-organic Co ^{II} - based complex. Wiem Jabeur, Marcus Korb, Mohamed Hamdi, Mariia Holub, Dávid Princík, Vladimír Zelenák , Antonio Sanchez-Coronilla, <u>Marwan Shalash</u> *, Erik Čižmár, Houcine Naïli. <i>RSC Advances journal</i> 14 (2024) 25048-25061. Impact Factor: 3.9, Q2 (2023-WOS)
3-	Covalent Organic Frameworks: Synthesis and Applications for Photocatalysis. Misbah Shahid, Aziz ur Rehman, Tayyaba Najam, Hammad Majeed, <u>Marwan Shalash</u> , Salah M. El-Bahy, Muhammad Sufyan Javed, Syed Shoaib Ahmad Shah*, Muhammad Altaf Nazir. <i>ChemPhotoChem journal</i> (2024) e202400131. Impact Factor: 3.0, Q2 (2023-WOS) https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/cptc.202400131
4-	Synergistic reductive catalytic effects of an organic and inorganic hybrid covalent organic framework for hydrogen fuel production Sonia Rani, <u>Marwan Shalash</u> , Muhammad Nadeem, Mazen R. Alrahili, Moazzam H. Bhatti, Khurram Shahzad Munawar, Muhammad Tariq, Ha fi z Muhammad Asif * and Zeinhom M. El-Bahy. <i>Dalton Transactions</i> . 53(2024) 10875-10889. Impact Factor: 4.0, Q1 (2023-WOS)
5-	Research progress on spherical carbon-based electromagnetic wave absorbing composites Yuxia Shi, Baoquan Liang, <u>Marwan Shalash</u> , Hong Gao, Rui Zhao, Qi Dong, Tingxi Li, Yong Ma, Wei Gao, Jing Zhang , Junwei Gu, Saad Melhi, Zeinhom M. El-Bahy, Zhanhu Guo. <i>Carbon</i> 227(2024) 119244. Impact Factor: 10.5, Q1 (2023-WOS)
6-	Mini review polyurethane hybrids: preparation, characterization and applications El-Sayed Negim, <u>Marwan Shalash</u> , MukatayevaZh.S., BaidullayevaA.K., AlferovT.K., NurtazinaA.A., KarabayevaA.E., Moshera Samy. <i>Engineering and Technology</i> 333 (2025)16-26. Impact Factor: 0.8 Q4(2023-WOS)
7-	Vortex-assisted liquid-liquid–liquid microextraction followed by high performance liquid chromatography for the simultaneous determination of fourteen phenolic acids in honey, iced tea and canned coffee drinks. <u>Marwan Shalash</u> , Ahmad Makahleh*, Salizawati Muhamad Salhimi, Bahrudin Saad* <i>Talanta</i> , 174 (2017) 428-435. Impact Factor: 5.6, Q1 (2023-WOS)
8-	Simple flow injection spectrophotometric determination of Acetaminophen in pharmaceutical formulations using 1,2-naphthoquinone- 4-sulphonate as chemical derivatization chromogenic reagent. <u>Marwan Shalash</u> , Abdussalam Salhin, Bahrudin Saad, and Ismail Ab. Rahman, <i>Journal of Liquid Chromatography and Related Technologies</i> , 36 (2013)155–166. Impact Factor: 1.0, Q4 (2023-WOS)
9-	Effect of Acrylate Copolymers on the Rheological Properties of Cement Pastes, Part II. El-Sayed Moussa Negim, <u>Marwan Shalash</u> , Mahyuddin Ramli, Bahrudin Saad, Jamal Khatib, Lyazzat Bekbayeva, Muhammad Idris Saleh , <i>Middle-East Journal of Scientific Research</i> ,9 (2011) 08-16.
10-	Spectroscopic Studies of 1,4-bis(4-dimethylaminobenzyl)-2,3-diaza-1,3-butadiene as colorimetric reagent for Cu ²⁺ <u>Marwan Shalash</u> , Abdussalam Salhin, Tan Theng Theng, <i>World Applied Sciences Journal</i> , 15 (2011) 598-605.

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11-	(E)-4-Hydroxy-N-(4-hydroxy-3-methoxy-benzylidene)benzohydrazide. Marwan Shalash , Abdussalam Salhin, Rohana Adnan, Chin Sing Yeap and Hoong-Kun Fun, Acta Crystallographica Section E, E66 (2010) o3126–o3127. Impact Factor: 0.35 Q4 (2023-WOS)
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10. Ongoing Projects:

1-	Performance of orange peels crosslinked β -cyclodextrin (OP- β -CD) to uptake lanthanum from water: conventional adsorption studies and ultrasound-assisted desorption Guilherme L. D., Marwan Shalash , Yifei Fenga , Wei Duf , Chuanxin Houa*. <i>Chemical Engineering Journal</i> (2024) (Submitted to journal-Under Review) Impact Factor: 13.3 Q1 (2023-WOS)
2-	Development and Validation of an Optimized HPLC-UV Analytical Method for the Quantification of 5-Methyltetrahydrofolate (Active Folate) in Dietary Supplements: Application to Commercial Tablets and Capsules Anas Alshishani*, Marwan Shalash , Aya Aldalaty, Lena Shaghlil. <i>Journal of Food Composition and Analysis</i> (2024) (Submitted to journal-Under Review) Impact Factor: 4.0 Q2 (2023-WOS)
3-	Organically modified bentonite (nanoclay) as micro-solid phase extraction sorbent for the high performance liquid chromatographic determination of phenolic acids. Marwan Shalash *, Ahmad Makahleh, Ahmad Saud, Bahrudin Saad. <i>Talanta</i> (2024) (Submitted to journal-Under Review). Impact Factor: 5.6, Q1 (2023-WOS)
4-	Recent development of metal-organic frameworks and their composites in electromagnetic wave absorption and shielding applications Kexin Wei; Yang Shi; Xin Tan; Marwan Shalash ; Ruanna Ren; Abeer A. Faheim; Chong Jia; Runzhou Huang; Yequan Sheng; John Zhanhu Guo*. <i>Advances in Colloid and Interface Science</i> (2024) (Submitted to journal-Under Review). Impact Factor: 15.9 Q1 (2023-WOS)
5-	An overreview of Adapting Modified Phenolic Resin Composites for Diverse Performance Requirements Across Various Fields Yue Zhang; Marwan Shalash ; Salah M El-Bahy; Zijian Wu; Junna, Dawei Jiang*. <i>Polymer</i> (2024) (Submitted to journal-Under Review) Impact Factor: 4.1 Q2 (2023-WOS)
6-	Ion-pair vortex-assisted liquid–liquid microextraction with back extraction combined with high-performance liquid chromatography- diode array detector for determination of ellagic acid in honeys. Marwan Shalash *, Ahmad Makahleh, Saliza Mohamad Salhimi, Bahrudin Saad. <i>Food Chemistry</i> (will be submitted Soon). Impact Factor: 8.5 Q1 (2023-WOS)
7-	Ultrasound-Assisted Matrix Solid-Phase Dispersion for the Determination of Phenolic Acids in Honey Using Capillary Zone Electrophoresis. Marwan Shalash *, Ahmad Makahleh, Salizawati Muhamad Salhimi, Bahrudin Saad a (Under Review after writing).
8-	Salting-out vortex assisted liquid-liquid-liquid microextraction combined with capillary electrophoresis for the simultaneous determination of phenolic acids in honey. Marwan Shalash *, Siti Farhana Binti Samsudin, Bahrudin Saad. (Under writing).

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11. Conferences and Workshops:

No	Details
1	<p>Conference: The 29th Regional Symposium of Malaysia Analytical Sciences (SKAM 29).</p> <p>Participate as : Presenter (Oral)</p> <p>Topic title: Ion-pair vortex-assisted liquid–liquid- liquid microextraction combined with high-performance liquid chromatography- diode array detector for the determination of ellagic acid in honeys.</p> <p>Date: 15-17 August 2016 on Bayview Beach Resort, Penang, Malaysia.</p>
2	<p>Conference: 5th International Conference for Young Chemists 2015 (ICYC 2015).</p> <p>Participate as : Presenter (Poster)</p> <p>Topic title: Ion-pair vortex-assisted liquid–liquid- liquid microextraction combined with high-performance liquid chromatography- diode array detector for the determination of phenolic acids in honeys.</p> <p>Date: 5-7th August 2015 on Bayview Hotel, Georgetown, Penang, Malaysia.</p>
3	<p>Conference: Vietnam -Malaysia International Chemical Congress (VMICC).</p> <p>Participate as : Presenter (Oral)</p> <p>Topic title : Organically modified bentonite (nanoclay) as micro-solid phase extraction sorbent for the high performance liquid chromatographic determination of phenolic acids</p> <p>Date: 7-9th November 2014 on Hanoi, Vietnam.</p>
4	<p>Conference: The 26th Regional symposium of Malaysia Analytical Sciences (SKAM 26).</p> <p>Participate as : Presenter (Oral)</p> <p>Topic title : vortex-assisted liquid–liquid microextraction followed by HPLC for the simultaneous determination of fourteen phenolic acids in fruit juice samples</p> <p>Date: 4-5 December 2013 on Hilton Kuching, Malaysia.</p>
5	<p>Conference: The 24th Regional Symposium of Malaysian Analytical Sciences (SKAM 24).</p> <p>Participate as : Presenter (Oral)</p> <p>Topic title : Ultrasonication matrix solid-phase dispersion for the determination of phenolic acids in honey using capillary electrophoresis</p> <p>Date: 21-23rd November 2011 on Hotel Helang, Langkawi, Malaysia.</p>
6	<p>Conference: 13th International Symposium on Advances in Extraction Technologies (ExTech).</p> <p>Participate as : Presenter (Oral)</p> <p>Topic title: Determination of phenolic acids in honey by using matrix solid-phase dispersion and capillary electrophoresis with diod array detection</p> <p>Date: 27-29 September 2011 on Putra World Trade Center, Singapore</p>
7	<p>Workshop: 13th International Symposium on Advances in Extraction Technologies (ExTech).</p> <p>Participate as : Attender</p> <p>Topic title : Solid-Phase Microextraction (SPME)</p> <p>Date: 26 September 2011 on Putra World Trade Center, Kuala Lumpur, Malaysia.</p>

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8	Workshop: 13 th International Symposium on Advances in Extraction Technologies (ExTech). Participate as : Attender Topic title : Liquid-Phase Microextraction (LPME) Date: 26 September 2011 on Putra World Trade Center, Kuala Lumpur, Malaysia.
9	Conference: 3 th International Conference for Young Chemists 2010. Participate as: Presenter (Oral). Topic title : Spectroscopic Studies of 1,4-bis(4-dimethylaminobenzyl)-2,3-diaza-1,3-butadiene as Colorimetric Reagent for Cu ²⁺ Date: 23-25 th June 2010 on Copthorne Orchid Hotel, Penang, Malaysia.
10	Conference: 2 th International Conference for Young Chemists 2008. Participate as: Presenter (Oral). Topic title: Simple flow injection spectrophotometric determination of acetaminophen in pharmaceutical formulations using 1,2-naphthoquinone-4-sulphonate as chemical derivatization chromogenic reagent. Date: 18-20 th June 2008 on Universiti Sains Malaysia, Penang, Malaysia.
11	Workshop: Procedures of Method Validation and Verification. Participate as : Attender Date: 28-29 th January 2008 on Copthorne Orchid Hotel, Penang, Malaysia.
12	Workshop: 3D CE & Chemstation. Participate as : Attender Date: 29-30 April 2008 on Universiti Sains Malaysia, Penang, Malaysia.
13	Workshop: Chirality: Analysis and Emerging Issues. Participate as : Attender Date: 23-24 th October 2007 on Copthorne Orchid Hotel, Penang, Malaysia.

11. Bachelor and Master Students Supervision:

No.	Student Name	Thesis Title	Advisor	Date
1	Student Name: Ama Schanit (Masters degree)	Determination and quantification of Chlorophenols in sea water by using micro solid phase extraction with high performance liquid chromatography	Co-supervisor	2016
2	Student Name: Siti Farhana Binti Samsudin (Bachelor's degree)	Salting-out vortex assisted liquid-liquid-liquid microextraction combined with capillary electrophoresis- for the simultaneous determination of phenolic acids in honey.	Co-supervisor	2015
3	Student Name: Nalisa Nurul (Bachelor's degree)	Ultrasound and vortex-assisted liquid-liquid-liquid microextraction coupled with capillary electrophoresis for the determination of three phenolic acids in iced tea.	Co-supervisor	2015
4	Student Name: Chong Jai Voon (Bachelors degree) (Paper in Preparation)	Determination of ellagic acid in honey samples using vortex-assisted liquid-liquid microextraction with high performance liquid chromatography	Co-supervisor	2014

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12. Scientific Awards:

No.	Scientific Awards
1.	Certificate of Reviewing -Food Chemistry 2023, 2024 (<i>Elsevier</i>)
2.	Certificate of Reviewing -The Chemical Society of Ethiopia 2022
	Excellent achievement in the category of Journal Publication , Sanggar Sanjung Award Universiti Sains Malaysia, 2017
2	Best poster presentation “Ion-pair vortex-assisted liquid–liquid microextraction with back extraction combined with high-performance liquid chromatography- diode array detector for determination of ellagic acid in honeys”, 5 th International Conference for Young Chemists 2015. 5-7 th August 2015 on Bayview Hotel, Georgetown, Penang, Malaysia
3	Graduate Assistant scholarship, Universiti Sains Malaysia, Penang, MALAYSIA (Jan. 2014- Dec. 2016)
4	Fellowship, Universiti Sains Malaysia, Penang, MALAYSIA (Jun. 2010- Dec. 2013).

13. References:

Name	Affiliation	Email
Associate Professor Ahmad Makahleh	Department of chemistry, Faculty of Science, University of Jordan Analytical chemistry.	makahleha@yahoo.com a.makahleh@ju.edu.jo
Associate Professor Khaldun Alazzam	Pharmaceutical Sciences Department, Al-Ahliyya Amman University,	azzamkha@yahoo.com
Assistant Professor, Anas Al-shishani	Faculty of Pharmacy, Zarqa University	aalshishani@zu.edu.jo
Professor El-Sayed Moussa Ashmawy	School of Chemical Engineering, Kazakh-British Technical University	elashmawi5@yahoo.com

Declaration :

I hereby declare that the particulars furnished above are true, complete and correct to the best of my knowledge and belief. All the information presented in this resume is documented. Should you require any further information, it is my pleasure to provide.

Yours Sincerely, *Dr. Marwan Shalash*