Personal Data

Name: Jwan Oday Abdulsattar
Gender: Female
Date of birth: 1977
Contact details: Chemistry Department, College of Science, Mustansiriyah University, Baghdad-Iraq,

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Academic achievements and Qualifications:

- **PhD** in Analytical Chemistry - University of Hull, Hull, United Kingdom, 2017.

  Thesis title: Development of an *insitu* quantitative measurement system for stress hormones; towards open microfluidic system.

- **M.Sc**. in Analytical Chemistry, Mustansiriyah University, Baghdad, Iraq, 2005. Thesis title: Extraction and Estimation of Complexes Clidinium Bromide with Gold and Palladium from the pharmaceutical preparation “Quarzan” by molecular and atomic Absorption Spectrophotometry methods.

- **B.Sc.** in Chemistry Science - Mustansiriyah University, Baghdad, Iraq, 1999.

Working Positions at Mustansiriyah University, Iraq (2001-2021):

- Assist prof in Analytical Chemistry, 2013.
- Teacher in Analytical Chemistry, 2005.
- Assist Teacher in Analytical Chemistry, 2001.

Working Experiences:

1- Experiences at Mustansiriyah University, Iraq (2001-2014):

-Teaching Analytical Chemistry for postgraduates (Master degree).

- Teaching Micro Analytical Chemistry (Lab-on-a-chip) for postgraduates (PhD degree).

- Teaching Analytical chemistry for undergraduates, 4th year.

-Analytical Chemistry Lab supervisor for undergraduates, 4th year.

-Teaching basic chemistry for undergraduates, 1st year.

- Basic Chemistry Lab supervisor for undergraduates, 1st year.

2- Experiences at University of Hull, United Kingdom (2014 – 2017):

- Teaching Assistance for analytical chemistry lab module for 1st year of chemistry students.

-Supervised project students in analytical Chemistry at the University of Hull, UK.

3- Experiences at Mustansiriyah University, Iraq (2001- 2013):

-Analytical Chemistry Lab supervisor for undergraduates, 4th year.

- Basic Chemistry Lab supervisor for undergraduates, 1st year.

-Analytical Chemistry Lab supervisor for undergraduates, 2rd year.

Scientific activities

1. Organization of the PhD Experience Conference at the University of Hull, April 2016.
2. Organization of International Conference of Chemistry (ICC2020) at University of Mustansiriyah, December 2020.
3. Associate member of the Royal Society of Chemistry (AMRSC) 27 September 2019 (membership No. 546922).
4. Certificate of completing “Introduction to teaching for Postgraduate Researchers Programme” and attending the following workshops : Student Learning, Small Group Learning, Assessment and feedback, Critical Reflection and Professional Development, Technology Enhanced Learning, Lab-based Teaching and Fieldwork, October 2014, Hull, UK.
5. Certificate of Postgraduate Certificate in Research Training, 10 July 2015, Hull, UK.

6. Certificate of completing “Fundamentals of manuscript preparation, Fundamentals of publishing, Funding, Social impact, and Fundamentals of peer review” including more than 21 modules, 2019, Research Academy, ELSEVER.
7. An assistance supervisor of postgraduate projects on “Lab-on-a-chip”, Hull, UK.
8. An activity as reviewer in several of journals as Analytical Methods, Environment, Development and Sustainability journal, International Journal of Environmental Analytical Chemistry, Baghdad Science Journal, Science Journal of Analytical Chemistry, Al-Mustansiriyah Journal of Science, Iraqi Journal of Science, and Heliyon to serve as an editorial board member. My peer reviews | Publons.
9. Attend many of viva exams for postgraduate students (master and PhD) inside and outside Mustansiriyah University, Baghdad, Iraq
10. Served as Scientific Committee and Linguistic Committee for many Master and PhD thesis.
11. Rewarded Mustansiriyah University / College of Science prize in 21th June 2020 and 22th June 2021 for the best published research paper.

Conferences and meetings:

- J. Abdulsattar, Joliot-Curie Conference, Royal Society of Edinburgh 2014, UK.
- J. Abdulsattar, G. Greenway, T. Horozov," Cortisol Determination using immunoassay", Regional Chemistry Conference 2015, Nottingham Trent University, Nottingham, UK.
- J. Abdulsattar, G. Greenway, T. Horozov, "Wetting properties of an open microfluidic chip", Chemistry Colloquium 2015, University of Hull, Hull, UK.
- J. Abdulsattar, the 6th PhD. Experience Conference 2015, University of Hull, Hull, UK
- J. Abdulsattar, G. Greenway, T. Horozov," Fabrication of superhydrophilic patterns on a superhydrophobic substrate: towards open microfluidic applications in a quantitative measurement system for stress hormones ", Ph.D. Experience Conference 2016, University of Hull, Hull, UK.
- J.Abdulsattar, OxFEST,S 5th Annual Conference-Signposts and Pathways:How to get ahead of your STEM career, University of Oxford, 2016, UK, (Attendance).

- J. Abdulsattar, G. Greenway, T. Horozov, "Development of an in situ quantitative measurement system for stress hormones ", Lab-on-a-chip & Microfluidics 2016, Madrid, Spain.

- J. Abdulsattar, G. Greenway, T. Horozov, "Lab-on-chip platform for Zebrafish whole- body sample stress hormone analysis", International Women's Day Chemistry Career Symposium, University of Hull 2016, Hull, UK.

- J. Abdulsattar, G. Greenway, T. Horozov, "Development of a point-of-care system for stress hormones; towards open microfluidic system", Chemistry Colloquium 2016, University of Hull, Hull, UK.

- J.Abdulsattar, G. Greenway, T. Horozov, "Wetting properties investigations towards constructing open microfluidic system", Ph.D. Experience Conference 2017, University of Hull, Hull, UK

- J. Abdulsattar, Analytical Research Forum, Royal Society of Chemistry, London 2017, UK.

- Attended most of Women in Science meetings in *University of Hull–UK* from 2013 to 2017.

- J.Abdulsattar, "Spectroscopic, particle size, AFM and TEM analysis of gold nano particles", 4th International Conference on Pure Science and Agricultural Science (ICPAS-2021), Antalya, Turkey.

Publications

2021

- M C Urabee, J O Abdulsattar , Z N Nasif and Z S Al-Garawi, Extraction methods of Alhagi Maurorum (camel thorn) and its therapeutic application, Journal of Physics: Conference Series 1853 (**2021**) 012053, doi:10.1088/1742-6596/1853/1/012053. Extraction methods of Alhagi Maurorum (camel thorn) and its therapeutic applications - IOPscience
- KHITAM JABER NABHAN, ABBAS SHEBEEB HASAN AL-KADUMI , JWAN ODAY ABDULSATTAR, Molecular and Atomic Absorption Spectrophotometric determination of Furosemide via complex formation with Chromium ion, International Journal of Pharmaceutical Research | Jan - Mar **2021** | Vol 13 | Issue 1, ViewArticleDetail (ijpronline.com).

2020

- Jwan Oday Abdulsattar , Hind Hadi , Samantha Richardson , Alexander Iles, Nicole Pamme, Detection of doxycycline hyclate and oxymetazoline hydrochloride in pharmaceutical preparations via spectrophotometry and microfluidic paper-based analytical device (mPADs), Analytica Chimica Acta, Volume 1136, 1 November **2020**, Pages 196-204, https://doi.org/10.1016/j.aca.2020.09.045.
- Jwan O Abdulsattar, Gillian M Greenway, Jay D Wadhawan, Electrochemical immunoassay for the detection of stress biomarkers, Volume 6, Issue 3, March **2020**, e03558, https://doi.org/10.1016/j.heliyon.2020.e03558.
- M. O. Abdulsattar , J. O. Abdulsattar , G. M. Greenway , K. J. Welham and S. H. Zein, Optimization of pH as a strategy to improve enzymatic saccharification of wheat straw for enhancing bioethanol production, Journal of Analytical Science and Technology (**2020**) 11:17, Optimization of pH as a strategy to improve enzymatic saccharification of wheat straw for enhancing bioethanol production | Journal of Analytical Science and Technology | Full Text (springeropen.com)
- Ban O. Abdulsattar, Jwan O. Abdulsattar, Khetam H. Rasool, Abdul-Rahman A. Abdulhussein and Mohammad H. Abbas, Study of Antimicrobial Resistance Pattern of Escherichia coli and Klebsiella Strains and Multivariate Analysis for Water Quality Assessment of Tigris River, Baghdad, Iraq, Nature Environment and Pollution Technology, Vol. 19, pp. 1327-1334, **2020**, EBSCOhost | 145459939 | Study of Antimicrobial Resistance Pattern of Escherichia coli and Klebsiella Strains and Multivariate Analysis for Water Quality Assessment of Tigris River, Baghdad, Iraq.
- Abbas Shebeeb Hasan Al-kadumi, Jwan O. Abdulsattar , Khitam J. Nabhan, Colorimetric Determination of Uric Acid in Live samples, Indian Journal of Forensic Medicine & Toxicology, April-June **2020**, Vol. 14, No. 2, https://doi.org/10.37506/ijfmt.v14i2.3057.

2019

- Jwan O. Abdulsattar & Gillian M. Greenway, A sensitive chemiluminescence based immunoassay for the detection of cortisol and cortisone as stress biomarkers, Journal of Analytical Science and Technology, volume 10, Article number: 34 (**2019**), A sensitive chemiluminescence based immunoassay for the detection of cortisol and cortisone as stress biomarkers | SpringerLink.

2014

- Jwan A. Abdulsattar, (Exploiting the diazotization reaction of 4-aminoacetophenone for methyldopa determination. (**2014**) JOURNAL OF BAGHDAD FOR SCIENCE, vol. 11(1), p.: 139-146, Exploiting the diazotization

reaction of 4- minoacetophenone for Methyldopa determination. | Baghdad Science Journal (uobaghdad.edu.iq)

- Jwan A. Abdulsattar, Arwa M. Huessien, Hind A.Abbas, (Biosorption of Vanadium ions from aqueous solution by acid modified and unmodified sour orange peels. (**2014**), JOURNAL OF THE COLLEGE OF BASIC EDUCATION, vol. 20, no. 83, p.: 589-598, 376cb4d9a75e6d3b (iasj.net).

2013

- Jwan A. AbdulSattar, (Toxic Metal Pollution Abatement Using Sour Orange Biomass. (**2013**), Jpurnal of Al-Nahrain University, vol. 16(3), p.: 56-64, Toxic Metal Pollution Abatement Using Sour Orange Biomass | Al-Nahrain Journal of Science

2012

- Mouayed Q. Al-Abachi, Jwan A. Abdul Sattar, (KINETIC SPECTROPHOTOMETRIC METHODS FOR THE DETERMINATION OF AMOXIXILLIN IN PHARMACETICAL PREPARATION. (**2012**) Iraqi Journal of Science, vol. 53, no. 1, p.:8-16, Iraqi Academic Scientific Journals - IASJ

2009

- Jwan A. Abdul- Sattar, Abdul-Jabar K. Atia, Sahar A. Kadhom, and Lubna F. Mohammed-Ali, (Spectrophotometric determination of Amoxicillin- Application to Capsules. (**2009**) Al-Mustansiriya J. Sci, vol.20, no. 4, p.:35-42, Iraqi Academic Scientific Journals - IASJ
- Jwan A. Abdul Sattar. (Spectrophotometric determination of Metformin in pharmaceutical preparation using Prussian blue reaction).(**2009**)JOURNAL OF COLLEGE OF EDUCATION., no 3,p:1157-1170, Iraqi Academic Scientific Journals - IASJ
- Abbas S. Alkadimy, Raghad A. Ahmed, Jwan A. Abdulsattar and Amina M. Abbas, Hamdan A.A. Al-Hamdany (A Highly sensitive Flame Emission Spectrophotometric Method for the Determination of some Phenothiazine Antipsychotics via Potassium Dichromate as Oxidant Reagent.(**2009**) JOURNAL OF THE COLLEGE OF BASIC EDUCATION. vol. no. 56, p:69-76, Iraqi Academic Scientific Journals - IASJ.

2008

- Jwan A. Abdul Sattar, (Application of Chlordiazepoxide as a Complex with Palladium for the Spectrophotometric Determination of Certain Benzodiazepine drug). Al-Mustansiriya J. Sci.,(**2008**) vol.19, no.3, p:52-57, Iraqi Academic Scientific Journals - IASJ.
- Abdul-Jabar K. Atia and Jwan A. Abdul-Sattar, (Determination of Metronidazole in Pure and Pharmaceutical Dosage Forms by Spectrophotometer Using 5-Nitroisatin. Journal of College of Education. (**2008**) vol.32, no.3, p.102-107.
- Ahmed H.Ismail, Jwan A. Abdul-Sattar, (A sensitive spectrophotometer method for the determination of 4-aminoantipyrine as a Schiff base complicated with Cr(III),

Ni(II) and Cu(II) transition elements and its preparation. (**2008**) JOURNAL OF DIYALA. vol. 32, p. 15-24, Iraqi Academic Scientific Journals - IASJ.

Scopus preview - Abdulsattar, Jwan O. - Author details - Scopus

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Dr Jwan Oday Abdulsattar - Google Scholar

نظام التعليم الالكتروني (uomustansiriyah.edu.iq)

Field of interest

1. Study of microfluidic lab-on-a-chip devices, which construct a miniaturized, automated, portable, disposable and easy-to-use systems that can be taken outside conventional laboratory setting.
2. Integration of lab-on-a-chip systems with sensors and biosensors could be incorporated into in situ measurement devices.
3. Application of these systems for environmental analysis on-site, clinical diagnostic, forensic chemistry analysis, biomedical research, cosmetic and pharmaceutical detection at point-of-care, micro total analysis microfluidic systems.
4. Collaboration with chemical engineering in the field of renewable fuels.
5. Employment of solid wetting onto the open microfluidic platforms.

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